

# INDIAN ACADEMY

Degree College - Autonomous

## DEPARTMENT OF CHEMISTRY

PRE SCREENING TEST FOR B.Sc.-I SEMESTER LIFE SCIENCE, SEP-2022

MAX. MARKS: 30

DURATION: 45 MINS

1. The substance which increases the rate of chemical reaction is
  - (a) Metal
  - (b) Catalyst
  - (c) Alloy
  - (d) Enzymes
2. Which of the following is a non-metal that remains liquid at room temperature?
  - (a) Chlorine
  - (b) Bromine
  - (c) Phosphorous
  - (d) Helium
3. The chemical symbol for manganese is
  - (a) Mn
  - (b) Mo
  - (c) Ma
  - (d) Ga
4. Which of the following has a positive charge?
  - (a) proton
  - (b) Neutron
  - (c) Anion
  - (d) Electron
5. Which of the following is classified as a metal?
  - (a) Ge
  - (b) As
  - (c) F
  - (d) V
6. Antibonding molecular orbitals are produced by

- (a) Constructive interaction of atomic orbitals.
- (b) Destructive interaction of atomic orbitals.
- (c) The overlap of the atomic orbitals of two negative ions
- (d) all of these

7. In any cubic lattice, an atom lying at the corner of a unit cell is shared equally by how many unit cells?

- (a) One
- (b) Two
- (c) eight
- (d) four

8. The vapor pressure of a solution containing a nonvolatile solute is directly proportional to the

- (a) Molality of the solvent.
- (b) Osmotic pressure of the solute.
- (c) Molarity of the solvent.
- (d) Mole fraction of solvent.

9. A catalyst:

- (a) Actually participates in the reaction.
- (b) Changes the equilibrium concentration of the products.
- (c) Does not affect a reaction energy path.
- (d) Always decreases the rate for a reaction.

10. Which metal can be found as the free element?

- (a) Na
- (b) Mn
- (c) Fe
- (d) Cr

11. Which element group is the most reactive of all the metallic elements?

- (a) Alkali metals
- (b) Alkaline earth metals
- (c) Coinage metals
- (d) Transition metals

12. Which type of radiation is the least penetrating?

- (a) alpha
- (b) Beta

- (c) Gamma
- (d) X-ray

13. Dehydration of an alcohol leads to the formation of a \_\_\_\_\_

- (a) Alkene
- (b) Alkane
- (c) Alkyne
- (d) Alkyl halide

14. The mixture which has not uniform composition throughout its mass is called?

- (a) Soft
- (b) Homogeneous
- (c) Saturated
- (d) Heterogeneous

15. A substance consists of two or more pure substances not chemically combined each other ar.?

- (a) Compound
- (b) Mixture
- (c) Element
- (d) None of the above

# INDIAN ACADEMY

## Degree College - Autonomous

DEPARTMENT OF CHEMISTRY

PRE SCREENING TEST FOR B.Sc.-I SEMESTER LIFE SCIENCE, SEP-2022

S.NO	NAME OF THE STUDENT	TOTAL SCORE
1.	SANIYA SYEDA	30/30
2.	BIPNA SINGH	30/30
3.	GOWTHAMI	30/30
4.	KOMALA	30/30
5.	CHETHAN RAM	30/30
6.	CHETHAN.K.S	28/30
7.	SOWMYADEEP ROY	27/30
8.	SAMSON	26/30
9.	AMRITA LOKITHA	27/30
10.	RITHISH KUMARESH.S.B	22/30
11.	SREELAKSHMI.K	30/30
12.	NANJE GOWDA	27/30
13.	HARISHINI	26/30
14.	KAUSHIK.M	29/30
15.	RACHANA.U	30/30
16.	NISHARA.R	30/30
17.	MEHERI BI	30/30
18.	RAMYA	30/30
19.	BRINDA	30/30
20.	CHANDRAVARDAN	28/30
21.	VARSHITHA	27/30

NAME OF THE FACULTY: Mrs. Latha.V

NAME OF THE H.O.D : Dr. Shyam Sunder.K

HEAD  
Department of Chemistry  
I.A.D.C. and Centre For  
Research & Post Graduate Studies  
Bangalore-560 043



*[Handwritten Signature]*  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
NUR MAIN ROAD, KALYAN NAGAR  
BANGALORE-560043, KARNATAKA

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF CHEMISTRY  
FOUNDATION COURSE  
B.Sc. I year Life Science (2022-2026 Batch)

**RESOURCE PERSON:** Mrs. Latha.V

**SCHEDULED DAYS:** 6th Sep to 20<sup>th</sup> Sep 2022

Total Number of students: 21

Total Number of classes taken: 4

## INTRODUCTION TO FIRST YEAR CHEMISTRY

**Aims:** To provide a bridge in knowledge between school chemistry and the start of university chemistry and to bring students of different backgrounds to the same point (First three semesters syllabus mainly consists of chemistry basics.)

To emphasize the threads that links the three main areas of chemistry (Inorganic, Organic and Physical). The student will learn the laboratory skills needed to design, safely conduct and interpret chemical research. The student will acquire a foundation of chemistry of sufficient breadth and depth to enable them to understand and critically interpret the primary chemical literature.

### Unit-I Some Basic Concepts Of Chemistry (2Hrs)

Chemistry & Branches of Chemistry, Matter & its classification, Elements, Compounds, Mixtures, Common methods for the separation of mixtures, Atoms and Molecules, Atomic Mass, Molecular Mass, Equivalent Mass

#### **Objectives:**

1. To study and understand the basic terms of chemistry
2. Common methods of separation of mixtures.
3. Learn the importance of atomic mass and molecular mass.

#### **Learning Outcome:**

1. Students should be able to explain the characteristics of three states of matter and to classify different substances into elements, compounds and mixtures.
2. Understand the significance of atomic mass and molecular mass

### Unit-2 Chemical Bonding (2Hrs.)

Chemical Bond, Octet Rule, Valence Electrons, Facts Stated by Kossel in Relation to Chemical Bonding, Modes of Chemical Combination, Ionic or Electrovalent Bond, Covalent Bond—Lewis-Langmuir Concept, Hydrogen bonding, Types of H-Bond

#### **Objectives:**

1. To study and understand the concepts of bonding
2. To learn the different types of bonding.

**Learning Outcome:** 1. Students should be able to explain basic concept in chemical bonding and different types of bonds

**Methodologies adopted:** PowerPoint presentation

**Evaluation Method:** Class Test



HEAD  
Department of Chemistry  
I.A.D.C. and Centre For  
Research & Post Graduate Studies  
Bangalore-560 043

PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
NUR MAIN ROAD, KALYAN NAGAR  
BANGALORE-560043, KARNATAKA

## INTRODUCTION TO FIRST YEAR CHEMISTRY

### Aims:

To provide a bridge in knowledge between school chemistry and the start of university chemistry and to bring students of different backgrounds to the same point.

To emphasize the threads that link the three main areas of chemistry (Inorganic, Organic and Physical).

The student will learn the laboratory skills needed to design, safely conduct and interpret chemical research. The student will acquire a foundation of chemistry of sufficient breadth and depth to enable them to understand and critically interpret the primary chemical literature

### Unit-1 Some Basic Concepts Of Chemistry (2 Hrs)

Chemistry & Branches of Chemistry, Matter & its classification, Elements, Compounds, Mixtures, Common methods for the separation of mixtures, Atoms and Molecules, Atomic Mass, Molecular Mass, Equivalent Mass

**Chemistry** is the branch of science which deals with the composition, structure and properties of matter.

### **Elements**

It is the simplest form of pure substance, which can neither be decomposed into nor built from simpler substances by ordinary physical and chemical methods. It contains only one kind of atoms. The number of elements known till date is 118. Hydrogen is the most abundant element in the universe. Oxygen (46.6%), a non-metal, is the most abundant element in the earth's crust. Aluminium is the most abundant metal in the earth's crust.

### **Compounds**

It is also the form of matter which can be formed by combining two or more elements in a definite ratio by mass. It can be decomposed into its constituent elements by suitable chemical methods, e.g., water ( $H_2O$ ) is made of hydrogen and oxygen in the ratio 1:8 by mass.

Compounds can be of two types:

- (i) **Inorganic compounds** previously, it was believed that these compounds are derived from non-living sources, like rocks and minerals. But these are in fact the compounds of all the elements except hydrides of carbon (hydrocarbons) and their derivatives.
- (ii) **Organic compounds** According to earlier scientists, these compounds are derived from living sources like plants and animals, or these remain

buried under the earth (e.g., petroleum). According to modern concept, these are the hydrides of carbon and their derivatives.

#### Mixtures

These are made up of two or more pure substances. They can possess variable composition and can be separated into their components by some physical methods. Mixtures may be homogeneous (when composition is uniform throughout) or heterogeneous (when composition is not uniform throughout).

**Common methods for the separation of mixtures are:**

- (a) **Filtration** is the process of separating solids that are suspended in liquids by pouring the mixture into a filter funnel. As the liquid passes through the filter, the solid particles are held on the filter.
- (b) **Distillation** is the process of heating a liquid to form vapours and then cooling the vapours to get back the liquid. This is a method by which a mixture containing volatile substances can be separated into its components.
- (c) **Sublimation** is the process of conversion of a solid directly into vapours

on heating. Substances showing this property are called sublimate, e.g., iodine, naphthalene, camphor. This method is used to separate a sublimate from non-sublimate substances.

(d) Crystallisation is a process of separating solids having different solubilities in a particular solvent.

(e) Magnetic separation is process based upon the fact that a magnet attracts magnetic components of a mixture of magnetic and non-magnetic substances. The non-magnetic substance remains unaffected. Thus, it can be used to separate magnetic components from non-magnetic components.

(f) Atmalysis method is based upon rates of diffusion of gases and used for their separation from a gaseous mixture.

#### Atoms and Molecules

Atom is the smallest particle of an element which can take part in a chemical reaction. It may or may not be capable of independent existence.

Molecule is the simplest particle of matter that has independent existence. It

may be homoatomic e.g.,  $H_2$ ,  $Cl_2$ ,  $N_2$  (diatomic),  $O_3$  (triatomic) or heteroatomic, e.g.,  $HCl$ ,  $NH_3$ ,  $CH_3$  etc. Other elements, in the ratio of small whole numbers, e.g., in  $NH_3$  and  $N_2H_4$ , fixed mass of nitrogen requires hydrogen in the ratio 3:2.

A mole is defined as the amount of substance which contains same number of elementary particles (atoms, molecules or ions) as the number of atoms present in 12 g of carbon ( $C-12$ ). Number of moles  
= amount of substance (in gram) / molar mass

#### Atomic Mass

It is the average relative atomic mass of an atom. It indicates that how many times an atom of that element is heavier as compared with  $1/12$  of the mass of an atom of carbon-12.

#### Molecular Mass

It is the mass of a molecule, i.e., number of times a molecule is heavier than  $1/12$ th mass of  $C-12$  atom. Molecular mass of a substance is an additive property and can be calculated by taking algebraic sum of atomic masses of all the atoms of different elements present in one molecule. Equivalent Mass

It is the mass of an element or a compound which would combine with or

displace (by weight) 1 part of hydrogen or 8 parts of oxygen or 35.5 parts of chlorine.

## FOUNDATION COURSE IN BIOCHEMISTRY

### Unit 2. Chemical Bonding

Chemical Bond, Octet Rule, Valence Electrons, Facts Stated by Kossel in Relation to Chemical Bonding, Modes of Chemical Combination, Ionic or Electrovalent Bond, Covalent Bond—Lewis -Langmuir Concept, Hydrogen bonding, Types of H-Bonds.

## FOUNDATION COURSE IN BIOCHEMISTRY

- **Chemical Bond**

The force that holds different atoms in a molecule is called chemical bond.

- **Octet Rule**

Atoms of different elements take part in chemical combination in order to complete their octet or to attain the noble gas configuration.

- **Valence Electrons**

It is the outermost shell electron which takes part in chemical combination.

### **Facts Stated by Kossel in Relation to Chemical Bonding**

In the periodic table, the highly electronegative halogens and the highly electro-positive alkali metals are separated by noble gases.

Formation of an anion and cation by the halogens and alkali metals are formed by gain of electron and loss of electron respectively.

Both the negative and positive ions acquire the noble gas configuration.

The negative and positive ions are stabilized by electrostatic attraction Example

### **Modes of Chemical Combination**

**By the transfer of electrons:** The chemical bond which is formed by the complete transfer of one or more electrons from one atom to another is termed as electrovalent bond or ionic bond.

**By sharing of electrons:** The bond which is formed by the equal sharing of electrons between one or two atoms is called covalent bond. In these bonds electrons are contributed by both.

**Co-ordinate bond:** When the electrons are contributed by one atom and shared by both, the bond is formed and it is known as dative bond or co-ordinate bond.

### **Ionic or Electrovalent Bond**

Ionic or Electrovalent bond is formed by the complete transfer of electrons from one atom to another. Generally, it is formed between metals and non-metals. We can say that it is the electrostatic force of attraction which holds the oppositely charged ions together.

The compounds which are formed by ionic or electrovalent bond are known as electrovalent compounds. For Example

**Covalent Bond—Lewis-Langmuir Concept** When the bond is formed between two or more atoms by mutual contribution and sharing of electrons, it is known as covalent bond.

If the combining atoms are same the covalent molecule is known as homo atomic. If they are different, they are known as heteroatom molecule.

For Example,

### **Hydrogen bonding**

When highly electronegative elements like nitrogen, oxygen, fluorine are attached to hydrogen to form covalent bond, the electrons of the covalent bond are shifted towards the more electronegative atom. Thus, partial positive charge develops on hydrogen atom which forms a bond with the

other electronegative atom. This bond is known as hydrogen bond and it is weaker than the covalent bond. **Types of H-Bonds**

Intermolecular hydrogen bond

(ii) Intramolecular hydrogen bond.

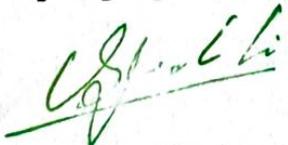
**Intermolecular hydrogen bond:** It is formed between two different molecules of the same or different compounds. For Example, in HF molecules, water molecules etc.

**Intramolecular hydrogen bond:** In this type, hydrogen atom is in between the two highly electronegative F, N, O atoms present within the same molecule. For example, in o-nitro phenol, the hydrogen is in between the two oxygen atoms.

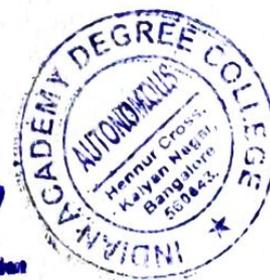
- Coordinate bond is a type of alternate covalent bond that is formed by sharing of electron pair from a single atom. Both shared electrons are donated by the same atom. It is also called dative bond or dipolar bond.
- Co-ordinate covalent bonds are usually formed in reactions that involve two non-metals such as a hydrogen atom or during bond formation between metal ions and ligands

#### Characteristics Of Coordinate Covalent Bond

- In this type of bonding, the atom that shares an electron pair from itself is termed as the donor.
- The other atom which accepts these shared pair of electrons is known as a receptor or acceptor.
- The bond is represented with an arrow  $\rightarrow$ , pointing towards acceptor from the donor atom.
- After sharing of electron pair each atom gets stability.
- This type of bonding is central to the Lewis theory.
- Getting a good understanding of co-ordinate covalent bonds can help in properly designing complex organic molecules.

  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
NUR MAIN ROAD, KALYAN NAGAR  
BANGALORE-560043, KARNATAKA

7/3  
HEAD  
Department of Chemistry  
I.A.D.C. and Centre For  
Research & Post Graduate Studies  
Bangalore - 560 043



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF CHEMISTRY  
FOUNDATION COURSE  
I Semester M.Sc – Organic Chemistry (2022-2024) Batch

RESOURCE PERSON: Dr.K.Shyamsunder  
Subject: Organic Chemistry (MCH\_102)  
SCHEDULED DAYS: 11-01-2023 to 20-02-2023

**INTRODUCTION TO FIRST SEMESTER M. Sc- CHEMISTRY**  
Aim: To provide a bridge course between UG and PG chemistry and making focus point for all the students of different backgrounds.  
To emphasize the basics of organic chemistry.  
Foundation Lectures in Organic Chemistry (MCH -102)

## Content

### Unit-I Basic concepts of electrochemistry(4 hrs)

- Cell, Description, Spontenity, Nernst equation

### Unit-II Reaction intermediates (2 hrs)

- Carbanioins, Electrophiles, Nucleophiles

### Unit-III VSEPER Theory (2 hrs)

- Bond angles, structure of molecules & its geometry

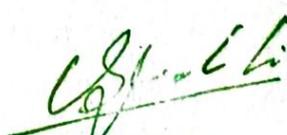
## Objectives:

1. To study the types of shapes of orbital, bonding and formation of molecules.
2. To study and understand the basics concepts of Electrochemistry
3. To study basic concepts of hybridization, bond angle, bond energy, bond order .  
Organic molecules.
4. To study basic concepts of aromaticity and stereochemistry.

## Learning Outcome:

Department of Chemistry  
L.A.D.C. and Centre For  
Research & Post Graduate Studies  
Bengaluru-560 043



  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD, KALYAN NAGAR  
BENGALURU-560043, KARNATAKA

1. Students will be able to apply the basic concepts of chemistry for further studies.
2. Students will be able to apply these basics in their regular curriculum.

**Methodologies adopted:**

**Power Point presentation and PDF**

**Evaluation: Test**

  
Department of Chemistry  
I.A.D.C. and Centre For  
Research & Post Graduate Studies  
Bangalore-560 043



  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD, KALYAN NAGAR  
BANGALORE-560043, KARNATAKA

# INDIAN ACADEMY

Degree College - Autonomous

## DEPARTMENT OF CHEMISTRY

### PRE SCREENING TEST FOR M.Sc.-I SEMESTER LIFE SCIENCE, MARCH-2022

1. A cathode and an anode are the most common components of an electrochemical cell. Which of the following claims about the cathode is correct?
- a) Oxidation occurs at the cathode
  - b) Electrons move into the cathode
  - c) Usually denoted by a negative sign
  - d) Is usually made up of insulating material
2. Which of the following claims about electrochemical cells is true?
- a) Cell potential is an extensive property
  - b) Cell potential is an intensive property
  - c) The Gibbs free energy of an electrochemical cell is an intensive property
  - d) Gibbs free energy is undefined for an electrochemical cell
3. Which of the following does not belong in the category of electrochemical cells?
- a) Voltaic cell
  - b) Photovoltaic cell
  - c) Electrolytic cell

HEAD  
Department of Chemistry  
L.A.D.C. and Centre For  
Research & Post Graduate Studies  
Bangalore-560 043



A handwritten signature in green ink, appearing to read "C. J. ...".

PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD, KALYAN NAGAR,  
BANGALORE-560043, KARNATAKA

# INDIAN ACADEMY

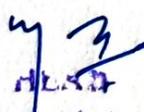
Degree College - Autonomous

## DEPARTMENT OF CHEMISTRY

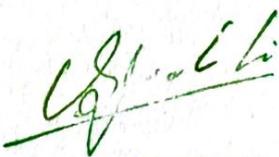
### PRE SCREENING TEST FOR M.Sc.-I SEMESTER Organic Chemistry, MARCH-2023

Sl.No.	Register Number	Student Name	Total Score
1	22IAMOS068	ABHINAV A.P	30/30
2	22IAMOS069	ADARSHA BS	28/30
3	22IAMOS070	ANIL KUMAR V	30/30
4	22IAMOS071	ANUSHA N M	27/30
5	22IAMOS072	AYESHA FATHIMA. S	27/30
6	22IAMOS073	BANU PRAKASH H.L	30/30
7	22IAMOS074	BHANUPRAKASH R	28/30
8	22IAMOS075	BHARGAVA LV	27/30
9	22IAMOS076	BHAVANI S	27/30
10	22IAMOS077	CHAITHANYA S K	30/30
11	22IAMOS078	CHAITHRA GN	28/30
12	22IAMOS079	DARSHAN R	28/30
13	22IAMOS080	GOWTHAMI GM	28/30
14	22IAMOS081	HARSHITHA R	28/30
15	22IAMOS082	INDRA M	30/30
16	22IAMOS083	KRISHNA MARUTIRAO	27/30
17	22IAMOS084	LIKITHKUMAR M U	27/30
18	22IAMOS085	MADAN C S	28/30
19	22IAMOS086	MANJUNATHA S P	28/30
20	22IAMOS087	MANOHARA S	28/30
21	22IAMOS088	MEGHAMALA C K	28/30
22	22IAMOS089	MOHINI AISHWARYA U	28/30
23	22IAMOS090	MURALI DB	27/30
24	22IAMOS091	N PAVITHRA	30/30

25	22IAMOS092	NANDHUSHREE H S	30/30
26	22IAMOS093	NANDINI M	26/30
27	22IAMOS094	NAVYA M	26/30
28	22IAMOS095	NAVYASHREE C M	26/30
29	22IAMOS096	NAYANA K R	30/30
30	22IAMOS097	RASOOL PARVEZ M B	26/30
31	22IAMOS098	ROHITH S	27/30
32	22IAMOS099	SALMANUL FARIS PATTANI THODU	29/30
33	22IAMOS100	SANDEEP RED	30/30
34	22IAMOS101	SANDHYA HD	29/30
35	22IAMOS102	SANIYA TABASUM	28/30
36	22IAMOS103	SHAILESHKUMAR HS	28/30
37	22IAMOS104	SHALOM RACHEL Y	28/30
38	22IAMOS105	SHAMA SULTHANA	29/30
39	22IAMOS106	SHARATH KUMAR G E	30/30
40	22IAMOS107	SHASHANK T S	27/30
41	22IAMOS108	SHRINATHA S	26/30
42	22IAMOS109	SIMRAN	26/30
43	22IAMOS110	SINDHU S N	26/30
44	22IAMOS111	SNEHA N	30/30
45	22IAMOS112	SRIKANTH RN	26/30
46	22IAMOS113	SUDEEP KR	26/30
47	22IAMOS114	SUPRITHA S	30/30
48	22IAMOS115	SUPRIYA R	26/30
49	22IAMOS116	SUSHMITHA R L	28/30
50	22IAMOS117	VEDHA CR	28/30
51	22IAMOS118	VISHNU BALAJI K	30/30

  
 Department of Chemistry  
 L.A.O.C. and Centre For  
 Research & Post Graduate Studies  
 Bangalore-560 043



  
 PRINCIPAL  
 INDIAN ACADEMY DEGREE  
 COLLEGE  
 HENUR MAIN ROAD, K  
 BANGALORE-560043





## Electrochemistry

1. **Electrochemistry** is the branch of chemistry which deals with the relationship between electrical energy and chemical energy and inter-conversion of one form into another.
2. An **electrochemical cell** consists of two metallic electrodes dipped in electrolytic solutions. The cells are of two types:  
(a) Electrolytic cells (b) Galvanic cells
3. A **galvanic cell** consists of two half cells. Each half cell contains an electrolytic solution and a metallic electrode. The electrode at which- oxidation takes place is called an anode and the electrode at which reduction takes place is called the cathode. The half-cells are separated from each other by means of a porous pot or a salt bridge.
4. The **passage of current from one electrode to the other** indicates the existence of potential difference between them. This difference of potential which causes current to flow from the electrode of higher negative potential is called the electromotive force (emf).
5. **Electrical energy = Emf (volts) x Quantity of electricity (coulombs)**
6. The potential of SHE is assigned an arbitrary value of zero.  $E^\circ = 0 \text{ V}$ . It is used as a reference electrode for measuring the standard electrode potentials.
7. When the elements are arranged in order of their standard electrode potentials, a series known as electrochemical series is obtained.
8. **Standard emf of a cell,**  
 $E^\circ_{\text{cell}} = E^\circ_{\text{cathode}} - E^\circ_{\text{anode}} = E^\circ_{\text{Right}} - E^\circ_{\text{Left}}$
9.  **$\Delta G^\circ = -nFE^\circ_{\text{cell}}$**   
If  $E^\circ_{\text{cell}}$  is positive,  $\Delta G^\circ$  would be negative and reaction would be spontaneous. If  $E^\circ_{\text{cell}}$  is negative,  $\Delta G^\circ$  would be positive and the reaction would be non-spontaneous.

rated.

Mass of substance A deposited or liberated / Mass of substance B deposited or liberated = current in amperes t = time in seconds, and Z = constant called electrochemical equivalent.

(b) **Second law:** When the same quantity of electricity is passed through solutions of different electrolytes, the weight of different substances deposited or liberated at the respective electrodes are proportional to their chemical equivalent weights.

## Reactive Intermediates

Reactive Intermediate in chemistry is a highly reactive, high energy and a short-lived molecule that will quickly turn into a stable molecule when it is generated in a chemical reaction. In certain cases, they are separated and stored. For example, Matrix Isolation and Low temperatures.

Matrix Isolation is a technique that is used experimentally in physics and chemistry that includes a material that has been trapped within an unreactive material. Host matrix generally comprises guest particles that are generally embedded. Guest particles can be molecules, atoms, and ions. The guest is isolated within the host matrix.

Department of Chemistry  
I.A.D.C. and Centre For  
Research & Post Graduate Studies  
Bangalore-560 043



PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
NUR MAIN ROAD, KALYAN NAGAR  
BANGALORE-560043, KARNATAKA

Reactive intermediates occur only in one of the intermediate steps but in the case of other chemical reactions, they take more than one elementary steps. It differs from a simple reaction intermediate or product or reactant only through fast spectrographic methods. Spectroscopy is a study of the interaction between electromagnetic radiation and matter. They are categorized based on the type of radiative energy used in the interaction.

#### Features Of Reactive Intermediate

Its existence can be proved with the help of chemical trapping. The chemical trap is nothing but a chemical compound that detects a molecule in certain cases, and they are illustrated below:

- When the molecule is highly reactive or when it cannot be determined by Spectroscopic means.
- When the concentration of the molecule is below the detection limit.
- When a molecule is present within the mixture, where elements of a component interfere with its detection.

It is hard to distinguish from a transition state. It is a state that corresponds to potential energy at a higher level along with a reaction coordinate. It is a type of chemical reaction that comprises a particular configuration along a reaction coordinate.

Here cage effects cannot be taken into consideration. In chemistry, the cage effect illustrates how molecular properties are affected by their surroundings. The cage particle must diffuse from its solvent cage in order to interact with other molecules.

# INDIAN ACADEMY

## Degree College - Autonomous

### FOUNDATION COURSE ON “CORPORATE ADMINISTRATION” FOR I BCOM ONLINE CLASSES STUDY MATERIAL-2022

#### COMPANY LAW :

Corporate law (also known as company law or enterprise law) is **the body of law governing the rights, relations, and conduct of persons, companies & organizations** . The term refers to the legal practice of law relating to corporations, or to the theory of corporations.

The objective of corporate law generally involves overseeing all legal and external affairs matters including **litigation, investigations, compliance, mergers and acquisitions, contract matters and international trade issues**.

The 29 chapters of the Companies Act-2013 is evolved with these rules and they are: **Incorporation of Company and Matters Incidental Thereto. Prospectus and Allotment of Securities. Share Capital and Debentures.**

#### Rules under Companies Act 2013

The Companies Act was evolved in the year 1913 based on the British Company Act 1908 and later modified in the year 1956 after independence. After India's growth into a

mammoth level and with the level of technology evolved around the globe which includes the globalized Economy, it became necessary to modify the Companies Act which happened in the year 2013. The objective of the Companies Act-2013 is to develop the act in terms of transparency, protecting the stake holders, setting up tribunals, and to enforce strict action on the defaulters. The rules regulated are described in this article.

### **Ingredients of Companies Act 2013**

The Companies Act 2013 has 29 Chapters, 470 sections, and 7 schedules .

## **FORMS OF BUSINESS ORGANISATION**

### **1) SOLE PROPRIETORSHIP SOLE PROPRIETORSHIP—**

Sole proprietorship also known as a **sole trader** is an unincorporated business that has just one owner who pays personal income tax on profits earned from the business. A sole proprietorship is the easiest type of business to establish or take apart, due to a lack of government regulation.

**2) JOINT HINDU FAMILY BUSINESS / HINDU UNDIVIDED FAMILY HUF** is a form of business organisation where in the business is owned & carried on by the member of HUF.

### **3) PARTNERSHIP:**

**Minimum number of partners 2 & maximum number of partners 100. Mutual business/ Agency-** The partners are the owners as well as the agent of their firm.

In **GENERAL PARTNERSHIP**, every partner has **unlimited liability**.

Partners have business motive & sharing profits.

**THE INDIAN PARTNERSHIP ACT 1932** - monitor & govern the partnership.

#### **PARTNERSHIP DEED :-**

A written legal document that contains an agreement made between 2 or more individuals intending to do business & share profits & losses.

### **4) CO OPERATIVE SOCIETIES :-**

A co-operative society is a voluntary association of individuals who come together with the intention to work together & to promote their economic interest.

As per 2021 data (11 August), India has **8 LAKHS** Registered **CO-OPERATIVE SOCIETIES**, especially in agricultural, banking & housing sectors.

**IFFCO** is the biggest co-operative in the world by the turnover on GDP per capita.

**---CO-OPERATIVE SOCIETIES ACT 1912.**

**---MULTI -STATE CO-OPERATIVE SOCIETIES ACT 2002.**

### **5) JOINT STOCK COMPANIES –**

**Meaning & Definition of COMPANY :-**The word 'COMPANY' is derived from LATIN WORD 'COM' which means 'with or together' & 'PANY' which means

'BREAD'.

A company thus may be defined as a voluntary association of persons formed for some common purpose, e.g. formed to carry on some business to earn profit or to promote art, science, education, sports or for some charitable purpose.

## **Features of a Company:**

A company is an **Artificial Person, Created by law** for some **specific purpose** whose **liability is limited** & has a **separate legal entity**, with **perpetual succession**.

## **CASES:**

### **SEPARATE LEGAL ENTITY:**

#### **1) SALOMAN Vs. SALOMAN & Co. Ltd. 1897**

Salomon and Company, Ltd., from personal liability to the creditors of the company he founded. The court also upheld firmly the doctrine of corporate personality, as set out in the Companies Act 1862, so that creditors of an insolvent company could not sue the company's shareholders to pay up outstanding debts. **2) LEE Vs. LEE'S AIR FARMING Ltd. 1960 :**  
**FACTS OF THE CASE**

In 1954 the appellant's husband Lee formed the company named LEE'S AIR FARMING LTD. for the purpose of carrying on the business of aerial top-dressing with 3000 thousand share of 1euro each forming share capital of the company and out of which 2999 shares were owned by Lee himself. Lee was also the director of the company. He exercised unrestricted power to control the affairs of the company and made all the decision relating to contracts of the company. Company entered into various contract with insurance agencies for insurance of its employees and few premiums of the policies were paid through companies bank account for the personal policies taken by Lee in its own name but it was debited in the account of lee in companies book. Lee apart from being the director of the company was also a pilot. In March, 1956, Lee was killed while piloting the aircraft during the course of aerial top-dressing. Lee's wife who is appellant claimed worker compensation under New Zealand Workers' Compensation Act, 1922 as she claimed that Lee during work as employee of the company. The New Zealand Court of Appeal declined the claim of appellant as it refused to hold that Lee was a worker, holding that a man could not in effect, employ himself.

#### **2) MACAURA Vs. NORTHERN ASSURANCE Co. Ltd. 1925**

### **HIGHLIGHTS OF COMPANIES ACT 2013:--**

The Indian Companies Act 2013 replaced the Indian Companies Act, 1956. The Companies Act 2013 makes comprehensive provisions to govern all listed and unlisted companies in the country. The Companies Act 2013 implemented many new sections and repealed the relevant corresponding sections of the Companies Act 1956. This is a landmark legislation with far-reaching consequences on all companies incorporated in India.

Indian Companies Act 2013 has fewer sections (470) than Companies Act 1956 (658). The new act empowers shareholders and gives high value for Corporate Governance.

### **Key Highlights of Indian Companies Act 2013**

- The maximum number of members (shareholders) permitted for a Private Limited Company is increased to 200 from 50.

- One-Person company.
- Section 135 of the Act which deals with Corporate Social Responsibility.
- Company Law Tribunal and Company Law Appellate Tribunal.

### **FORMATION OF COMPANY:-**

Following are the steps to form a company:-

- **PROMOTION**
- **INCORPORATION**
- **RAISING OF CAPITAL**
- **COMMENCEMENT OF BUSINESS**

**PROMOTION** :- Promotion of a company is the first important preliminary stage where in necessary steps are taken for the registration of a company.

**PROMOTER** :- The persons who undertake the task of promotion are known as **PROMOTERS**. A Promoter may be an individual, a firm or body corporate. The promoters of a company stands in a **Fiduciary Position**.

**Case: Erlanger Vs. New Sombrero Phosphate Co. 1878.**

A promoter is a person who does the necessary preliminary work for the formation of a company i.e. someone who takes all the necessary steps to bring into existence an incorporated company. Therefore, a promoter is the first person who is in charge of a company's affairs and it is they who have to take a company through initial legal compliances and any other operations necessary for incorporation into the Companies Act 2013. **Promoter u/s 2(69) of the Companies Act 2013:** The term 'Promoter' can be defined as the following- **A person who has been named as such in a prospectus or is identified by the company in the annual return in section 92.**

### **RIGHTS OF PROMOTER:-**

- **RIGHT TO RECEIVE PRELIMINARY EXPENSES**
- **RIGHT TO RECOVER PROPORTIONATE AMOUNT FROM HIS CO-PROMOTERS.**
- **RIGHT TO REMUNERATION.**

### **DUTIES OF PROMOTERS :-**

- **Duty to Disclose-**The promoter is under a duty to disclose fully all the material facts relating to the formation of a company.
- **Not to Make any Secret Profit. ...**
- **Duty to Give Benefits of Negotiations to the Company. ...**
- **Not to make Unfair Use of his Position. ...**

- Limitations of Promotional Remuneration.

## **INCORPORATION:**

**Incorporation is the legal process used to form a corporate entity or company. A corporation is the resulting legal entity that separates the firm's assets and income from its owners and investors.**

### **Steps before proceeding with the procedure of filing documents:**

- 1) **DIN (DIRECTOR'S IDENTIFICATION NUMBER)** has to be obtained.
- 2) **Digital signatures** of the Promoters.
- 3) Both **DIN & Digital Signatures** will be registered with **MCA (Ministry of Corporate Affairs) Portal**.
- 4) After registration & verification of DIN & digital Signatures of the promoter, the promoter has to sign an **e-form**. To sign the e-form few steps like availability of name to be taken.

### **Formalities to obtain Certificate of Incorporation :**

**a) Application Form:** An application shall be filed with ROC in form No. INC.2 ( for one person company) & form No. INC. 7 ( (other than one person company). [under the Companies (Registration Offices & Fees) Rules,2014 & Companies(Incorporation) Rules,2014]

#### **b) Documents to be filed with the registrar-**

1) **MOA**

2) **AOA**

3) **Declaration-** by an advocate, a C.A. or Cost Accountant or Company Secretary in practice and director, manager or secretary that all the requirements of this Act & the rules made thereunder in respect of registration are fulfilled & followed.

4) **Affidavit-** from each of the subscribers to the memorandum & first directors that he is **not convicted of any offence in connection** with promotion, formation or management of any company.

5) **Address of Correspondence till the Registered office is established.**

6) **Particulars of Subscribers-** Name, Surname, Residential address, Nationality etc.

7) **Particulars of First Directors-** DIN ,Name, Surname or Family name ,Residential Address, Nationality etc.

8) **Power of Attorney**

**e) CERTIFICATE OF INCORPORATION , CIN [ SEC 7 (2)] :**

On registration, the Registrar will issue a CIN in form INC – 11 where by he certifies that the company is incorporated.

### **DOCUMENTS OF THE COMPANY:**

**1) MOA:**Memorandum of association of a company is an important corporate document in certain jurisdictions. It is often simply referred to as the memorandum. In the UK, it has to be filed with the Registrar of Companies during the process of incorporating a company. **2)AOA:** In corporate governance, a company's articles of association is a document which, along with the memorandum of association form the company's constitution, and defines the responsibilities of the ...

**3)PROSPECTUS:** Prospectus sets out the prospects & the purpose of the company for which the capital is required. Any invitation issued to the public inviting it to deposit money with the company or to take shares or debentures of the company.

### **MANAGEMENT OF THE COMPANY:**

- 1) COMPANY SECRETARY :**The word **SECRETARY** is derived from the **LATIN** word '**SECRETARIUS**' which means a confidential writer or notary.
- 2) DIRECTORS:** are the persons by whom the business of the company is carried on.
- 3) AUDITOR:** who performs the task of auditing- conducting an official financial inspection of (a company or its accounts)."unlimited companies must also have their accounts audited".

### **MEETINGS OF A COMPANY :**

A company meeting may be defined as **a concurrence or coming together of at least a quorum of members in order to transact either ordinary or special business of the company.**

#### **Types of meetings :**

**They are broadly classifies as follows:**

- **Shareholders Meeting: -**

- **Statutory Meetings :** Statutory meeting is **the meeting of shareholders of a company**. According to Sec 165 of the companies act, every public limited by shares or limited by guarantee, having share capital must hold this meeting. This meeting is held once in the lifetime of a company. A private company need not hold this meeting.

**Annual General Meeting:** An Annual General Meeting (AGM) is **held to have an interaction between the management and the shareholders of the company**. The Companies Act, 2013 makes it compulsory to hold an annual general meeting to discuss the yearly results, auditor's appointment and so on.07-Apr-2022

**Content of Notice:** The notice must include the framework laid down by the circular. As ...

**Quorum of the AGM:** All the members physically present in the meeting and those att...

**Place of conducting AGM:** At any other place in the district where the registered office ...

**Mode of conducting a meeting:** The meeting must be conducted through Video Conf.

**Extra-ordinary General Meeting:** An EGM is also known as an emergency general meeting or special general meeting.

- Class Meetings : When a meeting is called for/ by a particular class. e.g. preference shareholders' meeting.

•Directors Meeting:

•Other Meetings:

- Creditors Meeting (Sec. 230)
- Debenture Holders Meeting with the Board of Directors.
- Audit Committee Meeting (Sec. 177)
- Nomination and Remuneration Committee Meeting (Sec. 178)

#### **WINDING UP OF A COMPANY:-**

Winding up of a company is a process of putting an end to the life of the company.

In the course of dissolution its assets are collected & debts are paid off.

#### **Ways for a company to cease to exist in the eye of law:**

- 1) Under a scheme of reconstruction & amalgamation of a company.
- 2) When the company becomes a defunct company, means no longer in function.
- 3) Through Winding up process.

# INDIAN ACADEMY

Degree College - Autonomous

## FOUNDATION COURSE ON "CORPORATE ADMINISTRATION" Pre-Assessment Marks List of 1<sup>st</sup> B. Com Online Classes for the Academic Year 2022-2023

SI No	Name Of the student	Total Marks	Marks Scored
1.	Bharath. B.R	10	5
2.	Manoj S R	10	4
3.	Vishal	10	5
4.	Prince Maher	10	5
5.	Gayathri. K	10	6
6.	Latha S	10	6
7.	Akshay j	10	6
8.	Gagan R	10	3
9.	Parthiban	10	5
10.	Mohammed sharieff	10	4
11.	Komal.R	10	7
12.	Martha vellian	10	5
13.	Pasha	10	6
14.	Maria Blessy	10	8
15.	Mohammad Laise	10	5
16.	Dharshan Raj M	10	4
17.	Manzoor Ahmed savadatti	10	4
18.	Moses A	10	4
19.	Saran.N.M.	10	3
20.	S,Mark Ethan	10	6
21.	Abhishek C	10	5
22.	Sam	10	5
23.	Gideon Selva Kumar	10	6
24.	Jeevan.v	10	4
25.	Shaik arfath ahmed	10	5
26.	Dhanush RM	10	4
27.	Fareed babai m	10	4
28.	M.Trishala	10	5
29.	Sunil shahi . H	10	5
30.	Syed Mohammad sabir	10	4
31.	Imran basha	10	5

32.	Vinay B	10	5
33.	Mohammed zeeshan	10	3
34.	Vidhya shree S	10	6
35.	Anusha J	10	4
36.	Sian	10	3
37.	Syed Zaid	10	7
38.	Murtuza hussain	10	6
39.	Dryva Dikshitha N	10	5
40.	Eshwari R	10	3
41.	Deepak B	10	7
42.	Rahul s	10	4
43.	Muralidhar P	10	5
44.	Sabitha shree A	10	6
45.	Mahaveeee	10	2
46.	Bhuvaneshwari S	10	5
47.	Abdul Azeez	10	2
48.	Samuel A	10	6
49.	MIRZA FARAAZ BAIG	10	5
50.	Vikram E	10	6
51.	Sunny	10	6
52.	Uzair	10	7
53.	Shakthi vell	10	3
54.	Tejas s	10	6
55.	Kavitha k	10	3
56.	R Rajesh	10	6
57.	Pramila R	10	5
58.	Yashwanth m	10	3
59.	ANSH MENDEKAR	10	7
60.	Stephen Raj S	10	3
61.	Varsha V	10	4
62.	Priya K Mandal	10	5
63.	Goutham s	10	5
64.	R Cristiano Ronaldo	10	5
65.	AnushaG	10	6
66.	Shalini s	10	5
67.	Ravi Kiran B	10	7
68.	Gunavathi T M	10	7
69.	Ajith J	10	7
70.	Joshua Y B	10	7

# CORPORATE ADMINISTRATION PRE ASSESSMENT TEST- ( 2022-2023)

INSTRUCTIONS:

\*TOTAL MARKS: 10

\*ALL THE QUESTIONS ARE MANDATORY TO ANSWER.

\*Each Question carries 2 Marks

\* Required

1. Email \*

---

2. STUDENT NAME \*

---

3. CLASS AND SECTION \*

---

4. 1.The person who sign the MOA of a Company are called: \*

*Mark only one oval.*

SHAREHOLDERS

DIRECTORS

PROMOTERS

SUBSCRIBERS

5. 2. Every company has to file with registrar a copy of: \*

Mark only one oval.

- AOA
- PROSPECTUS
- MOA
- NONE OF THE ABOVE

6. 3.The Company Act 1956 was repealed by \*

Mark only one oval.

- Companies Act 2002
- Companies Act 2013
- Companies Act 2005
- Companies Act 2015

7. 4.Which of the following is the feature of a registered company? \*

Mark only one oval.

- Transferability of Shares
- Limited Liability
- Perpetual Succession
- All of the Above

8. 5.Minimum number of members in case of private company is: \*

Mark only one oval.

- TWO
- SEVEN
- FIFTY
- TWENTY

# INDIAN ACADEMY DEGREE COLLEGE AUTONOMOUS - I YEAR B.COM CORPORATE ADMINISTRATION POST ASSESSMENT TEST- ( 2022-2023)

INSTRUCTIONS:

\*TOTAL MARKS: 20

\*ALL THE QUESTIONS ARE MANDATORY TO ANSWER.

\*Each Question carries 2 Marks

\* Required

1. STUDENT NAME \*

\_\_\_\_\_

2. SECTION \*

*Mark only one oval.*

I B.COM A

I B.COM B

3. 1. Minimum number of members to form a public company is \*

*Mark only one oval.*

5

7

12

21

4. 2. The company needs to obtain prior permission from central government when it changes the address of its registered office from

Mark only one oval.

- one city to another city
- with in the same city
- one state to another
- one country to another country

5. 3.A person cannot hold directorship in more than \_\_\_\_\_public companies \*

Mark only one oval.

- 3
- 10
- 20
- 7

6. 4. Powers, rights, remuneration, qualification and duties of directors are discussed clearly in \*

Mark only one oval.

- Memorandum of Association
- Articles of Association
- Prospectus
- none of the above

10. 8. The company will be considered as separate person and different from its members from the date (when the) \_\_\_\_\_ \*

Mark only one oval.

- start of business
- Apply for registration
- receive incorporation certificate
- mentioned in certificate

11. 9. prospectus is issued by \*

Mark only one oval.

- A private company
- A public company seeking investment from public
- A public enterprise
- A public company

12. 10. Minimum number of members to form a private company is \*

Mark only one oval.

- 2
- 3
- 5
- 7

This content is neither created nor endorsed by Google.

Google Forms

# INDIAN ACADEMY

Degree College - Autonomous

FOUNDATION COURSE ON "CORPORATE ADMINISTRATION"

Post Assessment Marks List of 1<sup>st</sup> B.Com Online Classes for the Academic

Year 2022-2023

CLASS: 1<sup>st</sup> B.COM A SEC

FACULTY: Ms. Revathi.S

Sl No	Name Of the student	Total Marks	Marks Score
1	Albin V.A	20	12
2	Dharshan Raj M	20	13
3	Bharath B.R	20	14
4	Manoj Kumar Sharma	20	14
5	Akshay.J	20	11
6	Eshwari R	20	10
7	Janani	20	13
8	Goutham S	20	12
9	Pasha	20	12
10	B Ramana Gokul	20	13
11	Imran Basha	20	14
12	Anusha J	20	10
13	Martha Vellian	20	14
14	Parthiban	20	12
15	Anshu Sahu	20	12
16	Mahesh Bhandari	20	12
17	Kiran.R	20	16
18	Vinay .B	20	16
19	Mahaveer	20	14
20	Abdul Azeez	20	16
21	Chaitra A	20	8
22	Sian Lydia	20	12
23	M.Trishala	20	13
24	Gayathri. A	20	14
25	Abhishek C	20	20
26	Deepak Franklin B	20	14
27	Ebenezer	20	18
28	Dhanush RM	20	14
29	Shakti Abishek	20	12

30	Komal.R	20	16
31	Gideon Selva Kumar	20	12
32	Manzoor Ahmed Savadatti	20	10
33	Bhuvaneshwari.S	20	16
34	Gunavathi T M	20	16
35	Kavitha.K	20	16
36	Chaya	20	14
37	Chetan Shahi	20	16
38	Jeevan.V	20	14
39	Mirza Faraaz Baig	20	12
40	Maria Blessy	20	16
41	Anusha.G	20	10
42	Prince Maher	20	12
43	Joshua Y B	20	12
44	Fareed	20	12
45	Gayathri. K	20	10
46	Manoj S R	20	16
47	Divya Dikshitha.N	20	18
48	Latha.S	20	10
49	Akash Phutane M	20	18
50	Deepak.B	20	12
51	Gagan R	20	18
52	Kashif Parveez	20	20
53	Darshan D	20	20
54	Hemalatha R	20	12

**CLASS: 1<sup>st</sup> B.COM B SEC**  
**FACULTY: Ms. Pallavi**

Sl.No	Name Of the student	Total Marks	Marks Score
1	Mohammad Yaseen	20	12
2	Moses A	20	13
3	Rahul A S	20	12
4	Mohammad Laise	20	13
5	S.Mark Ethan	20	19
6	Rahul S	20	13
7	Ravi Kiran.B	20	14
8	Sharath Kumar. N.	20	13
9	Sam	20	12
10	R Cristiano Ronaldo	20	13

11	Sunil Shahi . H	20	18
12	Rohith Kumar	20	12
13	Shalini S	20	12
14	Mohammad Sharieff	20	12
15	Yashwanth	20	14
16	Syed Mohammad Sabir	20	18
17	Shakthivell	20	12
18	Syed Zaid	20	15
19	Yubrajshahi	20	16
20	Priya Darshini. M	20	18
21	Sunny	20	17
22	Rajesh. V	20	18
23	Vignesh D	20	16
24	R Rajesh	20	14
25	Vikram.E	20	12
26	Priya K Mandal	20	13
27	Tejas	20	13
28	Sabitha Shree.A	20	18
29	Prem	20	15
30	Muralidhar.P	20	15
31	Mohammed Saqib	20	16
32	Vidhya Shree. S	20	15
33	Vishal	20	16
34	Samuel.A	20	14
35	Varsha V	20	14
36	Pramila.R	20	18
37	Poornima.L	20	17
38	Murtuza Hussain	20	18
39	Uma Maheshwari	20	20
40	Shaik Arfath Ahmed	20	16
41	Stephen Raj	20	16
42	Vanessa	20	16

# INDIAN ACADEMY

## Degree College - Autonomous

BCOM FOUNDATION COURSE - I SEM A SECTION 2022-23

SL NO.	NAMES	9.15-10.10 5/9/22	11.15-12.10 7/9/22	11.15-12.10 8/9/22	9.15-10.10 9/9/22	12.15-1.10 10/9/22	10.15-11.10 13/9/22	11.15-12.10 14/9/22	12.15-1.10 15/9/22	9.15-10.10 16/9/22
1	ABDUL AZEEZ	1	3	4	5	6	7	8	9	10
2	ABHISHEK C	1	3	4	5	Ab	6	7	Ab	8
3	AJITH J	Ab	2	Ab	Ab	Ab	3	Ab	4	Ab
4	AKSHAY J	1	3	4	5	6	7	8	9	10
5	AL SYED FADHA FATHA	Ab	Ab	Ab	Ab	Ab	Ab	1	Ab	2
6	ALBIN VA	1	2	Ab	Ab	Ab	3	4	Ab	5
7	ANSH LOKESH MENDEKAR	1	2	3	4	Ab	5	6	Ab	7
8	ANSHU SAHU	1	3	Ab	4	5	6	Ab	7	8
9	ANUSHA G	1	3	4	5	6	7	8	9	10
10	ANUSHA J	1	Ab	Ab	3	Ab	Ab	Ab	Ab	4
11	AVAIZ PASHA	1	3	4	5	6	7	8	9	10
12	BHARATH B R	1	3	4	5	Ab	6	7	Ab	8
13	BHUVANESHWARI	Ab	2	Ab	3	Ab	4	Ab	5	6
14	CHAYA RAJU	Ab	2	3	4	5	6	7	8	9
15	CHEZHAN SHAHI	1	Ab	Ab	3	Ab	Ab	Ab	Ab	4
16	PARTHIBAN	1	3	4	5	Ab	6	7	Ab	8
17	DEEPAK B	1	Ab	Ab	3	Ab	4	Ab	5	6
18	DEEPAK FRANKLIN B	1	2	Ab	3	Ab	4	5	6	7
19	DHANUSH R M	1	2	4	Ab	5	6	7	8	9
20	DHARSHAN RAJ M	1	2	4	5	6	7	8	9	Ab
21	DIVYA DIKSHITHA N	1	3	Ab	4	5	6	7	8	10
22	ESHWARI R	1	3	4	5	6	7	8	9	Ab
23	ESTHER SARAH PJ	Ab	Ab	Ab	Ab	Ab	6	7	Ab	8
24	FAREED BABAI M	1	Ab	3	4	5	6	7	Ab	8
25	GAGAN F	1	2	Ab	Ab	Ab	4	5	Ab	Ab
26	GAYATHRI A	1	Ab	Ab	5	6	7	8	9	5

M. Subramanyam  
HOD  
DEPT. OF COMMERCE  
Academy Degree Col.

Muthoor

HOD  
DEPT. OF COMMERCE  
Indira Academy Degree Col  
KALYAN NAGAR, BANGALURU

	5/9	6/9	7/9	8/9	9/9	10/9	13/9	14/9	15/9
27 GAYATHRI K	1	2	3	4	5	6	7	8	9
28 GIDEON SELVA KUMAR	1	AB	2	3	AB	AB	4	5	6
29 GOUTHAM S	1	2	3	4	5	6	7	8	9
30 GUNAVATHI TM	1	2	3	4	5	6	7	8	9
31 IMRAN BASHA	1	2	3	4	5	6	7	8	9
32 JANANI PARAMESH	1	AB	2	AB	AB	AB	3	4	5
33 JAYANTH J M	1	2	AB	AB	3	AB	AB	AB	4
34 JEEVAN V	1	2	AB	3	4	AB	5	6	7
35 JOSHUA Y B	AB	1	2	AB	AB	AB	AB	3	AB
36 KAVITHA K	AB	1	2	3	4	5	AB	6	7
37 KIRAN R	AB	AB	AB	AB	AB	AB	1	2	AB
38 KOMAL R	1	2	3	4	5	6	7	8	9
39 LATHA S	1	2	3	4	5	AB	6	7	8
40 M TRISHALA	1	2	3	4	5	AB	6	7	8
41 MAHAVEER	1	2	3	4	AB	5	6	7	8
42 MANOJ KUMAR SHARMA S	AB	1	AB	AB	2	3	4	5	6
43 MANOJ S R (ACCA)	1	2	3	4	5	6	7	8	9
44 MANZOOR AHMED SAVADATTI	AB	AB	1	2	3	AB	4	5	6
45 MARIA BLESSY	1	2	3	4	5	AB	6	7	8
46 MARTHA VELLIAN	1	2	3	4	5	6	7	8	9
47 MIRZA FARAAZ BAIG	1	2	3	4	AB	5	6	7	8
48 MOHAMMED ZEESHAN (ACCA)	1	2	3	4	5	6	7	8	9
49 PRINCE MAHER (ACCA)	1	AB	2	3	4	5	6	7	8
50 SHAKTHI ABISHEK S (ACCA)	1	AB	AB	AB	AB	AB	2	3	4
51 SIAN LYDIA (ACCA)	1	2	3	4	AB	AB	AB	AB	AB
52 VINAY B (ACCA)	1	2	AB	3	4	AB	AB	AB	5
53. MEMALATHA .R	AB	AB	AB	AB	AB	AB	AB	1	2
54. KASHIF PARVEEZ	AB	AB	AB	AB	AB	AB	AB	AB	2
55. MAHESH BHANDARI . P	AB	AB	AB	AB	AB	AB	AB	AB	2
56. EBENEZER . R	AB	AB	AB	AB	AB	AB	AB	AB	2



B

# INDIAN ACADEMY

## Degree College - Autonomous

12/15-11/10

17/9

B. C. O.P. FOUNDATION COURSE - I SEM B SECTION 2022-23

SL NO.	NAME	5/9	6/9	7/9	8/9	9/9	10/9	13/9	14/9	15/9	16/9
1	MOHAMMED LAISE	1	2	3	Ab	4	5	6	7	8	9
2	MOHAMMED MUSTAFA	1	Ab	Ab	Ab	Ab	2	Ab	Ab	Ab	Ab
3	MOHAMMED SAQIB B	1	Ab	Ab	Ab	Ab	Ab	7	Ab	2	Ab
4	MOHAMMED SHARIEFF	1	2	3	4	5	6	7	Ab	8	9
5	MOHAMMED YASEEN	1	2	3	Ab	Ab	Ab	4	Ab	5	Ab
6	MURALIDAR P.	1	2	3	4	5	Ab	6	7	8	9
7	MURTUZA HUSSAIN	1	Ab	2	3	Ab	4	5	Ab	6	Ab
8	POORNIMA L	Ab	Ab	1	Ab	Ab	Ab	2	3	4	Ab
9	FRAKASH RAI	1	Ab	Ab	2	4	4	5	Ab	6	7
10	PRAMILA R	1	Ab	2	3	4	Ab	Ab	5	6	Ab
11	PREM P	1	2	3	4	5	6	7	8	9	10
12	PRIYA DARSHINI M	1	Ab	Ab	2	3	4	5	6	7	Ab
13	PRIYA K MANDAL	1	2	3	4	5	6	7	8	9	Ab
14	R. CRISTIANO RONALDO	1	2	3	4	5	6	7	8	9	10
15	RAHUL AS	Ab	Ab	Ab	1	Ab	Ab	Ab	2	Ab	Ab
16	RAHUL S	1	2	3	4	Ab	Ab	5	6	7	8
17	RAJESH R	1	2	3	4	Ab	5	6	7	8	9
18	RANJITH V	1	2	3	4	Ab	Ab	5	6	7	Ab
19	RAVI KIRAN B	1	2	3	4	Ab	Ab	6	7	8	Ab
20	ROHIT KUMAR K	1	2	3	Ab	Ab	Ab	4	5	6	Ab
21	ROSHAN KUMAR M	Ab	1	2	Ab	Ab	6	3	4	5	Ab
22	S MARK ETHAN	1	2	3	4	5	6	7	8	9	Ab
23	SABITHA SHREE A	1	2	3	4	5	6	7	8	9	Ab
24	SAM D	1	2	3	4	5	6	7	8	9	Ab
25	SAMUEL A	1	2	3	Ab	Ab	Ab	4	Ab	5	Ab
26	SANTOSH SUBBA	1	Ab	Ab	2	Ab	3	4	Ab	5	Ab
27	SARAN N M	1	2	Ab	3	4	Ab	5	Ab	6	Ab
28	SHAIK ARFATH AHMED	1	2	3	4	5	Ab	6	7	8	Ab
29	SHAKTHI VELL	1	2	3	4	5	6	7	8	9	Ab
30	SHALINI S	1	2	3	4	5	6	7	8	9	Ab

12/15-11/10  
17/9  
HOD  
DEPT. OF COORDINATORS  
Academy Degree College  
Indian National  
University



**INDIAN ACADEMY**  
Degree College - Autonomous

**DEPARTMENT OF COMPUTER SCIENCE**

**BRIDGE COURSE**

**BCA / B.Sc 2022 – 23**

**PROBLEM SOLVING TECHNIQUES USING C**

**Date: 05.09.22 – 15.09.22**

**DURATION: 08 HOURS**



**Handled By: Mr. Regis Britto Arokia Raja K**



**HOD: Ms. Anuradha P**  
Head  
Department of Computer Science  
Indian Academy Degree College  
Hennur Cross, Hennur Main Road  
Bangalore-560043



**PRINCIPAL**  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD, KALYAN NAGAR  
BANGALORE-560043, KARNATAKA

# INDIAN ACADEMY

Degree College – Autonomous

## COMPUTER SCIENCE

### Bridge Course- BCA / B.Sc 2022-2023 Problem Solving Techniques using C

Date: 05.09.22 – 15.09.22

#### Course Objectives:

- To bridge the gap between computer science and non-computer science background students
- To make learners familiar with basic components and functionalities of a computer
- To make learners to understand the basic concepts of C programming
- To prepare the students to apply the programming logics to develop applications using C language

#### Course Outcomes:

At the end of the course the students will be able to

- Understand the fundamentals and working flow of a computer
- Understand the importance of programming languages to continue BCA course
- Demonstrate algorithms and flowchart for a given problem
- Apply building blocks of C language to develop programs

#### Course Content:

1. Basic Computer Organization.  
Assignment- Generation of Computers, Types of Memory
2. Problem Solving
3. Algorithm, Flow Chart, Languages, Translators.  
Examples, Assignments on Algorithm and flow chart.

**COMPUTER SCIENCE**  
**Bridge Course- BCA / B.Sc 2022-2026**  
**Problem Solving Techniques using C**

**Prescreening Test**

**Date: 06/09/2022**

**Time: 30 Minutes**

**Max. Marks: 15**

1. Who is the father of Computers?
  - James Gosling
  - Charles Babbage
  - Dennis Ritchie
  - Bjarne Stroustrup
2. Which of the following language does the computer understand?
  - Computer understands only C Language
  - Computer understands only Assembly Language
  - Computer understands only Binary Language
  - Computer understands only BASIC
3. Which of the following is the brain of the computer?
  - Central Processing Unit
  - Memory
  - Arithmetic and Logic unit
  - Control unit
4. Which of the following is the smallest unit of data in a computer?
  - Bit
  - KB
  - Nibble
  - Byte
5. Storage which stores or retains data after power off is called-
  - Volatile storage
  - Non-volatile storage
  - Sequential storage
  - Direct storage
6. Which of the following is fastest memory?
  - Secondary Memory
  - Auxiliary Memory
  - Cache Memory
  - Virtual Memory
7. Any data or instruction entered into the memory of a computer is considered as?
  - Input
  - Output
  - Storage
  - Information
8. What is an algorithm?
  - A flowchart
  - A pseudocode
  - A decision
  - Step by step instructions used to solve a problem

9. In a flowchart, an input or output instruction is represented by \_\_\_\_\_ ?
- A diamond
  - Parallelogram
  - Rectangle
  - A circle
10. To repeat a task, we use a \_\_\_\_\_ ?
- Input
  - Loop
  - Condition
  - Output
11. Who invented C Language?
- Charles Babbage
  - Dennis Ritchie
  - Graham Bell
  - Steve Jobs
12. C is \_\_\_\_\_ type of programming language?
- Object Oriented
  - Bit level language
  - Procedural
  - Functional
13. Find a correct C Keyword below:
- work
  - constant
  - case
  - permanent
14. Operator % in C Language is called?
- Percentage Operator
  - Modulus
  - Quotient Operator
  - Division
15. What is the limit for number of functions in a C Program?
- 16
  - 5
  - 32
  - None of the above

## Pre-screening- Mark statement

### Problem Solving Techniques using C

I Sem BCA		
Sl.No	Name of the Students	Marks Obtained (Converted to 10)
1	ABDULSHAIIEZ	5
2	ABHILASH CHODE	5
3	ABHINAYA.M	5
4	ABHISHEK S	AB
5	ADHEEP.S	7
6	ALIYA NIGAR	5
7	ALLAN JOSH. M	5
8	AMRUTHA.S	6
9	ANKIT SAINI	6
10	BALAJI G	5
11	CHAND JUNAID	AB
12	CHANDAN.S	6
13	CHETHAN KUMAR.S	7
14	DARSHAN.M	5
15	DARSHAN.V	5
16	DEEPAK	AB
17	DEEPANSH PANDEY	7
18	DEESHNAV PP	7
19	DENZIL DEMINE	7
20	DHANASHREE VIJAY BHATKAR	6
21	DHANUSH.N	6
22	DHANUSHREE G S	6
23	DHUMBI.R.M	5
24	DIVYA.S	5
25	DRUVISHA. R	6
26	G BALAJI	AB
27	GOWTHAM	5
28	GURU PRASAD	7
29	HARI KRISHNAN R K	AB
30	HARSHITHA.A	AB
31	HARSHA PRIYA. N	8
32	HELEN JOICE .S	AB
33	JEEVAN GURUNG	6
34	JIBRAN AHMED	4
35	JASWANTH.D	AB
36	K JEEVITHA	7

		9
37	KEERTHANA	5
38	KV NIKITHA	2
39	LAHARI C.B	9
40	LIVINGSTON L	7
41	M BHARATH	4
42	MADHAN.F	7
43	MADIHA NOOR	7
44	MANISH SAINI	6
45	MANOJ KUMAR	5
46	MARIA JASMINE L	7
47	MARIES IYYAPPAN	4
48	MERLIN	6
49	MISBAH FARHEEN	6
50	MOHAMMED TAMEEM	7
51	MOHAMMED ABDUR RAHMAN	3
52	MOHAMMAD ZUBAIR UL HUSSAIN	5
53	MOHAMMED AFFAN. M	AB
54	MOHAMMED AMEEN	8
55	MOHAMMED FAIZAN PASHA	10
56	MOHAMMED ILYAS AHMED	6
57	MOHAMMED NOORUL AMEEN	6
58	MOHAMMED OWAIZ	1
59	MOHAMMED TALHA M	AB
60	MOHAMMED TAMEEM	AB
61	MOHAMMED ZAKWAAN	AB
62	MOHAMMED ZUBAIR UL HUSSAIN	AB
63	MOHIT SHARMA	AB
64	MOMEEN KULSUM	4
65	MONISHA	AB
66	MUFEEDA. M	AB
67	N DANIEL STEVEN	4
68	NAFISA	5
69	NANDHINI V	2
70	NAMRATHA. R	AB
71	NEERAJA	6
72	NIKHAT TABASSUM	6
73	NIKHIL S B	AB
74	Nisha	3
75	NIYAS MUHAMMED	3
76	P. DHARSHAN	AB
77	PANKAJ	5
78	PAVAN KUMAR .D	9
79	PAVAN P	8

80	P
81	P
82	P
83	P
84	P
85	P
86	P
87	P
88	R
89	R
90	R
91	P
92	F
93	F
94	F
95	F
96	F
97	S
98	S
99	S
100	
101	
102	
103	
104	
105	
106	
107	
108	
109	
110	
111	
112	
113	
114	
115	
116	
117	
118	
119	
120	
121	
122	

80	PAVITHRA P	5
81	POOJA CA	4
82	POOJITHA.M	AB
83	PRASEELA RAJ	5
84	PRATHIMA	3
85	PRINCE	6
86	PRIYA GUPTA J	7
87	PRIYANKA.K	4
88	RABIN JOSE	5
89	RAHUL.R	5
90	RAJENDRA	AB
91	RAJESH M V	AB
92	RASHMI. P	3
93	RAVINDRANATH.V	7
94	RAYHAN ULLA SHARIFF	6
95	ROBIN JOSE	AB
96	RITISH K	3
97	S JYOTHIRMAYEE	5
98	S.NISHA GOPIKA	AB
99	SAM B SUNNY	6
100	SAMBIT BISWAL	6
101	SAMSON N	6
102	SANIA MUBEEN	5
103	SANJAY Y	4
104	SANTHOSH.M	7
105	SEEMA GURJAR	5
106	SHAHISTHA BEGUM	7
107	SHALINI.A	6
108	SHREYA. C	AB
109	SHREYAS MD	3
110	SHREYASH MOGAVEERA	7
111	SIMRAN. S	5
112	SNEHA.C	AB
113	SOWMYA. R	7
114	SREE HARISH. P K	7
115	SUFRA ARA M	AB
116	SWAGATH R P	AB
117	SWATHI. R	6
118	SYED ABDUL KHADIR	5
119	SYED HAMMAAD MEHDI	7
120	SYED MUTAHIR ANAS	7
121	T. MUHAMMAD ADYAN	9
122	THARUN P	6

123	TRISHA.U	AB
124	UJALA KUMARI	7
125	UROOJ KHAN	7
126	V. NANDHINI	AB
127	VINCENT DE PAUL	AB
128	VISHAL S	4
129	YASHAWINI	AB
<b>I Sem B.Sc</b>		
1	CHETANA KS	3
2	RITISHA K	AB
3	GOWTHAMI. G	7
4	HAMSA M	AB
5	PRIYA JAISWAL	7
6	RACHANA U	5
7	SAMSON N	AB
8	SIMRAN. R	AB

*(Handwritten signature)*

*Anandha*  
 Head  
 Department of Computer Science  
 Indian Academy Degree College  
 Hennur Cross, Hennur Main Road,  
 Bangalore-560043.

*(Handwritten signature)*  
 PRINCIPAL  
 INDIAN ACADEMY DEGREE COLLEGE  
 AUTONOMOUS  
 HENNUR MAIN ROAD, KALYAN NAGAR  
 BANGALORE-560043, KARNATAKA

## Computer

A computer is a fast and accurate device, which can accept data, store data, process them and give, desired results as output. The computer is organized into four units as shown in the following diagram.

In computer engineering, micro-architecture, also called computer organization, is the way a given instruction set architecture is implemented on a processor. A given ISA may be implemented with different micro-architectures.

Computer organization consist of following parts

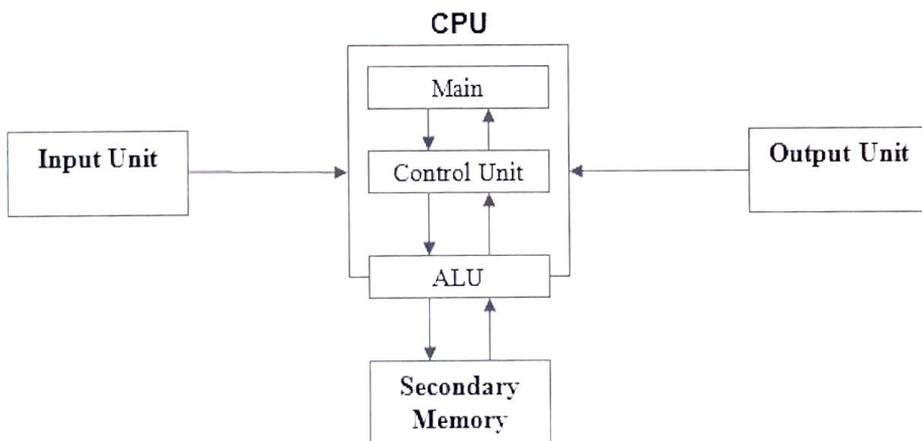
1. CPU – central processing unit
2. Memory
3. Input devices
4. Output devices

### CPU – central processing unit

#### Introduction

It is alternatively referred to as the **brain of the computer**, **processor**, **central processor**, or **microprocessor**, the **CPU** (pronounced as C-P-U) was first developed at Intel with the help of Ted Hoff in the early 1970's and is short for **Central Processing Unit**. The computer CPU is responsible for handling all instructions it receives from hardware and software running on the computer.

CPU is considered as the brain of the computer. CPU performs all types of data processing operations. It stores data, intermediate results and instructions (program).It controls the operation of all parts of computer.



CPU itself has following three components

1. **ALU (Arithmetic Logic Unit)**  
All arithmetic calculations and logical operation are performed using the Arithmetic/Logical Unit or ALU

## 2. Memory Unit

A memory is just like a human brain. It is used to store data and instruction. Computer memory is used to store information being processed by the CPU

## 3. Control Unit

Control unit help to perform operations of input unit, output unit, Memory unit and ALU in a sequence.

## Memory

Computer **memory** is any physical device capable of storing information temporarily or permanently. For example, Random Access Memory **RAM** is a type of volatile memory that stores information on an integrated circuit, and that is used by the operating system, software, hardware, or the user.

### Computer memory divided into two parts

#### 1. Volatile memory

Volatile memory is a temporary memory that loses its contents when the computer or hardware device loses power. eg. RAM

#### 2. Non-volatile memory

Non-volatile memory keeps its contents even if the power is lost. Example: ROM or EPROM is a good example of a non-volatile memory

## Input Devices

A device that can be used to insert data into a computer system is called as input device. It allows people to supply information to computers. An **input device** is any hardware device that sends data to the computer, without any input devices, a computer would only be a display device and not allow users to interact with it, much like a TV. The most fundamental pieces of information are keystrokes on a *keyboard* and clicks with a *mouse*. These two input devices are essential for you to interact with your computer. Input devices represent one type of computer **peripheral**. Examples of input devices include keyboards, **mouse**, scanners, digital cameras and joysticks.

## Output Devices

A device which is used to display result from a computer is called as **output device**. It Allows people to receive information from computers. An **output device** is any peripheral that receives or displays output from a computer. The picture shows an inkjet printer, an output device that can make a hard copy of anything being displayed on a monitor. Output device is electronic equipment connected to a computer and used to transfer data out of the computer in the form of text, images, sounds or print.

Examples of output devices include Printer, Scanner, Monitor, etc.

## Computer Programming

### Introduction

Intelligence is one of the key characteristics which differentiate a human being from other living creatures on the earth. Basic intelligence covers day to day problem solving and making strategies to handle different situations which keep arising in day to day life. One person goes Bank to

withdraw money. After knowing the balance in his account, he/she decides to withdraw the entire amount from his account but he/she has to leave minimum balance in his account. Here deciding about how much amount he/she may withdraw from the account is one of the examples of basic intelligence. During the process of solving any problem, one tries to find the necessary steps to be taken in a sequence. In this Unit you will develop your understanding about problem solving and approaches.

### **Problem Solving**

Can you think of a day in your life which goes without problem solving? Answer to this question is of course, No. In our life we are bound to solve problems. In our day to day activity such as purchasing something from a general store and making payments, depositing fee in school, or withdrawing money from bank account. All these activities involve some kind of problem solving. It can be said that whatever activity a human being or machine do for achieving a specified objective comes under problem solving. To make it clearer, let us see some other examples.

**Example 1:** If you are watching a news channel on your TV and you want to change it to a sports channel, you need to do something i.e. move to that 2 channel by pressing that channel number on your remote. This is a kind of problem solving.

**Example 2:** One Monday morning, a student is ready to go to school but yet he/she has not picked up those books and copies which are required as per timetable. So here picking up books and copies as per timetable is a kind of problem solving.

**Example 3:** If someone asks to you, what is time now? So seeing time in your watch and telling him is also a kind of problem solving.

**Example 4:** Some students in a class plan to go on picnic and decide to share the expenses among them. So calculating total expenses and the amount an individual have to give for picnic is also a kind of problem solving.

Now, broadly we can say that problem is a kind of barrier to achieve something and problem solving is a process to get that barrier removed by performing some sequence of activities. Here it is necessary to mention that all the problems in the world cannot be solved. There are some problems which have no solution and these problems are called Open Problems. If you can solve a given problem then you can also write an algorithm for it. In next section we will learn what an algorithm is.

### **2 Algorithms**

Algorithm can be defined as: "A sequence of activities to be processed for getting desired output from a given input."

Webopedia defines an algorithm as: "A formula or set of steps for solving a particular problem. To be an algorithm, a set of rules must be unambiguous and have a clear stopping point". There

may be more than one way to solve a problem, so there may be more than one algorithm for a problem.

Now, if we take definition of algorithm as: "A sequence of activities to be processed for getting desired output from a given input." Then we can say that:

1. Getting specified output is essential after algorithm is executed.
2. One will get output only if algorithm stops after finite time.
3. Activities in an algorithm to be clearly defined in other words for it to be unambiguous.

Before writing an algorithm for a problem, one should find out what is/are the inputs to the algorithm and what is/are expected output after running the algorithm. Now let us take some exercises to develop an algorithm for some simple problems: While writing algorithms we will use following symbol for different operations:

'+' for Addition

'-' for Subtraction

'\*' for Multiplication

'/' for Division and

'=' for assignment. For example  $A = X^3$  means A will have a value of  $X^3$ .

## 2.1 Simple Algorithms

**Problem 1:** Find the area of a Circle of radius r.

**Inputs to the algorithm:**

Radius r of the Circle.

**Expected output:**

Area of the Circle

**Algorithm:**

Step1: Read\input the Radius r of the Circle

Step2: Area  $PI * r * r$  // calculation of area

Step3: Print Area

**Problem2:** Write an algorithm to read two numbers and find their sum.

**Inputs to the algorithm:**

First num1.

Second num2.

**Expected output:**

Sum of the two numbers.

**Algorithm:**

Step1: Start

Step2: Read\input the first num1.

Step3: Read\input the second num2.

Step4: Sum num1+num2 // calculation of sum

Step5: Print Sum

Step6: End

**Problem 3: Convert temperature Fahrenheit to Celsius Inputs to the algorithm:**

Temperature in Fahrenheit

**Expected output:**

Temperature in Celsius

**Algorithm:**

Step1: Start

Step 2: Read Temperature in Fahrenheit F

Step 3:  $C = 5/9*(F-32)$

Step 4: Print Temperature in Celsius: C

Step 5: End

## 2.2 Type of Algorithms

The algorithm and flowchart, classification to the three types of control structures. They are:

1. Sequence
2. Branching (Selection)

### 3. Loop (Repetition)

These three control structures are sufficient for all purposes. The sequence is exemplified by sequence of statements placed one after the other – the one above or before another gets executed first. In flowcharts, sequence of statements is usually contained in the rectangular process box.

The branch refers to a binary decision based on some condition. If the condition is true, one of the two branches is explored; if the condition is false, the other alternative is taken. This is usually represented by the 'if-then' construct in pseudo-codes and programs. In flowcharts, this is represented by the diamond-shaped decision box. This structure is also known as the selection structure.

#### **Problem 1: write algorithm to find the greater number between two numbers**

Step1: Start  
Step2: Read/input A and B  
Step3: If A greater than B then C=A  
Step4: if B greater than A then C=B  
Step5: Print C  
Step6: End

#### **Problem 2: Write an algorithm to find the largest value of any three numbers.**

Step1: Start  
Step2: Read/input A, B and C  
Step3: If  $(A \geq B)$  and  $(A \geq C)$  then Max=A  
Step4: else if  $(B \geq A)$  and  $(B \geq C)$  then Max=B  
Step5: else Max=C  
Step6: Print Max  
Step7: End

The loop allows a statement or a sequence of statements to be repeatedly executed based on some loop condition. It is represented by the 'while' and 'for' constructs in most programming languages, for unbounded loops and bounded loops respectively. (Unbounded loops refer to those whose number of iterations depends on the eventuality that the termination condition is satisfied; bounded loops refer to those whose number of iterations is known before-hand.) In the flowcharts, a back arrow hints the presence of a loop. A trip around the loop is known as iteration. You must ensure that the condition for the termination of the looping must be satisfied after some finite number of iterations, otherwise it ends up as an infinite loop, a common mistake made by inexperienced programmers. The loop is also known as the repetition structure.

Examples:

**Problem1: An algorithm to calculate even numbers between 0 and 99**

1. Start
2.  $I \leftarrow 0$
3. Write I in standard output
4.  $I \leftarrow I+2$
5. If ( $I \leq 98$ ) then go to line 3
6. End

**Problem2: Design an algorithm which gets a natural value, n, as its input and calculates odd numbers equal or less than n. Then write them in the standard output:**

1. Start
2. Read n
3.  $I \leftarrow 1$
4. Write I
5.  $I \leftarrow I + 2$
6. If ( $I \leq n$ ) then go to line 4
7. End

**Problem3: Design an algorithm which generates even numbers between 1000 and 2000 and then prints them in the standard output. It should also print total sum:**

1. Start
2.  $I \leftarrow 1000$  and  $S \leftarrow 0$
3. Write I
4.  $S \leftarrow S + I$
5.  $I \leftarrow I + 2$
6. If ( $I \leq 2000$ ) then go to line 3 else go to line 7
7. Write S
8. End

**Problem4: Design an algorithm with a natural number, n, as its input which calculates the following formula and writes the result in the standard output:**

$$S = \frac{1}{2} + \frac{1}{4} + \dots + \frac{1}{n}$$

1. Start
2. Read n
3.  $I \leftarrow 2$  and  $S \leftarrow 0$
4.  $S = S + 1/I$
5.  $I \leftarrow I + 2$
6. If ( $I \leq n$ ) then go to line 4 else write S in standard output
7. End

Combining the use of these control structures, for example, a loop within a loop (nested loops), a branch within another branch (nested if), a branch within a loop, a loop within a branch, and so

forth, is not uncommon. Complex algorithms may have more complicated logic structure and deep level of nesting, in which case it is best to demarcate parts of the algorithm as separate smaller modules. Beginners must train themselves to be proficient in using and combining control structures appropriately, and go through the trouble of tracing through the algorithm before they convert it into code.

### 2.3 Properties of Algorithm

Donald Ervin Knuth has given a list of five properties for an algorithm, these properties are:

- 1) Finiteness:** An algorithm must always terminate after a finite number of steps. It means after every step one reach closer to solution of the problem and after a finite number of steps algorithm reaches to an end point.
- 2) Definiteness:** Each step of an algorithm must be precisely defined. It is done by well thought actions to be performed at each step of the algorithm. Also the actions are defined unambiguously for each activity in the algorithm.
- 3) Input:** Any operation you perform need some beginning value/quantities associated with different activities in the operation. So the value/quantities are given to the algorithm before it begins.
- 4) Output:** One always expects output/result (expected value/quantities) in terms of output from an algorithm. The result may be obtained at different stages of the algorithm. If some result is from the intermediate stage of the operation then it is known as intermediate result and result obtained at the end of algorithm is known as end result. The output is expected value/quantities always have a specified relation to the inputs.
- 5) Effectiveness:** Algorithms to be developed/written using basic operations. Actually operations should be basic, so that even they can in principle be done exactly and in a finite amount of time by a person, by using paper and pencil only.

### 3 Flowcharts

The flowchart is a diagram which visually presents the flow of data through processing systems. This means by seeing a flow chart one can know the operations performed and the sequence of these operations in a system. Algorithms are nothing but sequence of steps for solving problems. So a flow chart can be used for representing an algorithm. A flowchart, will describe the operations (and in what sequence) are required to solve a given problem. You can see a flow chart as a blueprint of a design you have made for solving a problem.

For example suppose you are going for a picnic with your friends then you plan for the activities you will do there. If you have a plan of activities then you know clearly when you will do what activity. Similarly when you have a problem to solve using computer or in other word you need to write a computer program for a problem then it will be good to draw a flowchart prior to writing a computer program. Flowchart is drawn according to defined rules.

3.1 FL

There  
Termi  
comp  
of AS

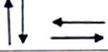

3. 1

1. 2  
2. 1  
Th  
3.  
4.  
as  
5.

6.  
7.  
st  
8.

### 3.1 Flowchart Symbols

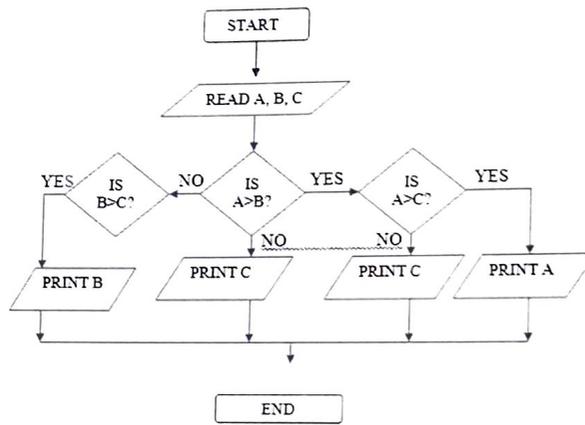
There are 6 basic symbols commonly used in flowcharting of assembly language Programs: Terminal, Process, and input/output, Decision, Connector and Predefined Process. This is not a complete list of all the possible flowcharting symbols, it is the ones used most often in the structure of Assembly language programming.

Symbol	Name	Function
	Process	Indicates any type of internal operation inside the Processor or Memory
	input/output	Used for any Input / Output (I/O) operation. Indicates that the computer is to obtain data or output results
	Decision	Used to ask a question that can be answered in a binary format (Yes/No, True/False)
	Connector	Allows the flowchart to be drawn without intersecting lines or without a reverse flow.
	Predefined Process	Used to invoke a subroutine or an Interrupt program.
	Terminal	Indicates the starting or ending of the program, process, or interrupt program
	Flow Lines	Shows direction of flow.

### 3.2 General Rules for Flowcharting

1. All boxes of the flowchart are connected with Arrows. (Not lines)
2. Flowchart symbols have an entry point on the top of the symbol with no other entry points. The exit point for all flowchart symbols is on the bottom except for the Decision symbol.
3. The Decision symbol has two exit points; these can be on the sides or the bottom and one side.
4. Generally a flowchart will flow from top to bottom. However, an upward flow can be shown as long as it does not exceed 3 symbols.
5. Connectors are used to connect breaks in the flowchart. Examples are:
  - From one page to another page.
  - From the bottom of the page to the top of the same page.
  - An upward flow of more than 3 symbols
6. Subroutines and Interrupt programs have their own and independent flowcharts.
7. All flow charts start with a Terminal or Predefined Process (for interrupt programs or subroutines) symbol.
8. All flowcharts end with a terminal or a contentious loop.

**Problem 5:** Draw a flowchart to find the largest of three numbers A, B, and C.

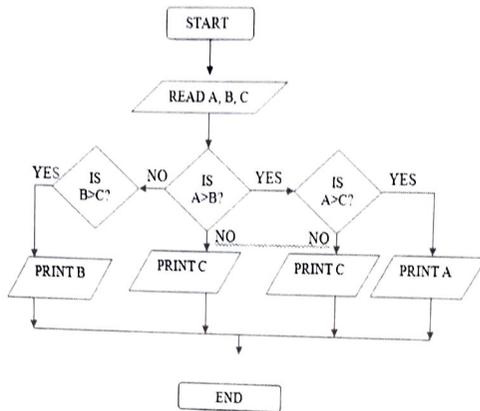


### 3.4 Advantages of Using Flowcharts

Flow chart is used for representing algorithm in pictorial form. This pictorial representation of a solution/system is having many advantages. These advantages are as follows:

- 1) **Communication:** A Flowchart can be used as a better way of communication of the logic of a system and steps involve in the solution, to all concerned particularly to the client of system.
- 2) **Effective analysis:** A flowchart of a problem can be used for effective analysis of the problem.
- 3) **Documentation of Program/System:** Program flowcharts are a vital part of a good program documentation. Program document is used for various purposes like knowing the components in the program, complexity of the program etc.

**Problem 5:** Draw a flowchart to find the largest of three numbers A, B, and C.



### 3.4 Advantages of Using Flowcharts

Flow chart is used for representing algorithm in pictorial form. This pictorial representation of a solution/system is having many advantages. These advantages are as follows:

- 1) **Communication:** A Flowchart can be used as a better way of communication of the logic of a system and steps involve in the solution, to all concerned particularly to the client of system.
- 2) **Effective analysis:** A flowchart of a problem can be used for effective analysis of the problem.
- 3) **Documentation of Program/System:** Program flowcharts are a vital part of a good program documentation. Program document is used for various purposes like knowing the components in the program, complexity of the program etc.

4) **Efficient Program Maintenance:** Once a program is developed and becomes operational it needs time to time maintenance. With help of flowchart maintenance become easier.

5) **Coding of the Program:** Any design of solution of a problem is finally converted into computer program. Writing code referring the flowchart of the solution become easy.

Sl. No.	Admission No.	NAME OF THE INSTITUTE : IADCA	NAMES	1	2	3	4	5	6	7	8	9	10	11	12
				$\frac{5}{9}$	$\frac{6}{9}$	$\frac{7}{9}$	$\frac{8}{9}$	$\frac{10}{9}$	$\frac{11}{9}$	$\frac{12}{9}$					
1.			A. Kaushik	0	0	0	0	0	2	3	0				
2.			Abhilash Chode	1	0	2	3	4	5	6	7	8			
3.			Abhishek.s	0	0	1	2	3	0	4	5	6			
4.			Alhan Josh M.	1	0	2	3	4	5	0	6	0			
5.			Ankit Saini	1	2	3	4	0	5	6	7				
6.			Bommini Naga Shom naidu	0	0	0	0	0	1	0	0				
7.			Charan.v.	0	0	0	2	0	0	3	0	0			
8.			Chethan Kumar.s	1	2	3	4	5	0	0	0				
9.			Darshan .M.	1	0	0	0	0	0	0	0				
10.			Deepansh Pandey.	1	2	3	4	5	6	7	8				
11.			Deeshnav pif.	1	2	3	4	5	6	7	8				
12.			Denzil Demone	1	2	0	0	0	0	0	3				
13.			Dhanashreevijay Bhatkar.	1	2	3	4	5	0	6	7	8			
14.			Dhanush .N.	1	2	3	4	5	6	7	8				
15.			Dhanushree G.S.	1	2	3	4	5	0	6	7	8			
16.			DVJA.S.	1	2	3	4	5	6	7	8				
17.			Druvisha. R.	1	2	3	4	0	5	6	7				
18.			Growthan p.	1	2	3	0	0	4	5	0				
19.			Harikrishna R.K	0	0	0	0	0	0	1	2	0			
20.			Harsha Prjya. N.	1	0	2	3	4	0	5	6	0			
21.			K.v. Nikitha.	1	2	3	4	5	6	7	8				
22.			Manish Saini.	1	2	3	4	0	5	6	7				
23.			Manji Kumar.	1	0	0	0	0	2	3	4				
24.			Manias Tyjapan	1	0	2	3	0	4	0	0				
25.			Misbah Farhaan	1	2	0	3	4	5	6	7	8			
26.			Mohammed Abdur Rahman	0	0	0	1	0	2	3	4				
27.			Mohammed Faizou Paska	1	2	3	0	0	4	5	6				
28.			Mohammed Noor ulama	1	2	3	4	5	6	7	8				

Number present M  
Daily E

10/5	11/5	10/5	10/5	9/5	11/5	9/5									
------	------	------	------	-----	------	-----	--	--	--	--	--	--	--	--	--

Initials M  
E

Q	Q	Q	Q	Q	Q	Q									
---	---	---	---	---	---	---	--	--	--	--	--	--	--	--	--

Sl. No.

Admission  
No.

NAME OF THE INSTITUTE

NAMES

1 2 3 4 5 6 7 8 9

28	Mohammed awaz	1	2	3	4	5	6	7	8
29	Mohammed Talha M.	1	2	3	0	0	0	4	0
30	Mohammed Zubair ull	1	2	3	4	5	6	7	8
31	Hussan.	0	1	2	3	4	5	6	7
32	Manisha.K.	1	2	3	4	5	6	7	8
33	Nandhini.V	0	0	0	1	0	2	0	3
34	Nisha Gopika.S.	1	2	3	4	5	6	7	8
35	Niyas Mohammed	1	2	3	4	5	6	7	8
36	Pankaj	1	2	3	4	5	6	7	8
37	Pooja C.A.	1	2	3	4	5	6	7	8
38	Poojitha. M.	1	2	3	4	5	6	7	8
39	Priya Gupta. J.	1	2	3	4	0	5	6	7
40	Priyanka.K	1	2	3	0	4	0	0	0
41	Puligundla Arun Teja	0	0	0	0	0	0	0	0
42	Rahul. R	1	2	3	4	5	0	0	0
43	Rajendra. A	0	1	2	3	0	4	5	6
44	Rajesh M.V.	0	0	1	2	3	4	0	5
45	Rashmi. P.	1	2	3	4	5	6	0	0
46	Rayhanulla Shariff	1	2	3	4	0	5	6	7
47	S. Jothirajee	1	2	3	4	5	6	7	8
48	Shahistha Begum.	1	2	3	0	4	0	5	0
49	Shreyas. C.K.	1	2	3	4	5	0	0	0
50	Shreyas M.D.	1	2	3	4	5	6	7	8
51	Sonu Singh	0	0	0	1	0	0	0	0
52	Sowmya. R	1	0	2	0	0	3	4	0
53	Sree Harish. P.K	1	2	3	4	5	6	7	8
54	Swagath. R.P.	0	0	1	2	3	4	0	0
55	Syed Abdul Khadir.	1	2	3	4	0	5	6	7
56	Syed Hamzad.	1	2	3	4	5	6	7	0

Number present M  
Daily EInitials M  
E

No. on roll at the beginning of month.

Admitted during the month.

Left No. on roll at end of month

# REGISTER OF ATTENDANCE & FEES

SL. No.	Admission No.	NAME OF THE INSTITUTE : <u>JADLA</u>	NAMES	1	2	3	4	5	6	7	8	9	10	11	12	
				57	Syed Inayath A.A	0	1	2	0	0	0	0	0	0		
58	Syed Mubahir Anas	1	2	3	0	0	0	4	0							
59	Trisha. U.	0	1	2	0	0	0	0	0							
60	Ujala Kumari.	1	2	3	0	4	5	6	7	8						
61	Urooj Khan	1	2	3	4	0	5	6	7							
62	Velu Y.	0	1	2	0	0	0	3	0							
63	Mohit Sharma	—————							1	2	3	4				
64	Mufeeda. M	—————								1	2	3				
65	Sufra Ara. M	—————									1	2				
66	Namratha. R	—————										1	2			
67	Chand Junaid	—————										1	2			
68	Sneha. C	—————										1	2			
69	Nikhil. S. B	—————											1			
70	Varun. K.	—————														
71	Aakash Thakur	—————														
72	Dhanush. V. R.	—————														
73	Jai Aditya. S.	—————														
74	Kavya. C.	—————														
75	Samson	—————														

Number present	M														
Daily	E														
Initials	M	A A A A A A A A A A A A A A A A													
	E														

SL. No.	Admission No.	NAME OF THE INSTITUTE :	NAMES	1	2	3	4	5	6	7	8	9		
				<del>5</del>	<del>6</del>	<del>7</del>	<del>8</del>	<del>9</del>	<del>10</del>	<del>11</del>	<del>12</del>	<del>13</del>	<del>14</del>	<del>15</del>
(ELCS)	1.	Chetana. K'S		1	2	3	0	4	0	0	0	5		
	2.	Rikisha K.		1	2	0	3	0	4	0	0			
(MACE)	3.	Gowthami. G.		1	2	3	4	5	6	7	8			
	4.	Priga. J		1	2	3	4	5	6	7	8			
	5.	Rachana. U		1	2	3	0	4	5	6	7			
	6.	Samson. N		1	2	3	0	4	5	6	0			
(ELCS)	7.	Simran. R		—		1	0	2	3	4	5			
(MAW)	8.	Hamsa. M		—										1

Number present	M	10.15	11.15	10.15	10.15	11.15	10.15	11.15
Daily	E	10.15	11.15	10.15	10.15	11.15	10.15	11.15
Initials	M	①	②	③	④	⑤	⑥	⑦
	E	⑧	⑨	⑩	⑪	⑫	⑬	⑭

SL. No.	Admission No.	NAME OF THE INSTITUTE : IADCA	NAMES	1	2	3	4	5	6	7	8	9	10	11	12
				1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
1.			Abdul Shaiqez.	1	2	3	4	5	6	7	8				
2.			Abhinaya m.	1	2	3	4	5	6	7	8				
3.			Adhaaf. S.	1	2	3	4	5	6	7	8				
4.			Aliya Nigar	1	2	3	4	5	6	7	8				
5.			Amrutha. S.	1	2	0	03	4	5	0	0				
6.			Balaji. G	1	2	3	0	0	4	5	6				
7.			Chandam. S.	1	2	3	4	5	6	7	8				
8.			Daniel Steven. N.	1	2	3	4	0	5	0	0				
9.			Darshan. v.	1	2	3	04	0	5	6	7				
10.			Dhumbi R. M.	1	2	3	4	5	6	7	8				
11.			Gowtham. P.	1	2	3	4	5	6	7	8				
12.			Guru Prasad	1	2	3	4	5	0	0	6				
13.			Harshitha. A	0	1	2	3	4	5	6	7				
14.			Heben Joice	0	1	2	3	4	5	6	7				
15.			Jeevan Gurung.	1	0	0	2	3	4	5	6				
16.			Jeevitha. K	1	2	3	4	5	6	7	8				
17.			Jibran Ahmed	1	2	3	4	5	6	7	8				
18.			Keerthana L	0	0	1	02	03	4	0	0				
19.			Livingston L	1	2	3	4	0	5	6	0				
20.			M. Bharath	1	2	3	04	05	6	7	8				
21.			Madhan. F.	1	2	3	4	5	6	7	8				
22.			Madiha Noor.	1	2	3	4	5	6	7	8				
23.			Marie Jasmine. L	1	2	3	4	5	6	7	8				
24.			Merlin.	1	2	0	0	0	3	4	5				
25.			Mohammed Athar M.	1	2	3	4	5	6	7	8				
26.			Mohammed Ameer	1	2	0	03	4	5	0	6				
27.			Mohammed Ilyas Ahmed.	1	2	3	4	5	6	7	8				
28.			Mohammed Tauseen	01	2	0	3	4	5	6	7				

Number present M  
Daily E

11/11 10/11 9/11 8/11 10/11 11/11 9/11 10/11

Initials M  
E

Q Q Q Q Q Q Q Q

Sl. No.	Admission No.	NAME OF THE INSTITUTE	IADCA								
			NAMES								
			1	2	3	4	5	6	7	8	9
29		M-hammed Zekwan	0	0	0	0	0	0	1	2	3
30		Muneez kulsum	1	2	3	4	5	6	7	8	
31		Nafisa.	1	2	3	4	5	6	7	8	
32		Neeraja P.	1	0	2	3	4	5	6	7	
33		Nikhil Tabassum	1	2	3	4	5	6	7	8	
34		Nisha.	1	0	2	3	4	5	6	7	
35		P. Dharshan	1	0	2	0	0	3	4	5	
36		Pavan Kumar D.	1	2	0	3	4	5	0	6	7
37		Pavan P.	1	2	3	4	5	6	7	8	
38		Pavithra	1	2	3	0	0	4	5	6	
39		Pavithra P.	1	2	3	4	5	6	7	8	
40		Praseela Raj.	1	2	3	4	5	6	7	8	
41		Prathima Yadav.	1	2	3	4	5	6	7	8	
42		Prince A	1	2	3	0	4	0	5	6	7
43		Priya Jaiswal	0	0	0	0	0	0	0	0	
44		Rabin Jose v.	1	2	3	4	5	0	0	6	
45		Rajesh P.	0	0	0	0	0	0	0	0	
46		Raivindranath	1	2	3	4	5	6	0	7	
47		Sam B Sunny	1	2	3	0	4	0	5	6	7
48		Sambit Biswal	1	0	2	3	4	5	6	7	8
49		Sania Mubeen	1	2	3	4	0	5	6	7	
50		Saijay. Y.	1	2	3	4	0	5	6	7	
51		Saikhosh. M.	1	2	3	4	0	5	6	7	
52		Seema Gurjar	1	2	3	4	5	6	7	8	
53		Shalini. A	1	2	3	4	5	6	7	8	
54		Shreya. C	1	2	3	4	5	6	7	8	
55		Shreyash Mogsveers	0	0	1	2	0	3	4	5	
56		Sumran. S.	1	2	3	4	5	6	7	8	

Number present	M								
Daily	E								
Initials	M								
	E								

# REGISTER OF ATTENDANCE & FEES

SL. No.	Admission No.	NAME OF THE INSTITUTE: <u>JADCA</u>												
		NAMES	1	2	3	4	5	6	7	8	9	10	11	12

57	Sweethi. R.	1	2	3	4	5	6	7	8						
58	T. Muhammad Adjar	1	2	3	4	5	6	7	8						
59	Tharun P.	1	2	0	3	0	0	0	0						
60	Vincent De Paul	0	1	2	3	0	4	0	5						
61	Vishal. S.	1	2	0	0	3	4	5	6	7					
62	Yashwanth. B.	0	0	0	1	0	0	2	3	4					
63	Lahari C.V	1	2	3	4	5	6	7	8						
64	Deepak P									1					
65	Jaswanth D														
66	Priya S.														
67	Hajeera Banu														
68	Moses Jaisoff														
69	Freshanth. V														
70	M. Indu														
71	Priya Gupta. J	Skipped from A sec													
72	Sheepikha. A														
73	Afnan Shaif														
73	Mohammad Danish														

Number present	M	
Daily	E	
Initials	M	P P P P P P P P P P P P P P P P
	E	

**BRIDGE COURSE ASSESSMENT TEST**  
**COMPUTER SCIENCE**  
**Problem Solving Techniques using C**

**Date: 15.09.2022**  
**Time: 30 Minutes**

**Max. Marks: 10**

1. Which of the following language does the computer understand?
  - Computer understands only C Language
  - Computer understands only Assembly Language
  - Computer understands only Binary Language
  - Computer understands only BASIC
  
2. Which of the following is not a function of the Input Unit?
  - It reads instructions and data from the outside world
  - It converts the data into computer acceptable format
  - It makes the data into user understandable format
  - It supplies the data and instructions to the computer for further processing
  
3. The process of producing useful information for the user is called \_\_\_\_\_
  - Controlling
  - Outputting
  - Inputting
  - Processing
  
4. Which of the following is the brain of the computer?
  - Central Processing Unit
  - Memory
  - Arithmetic and Logic unit
  - Control unit
  
5. The two basic types of memory in a computer are \_\_\_\_\_
  - Primary and major
  - Primary and Secondary
  - Minor and Major
  - Main and virtual
  
6. Storage which stores or retains data after power off is called-
  - Volatile storage
  - Non-volatile storage
  - Sequential storage
  - Direct storage
  
7. What is an algorithm?
  - A flowchart
  - A pseudocode
  - A decision
  - Step by step instructions used to solve a problem
  
8. In a flowchart, a calculation (process) is represented by

- A rectangle
- A rhombus

- A parallelogram
- A circle

9. \_\_\_\_\_ symbol used when the decision or condition to be checked.

- Connector
- Terminal Box
- Input/ Output
- Decision

10. Who invented C Language?

- Charles Babbage
- Grahambel
- Dennis Ritchie
- Steve Jobs

**BRIDGE COURSE ASSESSMENT TEST  
COMPUTER SCIENCE**

**Problem Solving Techniques using C**

**Mark Statement**

I Sem BCA		
Sl.No	Name of the Students	Marks Obtained (Out of 10)
1	ABDUL SHAIIEZ	8
2	ABHILASH CHODE	8
3	ABHINAYA.M	9
4	ABHISHEK S	10
5	ADHEEP S	8
6	ALIYA NIGAR	7
7	ALLAN JOSH. M	8
8	AMRUTHA.S	AB
9	ANKIT SAINI	8
10	BALAJI G	AB
11	CHAND JUNAID	9
12	CHANDAN	8
13	CHETHAN KUMAR S	7
14	DARSHAN.M	4
15	DARSHAN.V	9
16	DEEPAK	7
17	DEEPANSH PANDEY	9
18	DEESHNAV P P	7
19	DENZIL DEMINE	8
20	DHANASHREE VIJAY BHATKAR	9
21	DHANUSH.N	8
22	DHANUSHREE G S	9
23	DHUMBI.R.M	8
24	DIVYA.S	8
25	DRUVISHA R	8
26	G BALAJI	8
27	GOWTHAM.P	9
28	GURU PRASAD	9
29	HARI KRISHNAN R K	9
30	HARSHITHA.A	7
31	HARSHA PRIYA. N	AB
32	HELEN JOICE .S	8
33	JEEVAN GURUNG	8
34	JIBRAN AHMED	8
35	JASWANTH.D	4
36	K JEEVITHA	10

37	KEERTHANA C	6
38	KV NIKITHA	9
39	LAHARI CB	9
40	LIVINGSTON L	7
41	M BIARATH	9
42	MADHAN.F	9
43	MADIHA NOOR	8
44	MANISH SAINI	8
45	MANOJ KUMAR	5
46	MARIA JASMINE L	9
47	MARIES IYYAPPAN	9
48	MERLIN.C	9
49	MISBAH FARHEEN	9
50	MOHAMMED TAMEEM	AB
51	MOHAMMED ABDUR RAHMAN	8
52	MOHAMMAD ZUBAIR UL HUSSAIN	AB
53	MOHAMMED AFFAN. M	7
54	MOHAMMED AMEEN	8
55	MOHAMMED FAIZAN PASHA	9
56	MOHAMMED ILYAS AHMED	8
57	MOHAMMED NOORUL AMEEN	7
58	MOHAMMED OWAIZ	8
59	MOHAMMED TALHA M	7
60	MOHAMMED TAMEEM	9
61	MOHAMMED ZAKWAAN	10
62	MOHAMMED ZUBAIR UL HUSSAIN	5
63	MOHIT SHARMA	8
64	MOMEEN KULSUM	7
65	MONISHA	9
66	MUFEEDA. M	7
67	N DANIEL STEVEN	AB
68	NAFISA	7
69	NANDHINI. V	AB
70	NAMRATHA. R	9
71	NEERAJA	8
72	NIKHAT TABASSUM	8
73	NIKHIL. S B	9
74	NISHA A	7
75	NIYAS MUHAMMED	6
76	P. DHARSHAN	8
77	PANKAJ	6
78	PAVAN KUMAR D	9
79	PAVAN P	8
80	PAVITHRA P	7
81	POOJA CA	9

82	POOJITHA.M	8
83	PRASEELA RAJ	9
84	PRATHIMA	8
85	PRINCE.A	9
86	PRIYA GUPTA J	9
87	PRIYANKA.K	9
88	RABIN JOSE	AB
89	RAHUL. R	7
90	RAJENDRA	9
91	RAJESH M V	8
92	RASHMI. P	6
93	RAVINDRANATH.V	8
94	RAYHAN ULLA SHARIFF	9
95	ROBIN JOSE	8
96	RITISH K	AB
97	S JYOTHIRMAYEE	8
98	S.NISHA GOPIKA	4
99	SAM B SUNNY	10
100	SAMBIT BISWAL	8
101	SAMSON N	AB
102	SANIA MUBEEN	10
103	SANJAY Y	8
104	SANTHOSH M	9
105	SEEMA GURJAR	8
106	SHAHISTHA BEGUM	9
107	SHALINI.A	10
108	SHREYA. C	7
109	SHREYAS MD	5
110	SHREYASH MOGAVEERA	7
111	SIMRAN. S	10
112	SNEHA.C	6
113	SOWMYA. R	8
114	SREE HARISH P K	9
115	SUFRA ARA M	8
116	SWAGATH R P	6
117	SWATHI. R	7
118	SYED ABDUL KHADIR	8
119	SYED HAMMAAD MEHDI	AB
120	SYED MUTAHIR ANAS	7
121	T. MUHAMMAD ADYAN	10
122	THARUN P	AB
123	TRISHA.U	9
124	UJALA KUMARI	8
125	UROOJ KHAN	9
126	V. NANDHINI	5

127	VINCENT DE PAUL	9
128	VISHAL S	7
129	YASHAWINI	3
<b>I Sem B.Sc</b>		
1	CHETANA KS	8
2	RITISHA K	AB
3	GOWTHAMI.G	8
4	HAMSA M	8
5	PRIYA JAISWAL	9
6	RACHANA U	7
7	SAMSON N	AB
8	SIMRAN. R	6

*Ar*

*Arundha*

**Signature of HOD**  
**Head**  
**Department of Computer Science**  
**Indian Academy Degree College**  
**Hennur Cross, Hennur Main Road**  
**Bangalore-560043.**

*[Signature]*

**Signature of Principal**

**PRINCIPAL**  
**INDIAN ACADEMY DEGREE COLLEGE**  
**AUTONOMOUS**  
**HENNUR MAIN ROAD, KALYAN NAGAR**  
**BANGALORE-560043, KARNATAKA**

# INDIAN ACADEMY

Degree College - Autonomous

Department of Commerce (UG)

TIME TABLE *SEPTEMBER 2022*

CLASS :I SEMESTER B.COM B

CLASS	09:15-10:10	10:15-11:10	11:15-12:10	12:15-01:10
Monday	POM SHEETHAL	FA BANU PRAKASH	CA PALLAVI	ENG LAKSHMI
Tuesday	ENG LAKSHMI	CA PALLAVI	POM SHEETHAL	FA BANU PRAKASH
Wednesday	CA PALLAVI	POM SHEETHAL	FA BANU PRAKASH	ENG LAKSHMI
Thursday	FA ASMA	ENG LAKSHMI	CA PALLAVI	POM SHEETHAL
Friday	POM SHEETHAL	FA ASMA	CA PALLAVI	ENG LAKSHMI
Saturday	ENG LAKSHMI	FA ASMA	CA PALLAVI	POM SHEETHAL

*M. Alia*

# INDIAN ACADEMY

Degree College - Autonomous

Department of Commerce (UG)				
TIME TABLE <i>SEPTEMBER 2022</i>				
CLASS : I SEMESTER B.COM A				
CLASS	09:15-10:10	10:15-11:10	11:15-12:10	12:15-01:10
Monday	FA BANU PRAKASH	CA PALLAVI	POM SHEETHAL	ENG GEETHA RAVI
Tuesday	ENG GEETHA RAVI	FA BANU PRAKASH	CA PALLAVI	POM SHEETHAL
Wednesday	POM SHEETHAL	FA BANU PRAKASH	CA PALLAVI	ENG GEETHA RAVI
Thursday	FA MARIA	ENG GEETHA RAVI	POM VENESSA	CA REVATHI
Friday	CA REVATHI	FA MARIA	POM VENESSA	ENG GEETHA RAVI
Saturday	ENG GEETHA RAVI	FA MARIA	POM VENESSA	CA REVATHI

*Dr. Geetha*

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF COMMERCE (UG)

FOUNDATION COURSE

ON

FINANCIAL ACCOUNTING

“BASICS OF ACCOUNTING”

SEPTEMBER 2022

I BCOM

# INDIAN ACADEMY

Degree College - Autonomous

## Department of Commerce (UG)

### FOUNDATION COURSE ON "BASICS OF ACCOUNTING" FOR IBCOM ONLINE CLASSES

SCHEDULED HOURS - 10 Hrs.

#### BRIDGE COURSE:

With students coming from various academic backgrounds including Science, Commerce and Arts, a strong all-around foundation is important. The department conducts Bridge Course in accounting subject. This is to ensure that students are not left behind in subjects they may not have prior academic experience in, or in which strengthening of their foundation is required.

#### OBJECTIVE:

1. To bridge the gap between subjects studied at the pre-university level and subjects they would be studying at graduation.
2. To prepare themselves before the onset of courses for first-year degree programmes.
3. To give students the confidence and skills to successfully transition to college and new curriculum.

#### PROGRAMME OUTCOME:

1. The students will be equipped with the knowledge and the confidence needed to take on bigger challenges in future.
2. After completing the bridge course in accountancy, students better understand accounting concepts.

#### METHODOLOGY:

1. Theory with simple problems
2. PowerPoint presentation
3. Examples

#### EVALUATION:

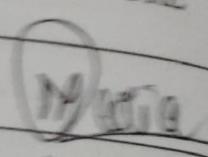
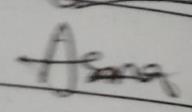
- Post bridge course test is conducted after completion of bridge course syllabus to assess the ability of students and suggestions are given to students for improvisation.

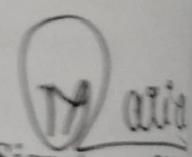
# INDIAN ACADEMY

Degree College - Autonomous

## Department of Commerce (UG)

- I. Name of the Department: UG Commerce
- II. Title of Foundation Course: FINANCIAL ACCOUNTING (Basics Of Accounting)
- III. Pre Assessment Test: Question Paper & Marks List Enclosed
- IV. Total Number & Name List of Students: Attendance copy Enclosed
- V. Syllabus for Foundation Course: Copy Enclosed
- VI. Total No of Classes Handled: 20 (Attendance copy Enclosed)
- VII. Study Material: Copy Enclosed
- VIII. Name & Signature of the faculties handling the subjects.

Sl No	NAME OF THE FACULTY	SECTION	SIGNATURE
1	Prof. Maria M	'A'	
2	Prof. Asma Banu	'B'	

  
Signature of HO

**COURSE STRUCTURE AND SYLLABUS**  
**BASICS OF ACCOUNTING**

UNIT	CHAPTER	TOPICS	OBJECTIVES	OUTCOMES	No. of Hrs.
UNIT-1	Chapter-1	<b>THEORETICAL FRAMEWORK</b>	<ul style="list-style-type: none"> <li>To understand the terms used in the accounting system</li> <li>To familiarize students with the basic concepts of accounting.</li> <li>To enable the students to develop cognizance of the importance of accounting in organization financial statements</li> </ul>	<ul style="list-style-type: none"> <li>Acquire conceptual knowledge of basics of accounting</li> <li>Record basic accounting transactions</li> <li>Understand basic accounting terminology</li> </ul>	1 Hrs.
		<b>INTRODUCTION TO ACCOUNTING</b>			
	Chapter-2	<b>THEORY BASE OF ACCOUNTING</b>			<ul style="list-style-type: none"> <li>Accounting Assumptions</li> <li>Accounting Principles</li> <li>Accounting Cycle</li> </ul>
UNIT-2	Chapter-3	<b>ACCOUNTING EQUATION</b>	<ul style="list-style-type: none"> <li>To know how the accounting entries are posted in books</li> <li>To give an insight into the basics of Accounting Principles to Prepare the Students to have a foothold in Accounts.</li> </ul>	<ul style="list-style-type: none"> <li>Identify events that need to be recorded in the accounting records</li> <li>Equip with the knowledge of accounting process and preparation of final accounts of a sole trader.</li> </ul>	2 Hrs.
		<b>ACCOUNTING PROCESS</b>			
		<b>RECORDING OF TRANSACTIONS</b>			<ul style="list-style-type: none"> <li>Single Entry System theory only</li> <li>Double Entry System</li> <li>Journal</li> <li>Ledger</li> </ul>

- |  |  |   |  |  |
|--|--|---|--|--|
|  |  | <ul style="list-style-type: none"><li>• Cash book</li><li>• Trial Balance</li></ul> |  |  |
|--|--|---|--|--|

**TOPICS IN FOUNDATION COURSE:**

1. BASIC ACCOUNTING PRINCIPLES
  - Introduction
  - Various terminology used in accounts
2. OBJECTIVES
3. GOLDEN RULES OF ACCOUNTING
4. ACCOUNTING CYCLE
5. ACCOUNTING ASSUMPTIONS
6. RECORD OF TRANSACTIONS:
  - Assets Account
  - Liabilities Account
  - Capital Account
  - Revenue Account
  - Expenses Account
7. SYSTEMS OF RECORDING:
  - Single Entry System
  - Double Entry System
8. CLASSIFICATION OF ACCOUNTS:
  - Personal Account
  - Real Account
  - Nominal Account
9. JOURNAL
10. CASHBOOKBOOK
11. LEDGER:
  - Ledger posting
  - Balancing of Ledger Accounts
12. FINAL ACCOUNTS:
  - Trial Balance

*Baria*

# INDIAN ACADEMY

Degree College - Autonomous

FOUNDATION COURSE ON "BASICS OF ACCOUNTING"

Pre-Assessment Question Paper of 1<sup>st</sup> B. Com Online Classes for the Academic  
Year 2022-2023

Time: 30 minutes

Total Marks: 10

1. Which of the following account will be debited if a company purchase building for cash?
  - a. Purchases A/c
  - b. Building A/c
  - c. Cash A/c
  - d. Fixed Assets A/c
2. An entry of more than one debit or credit is known as
  - a. Compound entry
  - b. Multiple entry
  - c. Single entry
  - d. Double entry
3. Which among the following is true??
  - a.  $\text{Assets} = \text{Liabilities} + \text{Capital}$
  - b.  $\text{Liabilities} = \text{Assets} - \text{Capital}$
  - c.  $\text{Capital} = \text{Assets} - \text{Liabilities}$
  - d. All of these
4. The rule "debit what comes in and credit what goes out" relates to
  - a. Personal account
  - b. Real account
  - c. Nominal account
  - d. Capital account
5. Sales made to Monish is debited to Narration
  - a. Cash account
  - b. Monish account
  - c. Purchases account
  - d. Sales account
6. Business enterprise is separate from its owner according to the Balance sheet
  - a. Business entity concept
  - b. Money measurement concept
  - c. Matching concept
  - d. Dual aspect concept

7. If the selling price is Rs. 10,000 and the cost of goods sold is Rs. 8,000 then the result will be Amount of sales
- Profit of Rs.2,000
  - Profit of Rs. 18,000
  - Loss of Rs.2,000
  - Loss of Rs.18,000
8. Which among the following is an intangible asset?
- Goodwill
  - Working capital
  - Net income
  - Capital
9. Debit Balances in the ledger will be
- An expense or an asset
  - An expense or a liability
  - An income or an asset
  - An income or a liability
10. Trial balance shows
- The balance of profit & loss a/c
  - Arithmetical accuracy of journal entries
  - Arithmetical accuracy of ledger accounts
  - Balance between assets and liabilities

# INDIAN ACADEMY

Degree College - Autonomous  
FOUNDATION COURSE ON "BASICS OF ACCOUNTING"  
Pre-Assessment Marks List of 1<sup>st</sup> B. Com Online Classes for the Academic  
Year 2022-2023

Sl. No	Name Of the student	Total Marks	Marks Scored
1	Bharath. B R	10	1
2	Manoj S R	10	2
3	Vishal	10	4
4	Prince Maher	10	3
5	Gayathri. K	10	4
6	Latha S	10	6
7	Akshay J	10	4
8	Gagan R	10	4
9	Parthiban	10	5
10	Mohammed sharieff	10	4
11	Komal.R	10	4
12	Martha vellian	10	5
13	Pasha	10	3
14	Maria Blessy	10	2
15	Mohammad Laise	10	4
16	Dharshan Raj M	10	3
17	Manzoor Ahmed savadatti	10	3
18	Moses A	10	6
19	Saran.N.M.	10	4
20	S.Mark Ethan	10	5
21	Abhishek C	10	3
22	Sam	10	1
23	Gideon Selva Kumar	10	5
24	Jeevan.v	10	4
25	Shaik arfath ahmed	10	3
26	Dhanush RM	10	3
27	Fareed babai m	10	3
28	M.Trishala	10	6
29	Sunil shahi . H	10	4
30	Syed Mohammad sabir	10	3
31	Imran basha	10	

32.	Vinay.B	10	5
33.	Mohammed zeeshan	10	3
34.	Vidhya shree. S	10	6
35.	Anusha J	10	4
36.	Sian	10	3
37.	Syed Zaid	10	7
38.	Murtuza hussain	10	3
39.	Divya Dikshitha.N	10	5
40.	Eshwari R	10	2
41.	Deepak.B	10	7
42.	Rahul s	10	2
43.	Muralidhar.P	10	2
44.	Sabitha shree.A	10	4
45.	Mahaveee	10	2
46.	Bhuvaneshwari.S	10	4
47.	Abdul Azeez	10	2
48.	Samuel.A	10	6
49.	MIRZA FARAAZ BAIG	10	5
50.	Vikram.E	10	5
51.	Sunny	10	5
52.	Uzair	10	5
53.	Shakthi vell	10	3
54.	Tejas s	10	4
55.	Kavitha.k	10	3
56.	R Rajesh	10	6
57.	Pramila.R	10	1
58.	Yashwanth.m	10	3
59.	ANSH MENDEKAR	10	7
60.	Stephen Raj. S	10	3
61.	Varsha V	10	4
62.	Priya K Mandal	10	4
63.	Goutham s	10	4
64.	R Cristiano Ronaldo	10	4
65.	AnushaG	10	5
66.	Shalini s	10	1
67.	Ravi Kiran.B	10	5
68.	Gunavathi T M	10	7
69.	Ajith. J	10	5
70.	Joshua.Y.B	10	7
		10	7

# INDIAN ACADEMY

Degree College, - Autonomous

FOUNDATION COURSE ON "BASICS OF ACCOUNTING"  
FOR I BCOM CLASSES STUDY MATERIAL-2022

## Meaning Accounting

Accounting is the process of recording financial transactions pertaining to a business. The accounting process includes summarizing, analyzing and reporting these transactions to oversight agencies, regulators and tax collection entities.

## Rules of accounting

Accounts are classified in to three namely real accounts, personal accounts and nominal accounts. There are separate rules for each type of accounts they are as follows

### 1. Real accounts

An account relating to an asset or property is called real account. Cash, furniture, plant & machinery etc are some examples of real accounts.

The rule of real account is

Debit what comes in  
Credit what goes out

### 2. Personal accounts

It includes the account of person with whom the business deals. These accounts are classified in to three categories

a) **Natural personal accounts** - the term natural persons mean persons who are creation of god. For example Madhav's accounts Ram's accounts etc.

b) **Artificial personal accounts** - these accounts include accounts of corporate bodies or institutions

c) **Representative personal account** - these are accounts which represents certain person or group of persons. For example, salary due, rent outstanding etc.

The rule of personal account is

Debit the receiver  
Credit the giver

### 3) Nominal accounts

Accounts relating to expenses and losses and incomes and gains are called nominal accounts. Salary accounts, commission account etc. are examples.

The rule of nominal account is

Debit all expenses and losses  
Credit all incomes and gains.

## RULES OF DEBIT AND CREDIT

Basically, debit means to enter an amount to the left side of an account and credit means to enter an amount to the right side of an account. In the abbreviated form Dr. Stands for debit and Cr. stands for credit. Both debit and credit may represent either increase or decrease depending upon the nature of an account. The Rules for Debit and Credit are given below:

The Rules for Debit and Credit are given below :

Types of Accounts	Rules for Debit	Rules for Credit
(a) For Personal Accounts	Debit the receiver	Credit the giver
(b) For Real Accounts	Debit what comes in	Credit what goes out
(c) For Nominal Accounts	Debit all expenses and losses	Credit all incomes and gains

### Posting

The term posting means transferring the debit and credit items from the journal to the respective accounts in the ledger. It is the process of recording the transaction from journal to ledger. The following rules should be observed while posting transactions in the ledger from the journal:

- Separate account should be opened in the ledger for posting transactions relating to different accounts recorded in the journal.
- The concerned account, which has been debited in the journal should also be debited in the ledger.
- The concerned account, which has been credited in the journal should also be credited in the ledger.

### MEANING AND FORMAT OF A JOURNAL

Journal is a historical record of business transactions or events. The word journal comes from the French word "Jour" meaning "day". It is a book of original or prime entry written up from the various source documents. Journal is a primary book for recording the day to day transactions in a chronological order i.e. in the order in which they occur. The journal is a form of diary for business transactions. This is also called the book of first entry since every transaction is recorded firstly in the journal. The format of a journal is shown as follows:

Date	Particulars	L.F.	Debit (Rs.)	Credit (Rs.)

- (a) **Date Column:** This column shows the date on which the transaction is recorded. The year and month is written once, till they change.
- (b) **Particular Column:** Under this column, first the names of the accounts to be debited, then the names of the accounts to be credited and lastly, the narration (i.e. a brief explanation of the transaction) are entered.
- (c) **L.F., i.e. Ledger Folio Column:** Under this column, the ledger page number containing the relevant account is entered at the time of posting.
- (d) **Debit amount Column:** Under this column, the amount to be debited is entered.
- (e) **Credit amount Column:** Under this column, the amount to be credited is entered.

### Meaning of Journalizing

The process of recording a transaction in the journal is called journalizing. The various steps to be followed in journalizing business transactions are given below:

- Step 1 Ascertain what accounts are involved in a transaction.
- Step 2 Ascertain what is the nature of the accounts involved.
- Step 3 Ascertain which rule of debit and credit is applicable for each of the accounts involved.
- Step 4 Ascertain which account is to be debited and which is to be credited.
- Step 5 Record the date of transaction in the 'Date column'
- Step 6 Write the name of the account to be debited, very close to the left hand side i.e. the line demarcating the 'Date column' and the 'Particulars' column along with the abbreviation 'Dr.' on the same line against the name of the account in the 'Particulars column' and the amount to be debited in the 'Debit Amount column' against the name of the account.
- Step 7 Write the name of the account to be credited in the next line preceded by the word 'To' at a few spaces towards right in the 'Particulars column' and the amount to be credited in the 'Credit Amount column' against the name of the account.
- Step 8 Write 'Narration' (i.e. a brief description of the transaction) within brackets in the next line in the 'Particulars column'.
- Step 9 Draw a line across the entire 'Particulars column' to separate one Journal Entry from the other.

### Advantages of Journal

1. The transactions are recorded in journal as and when they occur so the chances of error are minimized.
2. It helps in preparation of ledger.
3. Any transfer from one account to another account is made through Journal.
4. The entry recorded in journal is self explanatory as it includes narration also.
5. It can record any such transaction which cannot be entered in any other books of account.
6. Every transaction is recorded in chronological order (date wise) so the chances of manipulations are reduced.
7. Journal shows all information in respect of a transaction at one place.
8. The closing balances of previous year of accounts related to assets and liabilities can be brought forward to the next year by passing journal entry in journal

### CASH BOOK

#### Meaning of Cash Book

Cash book may be defined as the record of transactions concerning cash receipts and cash receipts and cash payments. In other words in Cash Book, all transactions (i.e., receipts and payments of cash) are recorded as soon as they take place.

Cash Book is in the form of an account and actually it serves the purpose of Cash Account also. It has two sides-debit and credit side. On the debit side, all receipts of cash are recorded while on the credit side, all the payments of cash are recorded. Items on the debit side of the cash book are posted on the credit side of the ledger accounts and items on the credit side are posted on the debit side of the ledger accounts.



## Three Column Cash Book

Three Column Book has three amount columns (one for cash, one for Bank, and one for Discount) on each side. All cash receipts, deposits into bank and discount allowed are recorded on debit side and all cash payments, withdrawals from bank and discount received are recorded on the credit side. In fact, a three-column cash book serves the purposes of Cash Account and Bank Account. Hence, there is no open these two accounts in the ledger.

Date	Particulars	L.F.	Dis.	Cash	Bank	Date	Particulars	L.F.	Dis.	Cash	Bank

## **TRIAL BALANCE**

Trial balance is a statement containing the various ledger balances on a particular date. This statement is prepared to check the correctness of ledger posting and balancing of accounts. If the total of the debit balances is equal to the credit balances. It is implied that posting and balancing of accounts are correct.

### **Features of trial balance**

1. It is prepared on a specific date
2. It is not a part of double entry and not an account
3. It is a statement of balance of all accounts or totals of ledger accounts.
4. Total of the debit and credit columns of the trial balance must tally
5. If the debit and credit columns are equal it is presumed that accounts are arithmetically accurate
6. Difference in the debit and credit columns indicate that some mistakes have been committed
7. Tallying of trial balance is not a conclusive proof of accuracy of books of accounts; it serves to prove only the arithmetical accuracy of books

### **Objectives of trial balance**

- The following are the objectives of preparing trial; balance
1. To ascertain the arithmetical accuracy of the ledger accounts
  2. To help in locating errors
  3. To help in the preparation of final accounts

Specimen of trial balance is given below Trial Balance as on

Account code	Name of the account	Debit Amount(Rs)	Credit Amount(Rs)
	Cash in hand	Xxx	
	Cash at bank	Xxx	
	Sundry debtors	Xxx	
	Sundry creditors		
	Sales		Xxx
	Sales returns	Xxx	Xxx
	Purchases	Xxx	
	Purchase returns		
	Drawing	xxx	xxx
	Capital		
	Bills receivable	xxx	xxx
	Bills payable		
	Stock of goods	xxx	xxx
	Bank loan/overdraft		
	Carriage inwards	xxx	Xxx
	Carriage outwards	xxx	
	Rent paid	xxx	
	Interest paid	xxx	
	Salary paid	xxx	
	Discount received	xxx	
	Commission received		Xxx
	Plant and machinery		xxx
	Buildings	xxx	
	Furniture	xxx	
	Vehicles	xxx	
	Goodwill	xxx	
	Provisions	xxx	
	Outstanding expenses		Xxx
	Prepaid expenses		xxx
	Accrued income	xxx	
	Pre received income	xxx	
	Reserve accounts		Xxx
	Advance from customers		Xxx
			xxx
		XXXX	xxxx

### Final Accounts

The final object of every businessman is to earn profit. He is interested to know how much profit he has earned or how much loss he has incurred during the year. For the purpose of income tax payment, financial position, distribution of dividend and for the future planning it becomes necessary to ascertain the profit or loss for the year. At the end of the year a trial balance is extracted from the ledger balances and then on the basis of the trial balance closing entries are passed and final Accounts are prepared. The process of preparing Final Accounts from the original records is as under.

- Recording of transaction in Journal or Subsidiary books
- Postings into ledger from Journal or subsidiary books.
- Preparation of Trial balance from ledger accounts
- Preparation of Final Accounts on the basis of Trial balance and other information

To know the trading results (Profit or loss) for the accounting period and the financial position as it the end of accounting period the final accounts are prepared. The final accounts consists of: Manufacturing Account, Trading and Profit & Loss Account, Balance sheet.

The followings points must be considered while preparing final accounts from trial balance

**Debit items of Trial Balance:-** The items of expenses or assets appear on debit side of Trial balance. The expenses (the benefit of which is derived within the accounting year in which they are incurred are called revenue expenses. These are debited either to trading account or profit & Loss Account.) Direct expenses such wages. Carriage inwards, freight etc. are debited to trading and indirect exp. such as salaries, rent repairs etc. are debited to profit & Loss account.

The expenses the benefit of which is derived in many years are called capital expenditure. This expenditure is called assets and they appear in the assets side of Balance sheet e.g. Building, Machinery, Furniture, Vehicle etc.

**Credit items of Trial Balance:** The items of incomes, gains or liabilities appear in the credit side of trial balance. The receipts are divided into two parts capital receipts and revenue receipts. Capital receipts are liabilities items they are mentioned in the liabilities side or deducted from the assets side of Balance sheet. Revenue receipts are called incomes. It is again divided into direct and indirect incomes. Direct incomes means sale proceeds of the goods which is credited to Trading Account. Indirect incomes are other incomes not directly related to the main business activities such as rent commission, interest, dividend etc received. These are credited to profit and loss account.

**Trading Account:** Trading Account is prepare to calculate gross profit. It can be prepared separately or combined with profit and loss account. Normally it is prepared jointly with profit and loss account. It is the first part of profit and loss account.

**Trading Account A/c For the Year ending.....**

Particulars	Rs.	Particulars	Rs.
To Opening Stock	-	By Sales	-
To Purchase	-	Less: Returns Inward	-
Less: Ret. Outward	-	-----	
		By Goods Sent on Consignment	-
To Wages	-	By Closing Stock	-
To Carriage	-	By Gross Loss c/d	-
To Fuel	-	(Balancing figure)	
To Motive Power	-		
To Octroi	-		
To Import Duty	-		
To Clearing Charges	-		

To Dock Charges	-	
To Stores Consumed	-	
To Royalty based on Production	-	
To Manufacturing Exp.	-	
To Gross Profit c/d (Balancing figure) -	-	

**Profit and Loss Account:** Profit and loss accounts is prepared to ascertain net profit or loss. This is the second stage of ascertaining trading results. Gross Profit calculated as per trading account is credited to Profit and loss account then all the indirect expenses are debited and the indirect incomes are credited. The excess of credits side over debit side is called net profit and vice versa. The format of P & L account is as under:

Profit and Loss A/c (For the year ending)

Particulars	Amt	Particulars	Amt
To Gross Loss	-	By Gross Profit	
To Office Salaries & Wages	-	By Discount received	
To Office Rent, Rates and Taxes	-	By Bad debts recovered	
To Office Printing and Stationery	-	By Income from Investment	
To Office Lighting	-	By Commission received	
To Insurance Premium	-	By Interest on Deposits	
To Repairs & Maintenance	-	By Profit on sale of fixed assets	
To Postage & Telegram	-	By Apprenticeship Premium	
To Legal expenses	-	By Interest on Drawings	
To Trade expenses	-	By Net Loss (Transferred to Capital Account)	
To Audit fees	-		
To Telephone expenses	-		
To General expenses	-		
To Bank Charges	-		
To Discount allowed	-		
To Interest on Capital	-		
To Interest on loan	-		
To Discount of Rebate on bills of exchange	-		
To Carriage outward	-		
To Freight outward	-		
To Bad debts	-		
To Entertainment expenses	-		
To Travelling Expenses	-		
To Cost of Samples	-		
To Catalogue expenses	-		
To Salesmen's salaries	-		
To Expenses and commission To Advertising expenses	-		
To Depreciation on fixed Assets	-		
To Loss on sale of fixed assets	-		
To Net Profit	-		
(Transferred to capital account)			

Balance Sheet

As on 31 March .....

Liabilities	Rs.	Assets	Rs.
Capital	-	Fixed Assets: Patent	-
Long term liabilities	-	Goodwill	-
Debentures	-	Land and Building Plant	-
Bank Loan Current	-	& Machinery Furniture	-
Liabilities: Advance	-	and fixtures	-
Income	-	Current Assets:	-
Outstanding expenses	-	Short terms Investment	-
Bank overdraft	-	Prepaid expenses)	-
Bills Payable Creditors	-	Accrued Income	-
Unearned Income	-	Debtors	-
		Closing Stock	-
		Bank Balance	-
		Cash Balance	-

**Closing Entries**

At the end of the year after preparing trial balance a list of unrecorded items is prepared which is called list of adjustment for which adjustment entries are passed. Now closing entries will be passed. The purpose of closing entries is to closed all those accounts which comes in trading and profit & Loss and these accounts are mainly related to goods and expenses and incomes.

**PROBLEMS**

# INDIAN ACADEMY

Degree College - Autonomous

## FOUNDATION COURSE ON "BASICS OF ACCOUNTING" Post Assessment Question Paper of 1<sup>st</sup> B. Com Online Classes for the Academic Year 2022-2023

Time: 30 minutes

Total Marks: 20

1. If building is Rs 1,80,000, Bills Receivable is Rs 50,000 and Sundry Creditors is Rs 50,000 the owner's capital is Rs \_\_\_\_\_

- a. 1,70,000
- b. 2,00,000
- c. 1,10,000
- d. None of these

2. Which of the following is not a correct

- a. Indian Bank - Real A/c
- b. Outstanding Expenses - Personal A/c
- c. Sales - Real A/c
- d. Salary - Nominal A/c

3. Purchase of goods from Suresh on cash. Ramesh A/c will appear in

- a. Purchase ledger debit side
- b. Purchase ledger credit side
- c. Both the side
- d. None of the above

4. Reserve & surplus appears on :

- a. Trading A/c
- b. Profit & Loss A/c
- c. Balance sheet
- d. Cashbook

5. The Trade Mark is

- a. An Asset
- b. A Liability
- c. A Direct Income
- d. An Indirect Income

6. Interest on Drawings is recorded in the Asset

- a. Trading A/c debit side
- b. Profit & Loss A/c debit side
- c. Profit & loss A/c credit side

- d. None of the Above
7. The summary of the closing balance of Ledger A/c is called?
- Journal
  - Trial Balance
  - Balance Sheet
  - Trading A/c
8. The outstanding salary amount will be recorded in trail balance
- Debit Side
  - Credit Side
  - Both the side
  - None of the above
9. The opening balance of cash is recorded in the
- Debit side of cash book
  - Credit Side of cash book
  - Both the side of cash book
  - None of these
10. Rent paid appeared in the trial balance
- Debit side
  - Credit side
  - Both A & B
  - None of the these

Q. 10

# INDIAN ACADEMY

Degree College - Autonomous

FOUNDATION COURSE ON "BASICS OF ACCOUNTING"  
Post Assessment Marks List of 1<sup>st</sup> B.Com Online Classes for the Academic  
Year 2022-2023

CLASS: 1<sup>st</sup> B.COM A SEC  
FACULTY: Ms. Maria Mendes

S/No	Name Of the student	Total Marks	Marks Score
1	Albin V.A	20	8
2	Dharshan Raj M	20	6
3	Bharath B.R	20	14
4	Manoj Kumar Sharma	20	14
5	Akshay.J	20	6
6	Eshwari R	20	4
7	Janani	20	4
8	Goutham S	20	12
9	Pasha	20	10
10	B Ramana Gokul	20	8
11	Imran Basha	20	8
12	Anusha J	20	8
13	Martha Vellian	20	14
14	Parthiban	20	12
15	Anshu Sahu	20	12
16	Mahesh Bhandari	20	10
17	Kiran.R	20	16
18	Vinay .B	20	16
19	Mahaveer	20	10
20	Abdul Azeez	20	16
21	Chaitra A	20	0
22	Sian Lydia	20	12
23	M.Trishala	20	10
24	Gayathri. A	20	10
25	Abhishek C	20	20
26	Deepak Franklin B	20	14
27	Ebenezer	20	18
28	Dhanush RM	20	10

29	Shakti Abishek	20	8
30	Komal.R	20	6
31	Gideon Selva Kumar	20	12
32	Manzoor Ahmed Savadatti	20	10
33	Bhuvaneshwari.S	20	16
34	Gunavathi T M	20	16
35	Kavitha.K	20	16
36	Chaya	20	14
37	Chetan Shahi	20	6
38	Jeevan.V	20	4
39	Mirza Faraaz Baig	20	12
40	Maria Blessy	20	16
41	Anusha.G	20	10
42	Prince Maher	20	8
43	Joshua Y B	20	8
44	Fareed	20	12
45	Gayathri. K	20	10
46	Manoj S R	20	6
47	Divya Dikshitha.N	20	8
48	Latha.S	20	10
49	Akash Phutane M	20	8
50	Deepak.B	20	12
51	Gagan R	20	8
52	Kashif Parveez	20	20
53	Darshan D	20	20
54	Hemalatha R	20	2

**CLASS: 1<sup>st</sup> B.COM B SEC**  
**FACULTY: Ms. Asma Banu**

SI No	Name Of the student	Total Marks	Marks Score
1	Mohammad Yaseen	20	8
2	Moses A	20	6
3	Rahul A S	20	10
4	Mohammad Laise	20	12
5	S.Mark Ethan	20	20
6	Rahul S	20	12
7	Ravi Kiran.B	20	16
8	Sharath Kumar. N.	20	10

6	Sam	20	10
7	R Cristiano Ronaldo	20	10
8	Sunil Shahi . H	20	8
9	Robith Kumar	20	10
10	Shalini S	20	10
11	Mohammad ShariEFF	20	12
12	Yashwanth	20	14
13	Syed Mohammad Sabir	20	18
14	Shakthivell	20	12
15	Syed Zaid	20	14
16	Yubrajshahi	20	16
17	Priya Darshini. M	20	18
18	Sunny	20	18
19	Rajesh. V	20	16
20	Vignesh D	20	14
21	R Rajesh	20	14
22	Vikram.E	20	10
23	Priya K Mandal .	20	12
24	Tejas	20	12
25	Sabitha Shree.A	20	18
26	Prem	20	14
27	Muralidhar.P	20	14
28	Mohammed Saqib	20	16
29	Vidhya Shree. S	20	14
30	Vishal	20	14
31	Samuel.A	20	10
32	Varsha V	20	10
33	Pramila.R	20	20
34	Poornima.L	20	20
35	Murtuza Hussain	20	18
36	Uma Maheshwari	20	20
37	Shaik Arfath Ahmed	20	16
38	Stephen Raj	20	20
39	Vanessa	20	20

# INDIAN ACADEMY

Degree College - Autonomous

FOUNDATION COURSE  
I SEM BCOM B SECTION 2022-23

NO	NAME	5/9	6/9	8/9	9/9	10/9	11/9	14/9	15/9	15/9	16/9
1	MOHAMMED LAISE	1	2	3	4	5	6	7	8	9	10
2	MOHAMMED MUSTAFA	1	2	3	4	5	6	7	8	9	10
3	MOHAMMED SAQIB B	1	2	3	4	5	6	7	8	9	10
4	MOHAMMED SHARIEFF	1	2	3	4	5	6	7	8	9	10
5	MOHAMMED YASEEN	1	2	3	4	5	6	7	8	9	10
6	MURALIDHAR P	1	2	3	4	5	6	7	8	9	10
7	MURTLIZA HUSSAIN	1	2	3	4	5	6	7	8	9	10
8	POORNIMA L	1	2	3	4	5	6	7	8	9	10
9	PRAKASH RAI	1	2	3	4	5	6	7	8	9	10
10	PRAMILA R	1	2	3	4	5	6	7	8	9	10
11	PREM P	1	2	3	4	5	6	7	8	9	10
12	PRIYA DARSHINI M	1	2	3	4	5	6	7	8	9	10
13	PRIYA K MANDAL	1	2	3	4	5	6	7	8	9	10
14	R CRISTIANO RONALDO	1	2	3	4	5	6	7	8	9	10
15	RAHUL AS	1	2	3	4	5	6	7	8	9	10
16	RAHUL S	1	2	3	4	5	6	7	8	9	10
17	RAJESH R	1	2	3	4	5	6	7	8	9	10
18	RANJITH V	1	2	3	4	5	6	7	8	9	10
19	RAVI KIRAN . B	1	2	3	4	5	6	7	8	9	10
20	ROHITH KUMAR K	1	2	3	4	5	6	7	8	9	10
21	ROSHAN KUMAR M	1	2	3	4	5	6	7	8	9	10
22	S MARK ETHAN	1	2	3	4	5	6	7	8	9	10
23	SABITHA SHREE . A	1	2	3	4	5	6	7	8	9	10
24	SAM D	1	2	3	4	5	6	7	8	9	10
25	SAMUEL A	1	2	3	4	5	6	7	8	9	10
26	SANTOSH SUBBA	1	2	3	4	5	6	7	8	9	10
27	SARAN N M	1	2	3	4	5	6	7	8	9	10
28	SHAIK ARFATH AHMED	1	2	3	4	5	6	7	8	9	10
29	SHAKTHI VELL	1	2	3	4	5	6	7	8	9	10
30	SHALINI S	1	2	3	4	5	6	7	8	9	10
31	SHAM M	1	2	3	4	5	6	7	8	9	10
32	SHARATH KUMAR N	1	2	3	4	5	6	7	8	9	10
33	SOWMYA R	1	2	3	4	5	6	7	8	9	10
34	STEPHEN RAJ . S	1	2	3	4	5	6	7	8	9	10
35	SUNIL SHAHI H	1	2	3	4	5	6	7	8	9	10
36	SUNNY	1	2	3	4	5	6	7	8	9	10
37	SYED HANNAN ASEEM	1	2	3	4	5	6	7	8	9	10
38	SYED MOHAMMED SABIR	1	2	3	4	5	6	7	8	9	10
39	SYED ZAID	1	2	3	4	5	6	7	8	9	10
40	TEJAS S	1	2	3	4	5	6	7	8	9	10
41	UZAIR A	1	2	3	4	5	6	7	8	9	10
42	VANESSA A	1	2	3	4	5	6	7	8	9	10
43	VARSHA . V	1	2	3	4	5	6	7	8	9	10
44	VIDHYASHREE S	1	2	3	4	5	6	7	8	9	10
45	VIGNESH D	1	2	3	4	5	6	7	8	9	10
46	VIKRAM . E	1	2	3	4	5	6	7	8	9	10
47	VISHAL RAO S	1	2	3	4	5	6	7	8	9	10
48	VISHWA M	1	2	3	4	5	6	7	8	9	10
49	YASHWANATH M	1	2	3	4	5	6	7	8	9	10
50	YUKTHI P E	1	2	3	4	5	6	7	8	9	10
51	ZOHA FIRDOUSE	1	2	3	4	5	6	7	8	9	10

Muthay  
HOD

S2 Moses  
S3 Uma Maheshwari  
S4 Raveg  
S5  
S6  
S7  
S8  
S9  
S10  
S11  
S12  
S13  
S14  
S15  
S16  
S17  
S18  
S19  
S20  
S21  
S22  
S23  
S24  
S25  
S26  
S27  
S28  
S29  
S30  
S31  
S32  
S33  
S34  
S35  
S36  
S37  
S38  
S39  
S40  
S41  
S42  
S43  
S44  
S45  
S46  
S47  
S48  
S49  
S50  
S51  
S52  
S53  
S54  
S55  
S56  
S57  
S58  
S59  
S60  
S61  
S62  
S63  
S64  
S65  
S66  
S67  
S68  
S69  
S70  
S71  
S72  
S73  
S74  
S75  
S76  
S77  
S78  
S79  
S80  
S81  
S82  
S83  
S84  
S85  
S86  
S87  
S88  
S89  
S90  
S91  
S92  
S93  
S94  
S95  
S96  
S97  
S98  
S99  
S100

# INDIAN ACADEMY

Degree College - Autonomous

FOUNDATION COURSE

1 SEM BCOM A SECTION 2022-23

Sl. NO	Registered Name	5/9	6/9	7/9	8/9	9/9	10/9	11/9	12/9	13/9	14/9	15/9	16/9	17/9
1	ABDUL AZEEZ	1	2	3	4	5	6	7	8	9	10	11	12	13
2	ABHISHEK C	1	1	2	3	4	5	6	7	8	9	10	11	12
3	AJITH J	1	2	3	4	5	6	7	8	9	10	11	12	13
4	AKSHAY J	0	1	2	3	4	5	6	7	8	9	10	11	12
5	AL SYED FADHA	1	1	2	3	4	5	6	7	8	9	10	11	12
6	ALBIN VA	1	1	2	3	4	5	6	7	8	9	10	11	12
7	ANSH LOKESH MENDEKAR	1	1	2	3	4	5	6	7	8	9	10	11	12
8	ANSHU SANJU	1	1	2	3	4	5	6	7	8	9	10	11	12
9	ANUSHA G	1	1	2	3	4	5	6	7	8	9	10	11	12
10	ANUSHA J	1	1	2	3	4	5	6	7	8	9	10	11	12
11	ARVAIZ PASHA	1	1	2	3	4	5	6	7	8	9	10	11	12
12	BHARATH B R	0	0	1	2	3	4	5	6	7	8	9	10	11
13	BHUVANESHWARI	0	0	1	2	3	4	5	6	7	8	9	10	11
14	CHAYA RAJU	0	0	1	2	3	4	5	6	7	8	9	10	11
15	CHETAN SHAHI	0	1	2	3	4	5	6	7	8	9	10	11	12
16	D PARTHIBAN	1	1	2	3	4	5	6	7	8	9	10	11	12
17	DEEPAK B	1	1	2	3	4	5	6	7	8	9	10	11	12
18	DEEPAK FRANKLIN B	1	1	2	3	4	5	6	7	8	9	10	11	12
19	DHANUSH R M	1	1	2	3	4	5	6	7	8	9	10	11	12
20	DHARSHAN RAJ M	1	1	2	3	4	5	6	7	8	9	10	11	12
21	DIVYA DIKSHITHA N	1	1	2	3	4	5	6	7	8	9	10	11	12
22	ESHWARI . R	1	1	2	3	4	5	6	7	8	9	10	11	12
23	ESTHER SARAH PJ	1	1	2	3	4	5	6	7	8	9	10	11	12
24	FAREED BABAI M	1	1	2	3	4	5	6	7	8	9	10	11	12
25	GAGAN R	1	1	2	3	4	5	6	7	8	9	10	11	12
26	GAYATHRI . K	1	1	2	3	4	5	6	7	8	9	10	11	12
27	GAYATHRI.A	1	1	2	3	4	5	6	7	8	9	10	11	12
28	GIDEON SELVA KUMAR	1	1	2	3	4	5	6	7	8	9	10	11	12
29	GOUTHAM S	1	1	2	3	4	5	6	7	8	9	10	11	12
30	GUNAVATHI TM	1	1	2	3	4	5	6	7	8	9	10	11	12
31	IMRAN BASHA	1	1	2	3	4	5	6	7	8	9	10	11	12
32	JANANI PARAMESH	1	1	2	3	4	5	6	7	8	9	10	11	12
33	JAYANTH J M	1	1	2	3	4	5	6	7	8	9	10	11	12
34	JEEVAN.V	1	1	2	3	4	5	6	7	8	9	10	11	12
35	JOSHUA Y B	1	1	2	3	4	5	6	7	8	9	10	11	12
36	KAVITHA K	0	1	2	3	4	5	6	7	8	9	10	11	12
37	KIRAN R	0	1	2	3	4	5	6	7	8	9	10	11	12
38	KOMAL . R	1	1	2	3	4	5	6	7	8	9	10	11	12
39	LATHA S	1	1	2	3	4	5	6	7	8	9	10	11	12
40	M TRISHALA	1	1	2	3	4	5	6	7	8	9	10	11	12
41	MAHAVEER	1	1	2	3	4	5	6	7	8	9	10	11	12
42	MANOJ KUMAR SHARMA . S	0	1	2	3	4	5	6	7	8	9	10	11	12
43	MANOJ S R (ACCA)	1	1	2	3	4	5	6	7	8	9	10	11	12
44	MANZOOR AHMED SAVADATTI	0	1	2	3	4	5	6	7	8	9	10	11	12
45	MARIA BLESSY	1	1	2	3	4	5	6	7	8	9	10	11	12
46	MARTHA VELLIAN	1	1	2	3	4	5	6	7	8	9	10	11	12
47	MIRZA FARAAZ BAIG	1	1	2	3	4	5	6	7	8	9	10	11	12
48	MOHAMMED ZEESHAN (ACCA)	1	1	2	3	4	5	6	7	8	9	10	11	12
49	PRINCE MAHER (ACCA)	1	1	2	3	4	5	6	7	8	9	10	11	12
50	SHAKTI ABISHEK S (ACCA)	1	1	2	3	4	5	6	7	8	9	10	11	12
51	SIAN LYDIA (ACCA)	1	1	2	3	4	5	6	7	8	9	10	11	12
52	VINAY . B (ACCA)	0	1	2	3	4	5	6	7	8	9	10	11	12

Sarah  
10.15-11.10

10.15  
9.15-10.10  
10.15  
P.L.L.A

Mudkara  
HOD

DEPT. OF COMMERCE  
Indian Academy Degree College  
Kalyan Nagar, BANGALORE

# INDIAN ACADEMY

Degree College - Autonomous

## DEPARTMENT OF BUSINESS ADMINISTRATION FOUNDATION COURSE I SEM BBA A&B - AUGUST 2023

Sl. No.	Second Language	User Name	Primary (Official) Email ID	Attendance				
				9.15am	11.15am	10.15	12.15	9.15
				24/07	25/07	26/07	27/07	28/07
1	KAN	AISHWARYA K	radhakrishna.7247@gmail.com	P	2	3	4	5
2	KAN	AISHWARYA M	aishwaryanayak0303@gmail.com	A	1	A	2	3
3	KAN	DILEEPAN R	vennilamurthi96@gmail.com	A	1	2	3	4
4	KAN	GEETHANJALI N	geethanjalin76@gmail.com	P	2	3	4	5
5	KAN	GORAKNATH M	gorakk.nath@gmail.com	1	2	3	4	5
6	KAN	K PRAJWAL	prjwlf@gmail.com	1	2	3	4	5
7	KAN	LINTON RAJESH R	lintuhoneyboy@gmail.com	1	2	3	4	5
8	KAN	M SINDHU	sindhuqueen2008@gmail.com	1	2	3	4	5
9	KAN	MANASRI R	MANASRI01092005@GMAIL.COM	1	2	3	4	5
10	KAN	MOHAMMAD TOUFEEQ	sheikhtoufeeq8691@gmail.com	1	A	2	A	A
11	KAN	NARMADHA S	darshanfalcon92@gmail.com	1	2	3	4	5
12	KAN	NITHIN S	nithin132004@gmaii.com	1	2	3	4	A
13	KAN	RAKSHITH A	gowdarakshith803@gmail.com	1	2	3	4	5
14	KAN	SHARATH KUMAR S	mamathasiddesh2004@gmail.com	A	A	A	A	A
15	KAN	USHA P	CHANDUUSHA1922@GMAIL.COM	1	2	3	4	5
16	KAN	VAISHNAVI R	VAISHU192005@GMAIL.COM	1	2	3	4	5
17	KAN	VIDHYA SAGAR GOWDA. N	venugopal84768@gmail.com	A	A	1	2	3
18	KAN	DURGA SHREE P	nn2574108@gmail.com	A	1	A	A	A
19	KAN	BHOOMIKA B	bhoonikababu583@gmail.com	1	A	2	3	4
20	HIN	AFRID ULLA KHAN	afridullakhan89@gmail.com	1	2	3	4	5
21	HIN	ARBIN BANU	kalcemsalma55@gmail.com	1	2	3	4	5
22	HIN	ASHOK P	chakraashok04@gmail.com	1	2	3	4	5
23	HIN	HUDA QUBEEN	nazialulu786@gmail.com	1	2	3	4	5
24	HIN	MIR HAMMAAD HUSSAIN	HAMMAAD12072005@GMAIL.COM	1	2	3	4	5
25	HIN	MOHAMMED FAHAB	mmohammedeahab@gmail.com	1	2	3	4	5
26	HIN	MOHAMMED SAQLAIN	txsxtasaq@gmail.com	1	2	3	4	5
27	HIN	MOHAMMED TOUSIF	*6112087@gmail.com	1	2	3	4	5

Foundation Course  
2023 Batch

28	HIN	MOHD KABEER							
29	HIN	MUKARAM AHMED	mohamedkabeer215@gmail.com	A	1	2	3	4	
30	HIN	NITASH KUMAR J	Mukaramahmed18@gmail.com	1	2	3	4	5	
31	HIN	S MUSKAN ANJUM	hemanthkumarj809@gmail.com	1	2	3	4	5	
32	HIN	SHAM. V	muskananjum048@gmail.com	1	2	3	4	5	
33	HIN	UMME AZRA	shamna12345677@gmail.com	A	A	1	2	3	
34	HIN	YOUNUS ALI KHAN	ummeazra27@gmail.com	1	2	3	4	5	
35	HIN	YOUNUS ALI KHAN	younuskhan0100@gmail.com	A	1	2	A	A	
36	HIN	BHARATH N SUTHAR	bharatsuthar93426@gmail.com	1	2	3	4	5	
37	HIN	MOHAMMED AFREED	afreedmohammed966@gmail.com	1	2	A	3	4	
38	HIN	SHRISTI RAJ	rajivraj87@gmail.com	A	A	A	A	A	
39	HIN	SYED MOHAMMED HASSAN	younus515@gmail.com	1	2	3	4	5	
40	HIN	DIVYANKA SHARMA	divyadsharma572@gmail.com	A	A	A	A	A	
41	HIN	MOHAMMED ZAID ALI KHAN	MDZAIDALIK2005@GMAIL.COM	1	2	3	4	A	
42	AE	RAHUL KUMAR	RAHULSHARMA85250408@GMAIL.COM	1	2	3	4	5	
43	AE	A BENNY	diwa1916@gmail.com	1	2	3	4	5	
44	AE	ABHINAYA R	abhinayar26092005@gmail.com	1	2	3	4	5	
45	AE	AHMED SHARIEF	barkathhanni@gmail.com	1	2	3	4	5	
46	AE	AKSHATHA S	akshuakshatha700@gmail.com	1	2	A	3	4	
47	AE	ANTONY REZON M J	dargin.thomas@gmail.com	1	2	3	4	5	
48	AE	ARHAM ABBAS SAIT	arhamsait07@gmail.com	1	2	3	4	5	
49	AE	AUGUSTIN BALRAJ	stellamariakush@gmail.com	1	2	3	4	A	
50	AE	BHOOMIKA SANGAMITHRE.M	akashbuddhasena321@gmail.com	1	2	A	3	4	
51	AE	CHALLA NIDHI KRISHNA 7893180769	nidhikrishnac28@gmail.com	1	2	3	4	5	
52	AE	D JUDHA JOHONAN	danuday58888@gmail.com	1	A	2	3	4	
53	AE	EMMANUEL C	emmanuelemmu110@gmail.com	1	2	3	4	5	
54	AE	JASMINE MARY K	mkj200e@gmail.com	1	2	3	4	A	
55	AE	KASHIFA	kashifa04khan@gmail.com	1	2	3	4	5	
56	AE	KAVYA B	nikhil889257@gmail.com	1	2	3	4	5	
57	AE	LAKSHMI PRASAD C R	crazyprasad17@gmail.com	1	2	A	3	4	
58	AE	LIGODI MANGANZA DAVID	davidligodi01@gmail.com	1	2	3	4	5	
59	AE	MANISH.C	manishmanish20326@gmail.com	1	2	3	4	5	
60	AE	MELVIN ABISHEK V	meliomelvin15@gmail.com	1	2	3	4	5	
61	AE	MITHUKULLA THIRUMALA NARAYANA TEJA	balanarayana1977@gmail.com	A	A	A	A	A	
62	AE	MOHAMMAD ASRAR KHAN	asrarkhanking08@gmail.com	1	2	3	4	A	
63	AE	MOHAMMED UMMAR N	umarff143@gmail.com	1	2	3	4	A	
64	AE	NATANIA SHANTAY J	nataniaschantay11@gmail.com	1	2	3	4	A	

64	AE	PENUEL MOCHAHARI	penuelmocha@gmail.com	1	2	3	4	5
65	AE	REHANA BANU	rehanarehu199@gmail.com	1	2	3	4	5
66	AE	S R JAYSREE	jaysreesrjaysrec@gmail.com	1	2	A	3	4
67	AE	SHARON VALENCIA J	sharonstyles1994@gmail.com	1	2	3	A	A
68	AE	SHREYAS S RAJANALKAR	srajanalkar@gmail.com	A	1	2	3	4
69	AE	SM.BRINDASHREE	brindabrinda290704@gmail.com	1	2	3	A	A
70	AE	TAM PINYA	pinya7439@gmail.com	1	2	3	4	5
71	AE	TENISON THONGAM	resmilai15@gmail.com	1	2	3	4	5
72	AE	V PRADEEP KUMAR	vpradeepkumar619@gmail.com	1	2	3	4	5
73	AE	AFNAAN AHMED	harmain143@gmail.com	1	2	3	4	5
74	AE	DIVYA V	divyavenkatesh69@gmail.com	1	2	3	4	5
75	AE	GEDDAM AKSHAY BABU	geddamakshaybabu3223ak@gmail.com	1	2	3	4	5
76	AE	JOHN ABRAHAM.A	stella@nias.res.in	1	2	3	4	5
77	AE	PRUTHVI V	Pruthvi200408@gmail.com	1	2	3	4	5
78	AE	SANDHYA D	udayadasarath@gmail.com	1	2	3	4	5
79	AE	SYED ALI	simal2004@yahoo.co.in	1	2	3	4	5
80	AE	DIVYA S	JAGASURESH2001@GMAIL.COM	1	2	3	4	5
81	AE	JIM ELLIOT S	poojameenavj@gmail.com	1	2	3	4	5
82	AE	MUKESH C	SARITHAKUMARI789@GMAIL.COM	1	2	3	4	5
83	AE	MAHALAKSHMI K		1	2	3	4	A
84	KAN	Abhisha 26/7/23		-	-	1	2	A

*des des des des des*

# INDIAN ACADEMY

Degree College - Autonomous

Department of Business Administration  
Foundation Course – Pre Screening Test, 25<sup>th</sup> July 2023

I semester BBA A&B & BA

Subject: Management Principles and Practice

Faculty In-charge: Ms. Deepa S  
Max Marks: 15

1. What is the primary purpose of management?  
a) Maximizing profits b) Achieving organizational goals c) Increasing employee satisfaction d) Implementing new technologies
2. Which of the following is not a basic function of management?  
a) Planning b) Organizing c) Delegating d) Controlling
3. What distinguishes leadership from management?  
a) Leadership focuses on setting goals, while management focuses on achieving them. b) Leadership involves decision-making, while management involves delegation. c) Leadership involves guiding and motivating others, while management involves administering resources. d) Leadership is a formal position, while management is an informal role.
4. The process of identifying organizational goals and determining the best way to achieve them is known as:  
a) Controlling b) Organizing c) Leading d) Planning
5. Why is effective communication crucial in management?  
a) It fosters competition among employees. b) It reduces employee turnover. c) It improves decision-making and coordination. d) It eliminates the need for delegation.
6. Which management principle emphasizes that each employee should report to only one supervisor?  
a) Unity of direction b) Scalar chain c) Division of labor d) Span of control
7. The process of assigning tasks and authority to employees is called:  
a) Planning b) Organizing c) Controlling d) Directing

8. Which analysis is used to identify an organization's internal strengths and weaknesses and external opportunities and threats?  
a) PESTLE analysis b) SWOT analysis c) Gap analysis d) Risk analysis
9. The process of resolving disputes or disagreements between employees is known as:  
a) Delegation b) Conflict management c) Span of control d) Centralization
10. Which motivational theory suggests that individuals are motivated by a hierarchy of needs, with basic physiological needs being the most fundamental?  
a) Theory X and Theory Y b) Expectancy theory c) Maslow's hierarchy of needs d) Two-factor theory
11. What does an organization's culture represent?  
a) The formal structure of the organization b) The skills and expertise of its employees c) The shared values, beliefs, and norms of its members d) The financial performance of the organization
12. The process of analyzing various alternatives and choosing the best course of action is known as:  
a) Planning b) Controlling c) Organizing d) Decision-making
13. What is the advantage of a decentralized organizational structure?  
a) It allows for faster decision-making. b) It creates a rigid hierarchy within the organization. c) It centralizes authority and control. d) It reduces employee empowerment.
14. How does technology influence modern management practices?  
a) It decreases the need for effective communication. b) It streamlines decision-making processes. c) It reduces the need for employee motivation. d) It eliminates the need for organizational planning.
15. What is the role of feedback in the control function of management?  
a) It helps in creating organizational goals. b) It provides information about employee salaries. c) It measures actual performance against set standards. d) It determines the organization's market share.

# INDIAN ACADEMY

Degree College - Autonomous  
Department of Business Administration  
Foundation Course - Pre Screening Test Score

Subject: M21 DC 1.1 Management Principles and Practice  
I sem BBA A&B & BA

Date: 25/07/2023  
Max Marks: 15

SL. No.	Name	Score
1	SYED ALI	11
2	MIR HAMMAAD HUSSAIN	8
3	PRUTHVI V	10
4	V.PRADEEP KUMAR	7
5	JAYSREE	10
6	MUKESH.C	8
7	DIVYA V	12
8	MUKARAM AHMED	10
9	EMMANUEL	8
10	AISHWARYA K	9
11	M. SINDHU	6
12	BHARATH N SUTHAR	8
13	KASHIFA	12
14	ARHAM ABBAS SAIT	11
15	JOHN ABRAHAM	4
16	MAHALAKSHMI. K	4
17	AFNAAN AHMED	10
18	MOHD KABEER	9
19	DAVID LIGODI	9
20	UMME AZRA	12
21	YOUNUS ALI KHAN	10
22	MOHAMMAD SAQLAIN	10
23	NITHIN S	12
24	REHANA BANU	11
25	MOHAMMAD UMMAR N	12
26	GEETHANJALI	11
27	SHARON	9
28	LAKSHMI PRASAD CR	10
29	MOHAMMED TOUSIF	12
30	CHALLA.NIDHI KRISHNA	8
31	AKSHATHA	8
32	AISHWARYA M	9
33	MITHUKULLA THIRUMALA NARAYANA TEJA	11
34	PENUEL MOCHAHARI	10
35	TENISON THONGAM	12
36	AHMED SHARIEF	5
37	NATANIA SHANTAY	10
38	GORAK	8
39	AUGUSTINE BALRAJ	7

40	JIM ELLIOT.S	11
41	S MUSKAN ANJUM	10
42	SM BRINDASHREE	10
43	MD ZAID ALI KHAN	11
44	TAM PINYA	10
45	A.BENNY	8
46	MOHAMMED AFREED	11
47	RAHUL KUMAR	10
48	DURGA SHREE	10
49	KAVYA B	7
50	VAISHNAVI	11
51	ANTONY REZON	9
52	BHOOMIKA	8
53	MANASRI.R	12
54	ABHINAYA.R	8
55	MELVIN	4
56	AFRID ULLA KHAN	6
57	SANDHYA	10
58	NARMADHA.S	7
59	JASMINE MARY	8
60	USHA.P	9
61	ASHOK	10
62	NITASH KUMAR J	8
63	LINTON RAJESH R	9
64	RAKSHITH.A	9
65	MANISH	9
66	GEDDAM AKSHAY BABU	8
67	K PRAJWAL	11
68	DIVYA S	9
69	SYED MOHAMMED HASSAN	8
70	MOHAMMED EAHAB	9
71	HUDA QUBEEN	12
72	ARBIN BANU	9
73	SHREYAS S RAJANALKAR	2
74	DILEEPAN R	9

# INDIAN ACADEMY

Degree College - Autonomous

Department of Business Administration  
Foundation Course – Post Assessment Test, 01<sup>st</sup> August 2023

I semester BBA A&B, BA

Faculty In-charge: Ms. Deepa S

Subject: Management Principles and Practice

Max Marks: 15

1. Which of the following is NOT a characteristic of an effective planning process in management?  
  
A) Flexibility to adapt to changing circumstances. B) Precise and detailed planning for all aspects of the organization. C) Involvement of key stakeholders in the planning process. D) Focus on both short-term and long-term goals.
2. Which of the following is a key difference between leadership and management?  
  
A) Leadership involves guiding the organization's overall direction, while management focuses on day-to-day operations. B) Management is about inspiring and motivating employees, while leadership is about planning and organizing. C) Leaders are appointed based on their expertise, while managers are chosen based on their interpersonal skills. D) Leadership is a position within the organizational hierarchy, while management is a set of qualities exhibited by individuals.
3. Who is known as the "Father of Scientific Management"?  
  
A) Max Weber B) Frederick Taylor C) Henri Fayol D) Elton Mayo
4. In the context of planning, what does the term "S.M.A.R.T. goals" refer to?  
  
A) Goals that are Specific, Measurable, Achievable, Relevant, and Time-bound. B) Goals that are Secretive, Measurable, Aggressive, Realistic, and Timely. C) Goals that are Specific, Measurable, Attainable, Resource-based, and Time-bound. D) Goals that are Strategic, Measurable, Adaptive, Reliable, and Tangible.
5. What does the term "Matrix Organization" refer to?

- A) An organizational structure that is hierarchical and rigid. B) A management approach that emphasizes teamwork and collaboration. C) A structure where employees report to multiple managers based on different projects or tasks. D) A technique used to allocate resources efficiently among different departments.
6. Which of the following best defines the term "Talent Acquisition" in the context of staffing?
- A) The process of recruiting and selecting employees to fill specific job vacancies. B) The ongoing efforts to retain and develop the existing workforce. C) The identification and development of high-potential employees for future leadership roles. D) The strategic planning and forecasting of the organization's future staffing needs.
7. What is the primary purpose of conducting a "Behavioral Interview" during the hiring process?
- A) To assess a candidate's specific job-related skills and qualifications. B) To evaluate a candidate's overall personality and character traits. C) To understand how a candidate has handled past work-related situations and challenges. D) To determine a candidate's long-term career aspirations and goals.
8. Which of the following staffing strategies involves hiring employees from external sources to fill vacant positions?
- A) Succession planning B) Internal recruitment C) Job rotation D) External recruitment
9. In the context of organizational communication, which channel is characterized by the free flow of information, ideas, and feedback among all levels of employees?
- A) Downward communication B) Upward communication C) Horizontal communication D) Diagonal communication
10. Which of the following is a key characteristic of a well-communicated organizational vision?
- A) It is ambiguous and open to interpretation by different employees. B) It focuses solely on short-term goals and objectives. C) It is consistent and

aligns with the organization's values and goals. D) It is exclusively formulated by top-level management without input from others.

11. Which control mechanism involves comparing actual performance against predetermined standards to identify deviations and take corrective action?

A) Concurrent control B) Feedforward control C) Feedback control D) Concurrent control

12. Which of the following best defines "coordination" in the context of the management process?

A) Monitoring and evaluating employee performance. B) Assigning tasks and responsibilities to specific individuals. C) Ensuring all departments and activities work together harmoniously to achieve common goals. D) Implementing a centralized decision-making process.

13. Which communication channel is most suitable for delivering sensitive or confidential information within an organization?

A) Face-to-face communication B) Email communication C) Telephone communication D) Social media communication

14. Which communication style is characterized by using complex language and technical jargon, often making it difficult for the receiver to understand the message?

A) Upward communication B) Formal communication C) Downward communication D) Technical communication

15. Which of the following best describes the concept of "span of control" in organizational management?

A) The number of employees an organization can hire within a given budget. B) The level of authority a manager has over their subordinates. C) The number of subordinates a manager can effectively supervise. D) The distance between various departments within an organization.

# INDIAN ACADEMY

Degree College - Autonomous

Department of Business Administration

Foundation Course - Post Assessment Test Score

Subject: M21 DC 1.1 Management Principles and Practice  
I sem BBA A&B & BA

Date: 01/08/2023

Max Marks: 15

SL. No.	Name	Score
1	PRUTHVI V	7
2	TAM PINYA	7
3	VIDYA SAGAR GOWDA	7
4	JAYSREE	10
5	AISHWARYA K	8
6	PENUEL MOCHAHARI	10
7	MIR HAMMAAD HUSSAIN	8
8	SHREYAS	4
9	EMMANUEL	9
10	AUGUSTIN BALRAJ	7
11	AHMED SHARIEF	7
12	AKSHATHA	3
13	LAKSHMI PRASAD CR	8
14	TENISON THONGAM	10
15	AFNAAN AHMED	9
16	ANTONY REZON M. J	11
17	SYED ALI	8
18	BHARATH N SUTHAR	10
19	RAHUL KUMAR	12
20	JIM ELLIOT. S	12
21	BHOOMIKA SANGAMITHRE M	6
22	DIVYA S	9
23	GORAKNATH M	9
24	DILEEPAN.R	5
25	A. BENNY	11
26	LINTON RAJESH R	9
27	JOHN ABRAHAM	5
28	MANASRI. R	8
29	RAKSHITH. A	9
30	MANISH	9
31	DAVID	6
32	ABHISHA.B	6
33	VAISHNAVI R	8
34	MUKESH.C	9
35	MOHAMMAD SAQLAIN	12
36	M. SINDHU	7
37	CHALLA NIDHI KRISHNA	9
38	AISHWARYA M	9
39	V.PRADEEP KUMAR	8

40	MOHAMMED TOUSIF	7
41	DURGA AGREE. P	8
42	SHAM. V	9
43	MAHALAKSHMI. K	9
44	HUDA QUBEEN	6
45	SM.BRINDASHREE	9
46	AFRID ULLA KHAN	7
47	KAVYA B	8
48	ARHAM ABBAS SAIT	7
49	NARMADHA.S	9
50	USHA P	8
51	JASMINE MARY	8
52	S.MUSLAN ANJUM	7
53	MOHAMMAD UMMAR N	9
54	NITHIN S	9
55	ABHINAYA.R	7
56	MOHAMMED EAHAB	9
57	BHOOMIKA.B	6
58	REHANA BANU	6
59	DIVYANKA SHARMA	6
60	SANDHYA	9
61	SHARON	10
62	MITHUKULLA THIRUMALA NARAYANA TEJA	9
63	MOHAMMED TOUFEEQ	9
64	SYED MOHAMMED HASSAN	7
65	NATANIA SHANTAY	9
66	K PRAJWAL	10
67	KASHIFA	7
68	DIVYA V	8
69	MOHAMMED ZAID ALI KHAN	7
70	MOHAMMED AFREED	7
71	MELVIN ABISHEK	10
72	GEDDAM AKSHAY BABU	9
73	ASHOK.P	9
74	NITASH KUMAR.J	10

# INDIAN ACADEMY

Degree College - Autonomous

## Department of Business Administration

Foundation Course 2023-24

1<sup>st</sup> semester BBA A&B and Business Analytics

**Title of the Course:** M21 DC 1.1 Management Principles and Practice

**Resource Person:** Ms. Deepa S

**Duration:** 5 Hours

### **Aims:**

- The primary aim of the management process for students is to help them achieve academic success. This involves setting clear educational goals, planning study schedules, and organizing study materials effectively to optimize learning and performance.
- Effective time management is a crucial aspect of the management process for students. It aims to help students allocate their time wisely between academic activities, extracurricular pursuits, and personal life.
- The management process for students also focuses on fostering personal growth and development.

### **Objectives:**

- Understanding the concepts for setting clear academic goals, providing resources and support to achieve those goals, and monitoring progress regularly.
- It aims to foster personal growth, critical thinking, problem-solving skills, and the ability to adapt to changing circumstances.

- It involves optimizing the use of time, materials, and facilities to enhance productivity and reduce wastage. By efficiently allocating resources, educational institutions can ensure that students have access to the necessary tools and support for their learning journey.

### **Content**

- Planning
- Organizing
- Controlling
- Coordinating

### **Teaching and Evaluation:**

- The above content is taught by using tools like PPT/Word, videos, chalk and talk, case studies and examples.
- After completion of the 5 hrs students will be evaluated with an objective type of questions.

### **Outcome:**

- The students acquire a comprehensive understanding of the subjects they study. This involves delivering well-structured and effective educational content, encouraging active participation in class.
- It encourages them to analyze information critically, evaluate different perspectives, and propose innovative solutions to complex problems. This outcome helps students become independent thinkers and equips them to handle challenges in various aspects of their lives.
- The Students can development of effective communication and collaboration skills.
- The faculty can also focuses on nurturing students' personal and social development.

# Foundation Course

## I semester BBA

### Management Principles and practice

Prof. DEEPA S  
Assistant Professor  
Department of Business Administration  
Indian Academy Degree College - Autonomous

## Management

Management (or managing) is the administration of an organization whether it is a business, a non profit organization, or government body.

'Management is the art of getting things done through others'

Henry Fayol stated: "to manage is to forecast and to plan, to organise, to command, to co-ordinate and to control."



## Syllabus of Management Principles and Practice – Foundational Course

History of Management –  
functions of management –  
Planning – Organising – Staffing  
– Direction – Coordination –  
Controlling – importance of  
communication in Business

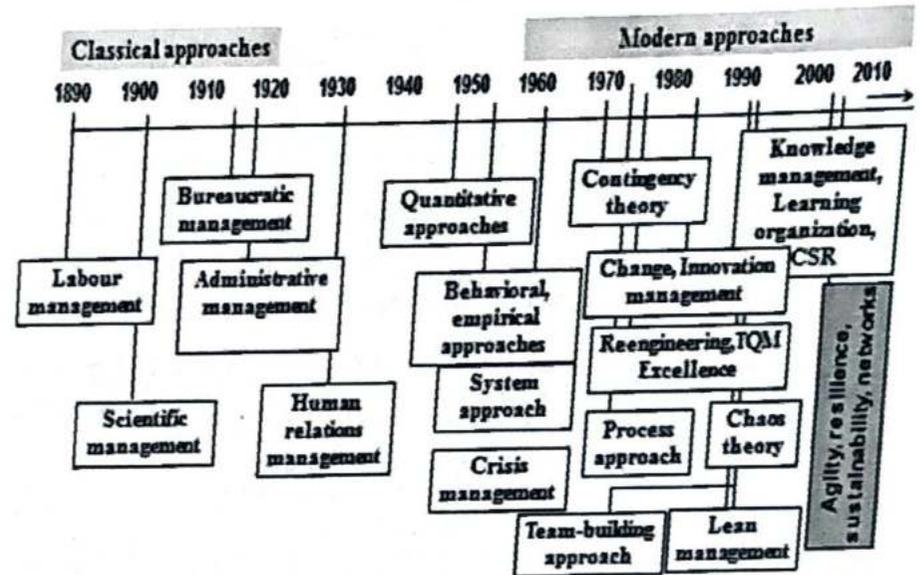
### Evolution of Management Thoughts:

- Development of a Management Practice:
- 1. Robert Owen – 1771 to 1858 – Improve working condition of labour
- 2. Charles Babbage – 1791 to 1871 – Division of labour
- 3. Andrew Ure – 1778 to 1857 – Study of management
- 4. Charles Dupin – 1784 to 1873 and
- 5. Henry R Towne – 1844 to 1924 – Business skill needed for running a business.

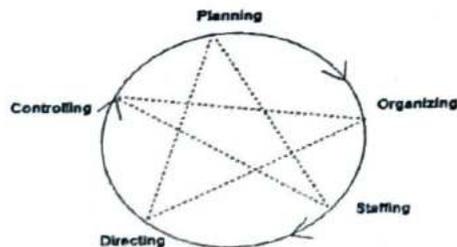
# Evolution of Management Thoughts:

• Its is divided into 4 parts:

1. Pre scientific management period
2. Classical Theory
3. Neo-classical Theory or (Behaviour Approach)
4. Bureaucratic Model of Max Weber



## Functions of Management

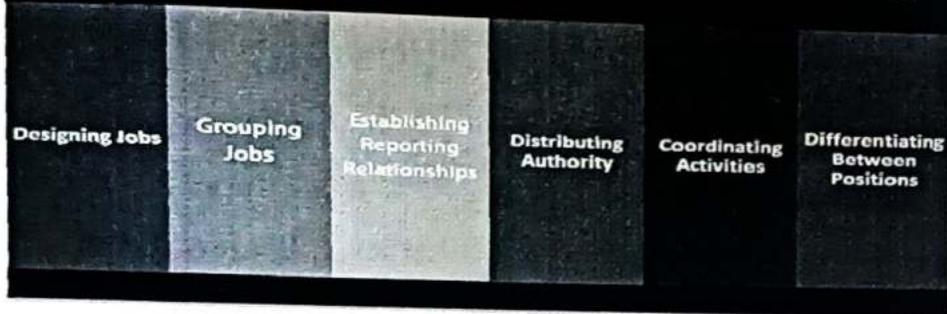


## Planning



# Organizing

## Basic Elements of Organizing



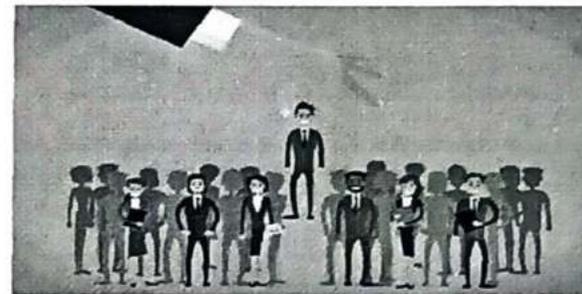
ORGANISING



# Staffing



FIGURE 1: STAFFING PROCESS



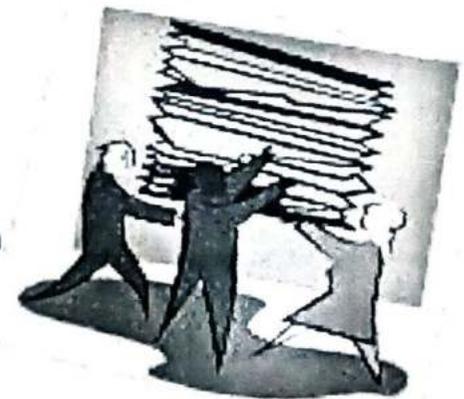
## Direction



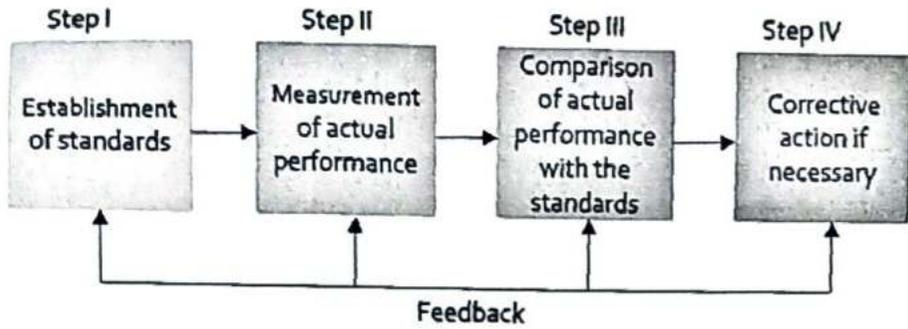
## Coordination

### INTRODUCTION TO COORDINATION

- Meaning:
1. the act or state of coordinating or of being coordinated.
  2. proper order or relationship.
  3. harmonious combination or interaction, as of functions or parts.



# Controlling



The Controlling function verifies that all allotted tasks are being performed on time.

# Importance of communication in business

## Importance of Communication in Corporate World

- Helps to increase the sale
- Helps in retaining the client
- Helps to implement strategies
- Helps in corporate branding
- Helps to develop global competence
- Helps in crisis management

## Business Communication Importance



The Importance Of Business Communication @ BRD SIX



Thank you

# INDIAN ACADEMY

Degree College - Autonomous

Department of Business Administration

Foundation Course - Mr. Ashish G. Wilson

2023 Batch

Sl.No.	Student Name	24/7/23	25/7/23	26/7/23	27/7/23	28/7/23
1	AISHWARYA K	1	2	3	4	5
2	AISHWARYA M	1	2	A	3	4
3	DILEEPAN R	1	2	3	4	5
4	GEETHANJALI N	1	2	3	4	A
5	GORAKNATH M	1	2	3	4	5
6	K PRAJWAL	1	2	3	4	A
7	LINTON RAJESH R	1	2	3	4	5
8	M SINDHU	1	2	3	4	5
9	MANASRI R	1	A	2	3	A
10	MOHAMMAD TOUFEEQ	1	2	3	4	5
11	NARMADHA S	1	2	3	4	A
12	NITHIN S	1	2	3	4	A
13	RAKSHITH A	A	A	A	A	A
14	SHARATH KUMAR S	1	2	3	4	5
15	USHA P	1	2	3	4	5
16	VAISHNAVI R	1	2	A	1	2
17	VIDHYA SAGAR GOWDA. N	A	A	A	2	A
18	DURGA SHREE P	1	2	A	3	A
19	BHOOMIKA.B	1	2	3	4	A
20	AFRID ULLA KHAN	1	2	3	A	4
21	ARBIN BANU	1	2	3	4	5
22	ASHOK P	1	2	3	4	5
23	HUDA QUBEEN	1	2	3	A	4
24	MIR HAMMAAD HUSSAIN	1	2	3	4	5
25	MOHAMMED EAHAB E-HAB	1	2	3	4	A
26	MOHAMMED SAQLAIN	1	2	3	4	A
27	MOHAMMED TOUSIF	1	2	3	4	A
28	MOHD KABEER	A	1	2	3	A
29	MUKARAM AHMED	1	A 2	3	4	A
30	NITASH KUMAR J	1	2	A	3	4
31	S MUSKAN ANJUM	1	2	3	4	A
32	SHAM. V	A	A	1	2	3
33	UMME AZRA	1	2	3	4	5
34	YOUNUS ALI KHAN	1	2	3	A	4
35	BHARATH N SUTHAR	1	2	3	4	5
36	MOHAMMED AFREED	1	A	A	2	3
37	SHRISTI RAJ	1	A	A	A	A
38	SYED MOHAMMED HASSAN	1	2	3	4	5
39	DIVYANKA SHARMA	A	A	A	A	A

11:15 -  
12:10

Ag

10:15 -  
11:15

Ag

9:15 -  
10:15

Ag

9:15 -  
10:15

Ag

11:15 -  
12:10

Ag

40	MOHAMMED ZAID ALI KHAN	B1	A	2	3	A
41	RAHUL KUMAR	1	2	3	4	S
42	A BENNY	1	2	3	4	A
43	ABHINAYA R	1	2	3	4	A
44	AHMED SHARIEF	1	2	3	4	S
45	AKSHATHA S	1	2	3	4	A
46	ANTONY REZON M J	1	2	3	4	S
47	ARHAM ABBAS SAIT	1	2	3	4	S
48	AUGUSTIN BALRAJ	1	2	3	4	A
49	BHOOMIKA SANGAMITHRE.M	1	A	A	2	3
50	CHALLA NIDHI KRISHNA	1	2	3	4	4
51	<del>D</del> JUDHA JOHONAN JUDAH	1	2	3	4	S
52	EMMANUEL C	1	2	3	4	S
53	JASMINE MARY K	1	2	3	A	A
54	KASHIFA	1	2	3	A	4
55	KAVYA B	1	2	3	A	S
56	LAKSHMI PRASAD C R	1	2	A	3	4
57	LIGODI MANGANZA DAVID	1	2	3	4	S
58	MANISH.C	1	2	3	4	S
59	MELVIN ABISHEK V	1	2	3	4	C
60	MITHUKULLA THIRUMALA Teja	1	2	3	4	A
61	MOHAMMAD ASRAR KHAN	A	A	A	A	A
62	MOHAMMED UMMAR N	1	2	3	4	A
63	NATANIA SHANTAY J	1	2	3	A	A
64	PENUJEL MOCHAHARI	1	2	3	A	4
65	REHANA BANU	1	2	3	4	S
66	S R JAYSREE	1	2	3	4	A
67	SHARON VALENCIA J	1	2	3	A	A
68	SHREYAS S RAJANALKAR	1	2	A	A	3
69	SM.BRINDASHREE	1	2	3	4	A
70	TAM PINYA	1	2	3	4	S
71	TENISON THONGAM	1	2	3	4	S
72	V PRADEEP KUMAR	1	2	3	4	S
73	AFNAAN AHMED	1	2	3	4	S
74	DIVYA V	1	2	3	A	4
75	GEDDAM AKSHAY BABU	1	2	3	4	S
76	JOHN ABRAHAM.A	1	2	3	4	C
77	PRUTHVI V	1	2	3	4	S
78	SANDHYA D	1	2	3	4	S
79	SYED ALI	1	2	3	A	4
80	DIVYA S	1	2	3	4	A
81	JIM ELLIOT S	1	2	3	A	4
82	MUKESH C	1	2	3	4	S

83. ~~Mohammed Abrar~~

83. Mahalakshmi. k 1 2 3 A 4

84. Abhisha. A A 1 2 A

85. Ismail

# **INDIAN ACADEMY**

Degree College - Autonomous

**Department of Business Administration**

**Foundation Course – Pre Screening Test, 25<sup>th</sup> July 2023**

**I semester BBA A&B & BA**

**Faculty In-charge: Mr. Ashish G Wilson**

**Subject: Fundamentals of Business Accounting**

**Max Marks: 15**

1. Explain the golden rules of accounting.
2. What are accounting concepts? Explain in detail.
3. Write a note on accounting conventions.
4. What is an asset? Explain the different types of assets.
5. What is a liability? Explain the different types of liabilities.

# INDIAN ACADEMY

Degree College - Autonomous

Department of Business Administration

Foundation Course - Pre Screening Test Score

Subject: Fundamentals of Business Accounting

Date: 25/07/2023

I sem BBA A&B & BA

Max Marks: 15

SL. No.	Name	Score
1	SYED ALI	9
2	MIR HAMMAAD HUSSAIN	7
3	PRUTHVI V	10
4	V.PRADEEP KUMAR	5
5	JAYSREE	9
6	MUKESH.C	8
7	DIVYA V	10
8	MUKARAM AHMED	9
9	EMMANUEL	8
10	AISHWARYA K	7
11	M. SINDHU	5
12	BHARATH N SUTHAR	8
13	KASHIFA	10
14	ARHAM ABBAS SAIT	10
15	JOHN ABRAHAM	4
16	MAHALAKSHMI. K	2
17	AFNAAN AHMED	9
18	MOHD KABEER	9
19	DAVID LIGODI	7
20	UMME AZRA	11
21	YOUNUS ALI KHAN	10
22	MOHAMMAD SAQLAIN	8
23	NITHIN S	11
24	REHANA BANU	11
25	MOHAMMAD UMMAR N	10
26	GEETHANJALI	10
27	SHARON	9
28	LAKSHMI PRASAD CR	8
29	MOHAMMED TOUSIF	11
30	CHALLA.NIDHI KRISHNA	8
31	AKSHATHA	6
32	AISHWARYA M	8
33	MITHUKULLA THIRUMALA NARAYAN	9
34	PENUEL MOCHAHARI	9
35	TENISON THONGAM	12
36	AHMED SHARIEF	3
37	NATANIA SHANTAY	9
38	GORAK	8

39	AUGUSTINE BALRAJ	5
40	JIM ELLIOT.S	10
41	S MUSKAN ANJUM	10
42	SM BRINDASHREE	8
43	MD ZAID ALI KHAN	10
44	TAM PINYA	10
45	A.BENNY	6
46	MOHAMMED AFREED	10
47	RAHUL KUMAR	10
48	DURGA SHREE	8
49	KAVYA B	6
50	VAISHNAVI	11
51	ANTONY REZON	7
52	BHOOMIKA	7
53	MANASRI.R	12
54	ABHINAYA.R	6
55	MELVIN	3
56	AFRID ULLA KHAN	6
57	SANDHYA	8
58	NARMADHA.S	6
59	JASMINE MARY	8
60	USHA.P	7
61	ASHOK	9
62	NITASH KUMAR J	8
63	LINTON RAJESH R	7
64	RAKSHITH.A	8
65	MANISH	9
66	GEDDAM AKSHAY BABU	6
67	K PRAJWAL	10
68	DIVYA S	9
69	SYED MOHAMMED HASSAN	6
70	MOHAMMED EAHAB	8
71	HUDA QUBEEN	12
72	ARBIN BANU	7
73	SHREYAS S RAJANALKAR	1
74	DILEEPAN R	9

# INDIAN ACADEMY

Degree College - Autonomous

## Department of Business Administration

Foundation Course – Post Test, 1<sup>st</sup> August 2023

I semester BBA A&B & BA

Faculty In-charge: Mr. Ashish G Wilson

**Subject: Fundamentals of Business Accounting**

**Max Marks: 15**

1. What is the concept of conservatism in accounting?
  - a. The principle that a business should always use the most conservative accounting methods
  - b. The principle that a business should always use the most aggressive accounting methods
  - c. The principle that a business should recognize potential losses immediately but only recognize potential gains when they are realized.
  
1. Which of the following is an example of the matching concept in accounting?
  - a. Recording a sales transaction when the customer places an order
  - b. Recording an expense when a supplier's invoice is received
  - c. Recording depreciation expense on a building over its useful life
  
2. What is the purpose of the consistency concept in accounting?
  - a. To ensure that a business is always consistent in the way it applies accounting policies from year to year
  - b. To ensure that a business uses the most appropriate accounting policies for each individual transaction

- c. To ensure that a business is always consistent in the way it presents its financial statements
3. What is the purpose of the consistency concept in accounting?
- a. To ensure that a business is always consistent in the way it applies accounting policies from year to year
  - b. To ensure that a business uses the most appropriate accounting policies for each individual transaction
  - c. To ensure that a business is always consistent in the way it presents its financial statements
4. Which of the following is an example of the materiality concept in accounting?
- a. Recording a \$1,000 expense for office supplies
  - b. Recording a \$10,000 expense for a new computer system
  - c. Recording a \$100,000 expense for a new building
5. What is the purpose of the entity concept in accounting?
- a. To ensure that a business is separate from its owners for accounting purposes
  - b. To ensure that a business is always recognized as a single entity, even if it has multiple divisions or subsidiaries
  - c. To ensure that a business's financial statements reflect only the transactions of the business itself, and not those of its owners or managers
6. Which of the following is an example of the accruals concept in accounting?
- a. Recording revenue when cash is received from a customer
  - b. Recording revenue when a product is shipped to a customer
  - c. Recording revenue when a customer places an order
7. Which of the following is an example of the prudence concept in accounting?
- a. Recording a large gain on an investment that was held for only a few days

- b. Recording a potential loss on a long-term contract even if the loss has not yet been incurred
  - c. Recording a potential gain on a long-term contract even if the gain has not yet been realized
8. What is the purpose of the historical cost concept in accounting?
- a. To ensure that a business's assets are always valued at their current market value
  - b. To ensure that a business's assets are always valued at their original purchase price
  - c. To ensure that a business's assets are always valued at their replacement cost
9. Which of the following is an example of the realization concept in accounting?
- a. Recording revenue when a product is shipped to a customer
  - b. Recording revenue when a customer places an order
  - c. Recording revenue when cash is received from a customer
10. What is the purpose of accounting conventions, and how do they impact financial reporting?
11. Explain the concept of the "going concern" convention in accounting and its significance.
12. What does the "consistency" convention require in terms of accounting practices?
13. Describe the "prudence" or "conservatism" convention and its role in financial reporting.
14. How does the "materiality" convention influence the treatment of transactions in accounting?
15. What is the "full disclosure" convention, and why is it important in financial statements?

16. Explain the concept of "historical cost" convention and its application in valuing assets.
17. Describe the "money measurement" convention and its impact on the recognition of certain economic events.
18. What are the dual aspects or "duality" golden rules of accounting? Provide examples.
19. How do the golden rules of accounting (debit and credit) help maintain the accounting equation in transactions?

# INDIAN ACADEMY

Degree College - Autonomous

Department of Business Administration

Foundation Course - Post Assessment Test Score

Subject: Fundamentals of Business Accounting Date: 01/08/2023

I sem BBA A&B & BA

Max Marks: 15

SL. No.	Name	Score
1	PRUTHVI V	12
2	TAM PINYA	9
3	VIDYA SAGAR GOWDA	11
4	JAYSREE	8
5	AISHWARYA K	11
6	PENUEL MOCHAHARI	9
7	MIR HAMMAAD HUSSAIN	13
8	SHREYAS	11
9	EMMANUEL	9
10	AUGUSTIN BALRAJ	10
11	AHMED SHARIEF	7
12	AKSHATHA	9
13	LAKSHMI PRASAD CR	13
14	TENISON THONGAM	12
15	AFNAAN AHMED	5
16	ANTONY REZON M. J	5
17	SYED ALI	11
18	BHARATH N SUTHAR	10
19	RAHUL KUMAR	9
20	JIM ELLIOT. S	13
21	BHOOMIKA SANGAMITHRE M	13
22	DIVYA S	9
23	GORAKNATH M	14
24	DILEEPAN.R	13
25	A. BENNY	13
26	LINTON RAJESH R	11
27	JOHN ABRAHAM	12
28	MANASRI. R	10
29	RAKSHITH. A	14
30	MANISH	9
31	DAVID	8
32	ABHISHA.B	11
33	VAISHNAVI R	11
34	MUKESH.C	10
35	MOHAMMAD SAQLAIN	15
36	M. SINDHU	4
37	CHALLA NIDHI KRISHNA	11

38	AISHWARYA M	11
39	V.PRADEEP KUMAR	7
40	MOHAMMED TOUSIF	13
41	DURGA AGREE. P	12
42	SHAM. V	9
43	MAHALAKSHMI. K	13
44	HUDA QUBEEN	13
45	SM.BRINDASHREE	7
46	AFRID ULLA KHAN	12
47	KAVYA B	13
48	ARHAM ABBAS SAIT	10
49	NARMADHA.S	7
50	USHA P	12
51	JASMINE MARY	10
52	S.MUSLAN ANJUM	10
53	MOHAMMAD UMMAR N	14
54	NITHIN S	7
55	ABHINAYA.R	5
56	MOHAMMED EAHAB	8
57	BHOOMIKA.B	9
58	REHANA BANU	9
59	DIVYANKA SHARMA	10
60	SANDHYA	8
61	SHARON	11
62	MITHUKULLA THIRUMALA NARAYANA TEJA	11
63	MOHAMMED TOUFEEQ	8
64	SYED MOHAMMED HASSAN	11
65	NATANIA SHANTAY	11
66	K PRAJWAL	7
67	KASHIFA	13
68	DIVYA V	10
69	MOHAMMED ZAID ALI KHAN	8
70	MOHAMMED AFREED	11
71	MELVIN ABISHEK	15
72	GEDDAM AKSHAY BABU	8
73	ASHOK.P	3
74	NITASH KUMAR.J	12

# INDIAN ACADEMY

Degree College - Autonomous

## Department of Business Administration

Foundation Course 2023-24

1<sup>st</sup> semester BBA A&B and Business Analytics

**Title of the Course:** Fundamentals of Business Accounting

**Resource Person:** Mr. Ashish G Wilson

**Duration:** 5 Hours

### **Accounting Standards:**

Accounting standards are guidelines for financial reporting that have been developed by various accounting bodies around the world to ensure that financial statements are consistent, accurate, and reliable. These standards provide guidance on how transactions and events should be recorded, measured, and disclosed in financial statements.

In the United States, the Financial Accounting Standards Board (FASB) sets accounting standards through its Generally Accepted Accounting Principles (GAAP), which are followed by most publicly traded companies. In other countries, such as the United Kingdom, accounting standards are set by the International Accounting Standards Board (IASB), which is responsible for developing and promoting International Financial Reporting Standards (IFRS).

Accounting standards cover a wide range of topics, including revenue recognition, leases, goodwill, and financial instruments. They aim to ensure that financial statements are comparable across companies and industries, and that investors and other stakeholders can make informed decisions based on the information presented in financial statements.

### **Accounting Conventions:**

Accounting conventions are generally accepted guidelines for accounting practices that are not necessarily required by accounting standards, but are commonly used in practice. These

conventions help to ensure consistency and accuracy in financial reporting, and provide a framework for companies to make accounting decisions.

Some common accounting conventions include:

1. **Consistency:** This convention requires that accounting methods and practices be applied consistently from one period to another, so that financial statements can be compared over time.
2. **Conservatism:** This convention encourages accountants to be cautious in their reporting, and to err on the side of understating assets and overstating liabilities and expenses.
3. **Materiality:** This convention requires that only significant transactions and events be recorded in financial statements, while immaterial transactions can be ignored.
4. **Matching:** This convention requires that expenses be recorded in the same period as the revenues they generate, to ensure that financial statements accurately reflect the results of a company's operations.
5. **Objectivity:** This convention requires that financial transactions and events be recorded based on verifiable evidence, such as receipts, invoices, and other documents.

In conclusion, accounting standards and conventions are important components of financial reporting, providing guidance and structure to the way in which transactions are recorded and reported. By following these standards and conventions, companies can ensure that their financial statements are accurate, reliable, and comparable over time.

#### **Accounting concepts:**

Accounting concepts are the fundamental principles that guide the accounting process. These concepts help to ensure consistency and accuracy in financial reporting and provide a framework for companies to make accounting decisions. The following are some of the most important accounting concepts:

1. **Entity Concept:** The entity concept states that a business is a separate entity from its owners. This means that the transactions and financial activities of the business must be kept separate from the personal transactions of the owners.

2. **Going concern concept:** Going concern concept prescribes that accountants prepare financial statements on the assumption that a business may continue its operations for the foreseeable future. Under this concept, the definition of a foreseeable future is a period of 12 months from the end date of the reporting period. If a business owner or the management is invested in scaling down business operations to zero, they cannot apply the going concern concept for accounting. Accountants may no longer apply the going concern concept if a company is:

- unable to pay dividends
- unable to raise credit from banks and financial services
- facing losses and negative operating cash flow
- facing an adverse financial position
- unable to pay back crucial debts
- facing an unfavourable legal or regulatory action against it

3. **Money measurement concept:** This is an accounting concept based on assumption, and it stipulates that companies record only those transactions that they can quantify and measure in terms of money. If they cannot assign a monetary value to a transaction, they do not record it in their annual financial statement. Though these transactions affect a company's financial performance, they may not find a place in financial statements, as monetising them can be challenging. Some examples of non-monetary value include employee competence, product quality, employee efficiency, market sentiment, business productivity and stakeholder satisfaction.

4. **Accounting period concept:** The accounting period concept prescribes a timeframe within which a business records and reports its financial performance for the purview of internal and external stakeholders. An accounting period of a company may coincide with the fiscal year. A company can determine a timeframe for internal reporting, like three or six months, or prepare monthly financial reports to analyse their cash flow positions. The management can determine a convenient accounting period for internal reporting, but the

reporting for investor, government and tax purposes is typically for the period of one year.

5. **Accrual concept:** Accrual is a fundamental concept that guides how a business can record cash or credit transactions. Under this concept, a business records a financial transaction in the period it occurs. It does not consider whether the business pays or receives cash at the time of the transaction, or if it pays cash after a certain period. For example, a company records a credit purchase at the time of purchase rather than when it pays back the seller. This helps record and report income, expenses, liabilities and receivables accurately. All modern accounting systems follow the accrual concept in recording financial transactions.
6. **Revenue realisation concept:** Under the revenue realisation or revenue recognition concept, a seller records potential revenue from a transaction, regardless of whether they have or have not received proceeds. The ownership of a product transfers from a buyer to a seller during a sale. A seller recognises the transaction by creating a receivable against the buyer's name in their ledger. An accountant creates another entry when they receive the due amount in the future.
7. **Full disclosure concept:** The full disclosure concept requires a business entity to furnish necessary information for the benefit of those who read financial statements and reports for investment, taxation or audit purposes. This concept aims to provide important financial information to investors, creditors, shareholders, clients, and other stakeholders. Disclosure policies cover revenue recognition, depreciation, inventory, taxes, earnings, stock value, leases and liabilities.
8. **Dual aspect concept:** Dual aspect concept states that every transaction affects two accounts of a business. A business then records both aspects to enable accurate accounting. Every financial transaction has a credit or debit or a giver or receiver aspect. If an accounting process does not represent both, it may lead to faults in the final

accounting record. The dual aspect concept is the foundation of the double-entry system of bookkeeping, which is now a standard method for auditing and taxation.

9. **Materiality concept:** The materiality concept prescribes guidelines to identify if a piece of financial information is material and whether it can influence the person reading a company's financial statements. Based on this concept, an accountant or a business may remove negligible transactions that may not have a bearing on final accounts. This concept is open to subjective interpretation and the basis for using the materiality concept varies with the size of a company. While a large company may round off figures in the final accounts to crores, a small firm may round off their figures to lakhs.
10. **Verifiable objective evidence concept:** Under this concept, a business can record only those transactions that they can furnish documentary proof for. Without proper and valid documentary evidence, a transaction can be biased or undependable, and it can increase the scope of financial irregularities. For example, a retail employee may present a bill for purchases and sales, and corroborate it with sale and purchase invoices.
11. **Historical cost concept:** The historical cost concept states that a business may record assets and liabilities at their historical cost rather than their current market or sale value. It helps to maintain consistent, reliable and verifiable financial information. Including the current value of an entity can result in financial irregularities.

Department of Business Administration					
Foundation Course					
2023 Batch					
Sl.No.	Student Name	24/7/23	25/7/23	26/7/23	27/7/23
1	AISHWARYA K				
2	AISHWARYA M				
3	DILEEPAN R				
4	GEETHANJALI N				
5	GORAKNATH M				
6	K PRAJWAL				
7	LINTON RAJESH R				
8	M SINDHU				
9	MANASRI R				
10	MOHAMMAD TOUFEEQ				
11	NARMADHA S				
12	NITHIN S				
13	RAKSHITH A				
14	SHARATH KUMAR S				
15	USHA P				
16	VAISHNAVI R				
17	VIDHYA SAGAR GOWDA. N				
18	DURGA SHREE P				
19	BHOOMIKA.B	Bhoomika B	Bhoomika B	Bhoomika B	Bhoomika B
20	AFRID ULLA KHAN				
21	ARBIN BANU				
22	ASHOK P				
23	HUDA QUBEEN				
24	MIR HAMMAAD HUSSAIN				
25	MOHAMMED EAHAB				
26	MOHAMMED SAQLAIN				
27	MOHAMMED TOUSIF				
28	MOHD KABEER				
29	MUKARAM AHMED				
30	NITASH KUMAR J				
31	S MUSKAN ANJUM				
32	SHAM. V	Sham V	Sham V	Sham V	Sham V
33	UMME AZRA				
34	YOUNUS ALI KHAN				
35	BHARATH N SUTHAR				
36	MOHAMMED AFREED				
37	SHRISTI RAJ				
38	SYED MOHAMMED HASSAN				
39	DIVYANKA SHARMA				

12.15 - 1.10 pm    12.15 - 1.10 pm    11.15 - 12.10 pm    12.15 - 1.10 pm

40	MOHAMMED ZAID ALI KHAN	M.Zaid	M.Zaid	M.Zaid	M.Zaid
41	RAHUL KUMAR	Rahul	Rahul	Rahul	Rahul
42	A BENNY	Benny	Benny	Benny	Benny
43	ABHINAYA R	Abhinaya	Abhinaya	Abhinaya	Abhinaya
44	AHMED SHARIEF	Ahmed	Ahmed	Ahmed	Ahmed
45	AKSHATHA S	Akshatha	Akshatha	Akshatha	Akshatha
46	ANTONY REZON M J	Rezon	Rezon	Rezon	Rezon
47	ARHAM ABBAS SAIT	Arham	Arham	Arham	Arham
48	AUGUSTIN BALRAJ	Augustine	Augustine	Augustine	Augustine
49	BHOOMIKA SANGAMITHRE.M	Bhoomika	Bhoomika	Bhoomika	Bhoomika
50	CHALLA NIDHI KRISHNA	Nidhi	Nidhi	Nidhi	Nidhi
51	D JUDHA JOHONAN	Judha	Judha	Judha	Judha
52	EMMANUEL C	Emmanuel	Emmanuel	Emmanuel	Emmanuel
53	JASMINE MARY K	Jasmine	Jasmine	Jasmine	Jasmine
54	KASHIFA	Kashifa	Kashifa	Kashifa	Kashifa
55	KAVYA B	Kavya	Kavya	Kavya	Kavya
56	LAKSHMI PRASAD C R	Lakshmi	Lakshmi	Lakshmi	Lakshmi
57	LIGODI MANGANZA DAVID	Ligodi	Ligodi	Ligodi	Ligodi
58	MANISH.C	Manish	Manish	Manish	Manish
59	MELVIN ABISHEK V	Melvin	Melvin	Melvin	Melvin
60	MITHUKULLA THIRUMALA	Mithu	Mithu	Mithu	Mithu
61	MOHAMMAD ASRAR KHAN	Asrar	Asrar	Asrar	Asrar
62	MOHAMMED UMMAR N	Ummar	Ummar	Ummar	Ummar
63	NATANIA SHANTAY J	Natania	Natania	Natania	Natania
64	PENUEL MOCHAHARI	Penuel	Penuel	Penuel	Penuel
65	REHANA BANU	Rehana	Rehana	Rehana	Rehana
66	S R JAYSREE	Jaysree	Jaysree	Jaysree	Jaysree
67	SHARON VALENCIA J	Sharon	Sharon	Sharon	Sharon
68	SHREYAS S RAJANALKAR	Shreyas	Shreyas	Shreyas	Shreyas
69	SM.BRINDASHREE	Brindashree	Brindashree	Brindashree	Brindashree
70	TAM PINYA	Tam	Tam	Tam	Tam
71	TENISON THONGAM	Tenison	Tenison	Tenison	Tenison
72	V PRADEEP KUMAR	Pradeep	Pradeep	Pradeep	Pradeep
73	AFNAAN AHMED	Afnaan	Afnaan	Afnaan	Afnaan
74	DIVYA V	Divya	Divya	Divya	Divya
75	GEDDAM AKSHAY BABU	Akshay	Akshay	Akshay	Akshay
76	JOHN ABRAHAM.A	John	John	John	John
77	PRUTHVI V	Pruthvi	Pruthvi	Pruthvi	Pruthvi
78	SANDHYA D	Sandhya	Sandhya	Sandhya	Sandhya
79	SYED ALI	Syed	Syed	Syed	Syed
80	DIVYA S	Divya	Divya	Divya	Divya
81	JIM ELLIOT S	Jim	Jim	Jim	Jim
82	MUKESH C	Mukesh	Mukesh	Mukesh	Mukesh

83. Mahalakshmi .k.  
84. Abhishta

Maha. Maha. Maha.  
Hobishu Abhishta.  
T.B.li T.B.li T.B.li T.B.li

## Introduction to Business

**Business** is any economic activity that includes the purchase or sale of goods or services with the basic objective of earning profit and satisfying the individuals' needs of the society. Business activities can be classified into two categories: Industry and Commerce.

### Economic and Non-Economic Activities

Every individual has different needs, and to fulfill these needs, they perform different activities. These activities are categorized as economic and non-economic activities.

#### Economic Activities

Economic activities refer to those activities which are performed with the objective of earning money and creating wealth. Economic activities are of three types, namely, Business, Profession, and Employment. For example, an individual running an organization is a business, a teacher teaching at a school is a profession, and an employee working in an organization is employment.

#### Non-Economic Activities

Non-economic activities refer to those activities which are performed with the objective of satisfying emotional, social, and psychological needs. Earning money and livelihood is not the motive of human beings while performing non-economic activities; instead, people perform them out of sympathy, love, affection, etc. For example, a mother cooking food for her children, a sports teacher coaching his daughter, and friends teaching each other before exams are considered non-economic activities.

### Discussion: What is a business?

#### Concept of Business

All economic activities that involve the sale and/or purchase of goods and services with some element of risk and motive of earning profits are known as business. All business activities also aim at satisfying the needs of human beings in society. It is an activity that is performed on a regular basis and hence also means 'being busy.'

#### Characteristics of Business

- **Economic activity:** Business is an economic activity, as it involves performing activities with the basic objective of earning money and profits.
- **Sale or exchange of goods and services:** A business should include the sale or exchange of goods and services for some consideration or value in return between the buyer and seller directly or through some third party. No internal consumption is involved in business activities.
- **Procurement or production of goods and services:** Procurement means trading goods and services, and production means manufacturing the goods and services in an organization. In procurement, businesses do not manufacture goods or services on their own; instead, they purchase them from other companies and then sell them to different consumers and businesses. Here goods include any consumable item, and services consisting of banking, insurance, transportation, etc.
- **Regular basis:** An activity will be considered as a business if it takes place on a regular basis. It means that selling or purchasing goods and services for one time only is not considered a business. For example, manufacturing and selling chairs on regular basis is a business. However, selling your school books for one time is not a business.

- **Profit earning:** The main objective of any business is to earn profits. No business can survive only on the sale and purchase of goods and services without making profits. Therefore, the efforts of a businessman are always directed towards earning more and more profits.
- **Uncertainty of return:** The environment in which a business operates is quite uncertain. Therefore, no matter how much money is invested in a business, one cannot say for sure how much profit the business will earn in a specific time period. Hence, the chances of losses are also present in a business.
- **Element of risk:** Uncertain business environment and different natural, human, social, economical, political, financial, or personal factors exist in every business that exposes them to certain risks. Therefore, a business has to consider these elements of risks while performing activities.

### Comparison between Business, Profession, and Employment

Basis	Business	Profession	Employment
<b>Meaning</b>	An economic activity including activities related to sales and purchase of goods and services on a regular basis with the objective of earning profit.	An economic activity including activities requiring special skills and knowledge in their occupation.	An economic activity including occupation in which individuals work for their superiors with the motive of earning remuneration in return.
<b>Mode of establishment</b>	Starts after legal formalities like MOA, AOA, etc., are completed.	It requires membership of a professional body like bar council, etc., and a certificate of practice.	Employment starts after receiving an appointment letter.
<b>Qualification</b>	No minimum qualification is required in business.	Formal qualification, expertise, and training from a professional body are essential.	Qualification requirements in employment vary according to the type of job and training prescribed by the employer.
<b>Nature of work</b>	It involves providing goods and services to society.	Profession involves rendering specialized services.	It includes work given by the employer as per the employment contract and the rules

Reward	Profit	Professional fees	Salary and wages
Capital	It depends on the nature and size of the business.	It requires limited capital.	Employment does not require any capital.
Code of conduct	A business does not have any code of conduct.	It consists of a professional code of conduct.	In employment, rules or codes of conduct are set by the employer in the terms and conditions of the service contract.
Risk	A business involves high risk.	In profession, there is low risk.	Employment does not involve any risk.
Transfer of interest	In business transfer of interest is possible.	In profession one cannot transfer interest.	In employment also transfer of interest is not possible.
Example	An individual having a manufacturing plant of automobiles.	Doctors, Lawyers, Teachers, Professors, Chartered Accountants are the professionals.	Jobs in firms, shops, banks, etc. are considered as employment.

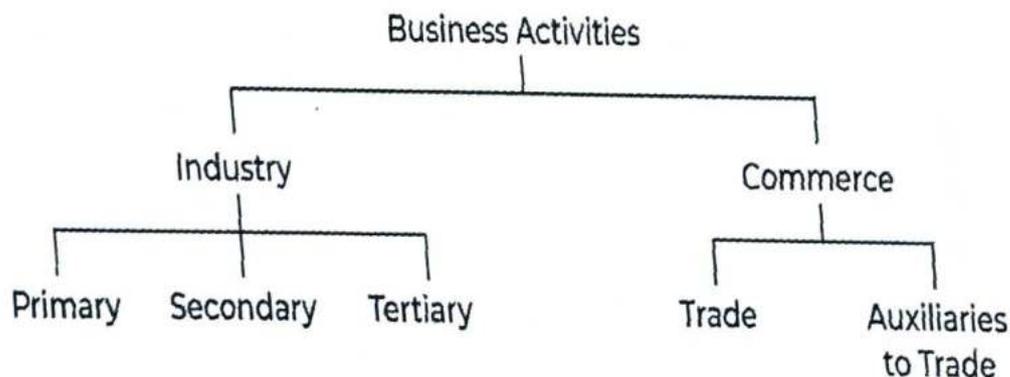
### Objectives of Business

- **Profit earning:** Profit is the amount of a business's revenue over expenditure. Profit earning is the prime motive of every organization as it ensures the survival and growth of the business. Even though profit is essential for a business, it can't be the sole motive of a business.
- **Innovation:** To attain success and growth, it is essential for a business to innovate. Innovation can be done by making new products or making better changes, or adding new features to the existing products. It helps a business in improving its production and distribution methods and explore new markets. In the present world, innovation is essential for every business to compete with other businesses and remain in the market.
- **Market standing:** Another important objective of any business is market standing which can be attained by providing goods and services to its customers to meet their needs and wants. By doing so, a business can maintain a market standing, attain goodwill, and survive for a long time.

- **Social responsibility:** Besides economic objectives, there are some social obligations that a business has to follow, also known as social responsibility. Simply put, social responsibility means contributing business resources to solve social problems and work in a socially desired manner.
- **Productivity/optimum utilization of resources:** The next objective of a business is optimum utilization of resources and productivity. It means that a business has to use its inputs or resources like money, material, labor, machinery, land, etc., in the best possible and optimum manner so as to achieve maximum result or output in return.
- **Physical and Financial resources:** For the production and sale of goods and services, a business requires some physical and financial resources. Physical resources consist of plant, machinery, land, labor, etc. However, financial resources consist of the funds or money to run and operate the business for the production and distribution of goods and services. Therefore, acquiring the required financial and physical resources is an objective of a business.
- **Quality goods and services at a fair price:** It is another social objective of a business that aims at providing better quality goods and services to the customer at a reasonable price. For example, providing goods with ISI mark on electrical goods, Hallmark on jewelry, etc.
- **Workers Development:** Human beings are the most important resource of a business, and their development is one of the most crucial objectives. It includes providing equal opportunities to all irrespective of caste, creed, religion, etc., proper remuneration, medical, entertainment, training, and welfare facilities to its employees.

### Classification of Business Activities

The business activities are classified as Industry and Commerce.



### Industry

Industry is concerned with the processing and production of goods and services with the motive of earning profit. Simply put, it involves changing the raw materials into finished products for the purpose of selling them to the customers. The goods sold by industry can be either used by other companies for further production or can be used by the end consumers for final consumption. The goods produced in the former case are known as producer goods. For example, machinery, etc. However, the goods produced in the latter case are known as consumer goods. For example, bread, milk, butter, cloth, groceries, medicines, etc. An organization can also produce materials that can be used by other companies to further process and convert into finished goods. These goods are known as

intermediate goods. For example, rubber, copper, plastic, etc. Industry can be further classified into three parts: primary, secondary, and tertiary industry.

### **Commerce**

Commerce is concerned with the activities involving taking goods and services from the manufacturers and delivering them to the users. The basic motive of commerce is ensuring the proper flow of goods and services in the market for the ease of manufacturers and consumers. With the help of commerce, an individual can purchase the goods produced in any part of the world. Commerce not only includes the buying and selling of goods but also consists of all the activities or services like transportation, banking, insurance, communication, packaging, advertisement, warehousing, etc., required to facilitate the process of trade, i.e., buying and selling of goods. Hence, commerce provides the required link between the manufacturers and consumers. Commerce can be further classified into two parts: trade and auxiliaries to trade.

EXCEL.

# INDIAN ACADEMY

Degree College - Autonomous

## Department of Business Administration

Admission No	User Name	Batch	24/x	25/x	26/x	27/x	28/x		
23UG0322	AISHWARYA K	BBA - A 2023	1	2	3	4	5		
23UG0345	AISHWARYA M	BBA - A 2023	1	2	A	3	4		
23UG0316	DILEEPAN R	BBA - A 2023	1	2	A	3	4		
23UG0351	GEETHANJALI N	BBA - A 2023	1	2	3	4	5		
23UG0335	GORAKNATH M	BBA - A 2023	1	2	3	4	5		
23UG0343	K PRAJWAL	BBA - A 2023	1	A	2	3	4		
23UG0312	LINTON RAJESH R	BBA - A 2023	1	2	3	4	5		
23UG0321	M SINDHU	BBA - A 2023	1	2	A	A	A		
23UG0308	MANASRI R	BBA - A 2023	1	2	3	4	5		
23UG0310	MOHAMMAD TOUFEEQ	BBA - A 2023	1	A	2	3	A		
23UG0319	NARMADHA S	BBA - A 2023	1	2	3	4	5		
23UG0332	NITHIN S	BBA - A 2023	1	2	3	4	5		
23UG0326	RAKSHITH A	BBA - A 2023	1	2	3	4	5		
23UG0346	SHARATH KUMAR S	BBA - A 2023	A	A	A	A	A		
23UG0330	USHA P	BBA - A 2023	1	2	3	A	4		
23UG0307	VAISHNAVI R	BBA - A 2023	1	2	3	A	4		
	VIDHYA SAGAR GOWDA. N	BBA - A 2023	1	A	2	3	4		
23UG0413	DURGA SHREE P	BBA INDUSTRY	1	2	A	A	A		
23UG0419	BHOOMIKA.B	BBA Internat:	1	2	3	4	5		
23UG0313	AFRID ULLA KHAN	BBA - A 2023	1	2	3	4	5		
23UG0354	ARBIN BANU	BBA - A 2023	1	2	3	A	A		
23UG0357	ASHOK P	BBA - A 2023	1	2	3	4	5		
23UG0329	HUDA QUBEEN	BBA - A 2023	1	2	3	4	5		
23UG0333	MIR HAMMAAD HUSSAIN	BBA - A 2023	1	2	3	4	5		
23UG0314	MOHAMMED EAHAB	BBA - A 2023	1	2	3	4	5		
23UG0317	MOHAMMED SAQLAIN	BBA - A 2023	1	2	3	4	A		
23UG0334	MOHAMMED TOUSIF	BBA - A 2023	1	2	3	4	A		
23UG0356	MOHD KABEER	BBA - A 2023	1	2	3	4	5		
23UG0359	MUKARAM AHMED	BBA - A 2023	1	2	3	4	5		
23UG0344	NITASH KUMAR J	BBA - A 2023	1	2	3	4			
23UG0315	S MUSKAN ANJUM	BBA - A 2023	1	2	3	4	5		
23UG0324	SHAM. V	BBA - A 2023	1	A	2	3	4		
23UG0306	UMME AZRA	BBA - A 2023	1	2	3	4	5		
23UG0363	YOUNUS ALI KHAN	BBA - A 2023	1	2	A	3	4		
23UG0394	BHARATH N SUTHAR	BBA BUSINESS	1	2	3	4	5		
23UG0397	MOHAMMED AFREED	BBA BUSINESS	1	2	3	4	5		
23UG0395	SHRISTI RAJ	BBA BUSINESS	A	A	A	A	A		
23UG0393	SYED MOHAMMED HASSAN	BBA BUSINESS	1	2	3	4	5		
23UG0418	DIVYANKA SHARMA	BBA INDUSTRY	JOINED				LATE		
23UG0416	MOHAMMED ZAID ALI KHAN	BBA INDUSTRY	1	2	3	A	4		
23UG0414	RAHUL KUMAR	BBA INDUSTRY	1	A	2	A	A		
23UG0339	A BENNY	BBA - A 2023	1	2	3	4	5		
23UG0305	ABHINAYA R	BBA - A 2023	1	2	3	A	5		
23UG0318	AHMED SHARIEF	BBA - A 2023	1	A	2	3	4		

			24/7	25/7	26/7	27/7	27/7
23UG0320	AKSHATHA S	BBA - A 2023	1	2	A	3	4
23UG0348	ANTONY REZON M J	BBA - A 2023	1	2	3	4	5
23UG0338	ARHAM ABBAS SAIT	BBA - A 2023	1	2	3	4	5
23UG0302	AUGUSTIN BALRAJ	BBA - A 2023	1	2	3	4	5
23UG0325	BHOOMIKA SANGAMITHRE.M	BBA - A 2023	1	A	2	3	4
23UG0361	CHALLA NIDHI KRISHNA	BBA - A 2023	1	2	3	A	4
23UG0341	D JUDHA JOHONAN	BBA - A 2023	1	2	3	4	A
23UG0323	EMMANUEL C	BBA - A 2023	1	2	A	3	4
23UG0352	JASMINE MARY K	BBA - A 2023	1	2	A	A	A
23UG0342	KASHIFA	BBA - A 2023	1	2	3	A	A
23UG0336	KAVYA B	BBA - A 2023	1	2	3	4	5
23UG0360	LAKSHMI PRASAD C R	BBA - A 2023	1	2	A	3	4
23UG0304	LIGODI MANGANZA DAVID	BBA - A 2023	1	2	3	4	5
23UG0340	MANISH.C	BBA - A 2023	1	2	3	4	5
23UG0347	MELVIN ABISHEK V	BBA - A 2023	1	2	3	4	5
23UG0355	MITHUKULLA THIRUMALA NA	BBA - A 2023	1	2	3	4	5
23UG0331	MOHAMMAD ASRAR KHAN	BBA - A 2023	A	A	A	A	A
23UG0337	MOHAMMED UMMAR N	BBA - A 2023	1	2	3	4	A
	NATANIA SHANTAY J	BBA - A 2023	1	2	3	A	A
23UG0328	PENUEL MOCHAHARI	BBA - A 2023	1	2	3	4	5
23UG0361	REHANA BANU	BBA - A 2023	1	2	3	4	5
23UG0309	S R JAYSREE	BBA - A 2023	1	2	A	3	4
23UG0349	SHARON VALENCIA J	BBA - A 2023	1	2	3	A	A
23UG0303	SHREYAS S RAJANALKAR	BBA - A 2023	1	2	3	4	A
23UG0301	SM.BRINDASHREE	BBA - A 2023	1	2	3	4	5
	TAM PINYA	BBA Internatio	1	A	2	3	4
23UG0350	TENISON THONGAM	BBA - A 2023	1	2	3	A	4
23UG0311	V PRADEEP KUMAR	BBA - A 2023	1	2	3	4	5
23UG0353	AFNAAN AHMED	BBA BUSINESS	1	2	3	4	5
23UG0396	DIVYA V	BBA BUSINESS	1	2	A	A	A
23UG0398	GEDDAM AKSHAY BABU	BBA BUSINESS	1	A	2	3	4
23UG0400	JOHN ABRAHAM.A	BBA BUSINESS	1	A	2	3	4
23UG0399	PRUTHVI V	BBA BUSINESS	1	2	3	4	5
23UG0392	SANDHYA D	BBA BUSINESS	1	A	2	3	4
23UG0391	SYED ALI	BBA BUSINESS	1	A	2	3	4
23UG0415	DIVYA S	BBA INDUSTRY	1	2	3	4	5
23UG0417	JIM ELLIOT S	BBA INDUSTRY	1	2	3	4	5
23UG0411	MUKESH C	BBA INDUSTRY	A	1	2	3	4

ABHISHA

A 1 2 3 4

# INDIAN ACADEMY

Degree College - Autonomous

PRE-FOUNDATION TEST

MARKS:10

Q.1	Excel is a .....program developed by Microsoft.
Q.2	What is the extension of MS-Excel file? A)xls B)xlt C)xlm D)ece
Q.3	Ms Excel File is also called a ..... A) Playbook B)Workbook C)Workstation D)Worksheet
Q.4	No of rows in excel ..... A)1048050 B)2000 C)5000 D) 1048576
Q.5	No of columns in excel .....
Q.6	Column width in excel is ..... A) 500 B)255 C)400 D)255
Q.7	Excel is used for ..... A)Data entry B)Analysis C) Promotion D)
Q.8	CTRL + S is to .....a file
Q.9	CTRL + O is to .....
Q.10	MS stands for .....

# INDIAN ACADEMY

Degree College - Autonomous

POST FOUNDATION TEST

MARKS: 10

Q.1	What is the intersection of a column and a row on a worksheet called? A)Column B)Value C)Address D) Cell
Q.2	Which of the following is not a valid datatype in MS-Excel? A)Number B)Character C)Label D)Date/Time
Q.3	How many hyperlinks can be there in a worksheet? A)32,767 B) 32,768 C)65,530 D) 65,535
Q.4	How many times undo levels can be used in a worksheet? A)25 B)50 C)75 D)100
Q.5	How many users can open the Excel file at the same time? A. 64 users B. 128 users C. 256 users D. 512 users
Q.6	The fill function can be ____ to complete formulas in a range. A. Single clicked B. Double-clicked C. Triple clicked D. Right clicked
Q.7	Which logical function returns TRUE if all arguments evaluate TRUE; FALSE if not? A. OR B. AND C. IF D. ANDIF
Q.8	Which logical function returns TRUE if one or more arguments evaluates to TRUE; FALSE if all arguments evaluate to FALSE? A. OR B. AND C. IF D. ANDIF
Q.9	The Excel ____ function returns the Boolean value FALSE.

	<p>A. TRUEFALSE(0) B. FALSE() C. Both of the above D. There is no such function</p>
Q.1 0	<p><b>Which function is used to create a date with year, month, and day?</b></p> <p>A. DATE() B. DATEDIF() C. DATEVALUE() D. CURDATE()</p>

NOTES

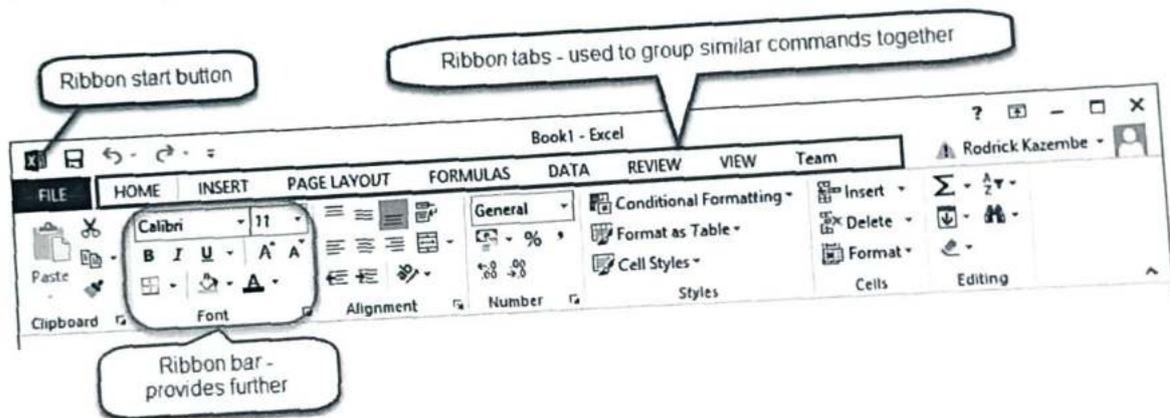
## What is Microsoft Excel?

**Microsoft Excel** is a spreadsheet program used to record and analyze numerical and statistical data. Microsoft Excel provides multiple features to perform various operations like calculations, pivot tables, graph tools, macro programming, etc. It is compatible with multiple OS like Windows, macOS, Android and iOS.

A Excel spreadsheet can be understood as a collection of columns and rows that form a table. Alphabetical letters are usually assigned to columns, and numbers are usually assigned to rows. The point where a column and a row meet is called a cell. The address of a cell is given by the letter representing the column and the number representing a row.

## Understanding the Ribbon

The ribbon provides shortcuts to commands in Excel. A command is an action that the user performs. An example of a command is creating a new document, printing a document, etc. The image below shows the ribbon used in Excel 2013.



## Ribbon components explained

**Ribbon start button** – it is used to access commands i.e. creating new documents, saving existing work, printing, accessing the options for customizing Excel, etc.

**Ribbon tabs** – the tabs are used to group similar commands together. The home tab is used for basic commands such as formatting the data to make it more presentable, sorting and finding specific data within the spreadsheet.

**Ribbon bar** – the bars are used to group similar commands together. As an example, the Alignment ribbon bar is used to group all the commands that are used to align data together.

## Understanding the worksheet (Rows and Columns, Sheets, Workbooks)

**A worksheet is a collection of rows and columns.** When a row and a column meet, they form a cell. Cells are used to record data. Each cell is uniquely identified using a cell address. Columns are usually labelled with letters while rows are usually numbers.

**A workbook is a collection of worksheets.** By default, a workbook has three cells in Excel. You can delete or add more sheets to suit your requirements. By default, the sheets are named Sheet1, Sheet2 and so on and so forth. You can rename the sheet names to more meaningful names i.e. Daily Expenses, Monthly Budget, etc.

### **Customization Microsoft Excel Environment**

Personally I like the black colour, so my excel theme looks blackish. Your favourite colour could be blue, and you too can make your theme colour look blue-like. If you are not a programmer, you may not want to include ribbon tabs i.e. developer. All this is made possible via customizations. In this sub-section, we are going to look at;

- Customization the ribbon
- Setting the colour theme
- Settings for formulas
- Proofing settings
- Save settings

## **Important Excel shortcuts**

---

<b>Ctrl + P</b>	used to open the print dialogue window
<b>Ctrl + N</b>	creates a new workbook
<b>Ctrl + S</b>	saves the current workbook
<b>Ctrl + C</b>	copy contents of current select
<b>Ctrl + V</b>	paste data from the clipboard
<b>SHIFT + F3</b>	displays the function insert dialog window
<b>SHIFT + F11</b>	Creates a new worksheet
<b>F2</b>	Check formula and cell range covered

---

# INDIAN ACADEMY

Degree College - Autonomous

Admission No	User Name	Batch	PRE FOUNDATION TEST	POST FOUNDATION TEST
23UG	ABHISHA	BBA - A 2023	AB	8
23UG0322	AISHWARYA K	BBA - A 2023	9	8
23UG0345	AISHWARYA M	BBA - A 2023	9	9
23UG0316	DILEEPAN R	BBA - A 2023	9	10
23UG0351	GEETHANJALI N	BBA - A 2023	10	10
23UG0335	GORAKNATH M	BBA - A 2023	10	10
23UG0343	K PRAJWAL	BBA - A 2023	7	8
23UG0312	LINTON RAJESH R	BBA - A 2023	8	9
23UG0321	M SINDHU	BBA - A 2023	8	10
23UG0308	MANASRI R	BBA - A 2023	9	9
23UG0310	MOHAMMAD TOUFEEQ	BBA - A 2023	AB	8
23UG0319	NARMADHA S	BBA - A 2023	10	10
23UG0332	NITHIN S	BBA - A 2023	AB	9
23UG0326	RAKSHITH A	BBA - A 2023	8	8
23UG0346	SHARATH KUMAR S	BBA - A 2023	AB	10
23UG0330	USHA P	BBA - A 2023	8	9
23UG0307	VAISHNAVI R	BBA - A 2023	9	9
23UG	VIDHYA SAGAR GOWDA. N	BBA - A 2023	9	9
23UG0413	DURGA SHREE P	BBA INDUSTRY	7	9
23UG0419	BHOOMIKA.B	BBA Internati	AB	9
23UG0313	AFRID ULLA KHAN	BBA - A 2023	7	9
23UG0354	ARBIN BANU	BBA - A 2023	10	9
23UG0357	ASHOK P	BBA - A 2023	6	9
23UG0329	HUDA QUBEEN	BBA - A 2023	9	9
23UG0333	MIR HAMMAAD HUSSAIN	BBA - A 2023	9	9
23UG0314	MOHAMMED EAHAB	BBA - A 2023	10	9
23UG0317	MOHAMMED SAQLAIN	BBA - A 2023	9	9
23UG0334	MOHAMMED TOUSIF	BBA - A 2023	9	9
23UG0356	MOHD KABEER	BBA - A 2023	9	9
23UG0359	MUKARAM AHMED	BBA - A 2023	10	9
23UG0344	NITASH KUMAR J	BBA - A 2023	8	9
23UG0315	S MUSKAN ANJUM	BBA - A 2023	10	9
23UG0324	SHAM. V	BBA - A 2023	AB	9
23UG0306	UMME AZRA	BBA - A 2023	9	9
23UG0363	YOUNUS ALI KHAN	BBA - A 2023	7	9
23UG0394	BHARATH N SUTHAR	BBA BUSINESS	8	9
23UG0397	MOHAMMED AFREED	BBA BUSINESS	7	9
23UG0395	SHRISTI RAJ	BBA BUSINESS	AB	9
23UG0393	SYED MOHAMMED HASSAN	BBA BUSINESS	10	9
23UG0418	DIVYANKA SHARMA	BBA INDUSTRY	AB	9
23UG0416	MOHAMMED ZAID ALI KHAN	BBA INDUSTRY	AB	9
23UG0414	RAHUL KUMAR	BBA INDUSTRY	8	9
23UG0339	A BENNY	BBA - A 2023	10	9

	ABHINAYA R	BBA - A 2023	6	9
	AHMED SHARIEF	BBA - A 2023	10	9
	AKSHATHA S	BBA - A 2023	10	9
	ANTONY REZON M J	BBA - A 2023	9	9
	ARHAM ABBAS SAIT	BBA - A 2023	10	9
	AUGUSTIN BALRAJ	BBA - A 2023	10	9
	BHOOMIKA SANGAMITHRE.M	BBA - A 2023	9	9
	CHALLA NIDHI KRISHNA	BBA - A 2023	9	9
	D JUDHA JOHONAN	BBA - A 2023	8	9
	EMMANUEL C	BBA - A 2023	9	9
	JASMINE MARY K	BBA - A 2023	10	9
	KASHIFA	BBA - A 2023	10	9
	KAVYA B	BBA - A 2023	9	9
	LAKSHMI PRASAD C R	BBA - A 2023	8	9
	LIGODI MANGANZA DAVID	BBA - A 2023	8	9
	MANISH.C	BBA - A 2023	7	9
	MELVIN ABISHEK V	BBA - A 2023	8	9
	MITHUKULLA THIRUMALA NA	BBA - A 2023	9	9
	MOHAMMAD ASRAR KHAN	BBA - A 2023	AB	9
	MOHAMMED UMMAR N	BBA - A 2023	9	9
	NATANIA SHANTAY J	BBA - A 2023	8	9
	PENUEL MOCHAHARI	BBA - A 2023	9	9
	REHANA BANU	BBA - A 2023	10	9
	S R JAYSREE	BBA - A 2023	9	9
	SHARON VALENCIA J	BBA - A 2023	8	9
	SHREYAS S RAJANALKAR	BBA - A 2023	8	9
	SM.BRINDASHREE	BBA - A 2023	10	9
	TAM PINYA	BBA Internatio	AB	9
	TENISON THONGAM	BBA - A 2023	9	9
	V PRADEEP KUMAR	BBA - A 2023	8	9
	AFNAAN AHMED	BBA BUSINESS	7	9
	DIVYA V	BBA BUSINESS	10	9
	GEDDAM AKSHAY BABU	BBA BUSINESS	7	9
	JOHN ABRAHAM.A	BBA BUSINESS	8	9
	PRUTHVI V	BBA BUSINESS	8	10
	SANDHYA D	BBA BUSINESS	9	9
	SYED ALI	BBA BUSINESS	7	9
	DIVYA S	BBA INDUSTRY	10	9
	JIM ELLIOT S	BBA INDUSTRY	6	9
	MUKESH C	BBA INDUSTRY	10	9
	Md Ismail		LATE JOINERS	
	Md Haris		"	"
	Divyanka Sharma		"	"
	Durgasree		"	"
	Abhishek C		"	"
	Mahalakshmi		8	10

# INDIAN ACADEMY

Degree College - Autonomous

## Department Of Mathematics

### FOUNDATION COURSE FOR DISCRETE STRUCTURES

(I BCA-September-2022)

**Resource Person:** Mrs. Lourdhu Jannet Vinoli X & Mrs. Shyba. P

**Aim:** To encourage and enable students to recognise the basic Mathematical concepts.

**Objective:** To make students recapitulate the fundamentals of basic Mathematics.

**Learning Outcome:** By the end of the course students should be capable of solving simple problems related to the topics of the foundation course.

#### **Syllabus:**

1. Number System and Counting (02 hours)
2. Theory of Equations (02 hours)
3. Basics of set theory (02 hours)
4. Introduction to Probability (02 hours)
5. Introduction to Graph theory (02 hours)

# INDIAN ACADEMY

## Degree College - Autonomous

Department Of Mathematics

I BCA Foundation Course – Discrete Structures

Pre-Assessment Mark Sheet

Total Marks: 20

Date: 06/09/2022

SI No	Name of the Student	Class and Section	Marks Scored
1.	RABIN JOSE	BCA B	18 / 20
2.	ADHEEP.S	BCA B	18 / 20
3.	MOHAMMED ILYAS AHMED	BCA B	16 / 20
4.	SAM B SUNNY	BCA B	18 / 20
5.	DANIEL STEVEN	BCA B	20 / 20
6.	T. MUHAMMAD ADYAN	BCA B	16 / 20
7.	AMRUTHA.S	BCA B	10 / 20
8.	LAHARI CB	BCA B	14 / 20
9.	SANJAY Y	BCA B	16 / 20
10.	VISHAL S	BCA B	18 / 20
11.	LIVINGSTON L	BCA B	16 / 20
12.	MOHAMMED ABDURRAHMAN	BCA A	16 / 20
13.	THARUN P	BCA B	12 / 20
14.	SANTHOSH.M	BCA B	18 / 20
15.	ABDUL SAMAD	BCA B	8 / 20
16.	SAMBIT BISWAL	BCA B	18 / 20
17.	GURU PRASAD	BCA B	16 / 20
18.	NAFISA	BCA B	14 / 20
19.	RAVINDRANATH.V	BCA B	16 / 20
20.	PRINCE	BCA B	18 / 20
21.	PRASEELA RAJ	BCA B	14 / 20
22.	HARSHITHA.A	BCA B	18 / 20
23.	MERLIN	BCA B	12 / 20
24.	P. DHARSHAN	BCA B	18 / 20
25.	DHUMBI.R.M	BCA B	14 / 20
26.	VINCENT ALBERT	BCA B	12 / 20
27.	SIMRAN	BCA B	12 / 20
28.	MARIA JASMINE L	BCA B	14 / 20
29.	SEEMA GURJAR	BCA B	14 / 20
30.	SANIA MUBEEN	BCA B	8 / 20
31.	MADIHA NOOR	BCA B	10 / 20

32.	YADAV	BCA B	14 / 20
33.	SHREYASH MOGAVEERA	BCA B	18 / 20
34.	K.JEEVITHA	BCA B	12 / 20
35.	MADHAN.F	BCA B	14 / 20
36.	GOWTHAM	BCA B	16 / 20
37.	NIKHAT TABASSUM	BCA B	10 / 20
38.	ALIYA NIGAR	BCA B	10 / 20
39.	PAVITHRA P	BCA B	14 / 20
40.	SWATHI. R	BCA B	10 / 20
41.	SHALINI	BCA B	8 / 20
42.	ABDUL SHAIIEZA	BCA B	16 / 20
43.	JIBRAN AHMED	BCA B	16 / 20
44.	ABHINAYA.M	BCA B	10 / 20
45.	MOHAMMED AFFAN. M	BCA B	14 / 20
46.	PAVAN KUMAR D	BCA B	16 / 20
47.	HELEN JOICE	BCA B	4 / 20
48.	CHANDAN	BCA B	16 / 20
49.	PAVAN P	BCA B	14 / 20
50.	M BHARATH	BCA B	14 / 20
51.	SHREYAS MD	BCA A	8 / 20
52.	RASHMI. P	BCA A	16 / 20
53.	GOWTHAM	BCA A	6 / 20
54.	SYED MUTAHIR ANAS	BCA A	20 / 20
55.	MOHAMMED TALHA M	BCA A	6 / 20
56.	POOJA C A	BCA A	16 / 20
57.	ALLAN JOSH. M	BCA A	6 / 20
58.	MOHAMMED FAIZAN PASHA	BCA A	20 / 20
59.	RAYHAN ULLA SHARIFF	BCA A	18 / 20
60.	SYED HAMMAAD MEHDI	BCA A	18 / 20
61.	DHANASHREE VIJAY BHATKAR	BCA A	20 / 20
62.	SYED ABDUL KHADIR	BCA A	12 / 20
63.	DHANUSHREE G S	BCA A	16 / 20
64.	MANOJ KUMAR	BCA A	16 / 20
65.	DEEPANSH PANDEY	BCA A	16 / 20
66.	ABHILASH CH	BCA A	12 / 20
67.	RAHUL.R	BCA A	16 / 20
68.	CHETHAN KUMAR S	BCA A	14 / 20
69.	CHARAN. V	BCA A	18 / 20
70.	MOHAMMED OWAIZ	BCA A	12 / 20
71.	DENZIL DEMINE	BCA A	6 / 20
72.	NIYAS MUHAMMED	BCA A	14 / 20
73.	DHANUSH.N	BCA A	18 / 20
74.	DEESHNAV PP	BCA A	8 / 20
75.	MANISH SAINI	BCA A	10 / 20
76.	SWAGATH R P	BCA A	18 / 20
77.	DIVYA .S	BCA A	8 / 20
78.	ANKIT SAINI	BCA A	8 / 20
79.	PANKAJ	BCA A	18 / 20

80.	SREE HARISH P K	BCA A	10 / 20
81.	MOHAMMED ZUBAIR UL HUSSAIN	BCA A	16 / 20
82.	PRIYANKA.K	BCA A	12 / 20
83.	DRUVISHA. R	BCA A	10 / 20
84.	PRIYA GUPTA J	BCA A	12 / 20
85.	UJALA KUMARI	BCA A	8 / 20
86.	VELU	BCA A	6 / 20
87.	POOJITHA	BCA A	10 / 20
88.	MOHAMMED NOORUL AMEEN	BCA A	16 / 20
89.	NANDHINI. V	BCA A	10 / 20
90.	UROOJ KHAN	BCA A	14 / 20
91.	TRISHA.U	BCA A	12 / 20
92.	SHAHISTHA BEGUM	BCA A	20 / 20
93.	KV NIKITHA	BCA A	16 / 20
94.	SJYOTHIRMAYEE	BCA A	14 / 20
95.	MISBAH FARHEEN	BCA A	20 / 20
96.	A.KAUSHIK	BCA A	20 / 20
97.	ABHISEK	BCA A	10 / 20
98.	RAJENDRAN	BCA A	12 / 20
99.	MOHAMMED TAMEEM	BCA B	12 / 20
100.	BALAJI G	BCA B	14 / 20
101.	RAJESH.MV	BCA A	8 / 20
102.	MONISHA.K	BCA A	8 / 20

Name of the Faculty with Signature: Mrs. Lourdhu Jannet Vinoli X

Mrs. Shyba. P

Name of the HOD with Signature: Lakshmikanthamma P K

*[Handwritten signature]*

*[Handwritten signature]*

# INDIAN ACADEMY

Degree College - Autonomous

Department Of Mathematics

I BCA Foundation Course – Discrete Structures

Post-Assessment Mark Sheet

Date: 15/09/2022

Total Marks: 20

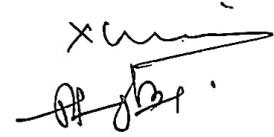
SI No	Name of the Student	Class and Section	Marks Scored
1.	BALAJI G	I BCA - B	20 / 20
2.	MADHAN.F	I BCA - B	20 / 20
3.	SAM B SUNNY	I BCA - B	16 / 20
4.	NEERAJA P	I BCA - B	14 / 20
5.	VISHAL S	I BCA - B	10 / 20
6.	ADHEEP S	I BCA - B	16 / 20
7.	GOWTHAM	I BCA - B	16 / 20
8.	LAHARI CB	I BCA - B	18 / 20
9.	MADIHA NOOR	I BCA - B	16 / 20
10.	SEEMA GURJAR	I BCA - B	18 / 20
11.	HARSHITHA.A	I BCA - B	18 / 20
12.	K JEEVITHA	I BCA - B	16 / 20
13.	NISHA A	I BCA - B	18 / 20
14.	MARIA Jasmine L	I BCA - B	16 / 20
15.	PRINCE	I BCA - B	18 / 20
16.	HELEN JOICE	I BCA - B	10 / 20
17.	Merlin	I BCA - B	14 / 20
18.	PAVITHRA P	I BCA - B	18 / 20
19.	Sanjay y	I BCA - B	18 / 20
20.	DEEPAK	I BCA - B	18 / 20
21.	Swathi. R	I BCA - B	18 / 20
22.	P DHARSHAN	I BCA - B	20 / 20
23.	NAFISA	I BCA - B	18 / 20
24.	SANIA MUBEEN	I BCA - B	18 / 20
25.	ABHINAYA.M	I BCA - B	16 / 20
26.	Vincent	I BCA - B	18 / 20
27.	M.BHARATH	I BCA - B	14 / 20
28.	MOHAMMED ILYAS AHMED	I BCA - B	14 / 20
29.	PAVAN KUMAR D	I BCA - B	14 / 20
30.	T. MUHAMMAD ADYAN	I BCA - B	12 / 20
31.	SAMBIT BISWAL	I BCA - B	18 / 20
32.	SIMRAN. S	I BCA - B	16 / 20
33.	Jeevan Gurung	I BCA - B	18 / 20

34.	SHREYASH MOGAVEERA	I BCA - B	16 / 20
35.	CHANDAN	I BCA - B	18 / 20
36.	Momeen kulsum	I BCA - B	12 / 20
37.	DHUMBI.R.M	I BCA - B	18 / 20
38.	SHREYA. C	I BCA - B	16 / 20
39.	Shalini.A	I BCA - B	12 / 20
40.	Yashaswini	I BCA - B	8 / 20
41.	SANTHOSH M	I BCA - B	18 / 20
42.	PAVAN P	I BCA - B	10 / 20
43.	Guru prasad	I BCA - B	16 / 20
44.	Abdulshaieez	I BCA - B	16 / 20
45.	Robin jose	I BCA - B	16 / 20
46.	RAVINDRANATH.V	I BCA - B	10 / 20
47.	Jibran Ahmed	I BCA - B	18 / 20
48.	MOHAMMED ZAKWAAN	I BCA - B	20 / 20
49.	NIKHAT TABASSUM	I BCA - B	18 / 20
50.	ALIYA NIGAR	I BCA - B	16 / 20
51.	MOHAMMED AFFAN. M	I BCA - B	16 / 20
52.	Mohammed Ameen	I BCA - B	16 / 20
53.	MOHAMMED TAMEEM	I BCA - B	18 / 20
54.	Darshan.v	I BCA - B	8 / 20
55.	S.NISHA GOPIKA	I BCA - A	8 / 20
56.	SHREYAS MD	I BCA - A	10 / 20
57.	MOHAMMED TALHA M	I BCA - A	8 / 20
58.	MARIES IYYAPPAN	I BCA - A	14 / 20
59.	Rajendra	I BCA - A	6 / 20
60.	ABHISHEK S	I BCA - A	8 / 20
61.	DENZIL DEMINE	I BCA - A	4 / 20
62.	DEEPANSH PANDEY	I BCA - A	12 / 20
63.	SYED ABDUL KHADIR	I BCA - A	18 / 20
64.	UJALA KUMARI	I BCA - A	12 / 20
65.	RAYHAN ULLA SHARIFF	I BCA - A	16 / 20
66.	PRIYA GUPTA J	I BCA - A	14 / 20
67.	CHAND JUNAID	I BCA - A	8 / 20
68.	SREE HARISH PK	I BCA - A	12 / 20
69.	MOHAMMED OWAIZ	I BCA - A	4 / 20
70.	S Jyothirmayee	I BCA - A	16 / 20
71.	HARI KRISHNAN R K	I BCA - A	12 / 20
72.	MOHAMMED FAIZAN PASHA	I BCA - A	18 / 20
73.	MANOJ KUMAR	I BCA - A	14 / 20
74.	Mufeeda. M	I BCA - A	8 / 20
75.	MOHAMMED NOORUL AMEEN	I BCA - A	8 / 20
76.	POOJA CA	I BCA - A	16 / 20
77.	SHAHISTHA BEGUM	I BCA - A	16 / 20
78.	SUFRA ARA M	I BCA - A	8 / 20
79.	V. NANDHINI	I BCA - A	12 / 20
80.	SNEHA.C	I BCA - A	8 / 20
81.	MISBAH FARHEEN	I BCA - A	16 / 20
82.	Abhilash chode	I BCA - A	10 / 20
83.	SYED MUTAHIR ANAS	I BCA - A	18 / 20
84.	MOHIT SHARMA	I BCA - A	16 / 20

85.	DHANUSH.N	I BCA - A	16 / 20
86.	DIVYA.S	I BCA - A	14 / 20
87.	DEESHNAV PP	I BCA - A	12 / 20
88.	UROOJ KHAN	I BCA - A	14 / 20
89.	DRUVISHA R	I BCA - A	10 / 20
90.	DIVYA.S	I BCA - A	14 / 20
91.	Poojitha.M	I BCA - A	8 / 20
92.	Mohammed abdurrahman	I BCA - A	18 / 20
93.	ALLAN JOSH. M	I BCA - A	8 / 20
94.	KV NIKITHA	I BCA - A	12 / 20
95.	MOHAMMED ZUBAIR UL HUSSAIN	I BCA - A	10 / 20
96.	PANKAJ	I BCA - A	14 / 20
97.	NIYAS MUHAMMED	I BCA - A	6 / 20
98.	SOWMYA.R	I BCA - A	8 / 20
99.	MANISH SAINI	I BCA - A	12 / 20
100.	ANKIT SAINI	I BCA - A	8 / 20
101.	Jaswanth D	I BCA - B	8 / 20
102.	KEERTHANA C	I BCA - B	10 / 20
103.	RASHMI. P	I BCA - A	10 / 20
104.	Dhanushree GS	I BCA - A	20 / 20
105.	DHANASHREE VIJAY BHATKAR	I BCA - A	20 / 20
106.	PRASEELA RAJ	I BCA - B	20 / 20

Name of the Faculty with Signature: Mrs. Lourdhu Jannet Vinoli X

Mrs. Shyba. P



Name of the HOD with Signature: Lakshmikanthamma P K





# REGISTER OF ATTENDANCE & FEES

Sl. No.	Admission No.	NAME OF THE INSTITUTE : JADCA												
		NAMES	1	2	3	4	5	6	7	8	9	10	11	
29		DARSHAN V	P	A	P	P	A	A	A	P	A			
30		PAVITHRA	P	P	P	P	P	P	P	P	P			
31		PRIYA JAISWAL	A	A	A	A	A	A	A	A	A			
32		Momeen Kuleem	P	A	P	A	P	P	P	P	P			
33		RABINJOSE V	P	A	P	P	P	P	A	A	P			
34		SHALINI A	P	P	P	P	P	P	P	P	P			
35		SANTHOSH M	P	P	P	P	P	P	P	P	P			
36		NAFISA	P	P	P	P	P	P	P	P	P			
37		SHREYASH MOHAVEERA	P	P	P	P	P	P	P	P	P			
38		PRATHIMA YADAV	P	P	P	P	P	P	P	P	P			
39		SANIA MUBEEN	P	P	P	P	P	A	P	P	P			
40		HARSHITHA A	P	P	P	P	P	P	P	P	P			
41		AMRUTHA S	P	P	P	A	P	P	P	P	P			
42		YASHASWINI B	A	A	P	P	P	P	P	P	P			
43		PAVAN KUMAR D	P	P	P	P	P	P	A	P	P			
44		MOHAMMED AFFAN M	P	P	P	P	P	P	P	P	P			
45		MOHAMMED ZAKWAN	A	A	A	P	A	A	P	P	P			
46		ADHEEP S	P	A	P	P	P	P	A	P	P			
47		PRASEELA RAJ	P	P	P	P	P	P	P	P	P			
48		MOHAMMED AMEEN	P	P	P	P	P	P	P	A	P			
49		SEEMA GUPTAR	P	P	P	P	P	P	P	P	P			
50		NEERAJA P	P	A	P	P	P	P	P	P	P			
51		GOWTHAM P	P	A	P	P	P	P	A	P	P			
52		SIMRAN S	P	A	P	P	P	P	P	P	P			
53		MARIA JASMINE L	P	P	P	P	P	P	P	P	P			
54		M BHARATH	P	P	P	P	P	P	P	P	P			
55		MOHAMMED ILYAS AHMED	P	P	P	P	P	P	P	P	P			
56		SWATHI R	P	P	P	P	P	P	P	P	P			

Number Present M Daily E														
Initials M E														



Foundation Course : Discrete Structures  
**REGISTER OF ATTENDANCE & FEES**

Sl. No.	Admission No.	NAME OF THE INSTITUTE : TADC - A	DATE													
			05/09/2022	06/09/22	7/9/22	8/9/22	9/9/22	10/9/22	11/9/22	12/9/22	13/9/22	14/9/22	15/9/22	10	11	12
		NAMES														
1		Rashmi . P	P	P	P	P	P	P	P	P	P	P				
2		Md. Zubair Ullhusin	P	P	P	P	P	P	P	P	P	P				
3		Priya Gupta . J	P	P	P	P	P	A	P	P	P					
4		Poojitha . M	P	P	P	P	P	P	P	A	P					
5		Dhanushree . C.G	P	P	P	P	P	P	P	P	P					
6		Md. Abdur Rahman	P	P	P	P	P	A	P	P	P					
7		Bommini Naga Shouri Naidu	A	A	A	A	A	A	P	A	A					
8		Velu . Y	A	P	P	A	A	A	A	A	A					
9		Sonu Singh	A	A	A	P	A	A	A	A	A					
10		Manoj kumar	P	A	A	A	A	A	P	P	P					
11		Ujala kumari	P	P	P	P	P	P	P	P	P					
12		Misbah Farheen	P	P	P	P	P	P	A	P	P					
13		Darshan . M	P	A	A	A	A	A	A	A	A					
14		Syed Abdul khadir	P	P	P	P	P	P	P	P	P					
15		monisha . k	A	P	P	P	P	P	P	P	A					
16		Md. Owaiz	P	P	P	P	P	P	P	P	P					
17		Charan . V	A	A	A	P	A	A	A	A	A					
18		Shreyas . M	P	P	A	P	P	P	P	P	P					
19		Deepansh Pandey	P	P	P	P	P	P	P	P	P					
20		Ankit Saini	P	P	P	P	P	P	A	P	P					
21		Abhilash Chode	P	P	P	P	P	P	P	P	P					
22		Shahista Begum	P	P	P	P	P	A	A	A	P					
23		Divya . S	P	P	P	P	P	P	P	P	P					
24		Md. Faizan Pasha	P	P	P	P	A	A	P	P	P					
25		A kaushek	A	P	A	A	A	A	P	A	A					
26		Mariés Iyyappan	P	A	A	A	P	A	A	A	P					
27		Harsha Priya N	P	A	P	NCC	P	NCC	P	P	NCC					
28		k.v. Nikiitha	P	P	A	A	P	P	P	P	P					

Number Present M  
Daily E

Initials M  
E

12-15	1-10	12-15	1-10	9-15	1-10	11-15	1-10	9-15	1-10	10-15	1-10	12-15	1-10	9-15	1-10	11-15	1-10
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Foundation Course : Discrete Structures  
REGISTER OF ATTENDANCE & FEES

Sl. No.	Admission No.	NAME OF THE INSTITUTE : IADC - A	NAMES	1	2	3	4	5	6	7	8	9	10	11	12
				29		Chethan kumar S	P	P	P	A	P	P	P	A	A
30		Dhanush .N	P	P	P	A	P	P	P	P	P				
31		S. Jyothirmayee	P	P	P	P	P	P	P	P	P				
32		Uzooj khan	P	P	P	P	P	A	P	P	P				
33		Rayhanulla Shariff	P	P	P	P	P	P	P	P	P				
34		Denzil Demine	P	P	A	A	A	A	A	A	P				
35		Md. Talha .M	P	P	P	P	A	A	A	P	P				
36		Shreyas .C.k	A	A	A	P	A	A	A	P	A				
37		Syed Mutahir Anas	P	P	P	P	A	A	P	A	P				
38		Dhanasree Vijay Bhatka	P	P	P	P	P	P	P	P	P				
39		Abhishek - S	A	P	P	P	P	A	A	P	A				
40		Pooja .C .A	P	P	P	P	P	P	P	P	P				
41		Sree Harish .P .k	P	P	P	P	P	P	P	P	P				
42		Priyanka .k	P	P	P	P	P	P	A	A	A				
43		Md. Noor Ulameen	P	P	P	P	P	P	P	P	P				
44		Pankaj .	P	P	P	P	P	P	P	P	P				
45		Rahul .R	P	P	A	A	P	P	P	A	A				
46		Syed Inayath .A .A	A	A	A	A	P	A	A	A	A				
47		Puligundla Arun Teja	A	A	A	A	A	A	A	A	A				
48		Syed Hammad	P	P	P	P	P	P	P	P	P				
49		Allan Josh M	P	P	P	A	P	P	A	P	P				
50		Trisha U	A	P	P	P	A	P	P	A	A				
51		Nandhini .V.	P	P	P	P	P	P	P	P	P				
52		Druvisha .R	P	P	P	P	P	A	P	P	P				
53		Niyas Md	P	P	P	P	P	P	P	P	P				
54		Crowtham .P	P	P	A	A	A	A	A	P	A				
55		Manish Saini	P	P	P	P	P	P	A	P	P				
56		Rajendra .A	A	P	P	P	P	A	A	P	A				

Number Present M  
Daily E

Intials M  
E

No. on roll at the begining of month.

Admitted during the month.

Left No. on Roll at end of month.



# INDIAN ACADEMY

## Degree College - Autonomous

### Department Of Mathematics

FOUNDATION COURSE FOR I B.Sc. MATHEMATICS (OCTOBER-2021)

#### SYLLABUS

**Resource Person:** Mrs. Shyba P

**Aim:** To equip the students with the basic and foundational skills necessary to be successful in the course.

**Objective:** Recapitulate some important concepts in Algebra, Differential Calculus, Integral Calculus, Analytic Geometry and Group theory that is necessary for BSc course.

**Learning Outcome:** By the end of the course students should be capable of solving some basic problems of Algebra, Differential Calculus, Integral Calculus and Analytic Geometry and Group theory. This will be helpful to understand UG syllabus.

**Algebra:** Recapitulation: Symmetric and Skew Symmetric matrices, Algebra of Matrices. (02 hours)

**Differential Calculus:** Derivative of functions – properties – some problems. (02 hours)

**Integral Calculus:** Standard Integrals – Basic rules of integration- properties-Definite integrals-Some problems. (02 hours)

**Analytic Geometry:** Introduction to basic geometry - Cartesian, Polar and parametric coordinates. (01 hours)

**Group Theory:** Introduction – Binary operations - some problems. (01 hours)

# INDIAN ACADEMY

Degree College - Autonomous

Department Of Mathematics

I B.Sc. Foundation Course – Algebra I & Calculus I

Pre-Assessment Mark Sheet

Total Marks: 20

Date: 06/09/2022

SI No	Name of the Student	Class and Section	Marks Scored
1.	Chetana ks	BSC ECS	4/ 20
2.	Rachana u	Bsc MCS	11/ 20
3.	Samson N	Bsc MCS	7 / 20
4.	Ritish k	Bsc-ECS	7 / 20
5.	Priya jaiswal	Bsc MCS	9 / 20
6.	Gowthami. G	Bsc MCS	10 / 20
7.	HAMSA M	Bsc MCS	11 / 20

Name of the Faculty with Signature: Mrs. Shyba. P



Name of the HOD with Signature: Lakshmikanthamma P K



# INDIAN ACADEMY

Degree College - Autonomous

Department Of Mathematics

I B.Sc. Foundation Course – Algebra I & Calculus I

Post-Assessment Mark Sheet

Total Marks: 20

Date: 15/09/2022

SI No	Name of the Student	Class and Section	Marks Scored
1.	Chetana ks	BSC ECS	14/ 20
2.	Rachana u	Bsc MCS	6/ 20
3.	Samson N	Bsc MCS	12/ 20
4.	Ritish k	Bsc-ECS	16/ 20
5.	Priya jaiswal	Bsc MCS	16/ 20
6.	Gowthami. G	Bsc MCS	10/ 20
7.	HAMSA M	Bsc MCS	14/ 20

Name of the Faculty with Signature: Mrs. Shyba. P



Name of the HOD with Signature: Lakshmikanthamma P K





# **INDIAN ACADEMY**

Degree College - Autonomous

**DEPARTMENT OF HISTORY**  
**FOUNDATION COURSE**  
**2022-23 BATCH**

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF HISTORY

2022-23 Batch

PRE ASSESSMENT TEST- FOUNDATION COURSE

Answer the following questions:

(1x1=10)

1. Who is known as the Father of History?
2. When was the battle of Plassey fought?
3. Who is the Father of Buddhism?
4. Where is Harappa located?
5. Who is the founder of the Mughal Empire?
6. Where was the capital of Vijayanagar located?
7. Along Which river did the Harappan Civilization take place?
8. Who was the first Primeminister of India?
9. Who was the founder of the Maratha kingdom?
10. Where did the Jallianwala Bagh tragedy take place?

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF HISTORY

FOUNDATION COURSE

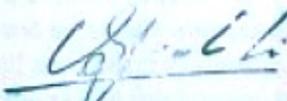
MARKS OBTAINED IN PRE-ASSESSMENT TEST

Max. Marks: 10

Sl. No	NAME	MARKS
1.	AFREEN	03
2.	DIYA B	AB
3.	MARIA NITHYA SHREE	04
4.	NINITHA D	AB
5.	NZANDI T MURRY	02
6.	UMME HABIBA	AB
7.	NISHANTH M	04
8.	MEGHA	AB
9.		
10.		
11.		
12.		

for   
Signature of Faculty

  
Signature of HOD  
INDIAN ACADEMY  
Autonomous  
Hennur Main Road, Bangalore-560043

  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 560043



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF HISTORY

FOUNDATION COURSE

1 year BA (2022-23 BATCH)

**RESOURCE PERSONS:** Ms. Ms.SANJANA PHADKE

**SCHEDULED DAYS:** 05/09/22 to 15/09/22

**TITLE OF THE COURSE:** History

**Duration:** 05 Hours

## LEARNING OBJECTIVES

- ✓ Awareness of the different views on meaning and scope of History.
- ✓ Ability to identify different periods in Indian History and distinguish the sources of History.
- ✓ To create an awareness on the study of History of Karnataka.

## SYLLABUS

- ✓ Introduction
- ✓ Nature
- ✓ Scope

## LEARNING OUTCOME

Student should be able

- ✓ Understand the Basic ideas and concept of History.
- ✓ Distinguish between primary and secondary sources and different types of Sources available for Ancient, Medieval and Modern Histories.
- ✓ Have a clear idea on Classification of Indian History into 3 different Periods.
- ✓ Understand the importance of Studying Karnataka History.

## Teaching and Evaluation:

- PPT
- Group Discussions
- Quiz

## HISTORY

### INTRODUCTION

History is the Study of Life in society in the past, in all its aspect, in relation to the present developments and future hopes. It is the story of Man in time, an inquiry into the past based on evidence. It is an inquiry into what happened in the past, when it happened and how it happened. History aims at helping students to understand the present existing social, political and religious and economic conditions of the people.

### MEANING

History is the study of the past-specifically the people and societies. The origin of the word HISTORY is associated with the Greek word HISTORIA which means information or an enquiry to elicit truth.

### DEFINITIONS

**Henry Johnson** - "History, in its broadest sense, is everything that ever happened"

**Jawaharlal Nehru** - "History is the story of man's struggle through the ages against nature and elements; against wild beasts and the jungle and some of his own kind who have tried to keep him down and to exploit him for their own benefit"

### NATURE:

- **A study of present in the light of past** - The present has evolved out of the past. Modern History enables us to understand how society has come to its present form so that one may intelligently interpret the sequence of the events.
- **Continuity and Coherence** - are the necessary requisites of History. History carries the burden of human progress as it is passed down from generation to generation, from society to society justifying the essence of Continuity.
- **Relevant** - It is the study of history, only those events are included which are relevant to the understanding of the present life.
- **Objective record of the happenings**-Every precaution is taken to base the data on original sources and make them free from subjective interpretation.
- **Comprehensiveness** - According to the modern concept, history is not confined to one period or country or nation. It also deals with all aspects of human life-political, social, economic, religious, literary, aesthetic, giving a clear sense of world unity and world citizenship.

### SCOPE OF HISTORY:

The scope of History is vast; it is the story of man in relation to totality of his behaviour. The scope of history means the breadth, comprehensiveness, variety and extent of learning experiences, provided by the study. History which was only limited to a local saga has during the course of century become universal history of mankind ,depicting man's achievements in every field of life political,economic,social,cultural,scientific,technological,religious and artistic etc.

Events like wars, revolutions, rise and fall of empires, fortunes and misfortunes of great empire builders as well as the masses in general are all the subject matter of history.

## **CLASSIFICATION OF HISTORICAL PERIODS-**

Ancient India (Prehistoric-700 ce)

Medieval India (700 ce- 1857 ce)

Modern India (1857 onwards)

### **SOURCES- PRIMARY AND SECONDARY SOURCES**

Primary sources include documents or artifacts created by a witness or participant in an event.

EXAMPLES-Newspaper Articles, diaries, letters, memoirs, speeches, Photos, Novels and Government documents.

**SECONDARY SOURCES** - were produced sometime after an event took place.

EXAMPLE-Book reviews, scholarly articles, Literature reviews, Biographies.

**Sources-** There are 2 kinds of sources that help in reconstructing Indian history-Literary and Archaeological.

**Literary sources-** The Vedas, Epics of Ramayana and Mahabharatha, Sutras, Buddhist religious texts and Jain religious texts

**SECULAR LITERATURE** Dharmashastras, Arthashastra, Literaryworks of Kalidasa, Rajatarangini, Sangam Literature.

**Archaeological sources-** Archaeological sources include Monuments coins, Inscriptions, Epigraphy.

**Introduction to Karnataka History-** Importance of studying Karnataka history.

Karnataka being our state, the need to study history of Karnataka needs to be stressed. As the Kannada people did not know their own history they lagged behind in the national movement.

Alur Venkatrao realized the importance of Karnataka history. He wrote the book KARNATAKA GATHAVAIBHAVA in 1917. This inspired people to jump into the freedom movement.

**Antiquity of the Kannada language-** Kannada is one among the 20 languages of the Dravidian group and next only to Tamil in its antiquity.

The GEOGRAPHY by Ptolemy during the first half of 2nd c speaks of many places in Karnataka such as KALGERIS, MODUGALLA AND BADAMIOS. This proves the antiquity of the language.

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF HISTORY

FOUNDATION COURSE

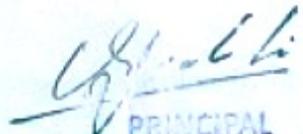
2022-23

ATTENDANCE DETAILS

Sl. No	NAME	05/09/22	06/09/22	07/09/22	08/09/22	09/09/22	10/09/22
1.	AFREEN	AB		P		A	P
2.	DIYA B	P		P		P	P
3.	MARIA NITHYA SHREE	P		P		P	P
4.	NINITHA D	P		P		P	P
5.	NZANDI T MURRY	P		P		P	P
6.	UMME HABIBA	P		P		A	P
7.	NISHANTH M			A		A	A
8.	MEGHA						
9.							
10.							
11.							
12.							

  
Signature of Faculty

  
HEAD OF THE DEPARTMENT  
Department of History  
Signature of HODs  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560043

  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 560043



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF HISTORY

2022-23 Batch

## FOUNDATION COURSE TEST

### MULTIPLE CHOICE QUESTIONS-

(5x2=10)

1. \_\_\_\_\_ are writings engraved on hard surfaces like metal, rock and stone.  
a) Coins    b) Archaeological evidence    c) Inscriptions    d) Portraits
2. \_\_\_\_\_ is not Primary source  
a) Newspaper articles    b) diary    c) Literary reviews    d) government documents
3. Who wrote the work KARNATAKA GATHAVAIBHAVA?  
a) D.R Bendre    b) Kuvempu    c) Alur venkata rao    d) Masti venkatesh Iyengar
4. Who wrote the book GEOGRAPHY?  
a) Euclid    b) Ptolemy    c) Aristotle    d) Galileo Galilei
5. The work INDICA was written by \_\_\_\_\_  
a) Chanakya    b) Herodotus    c) Megasthenese    d) Ibn- Btuta
6. Where is Victoria memorial located?  
a) Bangalore    b) Delhi    c) Goa    d) Calcutta
7. Who wrote Ain-i-Akbari?  
a) Abul faizi    b) Mohammad kasim    c) Abul fazal    d) Firdausi
8. Where is the national archives of India Located?  
a) Bengaluru    b) chennai    c) Delhi    d) Mumbai
9. The Bengal Gazette was started by  
a) Lord William Bentick  
b) Charles Canning  
c) James Augustus Hickey  
d) Mount Batten
10. What was the name of the novel written by Bankim Chandra Chaterjee?  
a) Vande mataram  
b) Durgeshnandini  
c) Ananda math  
d) Kalpa kapalkundala

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF HISTORY

FOUNDATION COURSE

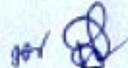
MARKS OBTAINED IN ASSESSMENT TEST

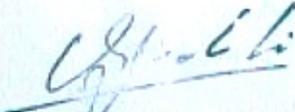
Time: 1 hr

Date: 15.09.22

Max.Marks:10

Sl. No	NAME	MARKS
1.	AFREEN	AB
2.	DIYA B	AB
3.	MARIA NITHYA SHREE	09
4.	NINITHA D	04
5.	NZANDI T MURRY	07
6.	UMME HABIBA	AB
7.	NISHANTH M	09
8.	MEGHA	AB
9.		
10.		
11.		
12.		

  
Signature of Faculty

  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE



  
Signature of HOD  
HEAD OF DEPARTMENT  
Department of History  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560 04

# **INDIAN ACADEMY**

Degree College - Autonomous

**DEPARTMENT OF POLITICAL SCIENCE**  
**FOUNDATION COURSE**  
**2022-23 BATCH**

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF POLITICAL SCIENCE

2022-23 Batch

PRE ASSESSMENT TEST- FOUNDATION COURSE

Fill in the blanks with the correct answers:

(1x1=10)

1. -----first exponents of political ideas.
2. Father of Political Science -----
3. The two city – states of Greece -----
4. The word 'Polis' Derived -----.
5. Plato important work-----
6. Aristotle work -----
7. Aristotle called political science -----
8. The rules and regulations that prescribe a certain code of behavior in a society is called -----
9. ----- has called politics a 'Supreme Science or Master Science '.
10. How many divisions are there in the Subject matter of Political Science?

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF POLITICAL SCIENCE

FOUNDATION COURSE

MARKS OBTAINED IN PRE-ASSESSMENT TEST

Max. Marks: 10

Sl. No	NAME	MARKS
1.	AFREEN	02
2.	DIYA B	AB
3.	MARIA NITHYA SHREE	06
4.	NINITHA D	05
5.	NZANDI T MURRY	07
6.	UMME HABIBA	AB
7.	NISHANTH M	04
8.	MEGHA	00
9.		
10.		
11.		
12.		

  
Signature of Faculty

  
Signature of HOD  
HEAD OF THE DEPARTMENT  
Department of Humanities  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560043

  
PRINCIPAL

INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF POLITICAL SCIENCE

FOUNDATION COURSE

1 year BA (2022-23 BATCH)

**RESOURCE PERSONS:** Ms. Deepa S & Mr. Muralidhara K

**SCHEDULED DAYS:** 05/09/22 to 15/09/22

**TITLE OF THE COURSE:** Political Science

**Duration:** 05 Hours

## LEARNING OBJECTIVES

- ✓ To know about political science & its basic concepts
- ✓ To create awareness about the political processes and the actual functioning of the political system.

## SYLLABUS

- ✓ Introduction
- ✓ Nature
- ✓ Scope
- ✓ Importance of Political Science

## LEARNING OUTCOME

Student should be able

- ✓ Understand the basic ideas and concepts of political science and rights and duties towards the State
- ✓ Comprehend the basic features of the Constitution

## Teaching and Evaluation:

- PPT
- Group Discussions
- Quiz

## POLITICAL SCIENCE

### INTRODUCTION

Political Science is an academic discipline concerned with the study of state and government. Political science studies the functions performed by a government-e.g., Legislation and administration of the law.

It is the study of the state and of the organs and institutions through which the state functions. No individual on earth can ever claim that he does not live in a state and government. The discipline of political science covers all aspects of state and government. Thus, political science is one of the major areas in social science dealing with all aspects of human political behavior.

### MEANING

The English word politics is derived from the Latin word Politicus which in turn is derived from Greek word Polis. The Polis means City-State. Politics is the study of city-state and its administration in practical as well as its philosophical terms.

### DEFINITIONS

**According to Girpert-** Political Science is a Social Science systematically dealing with the State and Government.

**Catlin:** Political Science is the study of political aspects of organized human society.

### NATURE:

Man is by nature a social animal who is born in society and wishes to live in society. The social nature of man is well summarised by Aristotle. He say 'He who is unable to live in society, or has no need because he is sufficient for himself, must be either a beast or a God'.

Man's love for company is prompted by twin factors of necessity of fulfilling his wants and his gregarious nature, to love and to be loved. Thus, in order to satisfy his wants and requirements, which he alone cannot fulfil and the desire to be cared and appreciated makes him to seek co-operation of others.

Man is social by nature but at the same time he is selfish, egoist and quarrelsome too. In the process of living together in a society, he tries to dominate over others. This nature of man leads to conflict in the society.

The rules and regulations that prescribe a certain code of behaviour in a society is called Laws. An organised society requires an agency to make laws but also to implement them strictly and impartially. This law enforcing authority is called Government.

The functioning of the government can be effective if people settle down within a fixed area in which the laws of the government operate is called Territory.

The society so constituted is called a state when the social conduct of the people is regulated by law supervised over by a government having a fixed territory along with the supreme power of Sovereignty.

### SCOPE

No subject matter can be without boundaries and political science is no exception. The scope refers to the area or extent of the subject. The definitions of political science, there is no general agreement on the scope of the political science among the political scientists.

First group of scholars are argue that the scope of political science is the study of state alone.

Second group of scholars are consisting that the scope of political science include the study of government.

Third group of scholars are balance b/w two extreme views and conclude that the scope of political science includes the study of both State & Government.

A description of the state must also include the study of structure and functions of the government.

The eminent political scientists from all over the world who assembled at UNESCO House in Paris in 1948 found the term political science generally divided the subject-matter into 4 divisions in order to widen the knowledge of discipline and also to promote specialization they are

1. Political Theory, the history of political ideas was studied with the emphasis on the origin, emergences and development of political ideas over a period of time.
2. Political Institutions, the areas such as constitution, government and public administration were covered.
3. Political Parties, included the working and functioning of the political parties, public opinion, the role of various groups and associations
4. International Relations, included the international organization, administration, international law.

#### **STATE AS IT HAS BEEN:**

Political science makes a survey of the origin and growth of organized political life. The past study has been great help in understanding the present institution ideas and processes.

#### **STATE AS IT IS:**

Political science makes an empirical investigation of existing political institution. It also deals with the structure of the governments as well as their working purpose and functions.

#### **STATE AS IT SHOULD BE:**

Political science tries to arrive at practical decisions about the policy to be adopted on the basis of the past experience and the current working of the political institutions.

Thus, political science prediction has been an important aspects of political science. Since, the earliest times and still continues to be an important aspects of its study.

#### **IMPORTANCE OF POLITICAL SCIENCE**

1. **Essential for a cultured existence:** To lead a respectful and a dignified life, a cultured society is essential. Basic Freedoms such as Freedom of thought, Expression and action and fair degree of Equality- Social, Political Economic will not only help lead a free but also fearless life. In society governed by a law, all are treated equal in the eyes of law. The study of political science introduces an individual to the requirement of a cultural society.
2. **To understand evolution of state government:** In order to understand the roots of the state and governments as how, why state and government existences. So we need the knowledge of political science is essential.
3. **Realization of rights and duties:** To be a citizen, he should be well aware of rights and duty. It is his duty to know the laws which gives him the rights.
4. **An understanding of working of the government:** By studying the various organs of the government the Legislation, Executive and Judiciary their powers and functions we get a clear picture of the working of the Government.
5. **Develops political consciousness:** An individual well aware of rights and duties, good knowledge of electoral system, understanding of the value of vote and a sound knowledge of the working of government would enable him to use his maturity both in the choice of candidate as well as the choice of government.
6. **Helps to understand evolution of concepts:** We understand theories our knowledge will increase and it becomes easy for us to know which theory is useful for the purpose of the people. To understand all this we have to depend upon the study of political science.
7. **Knowledge of the constitution:** A state without the constitution is like a man without the head. Constitution is a must of its size and population. It reflects social, political, economic

aspirations of the people of a country. To understand a better state, a understanding of constitution is necessary which is possible by studying political science.

8. **A guide to statesmen:** A statesman is one who places the interests of his country ahead of personal interests. A statesman aware of political science based on established principles of administration and management.
9. **A standard reference to civil servants:** A civil servants acts as an instrument of socio-economic changes. The progress of a country depends on the active interest shown by the civil servants towards national developments.
10. **Role of political parties and public opinion:** The study of political science throws light on vital aspects such as the necessity and importance of political parties, types and functions of political parties. The importance of public opinion in successful working of democracy, the factors that are responsible for mobilizing public opinion and also its agencies.

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF POLITICAL SCIENCE

FOUNDATION COURSE

2022-23

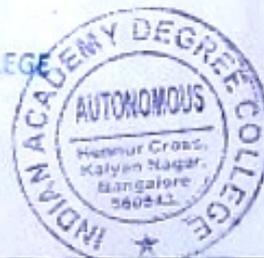
ATTENDANCE DETAILS

Sl. No	NAME	05/09/22	08/09/22	10/09/22	11/09/22	15/09/22
1.	AFREEN	P	P	P	P	P
2.	DIYA B	P	P	P	P	P
3.	MARIA NITHYA SHREE	P	P	P	P	P
4.	NINITHA D	P	P	P	P	P
5.	NZANDI T MURRY	P	P	P	P	P
6.	UMME HABIBA	P	P	P	P	P
7.	NISHANTH M				P	P
8.	MEGHA					
9.						
10.						
11.						
12.						

Signature of Faculty

Signature of HOD  
HEAD OF THE DEPARTMENT  
Department of Humanities  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560022

Principal  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 43



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF POLITICAL SCIENCE

2022-23 Batch

FOUNDATION COURSE TEST

Answer the following questions in two – three sentences: (5x2=10)

1. Political Science was known by different names. Name them.
2. Define Politics.
3. Name the four divisions of the scope of Political Science.
4. Political Science is the study of government alone. Name the writers who support this argument?
5. List out the importance of Political Science.

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF POLITICAL SCIENCE

FOUNDATION COURSE

MARKS OBTAINED IN ASSESSMENT TEST

Time: 1 hr

Date: 15.09.22

Max.Marks:10

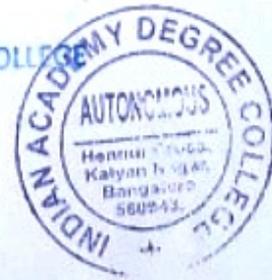
Sl. No	NAME	MARKS
1.	AFREEN	06
2.	DIYA B	06
3.	MARIA NITHYA SHREE	08
4.	NINITHA D	08
5.	NZANDI T MURRY	09
6.	UMME HABIBA	06
7.	NISHANTH M	06
8.	MEGHA	05
9.		
10.		
11.		
12.		

  
Signature of Faculty



PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 43

  
Signature of HOD  
Department of Humanities  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560043



# **INDIAN ACADEMY**

Degree College - Autonomous

**DEPARTMENT OF PSYCHOLOGY**

**FOUNDATION COURSE**

**2022-23 BATCH**

# INDIAN ACADEMY

Degree College - Autonomous

## DEPARTMENT OF PSYCHOLOGY

2022-23 Batch

### PRE ASSESSMENT TEST- FOUNDATION COURSE

Answer the following.

Total Marks= 15

1. Psychology is the scientific study of \_\_\_\_ and \_\_\_\_\_. (1x2=2)
2. \_\_\_\_\_ is the father of Psychology. (1x1=1)
3. Psychology is the process of \_\_\_\_ and \_\_\_\_ behaviour. (1x2=2)
4. Name any three fields of psychology. (1x3=3)
5. Counselling psychology is a \_\_\_\_ therapy. (1x1=1)
6. Two main symptoms of schizophrenia are \_\_\_\_ and \_\_\_\_\_. (1x2=2)
7. Can psychologists prescribe medicines. True/False (1x1=1)
8. Structure of the mind is made up of \_\_\_\_, \_\_\_\_ and \_\_\_\_\_. (1x3=3)

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF PSYCHOLOGY

FOUNDATION COURSE

MARKS OBTAINED IN PRE-ASSESSMENT TEST

Max. Marks: 10

Sl. No	NAME	MARKS
1.	AFREEN	15
2.	DIYA B	15
3.	MARIA NITHYA SHREE	15
4.	NINITHA D	8
5.	NZANDI T MURRY	15
6.	UMME HABIBA	AB

  
Signature of Faculty

  
HEAD OF DEPARTMENT  
Department of Humanities  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560043

  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE-43



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF PSYCHOLOGY

FOUNDATION COURSE

I year BA (2022-23 BATCH)

**RESOURCE PERSONS:** Ms. Maria Aquilla

**SCHEDULED DAYS:** 5/9/22 to 15/9/22

**TITLE OF THE COURSE:** Psychology

**Duration:** 05 Hours

## LEARNING OBJECTIVES

- ✓ To know the basic concepts of psychology
- ✓ To understand the branches of psychology.

## SYLLABUS

- ✓ Introduction
- ✓ Nature
- ✓ Branches of Psychology
- ✓ Psychology and other Disciplines
- ✓ Psychologists at Work

## LEARNING OUTCOME

Student should be able

- ✓ Understand the necessary skills for studying psychology.
- ✓ Familiarize students with the various disciplines in the field of Psychology

## Teaching and Evaluation:

- Chalk and Talk
- Group Discussions
- Quiz

## PSYCHOLOGY

### INTRODUCTION

Psychology is defined formally as a science which studies mental processes, experiences and behavior in different contexts. In doing so, it uses methods of biological and social sciences to obtain data systematically. Wilhelm Wundt is known as the father of Psychology.

The term psychology is derived from two Greek words psyche meaning soul and logos meaning science or study of a subject.

### DEFINITIONS

Psychology is the scientific study of mental process and behavior.

### NATURE:

Nature of Psychology

- Psychology as a Discipline
- Psychology as a Natural Science
- Psychology as a Social Science

#### **Psychology as a Discipline**

Psychology studies behaviour, experience and mental processes. It seeks to understand and explain how the mind works and how different mental processes result in different behaviours. When we observe others as lay or common persons, our own points of view or our ways of understanding the world influence our interpretations of their behaviours and experiences. Psychologists try to minimise such biases in their explanations of behaviour and experience in various ways. Some do so by seeking to make their analysis scientific and objective. Others seek to explain behaviour from the point of view of the experiencing persons because they think that subjectivity is a necessary aspect of human experience.

#### **Psychology as a Natural Science**

Modern psychology has developed because of the application of the scientific method to study psychological phenomenon. Science places a great deal of emphasis on objectivity which can be obtained if there is consensus on the definition of a concept and how it can be measured.

#### **Psychology as a Social Science**

Psychology is recognised more as a social science because it studies the behaviour of human beings in their socio-cultural contexts. Humans are not only influenced by their socio-cultural contexts, they also create them. Psychology as a social science discipline focuses on humans as social beings.

### **Branches of Psychology**

1. Cognitive Psychology investigates mental processes involved in acquisition, storage, manipulation, and transformation of information received from the environment along with its use and communication. The major cognitive processes are attention, perception, memory, reasoning, problem solving, decision-making and language.
2. Developmental Psychology studies the physical, social and psychological changes that occur at different ages and stages over a life-span, from conception to old age. The primary concern of developmental psychologists is how we become what we are.
3. Social Psychology explores how people are affected by their social environments, how people think about and influence others. Social psychologists are interested in such topics as attitudes, conformity and obedience to authority, interpersonal attraction, helpful behaviour, prejudice, aggression, social motivation, inter-group relations and so on.
4. Clinical and Counselling Psychology deals with causes, treatment and prevention of different types of psychological disorders such as anxiety, depression, eating disorders and chronic substance abuse. A related area is counselling, which aims to improve everyday functioning by helping people solve problems in daily living and cope more effectively with challenging situations.
5. Industrial/Organisational Psychology deals with workplace behaviour, focusing on both the workers and the organisations that employ them. Industrial/organisational psychologists are concerned with training employees, improving work conditions, and developing criteria for selecting employees.

### **Psychology and other Disciplines**

1. Economics, Political Science and Sociology : As sister social science disciplines, these three have drawn considerably from psychology and have enriched it as well. Psychology has contributed a great deal to the study of micro-level economic behaviour, particularly in understanding consumer behaviour, savings behaviour and in decision making.
2. Medicine : Doctors have realised that the maxim, healthy body requires a healthy mind, is actually true. A large number of hospitals now employ psychologists. The role of psychologists in

preventing people from engaging in health hazardous behaviours and in adhering to the prescribed doctors' regimen are some of the important areas where the two disciplines have come together.

3. **Computer Science** : From the very beginning, the effort of computer science has been in mimicking the human mind. One can see it in terms of how a 'computer' is structured, its memory organised, sequential and simultaneous (read parallel) processing of information. Computer scientists and engineers are seeking to make computers not only more and more intelligent but also machines which can sense and feel.
4. **Law and Criminology** : A skilled lawyer and a criminologist requires knowledge of psychology in answering such questions as: How well a witness remembers an accident, a street fight, or a murder? How well can s/he report such facts when taking the witness stand in the court? What factors influence the decision which is taken by the jury? What are the dependable signs of guilt and falsehood?

#### **Psychologists at Work**

1. **Clinical psychologists** specialize in helping clients with behavioral problems by providing therapy for various mental disorders and in cases of anxiety or fear, or with stresses at home or at work. They work either as private practitioners or at hospitals, mental institutions, or with social agencies. They may be involved in conducting interviews and administering psychological tests to diagnose the client's problems, and use psychological methods for their treatment and rehabilitation. Job opportunities in clinical psychology attract quite a few to this field of psychology.
2. **Counselling psychologists** work with persons who suffer from motivational and emotional problems. The problems of their clients are less serious than those of the clinical psychologists. A counselling psychologist may be involved in vocational rehabilitation programmes, or helping persons in making professional choices or in adjusting to new and difficult situations of life. Counselling psychologists work for public agencies such as mental health centres, hospitals, schools, colleges and universities.
3. **Community psychologists** generally focus on problems related to community mental health. They work for mental health agencies, private organisations and state governments. They help the community and its institutions in addressing physical and mental health problems. In rural

areas they may work to establish a mental health centre. In urban areas they may design a drug rehabilitation programme.

4. School psychologists work in educational systems, and their roles vary according to the levels of their training. For example, some school psychologists only administer tests, whereas others also interpret test results to help students with their problems. They also help in the formulation of school policies. They facilitate communication between parents, teachers and administrators, and also provide teachers and parents with information about the academic progress of a student.

5. Organisational psychologists render valuable help in dealing with problems that the executives and employees of an organisation tend to face in their respective roles. They provide organisations with consultancy services and organise skill training programmes in order to enhance their efficiency and effectiveness. Some organisational psychologists specialise in Human Resource Development (HRD), while others in Organisational Development and Change Management programmes.

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF PSYCHOLOGY

FOUNDATION COURSE

2022-23

ATTENDENCE DETAILS

Sl. No	NAME	05/09/22	06/09/22	07/09/22	08/09/22	09/09/22	10/09/22
1.	AFREEN	AB	√	√	√	AB	AB
2.	DIYA B	√	√	√	√	√	√
3.	MARIA NITHYA SHREE	√	√	√	√	√	√
4.	NINITHA D	√	√	√	√	√	AB
5.	NZANDI T MURRY	√	√	√	√	√	√
6.	UMME HABIBA	√	AB	√	√	AB	√
7.	NISHANTH	AB	AB	AB	√	√	√
8.	MEGHA	AB	AB	AB	AB	AB	√

  
Signature of Faculty

HEAD OF THE DEPARTMENT  
Department of Humanities  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560043

  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 43



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF PSYCHOLOGY

2022-23 Batch

FOUNDATION COURSE TEST

Answer the following questions in two – three sentences: (5x2=10)

1. Define Psychology. Who is the father of psychology.
2. Briefly explain the nature of Psychology.
3. Enumerate any 3 branches of Psychology.
4. In terms of helping solve an important social problem such as crime, which branch of psychology do you think is most suitable.
5. Write a note on any two psychologists at work.

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF PSYCHOLOGY  
FOUNDATION COURSE

MARKS OBTAINED IN ASSESSMENT TEST

Time: 1 hr

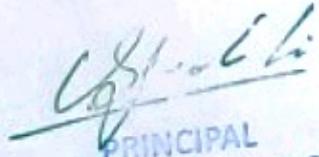
Date: 10/09/2022

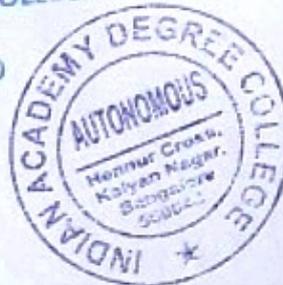
Max.Marks:10

Sl. No	NAME	MARKS
1.	AFREEN	AB
2.	DIYA B	AB
3.	MARIA NITHYA SHREE	10
4.	NINITHA D	AB
5.	NZANDI T MURRY	10
6.	UMME HABIBA	06
7.	NISHANTH	08
8.	MEGHA	07

  
Signature of Faculty

  
Signature of HOD  
Department of Psychology  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560043

  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 43



# INDIAN ACADEMY

Degree College - Autonomous

**DEPARTMENT OF JOURNALISM**

**FOUNDATION COURSE**

**2022-23 BATCH**

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF JOURNALISM

2022-23 Batch

PRE-ASSESSMENT TEST- FOUNDATION COURSE

Answer The Following Questions.

(1x1=10)

1. What is News?
2. Name any One Journalist.
3. Name any 2 Social Media Platforms.
4. What is Journalism?
5. What is Reporting?
6. Which is the First Kannada Newspaper?

OR

Which is the First Newspaper in India?

7. Who is Gauri Lankesh?
8. Give any 2 Examples of Electronic Media.
9. Expand OTT.
10. Any 2 Advantages of Social Media.

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF JOURNALISM

FOUNDATION COURSE

MARKS OBTAINED IN PRE-ASSESSMENT TEST

Max. Marks: 10

Sl. No	NAME	MARKS
1.	AFREEN	ab
2.	DIYA B	7
3.	MARIA NITHYA SHREE	6
4.	NINITHA D	5
5.	NZANDI T MURRY	7
6.	UMME HABIBA	ab
7.	NISHANTH	ab
8.	MEGHA	ab

Signature of Faculty

Signature of HOD

HEAD OF THE DEPARTMENT  
Department of Journalism  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560049

PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 43



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF JOURNALISM

FOUNDATION COURSE

I year BA (2022-23 BATCH)

**RESOURCE PERSONS: DILROOPA KN**

**SCHEDULED DAYS: 5/9/22 to 15/9/22**

**TITLE OF THE COURSE: Journalism**

**Duration: 05 Hours**

## LEARNING OBJECTIVES

- ✓ To introduce the concept of media and journalism in particular
- ✓ To familiarize the students to the applications of computers in print and electronic journalism

## SYLLABUS

- ✓ Introduction
- ✓ Nature
- ✓ Scope
- ✓ Various applications of computers in media: Text, Graphics, Drawings; Animation; Audio and Video

## LEARNING OUTCOME

Student should be able

- ✓ Understand the basic ideas and concepts of Journalism
- ✓ Enhance the media skills and computer skills.

## Teaching and Evaluation:

- PPT
- Group Discussions
- Lecture Method

## JOURNALISM

### INTRODUCTION

Journalism is the practice of gathering, recording, verifying, and reporting on information of public importance. The particulars of the journalistic process have evolved as the ways information is collected, disseminated, and consumed have changed. Journalism as a craft, a profession and even as a trade or business is over two centuries old. It was made possible by the coming together of a number of technologies as well as several social, political and economic developments.

### MEANING

**Journalism** is the collection, preparation, and distribution of news and related commentary and feature materials through such print and electronic media as newspapers, magazines, books, blogs, webcasts, podcasts, social networking and social media sites, and e-mail as well as through radio, motion pictures, and television. The word journalism was originally applied to the reportage of current events in printed form, specifically newspapers, but with the advent of radio, television, and the Internet in the 20th century the use of the term broadened to include all printed and electronic communication dealing with current affairs.

### NATURE AND SCOPE:

Journalism is the **timely reporting of events** at the local, provincial, national and international levels. Reporting involves the gathering of information through interviewing and research, the results of which are turned into a fair and balanced story for publication or for television or radio broadcast. Journalism is not just fact-finding media analysis opinion writing or commentary although all of those aspects can play a part at times. Journalism is that part of social activity which is concerned with the dissemination of news and views about the society.

Modern journalism feeds five areas of mass communication – (1) Newspapers and Periodicals, (2) Radio, (3) Television, (4) Films, (5) Advertising & Public Relations.

In modern societies, Journalism has become the media of mass education providing supplementary education to students at all stages and to the general masses – educated and uneducated. In modern times, the horizon of journalism has widened and it has transcended the limits of mere reporting of political and economic news. Journalism has as its main activity the reporting of events stating who, what, where, why and how, and explaining the significance and effects of events or trends. Journalism exists in a number of media: newspapers, television, radio, magazines and, most recently, the World Wide Web through the internet.

### **Print Media**

Below are some important job profiles and their roles in print media.

- **Reporter:** The role of a reporter is to gather news and report with accuracy. News sense, objectivity and timeliness are few important qualities, which a reporter should possess.
- **Correspondent:** Correspondents are also known as special reporters who are assigned for a particular purpose. Correspondents can be of any beat like politics, sports, crime etc.
- **Feature Writer:** The responsibility of a feature writer is to write soft stories with deep research and observations on particular subject.
- **Proof Reader:** The role of a proof reader is to assess the edited copy. A proof reader must have good grammatical and punctuation skills.
- **Leader Writer:** The role of a leader writer is to write their views on the current topics through editorials.
- **Editor:** Editor's responsibility is to maintain a journal's reputation. He also ensures that article corresponds with the media in-house style guides.
- **Columnist:** The role of a columnist is to write for a specific column in detail in the newspaper or magazine. The column can be related to any topic highlighting his viewpoint on any subject like politics, fashion or films.

Photo Journalists, Cartoonists are some other profiles.

### **Electronic Media**

Here are various job profiles included in electronic media.

- **Researchers:** The role of researchers involves deep research on a particular topic. Significant qualities required for this job profile are creativity and excellent research skills.
- **Electronic Media Reporters:** An electronic media or broadcast reporter should have good verbal and presentation skills. He should have a news sense.
- **Presenters/Anchors:** A presenter should be confident. He must have excellent communication skills, ability to remain balanced in stressful conditions.
- **Freelancers:** Apart from the above-mentioned job profiles, freelancers are informal employees who are assigned particular task and are paid according to it.

### **COMPUTER APPLICATION FOR MEDIA:**

**Computer Graphics** involves creation, display, manipulation and storage of pictures and experimental data/models or images for proper visualization using a computer. Computers are becoming a powerful tool for the rapid and economic production of pictures. Computer graphics has numerous of diverse applications listed in the previous section which differ in a variety of ways, and a number of classification is by type (dimensionality) of the object to be represented and the kind of picture to be produced. Furthermore, computer graphics is used today in many different areas of industry, business, government, education, entertainment, and most recently, the home.

#### **Text-**

Text is the basic element of multimedia. It involves the use of text types, sizes, colors and background colors. In multimedia, text is mostly use for titles, headlines, menu, paragraph, list etc. In a multimedia application, other media or screen can be linked through the use of text.

This is what you call Hypertext. The most commonly used software for viewing text files is Microsoft Word, Notepad, Word pad etc. Mostly the text files are formatted with , DOC, TXT etc extension.

### **Animation-**

Graphics that contain movement are often referred to as animation. Animation is a series of images put together to give the effect of movement. In multimedia, 2D and 3D digital animation is used.

Movement, rather than just viewing a still image, is especially useful for illustrating concepts that involve movement. Animation is used to add visual interest or bring attention to important information or links.

It can illustrate how things work or present information in entertaining ways. Animation can also include interactive effects allowing visitors to engage with the animation action using their mouse and keyboard. Animation is a dynamic and media-rich content that stays within one container on a page – a very powerful form of communication.

### **Video-**

Video is the technology of electronically capturing, recording, processing, storing, transmitting, and reconstructing a sequence of still images representing scenes in motion. Video is a visual multimedia application that combines a sequence of images to form moving pictures and sound. Video can have an impact on websites and on social media platforms in a very unique and powerful way.

Video on websites, and especially on social media platforms, already has a great presence and will only continue to gain popularity as more and more visitors demand it. Social media sites like Facebook, Twitter and LinkedIn all provide video integration capabilities which allow marketers to share relevant videos on these platforms. Short videos can be a smart marketing advantage and an excellent way to differentiate yourself from your competitors.

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF JOURNALISM

FOUNDATION COURSE

2022-23

ATTENDENCE DETAILS

Sl. No	NAME	07/09/22	06/09/22	07/09/22	08/09/22	09/09/22	10/09/22
1.	AFREEN	ab	ab	✓	ab	ab	ab
2.	DIYA B	✓	✓	✓	✓	✓	ab
3.	MARIA NITHYA SHREE	✓	✓	✓	✓	✓	✓
4.	NINITHA D	✓	✓	✓	✓	✓	ab
5.	NZANDI T MURRY	✓	✓	✓	✓	✓	✓
6.	UMME HABIBA	ab	✓	✓	✓	ab	✓
7.	NISHANTH	ab	ab	✓	ab	✓	✓
8.	MEGHA	ab	ab	ab	ab	ab	✓

Signature of Faculty

Signature of HOD

HEAD OF THE DEPARTMENT  
Department of Journalism  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560049

PRINCIPAL

INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 43



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF JOURNALISM

FOUNDATION COURSE

2022-23

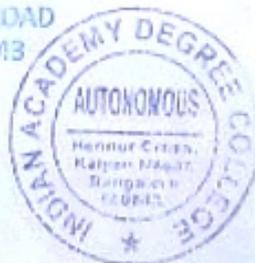
ATTENDANCE DETAILS

Sl. No	NAME	07/09/22	06/09/22	07/09/22	08/09/22	09/09/22	10/09/22
1.	AFREEN	ab	ab	✓	ab	ab	ab
2.	DIYA B	✓	✓	✓	✓	✓	ab
3.	MARIA NITHYA SHREE	✓	✓	✓	✓	✓	✓
4.	NINITHA D	✓	✓	✓	✓	✓	ab
5.	NZANDI T MURRY	✓	✓	✓	✓	✓	✓
6.	UMME HABIBA	ab	✓	✓	✓	ab	✓
7.	NISHANTH	ab	ab	✓	ab	✓	✓
8.	MEGHA	ab	ab	ab	ab	ab	✓

Signature of Faculty

Signature of HOD  
HEAD OF THE DEPARTMENT  
Department of Journalism  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560043

Principal  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR MAIN ROAD  
BANGALORE - 43



# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF JOURNALISM

2022-23 Batch

FOUNDATION COURSE TEST

Answer the following questions in two – three sentences: (5x2=10)

1. What is Journalism?
2. Nature of Journalism?
3. Scope of Journalism?
4. What do you mean by Graphics?
5. What are the applications of computer in media

# INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF JOURNALISM

FOUNDATION COURSE

MARKS OBTAINED IN ASSESSMENT TEST

Time: 1 hr.

Date: 17.7.18

Max.Marks:10

Sl. No	NAME	MARKS
1.	AFREEN	ab
2.	DIYA B	ab
3.	MARIA NITHYA SHREE	8
4.	NINITHA D	ab
5.	NZANDI T MURRY	9
6.	UMME HABIBA	2
7.	NISHANTH	6
8.	MEGHA	6

  
Signature of Faculty

  
HEAD OF THE DEPARTMENT  
Department of Journalism  
Signature of HOD  
INDIAN ACADEMY DEGREE COLLEGE  
Autonomous  
Hennur Main Road, Bangalore-560043

  
PRINCIPAL  
INDIAN ACADEMY DEGREE COLLEGE  
AUTONOMOUS  
HENNUR  
BANGALORE



# **INDIAN ACADEMY**

Degree College - Autonomous

## **DEPARTMENT OF MICROBIOLOGY**



## **FOUNDATION COURSE IN MICROBIOLOGY**

**ACADEMIC YEAR 2022 - 2023**

**November 2022**

## OBJECTIVES

- To communicate the basic knowledge in general microbiology with detailed applications of microbes in medicine, environment, public health, safety and industry
- To enhance the students knowledge on the advanced sections of Microbiology in the recent years
- To gain a broader perspective on fundamentals of Applied Microbiology

## PEDAGOGY

- Power point presentation
- Animated and simulation videos
- Lecture notes

## SYLLABUS

Sl.No.	Syllabus	Hours allotted	Teacher in charge
1.	<b>Aim</b> To acquire knowledge of eukaryotic organisms <b>Topic</b> Isolation, cultivation and characteristic features of fungi, protozoa and algae <b>Outcome</b> Various methods involved in isolation, identification and cultivation of eukaryotic organisms can understand.	03	Dr. Anu Kiruthika S
2.	<b>Aim</b> To understand the fundamentals of genomics and proteomics. <b>Topic</b> Transcriptomics and metabolomics and their applications in various applied areas of biology. <b>Outcome</b> Enhanced awareness on bioinformatics and computational genomics.	03	Prof. P Rajarajan
3.	<b>Aim</b> To study the basics of plant tissue culture <b>Topic</b> Genetic transformation in plants and applications of plant tissue culture <b>Outcome</b> Provides fundamental knowledge on plant genetic engineering and plant based industrial products production.	03	Dr. Sahithya K.

4.	<p><b>Aim</b> To study the cellular functions of different types of cells</p> <p><b>Topic</b> Introduction to different receptors, modes of cellular signalling and signal amplification</p> <p><b>Outcome</b> Role of different cell receptors and its importance in human system</p>	03	Dr. P. Malaiyarasa Pandian
5.	<p><b>Aim</b> To gain insights about nanomaterials and nanotechnology</p> <p><b>Topic</b> Synthesis approaches, characterization and applications in nanomedicine</p> <p><b>Outcome</b> Biological applications of nanomaterials can understand.</p>	02	Prof. P Rajarajan
6.	<p><b>Aim</b> To understand the importance of metagenomics</p> <p><b>Topic</b> Sequencing techniques, data analysis and applications in the field of environmental remediation and agriculture</p> <p><b>Outcome</b> Learners get the idea of microbial diversity in the environment.</p>	03	Dr. P. Malaiyarasa Pandian
7.	<p><b>Aim</b> To study human intestinal microbiota</p> <p><b>Topic</b> Examples of probiotic strains in commercial products</p> <p><b>Outcome</b> Reflects the importance of probiotics and prebiotics.</p>	01	Dr. Anu Kiruthika S.
8.	<p><b>Aim</b> To study the applications of recombinant DNA technology</p> <p><b>Topic</b> Discussion on various techniques involved in the production of recombinant products and GMOs</p> <p><b>Outcome</b> An understanding on application of genetic engineering techniques in basic and applied experimental biology</p>	03	Dr. K Sahithya
9.	<p><b>Aim</b> To study impact of environmental pollutants on</p>		

	<p>ecosystems and biota</p> <p><b>Topic</b> Detection and quantification of environmental contamination</p> <p><b>Outcome</b> Significance of prevention and remediation of environmental pollution can understand</p>	03	Dr. Malaiyarasa P.
10.	<p><b>Aim</b> To study industrially important microbes and important products</p> <p><b>Outcome</b> Various sources of microbes for industrial applications</p>	03	Dr. K Sahithya
11.	<p><b>Aim</b> To understand concepts of entrepreneurship such as Planning, decision making, leadership, organizations and authority</p> <p><b>Topic</b> Basic requirements for establishing a bio-based start up and company</p> <p><b>Outcome</b> Imparts basic understanding and skills required for a successful entrepreneur</p>	02	Dr. Anu Kiruthika S.
	<p><b>Aim</b> To understand the scope of the subject</p> <p><b>Topic</b> Scope of Microbiology and its career prospects</p> <p><b>Outcome</b> After finishing master's degree, fields to get job, eligibility of higher studies</p>	01	Prof. P Rajarajan

## OUTCOMES

- Students can easily understand the advanced concepts in Microbiology
- Students acquire knowledge of microbiological applications and opportunities in the field of microbiology.

## EVALUATION METHODS

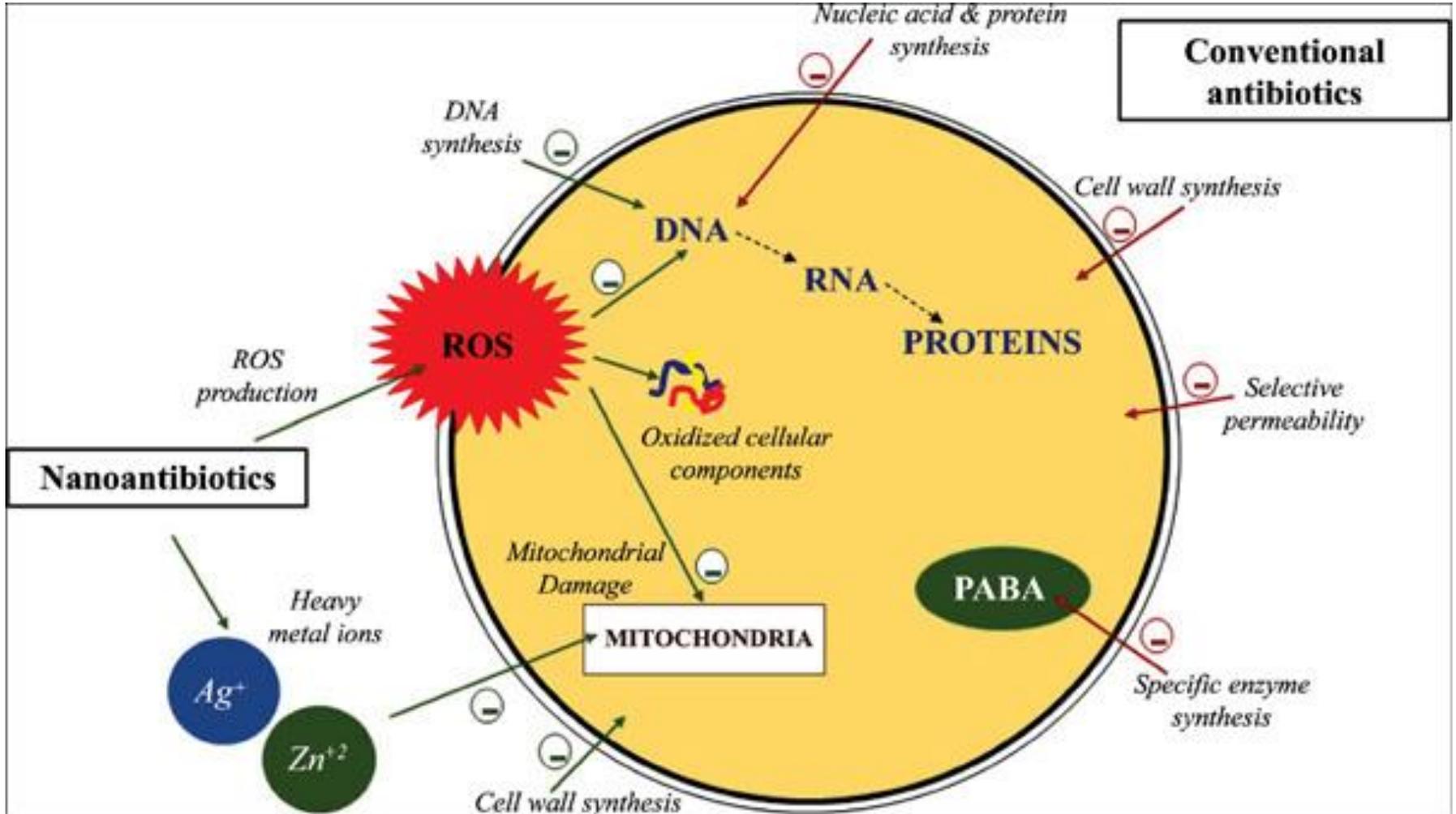
- Conducting quiz
- Snap test
- Group discussion

## **REFERENCE BOOKS**

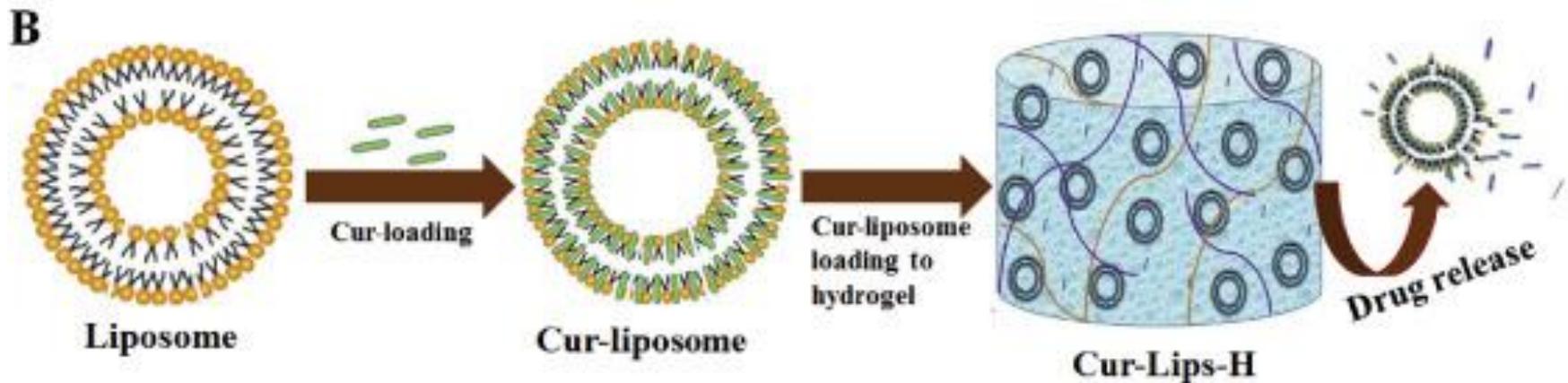
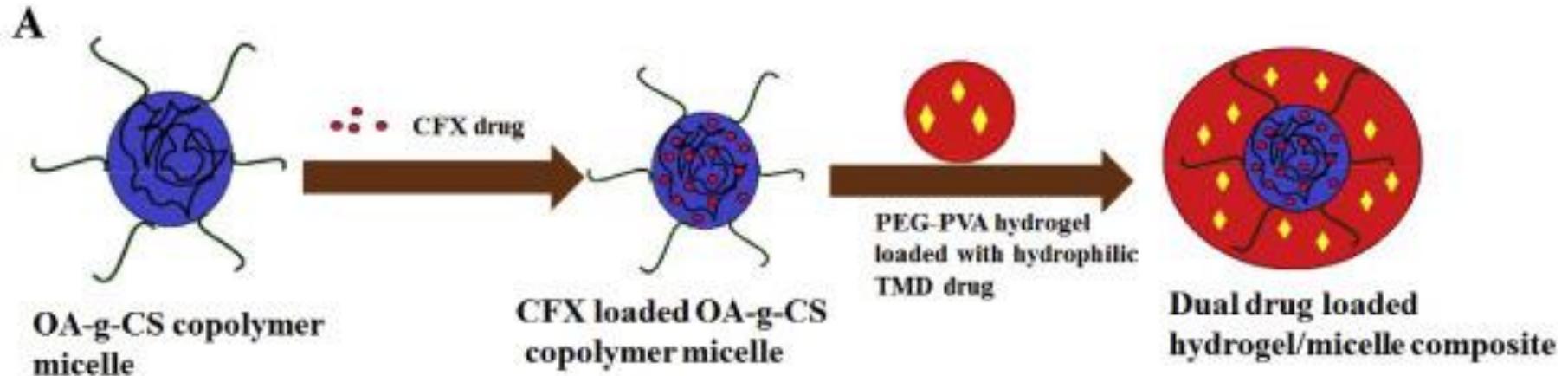
1. Concepts and Techniques in Genomics and Proteomics by N Saraswathy & P Ramalingam (2011) Published by Elsevier Science.
2. Recent Developments in Applied Microbiology and Biochemistry by Buddolla Viswanath (2020) Published by Elsevier Science.
3. Applied Microbiology by S. M. Reddy, S. Girisham & G. Narendra Babu (2017) Published by Scientific Publishers.
4. Plant Tissue Culture: An Introductory Text by Sant Saran Bhojwani, Prem Kumar Dantu (2013) Published by Springer India
5. Introduction to Nano: Basics to Nanoscience and Nanotechnology by Amretashis Sengupta & Chandan Kumar Sarkar (2015) Published by Springer Berlin Heidelberg.

# **NANOTECHNOLOGY IN MICROBIOLOGY**

# Nanoantibiotics



# Nanocomposite hydrogel systems



# Smart drugs



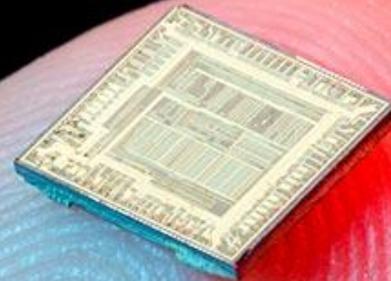
# Nanosensors

## Global Nanosensor Market

OPPORTUNITIES AND FORECASTS,  
2019-2026

Global Nanosensor Market is  
expected to reach  
**\$1,321.30 Million** by 2026.

Growing at a **CAGR of 11.00%**  
(2019-2026)



# GENOMICS & PROTEOMICS

---

# WHAT DO YOU MEAN BY GENOMICS?

The term genome introduced by **H. Winkler** in 1920

The term genomics coined by **T.H. Roderick** in 1987

**Genome + Omics → Genomics**

Genomics is a an area of life science that deals with  
*the study of the genomes of organisms*

- **Today genomics includes:**

- ✓ sequencing of genomes
- ✓ determination of the complete set of proteins encoded by an organism
- ✓ the functioning of genes and metabolic pathways in an organism

## **Where do we get these sequences from?**

- ✓ Through genome sequencing projects



# The Genome Is All The DNA In A Cell

- All the DNA on all the chromosomes
- Includes genes, intergenic sequences, repeats
- Specifically, it is all the DNA in an organelle
- **Eukaryotes can have 2-3 genomes**
  - Nuclear genome
  - Mitochondrial genome
  - Plastid genome
- If not specified, “genome” usually refers to the nuclear genome

# How Many Types Of Genome???

- **Prokaryotic genomes**
- **Eukaryotic Genomes**
  - *Nuclear Genomes*
  - *Mitochondrial genomes*
  - *Choloroplast genomes*

# GENOME SEQUENCING- HISTORY

- The first genome to be sequenced was that of *Haemophilus influenzae* in 1995.
- The *E. coli* genome was completely sequenced in 1997.
- Yeast (*Saccharomyces cerevisiae*) (12.8 x 10<sup>6</sup> bp) and worm (*Caenorhabditis elegans*) genomes were the first eukaryotic genomes to be sequenced in 1999.
- Genomes of *Drosophila melanogaster* and *Arabidopsis thaliana* were sequenced in 2000.

# GENOME SEQUENCING PROJECT

## Human Genome project

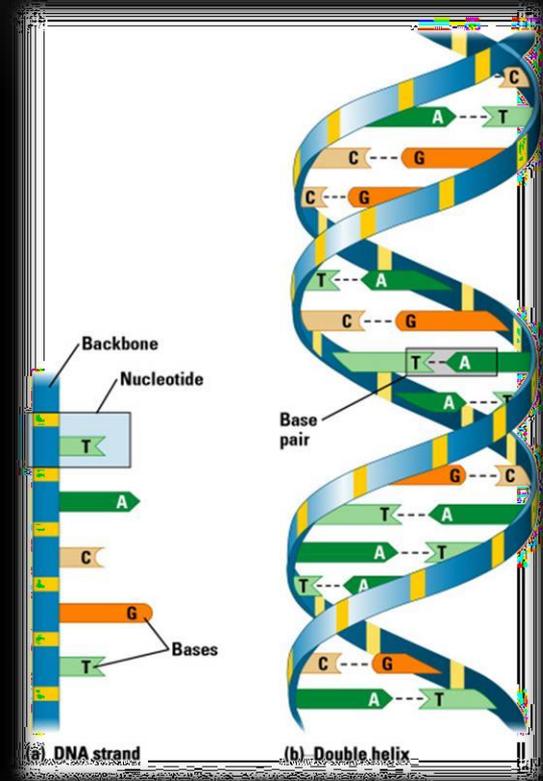
- The Human Genome Project officially began on Oct. 1, 1990.
- Completed in 13 years
- **Mission of HGP:**
- To understand the human genome and the role it plays in both health and disease.
- The U.S. govt. project coordinated by the Department of Energy and the National Institutes of Health
- **Francis Collins**, Director of the HGP and the National Human Genome Research Institute (NHGRI)

# THE GENOME IS OUR GENETIC BLUEPRINT

- Nearly every human cell contains 23 pairs of chromosomes
  - 1 - 22 and XY or XX
    - **XY = Male**
    - **XX = Female**
- Length of chr 1-22, X, Y together is ~3.2 billion bases

# The genome is who we are from the inside!

- **Chromosomes consist of DNA**
  - molecular strings of A, C, G, & T
  - base pairs, A-T, C-G
- **Genes**
  - DNA sequences that encode proteins
  - less than 3% of human genome



# AIMS OF THE PROJECT:

- To identify the approximate 100,000 genes in the human DNA.
  - Determine the sequences of the 3 billion bases that make up human DNA.
  - Store this information in databases.
  - Develop tools for data analysis.
  - Address the ethical, legal, and social issues that arise from genome research.
-

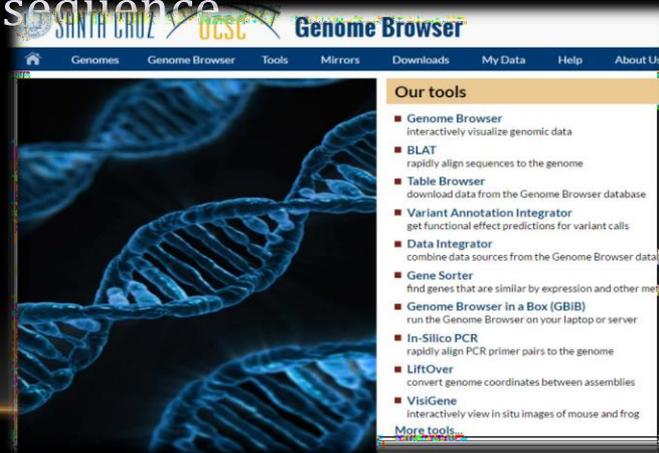
# How was it done...

## First, it was the Assembly

- The DNA sequence is so long that no technology can read it all at once, so it was broken into pieces.
  - There were millions of **clones** (small sequence fragments).
  - The assembly process included finding where the pieces overlapped in order to put the draft together.
-

# UCSC put the human genome sequence on the web July 7, 2000

- UCSC put the human genome sequence on CD in October 2000, with varying results
- Publication of 90 percent of the sequence in February 2001 issue of the journal *Nature*.
- Completion of 99.99% of the genome as finished sequence in July 2003.



# Next ...the Annotation

- Where are the **genes**?
- How do genes work?
- How do scientists use this information for scientific understanding and to benefit us?
- **What do genes do anyway?**
- We only have ~27,000 genes, so that means that each gene has to do a lot.
- Genes make proteins that make up nearly all we are (muscles, hair, eyes).
- Almost everything that happens in our body happens because of proteins
- **(walking, digestion, fighting disease).**



Eye Color is determined by genes

# From our genome so far...

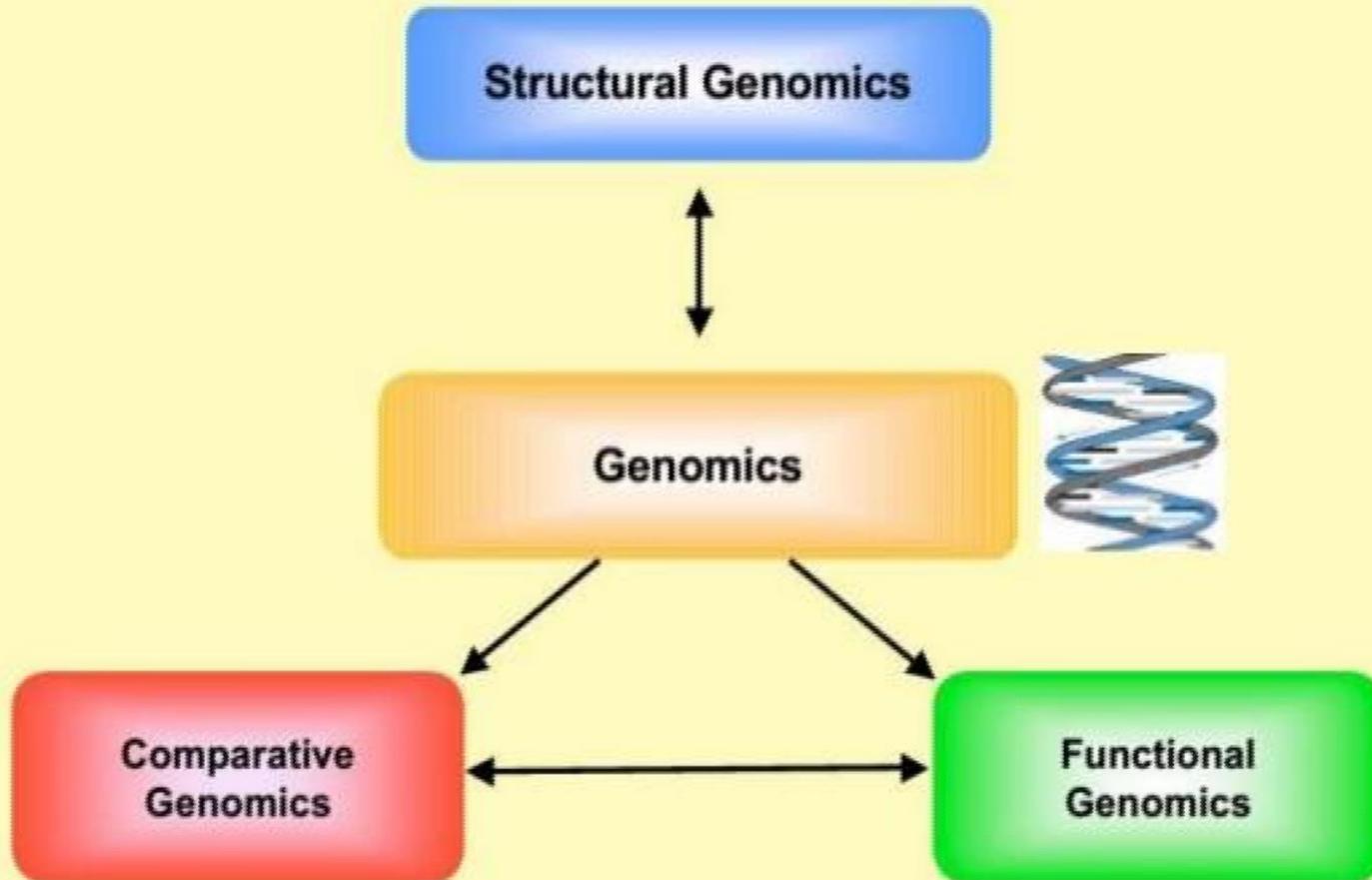
- Relatively small number of human genes, less than 30,000
  - Have a complex architecture (which is yet to be analyzed completely)
  - We know where 85% of genes are in the sequence.
  - We don't know where the other 15% are because we haven't seen them "on" (they may only be expressed during fetal development).
  - We only know what about 20% of our genes do so far.
-

# What Does The Draft Human Genome Sequence Tell Us?

- The human genome contains 3.2 billion chemical nucleotide bases (A, C, T, & G)
- Takes **95** years to read



# Types of genomics :



Model systems



Agriculture  
Medicine

(synteny/allelic diversity)

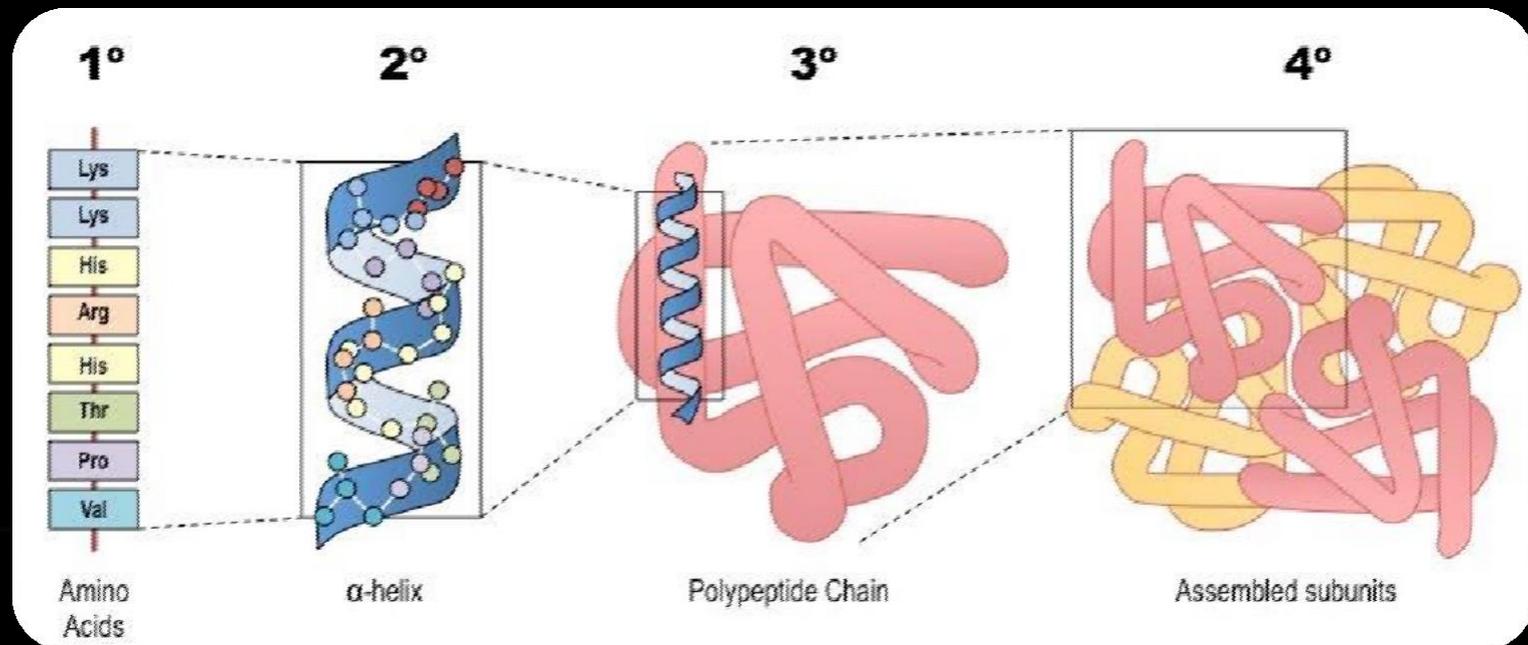
Genome



Phenome

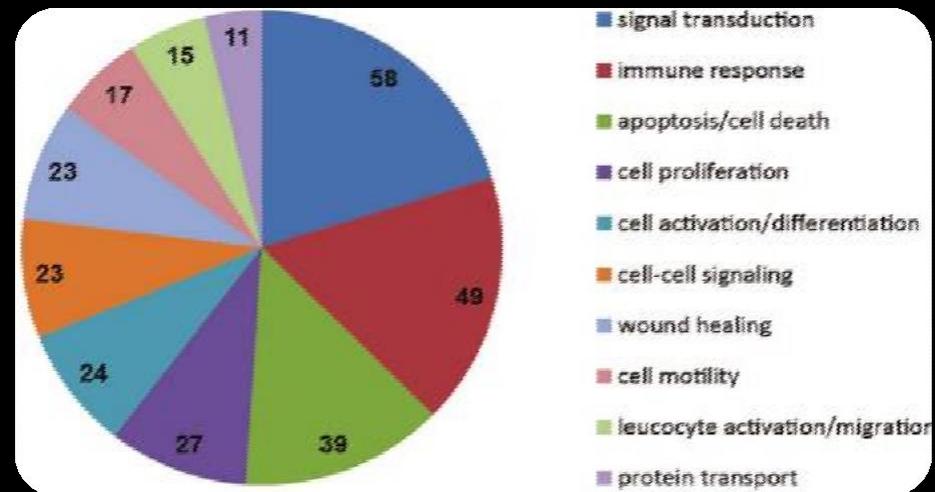
# STRUCTURAL GENOMICS

- Effort aimed at determining the three-dimensional **structures** of gene products
- Using efficient and high-throughput mode
- **For Proteins- Structural proteomics!**
- Understanding novel proteins and 3D structures



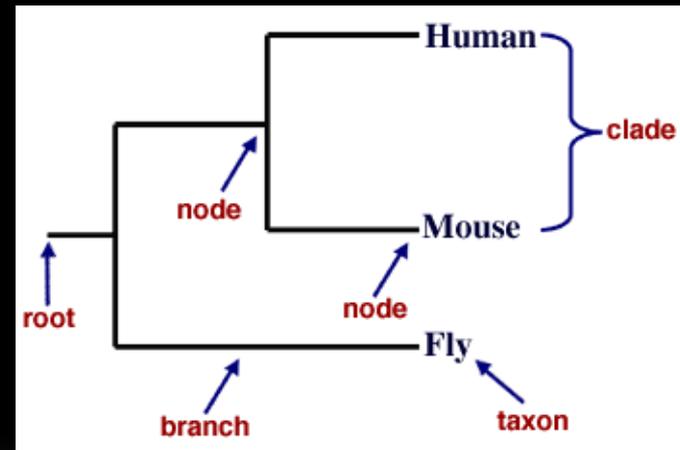
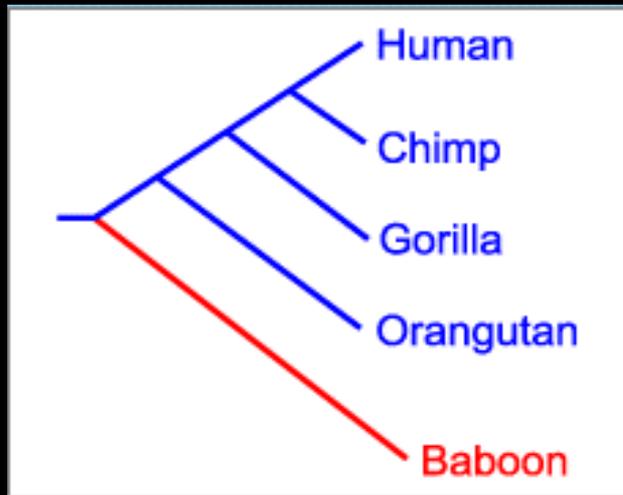
# FUNCTIONAL GENOMICS

- Identify functions of gene and non-gene sequences
- Describe gene & protein functions
- Gene & Protein interaction
- Genotype- Phenotype



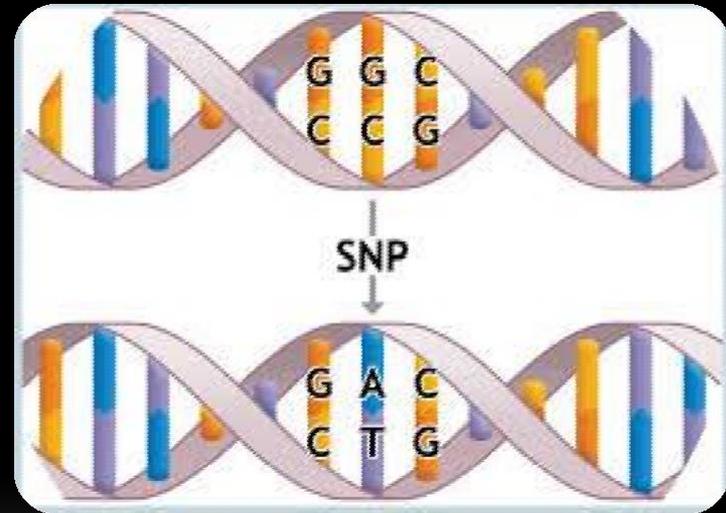
# COMPARATIVE GENOMICS

- Compare genome sequence between different species
- To better understand the evolutionary relationships
- Determine the function of each genome



# MUTATIONAL GENOMICS

- Study of genome in terms of mutations that occur in the DNA or Genome of an individual
- Also termed as **gene function determination**
- Understand the mutations in
  - ✓ Coding sequences
  - ✓ Non coding sequences
- Due to Repeat sequences:
  - ✓ Minisatellites
  - ✓ Microsatellites
- **SNP**



# TRANSCRIPTOMICS



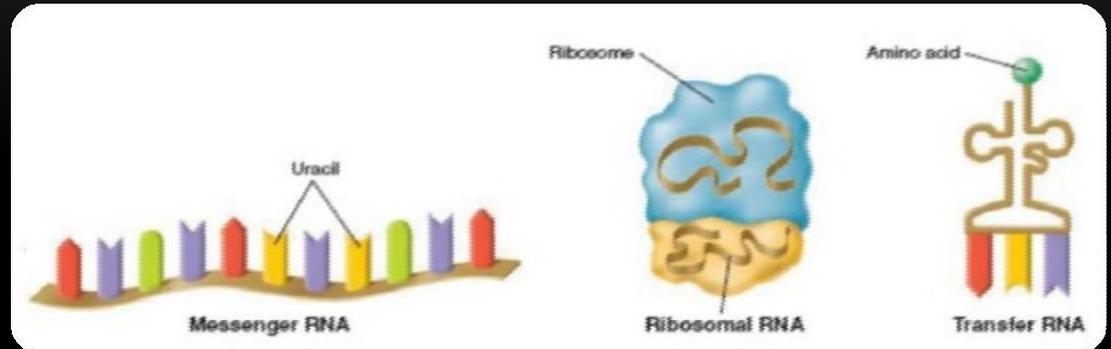
- The set of all RNA molecules including:

- ✓ mRNA

- ✓ rRNA

- ✓ tRNA

- ✓ non-coding RNA produced in one or a population of cells



Transcriptomics, is a global way of looking at gene expression patterns

# TRANSCRIPTOME PROFILING

- Deep investigation of the transcriptome
- Study the transcriptional activity
- Proteins coded by the RNA transcript
- Study gene fusions etc...

**Annotate the RNA transcript**

---

# PROTEOMICS



We all are made  
up of proteins

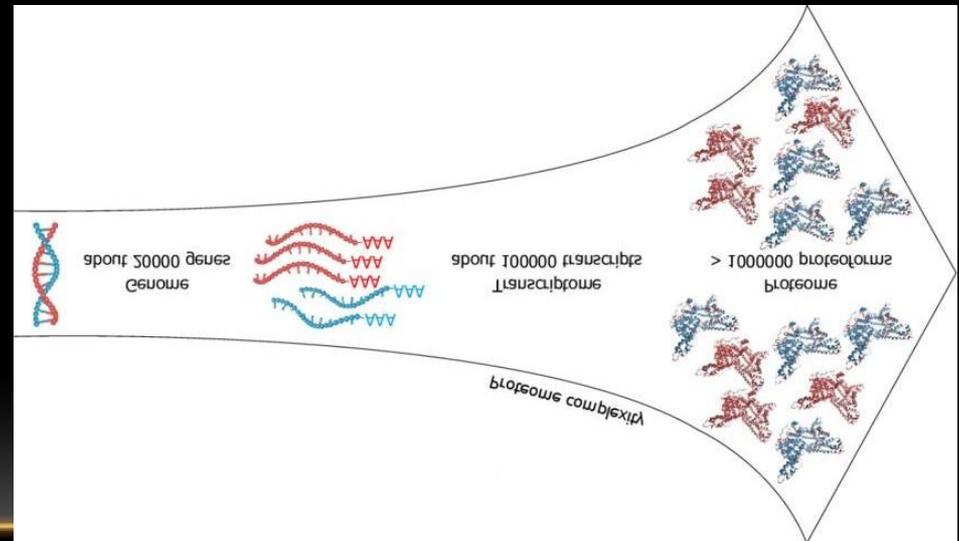


# WHY PROTEOMICS?

## Fact:

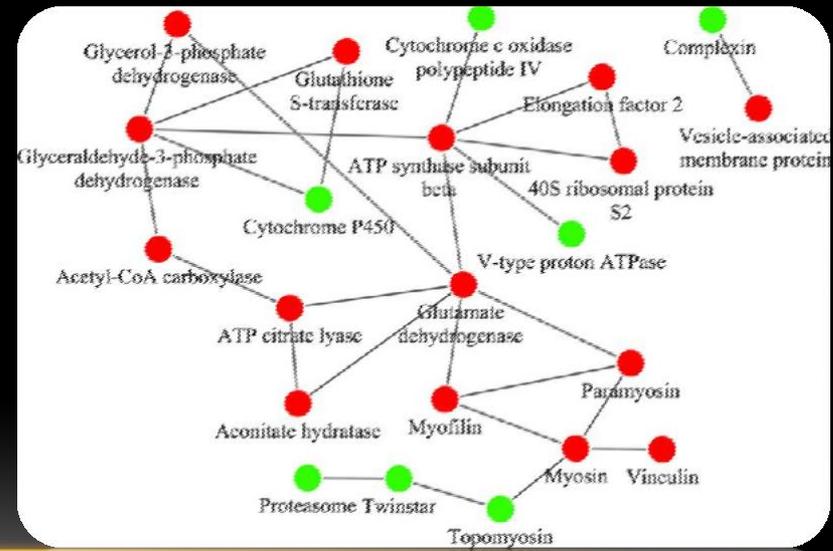
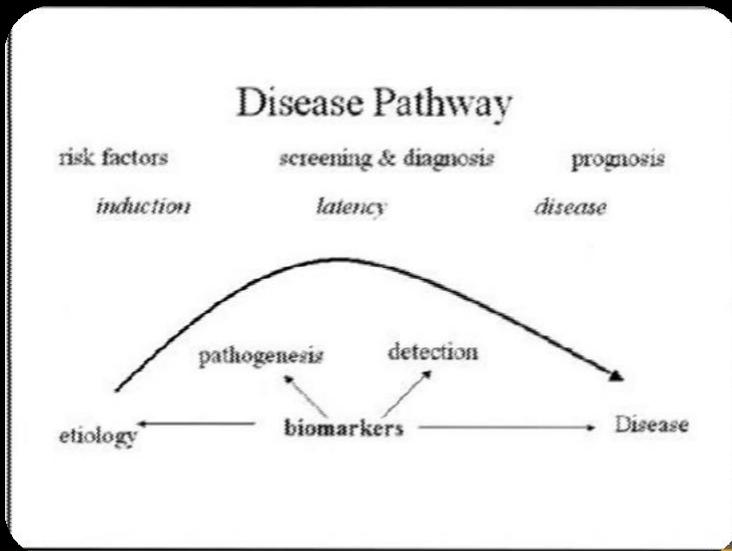
- Genome ~ 26,000-31,000 protein encoding genes
- **Human proteins  $\geq 1$  million**
- **Proteomics –**
- Study of the full protein complement of organisms

e.g. plasma, cells and tissue



# UNDERSTANDING THE PROTEOME ALLOWS...

- Characterisation of proteins
- Understanding protein interactions
- Identification of disease biomarkers



# MAJOR APPLICATIONS...

## GENOMICS, TRANSCRIPTOMICS, PROTEOMICS

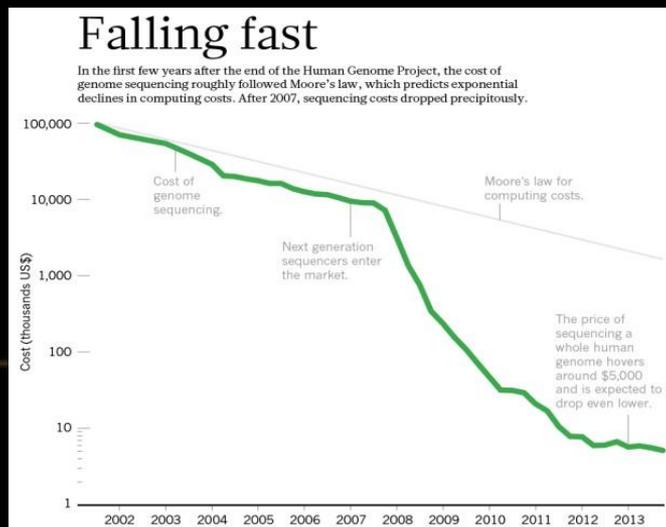
- Gene prediction
- ORF Finding
- Metagenomics
- Next Generation Sequencing
- Computer Aided Drug Design

# NEXT GENERATION SEQUENCING

- DNA sequencing technology which has revolutionised genomic research
- Determining the number and order of nucleotides that make up a given molecule of DNA.
- Using NGS an entire human genome can be sequenced within a single day.
- In contrast to the previous Sanger sequencing technology
- A number of different modern sequencing technologies including:

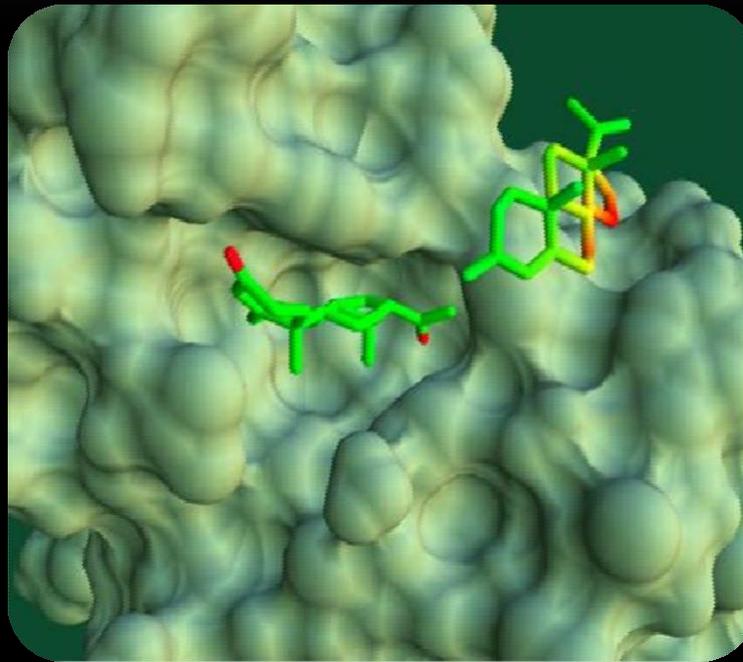
*Illunmina, Roche 454 sequencing, Ion Torrent , PacBio etc.*

- Cost

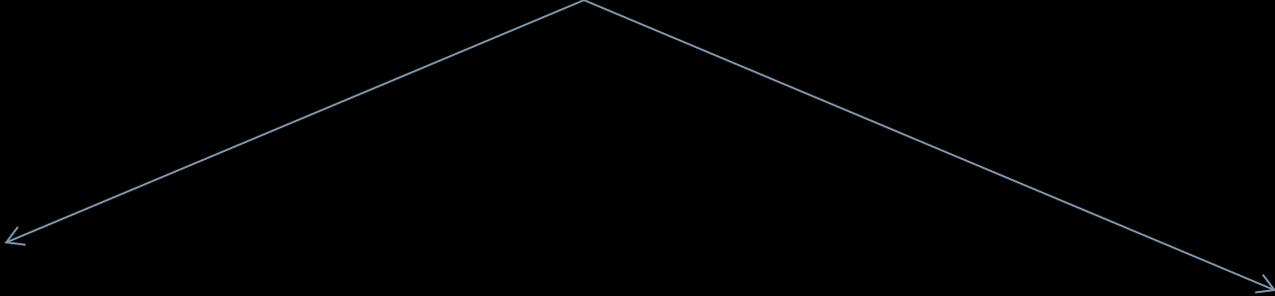


Method	Read Length
Sanger	600-1000 bp
454	300-500 bp
<u>Illumina</u>	~100 bp
Ion Torrent	~200 bp

# COMPUTER AIDED DRUG DESIGN



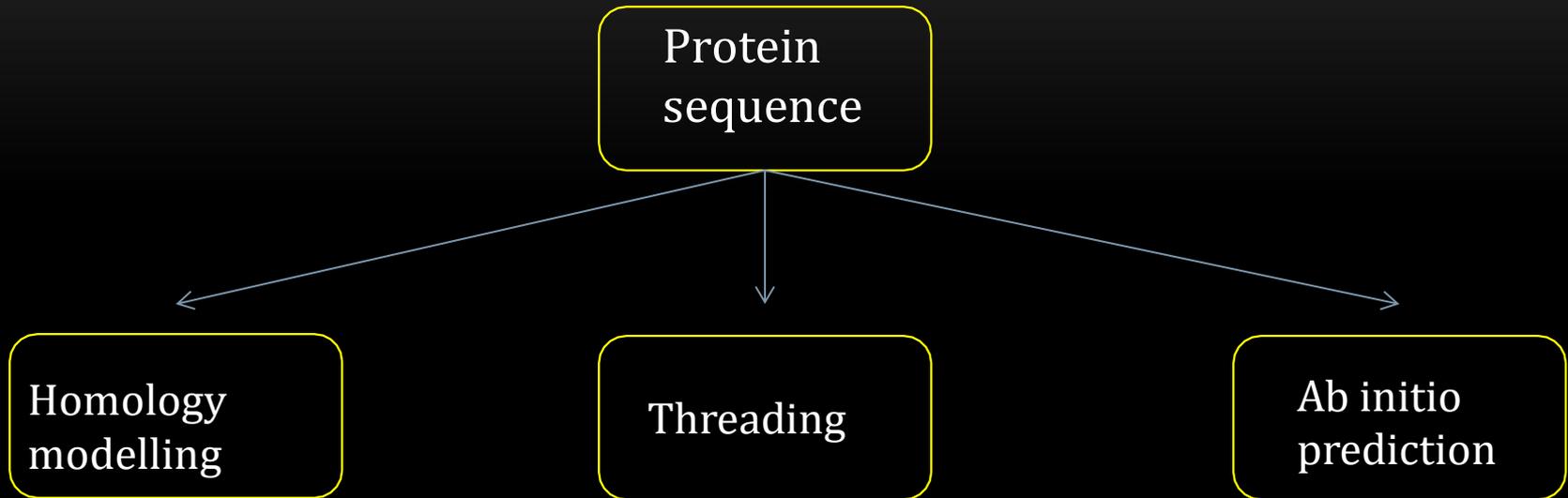
# COMPUTER AIDED DRUG DISCOVERY



**Choosing the right  
“one” among  
millions: *virtual  
screening***

**Designing the right  
“one” from chemical  
building blocks:  
*de novo drug design***

# PREDICT TERTIARY STRUCTURE



- Find homologous sequence
- Homology > 30%
- Keeping in view of the template structure

**Swiss PDB Viewer, MODELLER**

If homologous sequence is < 30 % similar we use this method

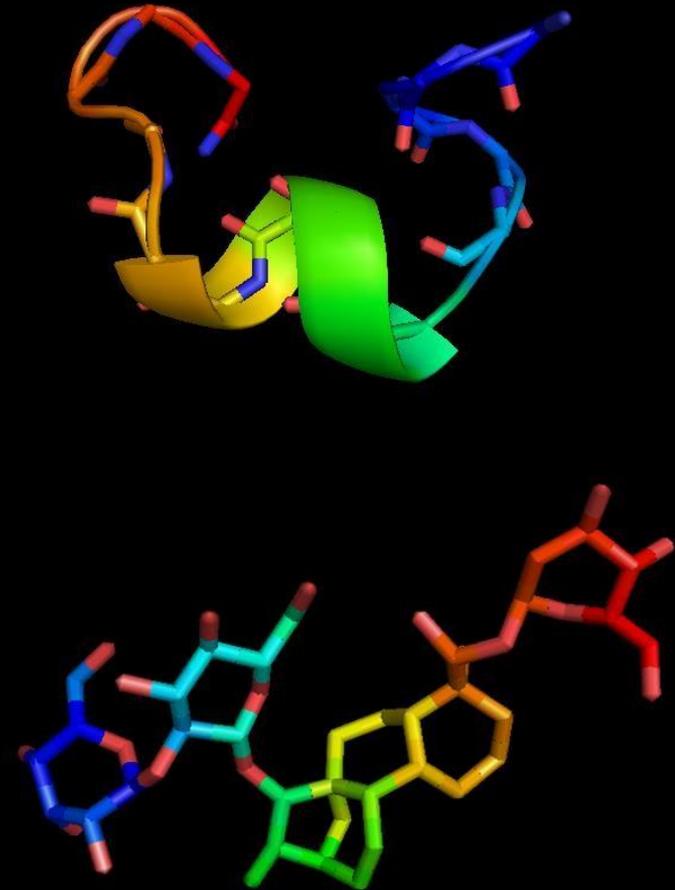
**iTASSER, PHYRE**

Prediction of structure from scratch using the knowledge of amino acid properties

**ROSETTA**

# STRUCTURE VISUALIZATION

RASMOL  
MOLMOL  
PYMOL  
SPDBV



# TIME & MONEY ...

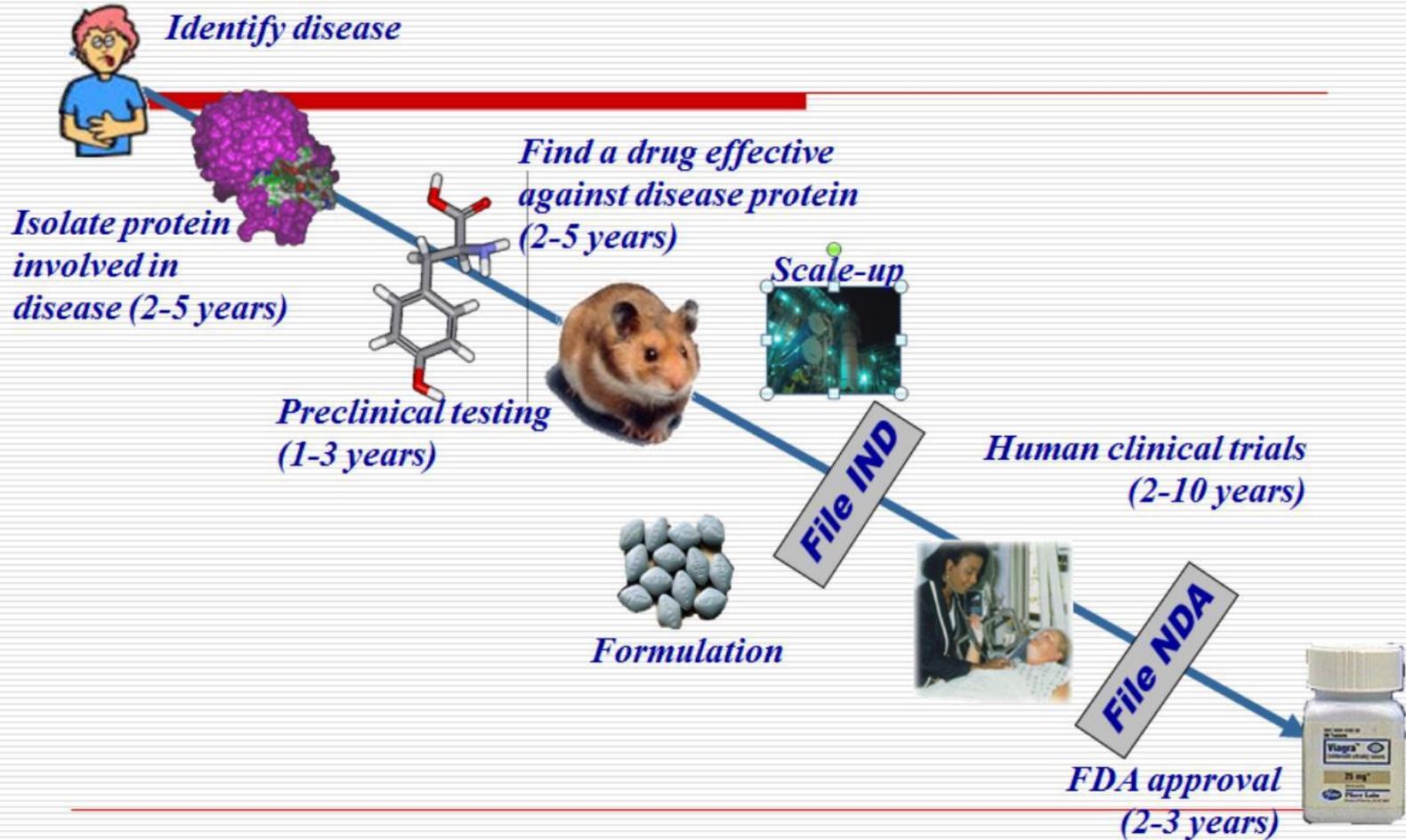
- 10-12 Years
- 1 Drug/Year
- Rs 400 Crores
- 5000 to even 50000 screenings

*Returns too are striking...*

- *Lipitor*, cholesterol reducer from Pfizer sold for 8.6 Billion US\$ in 2001



# DRUG PIPELINE



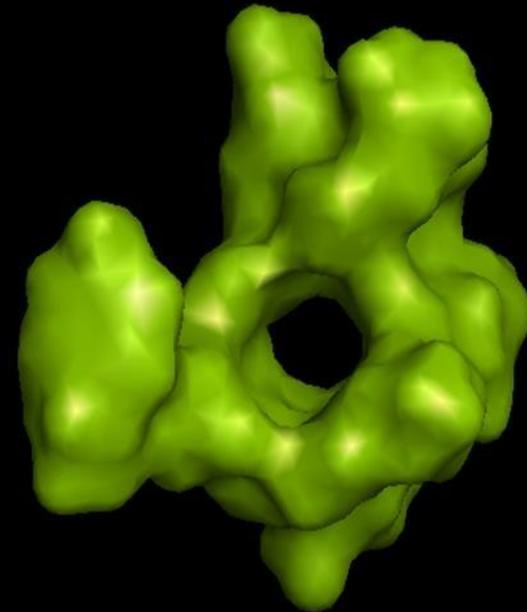
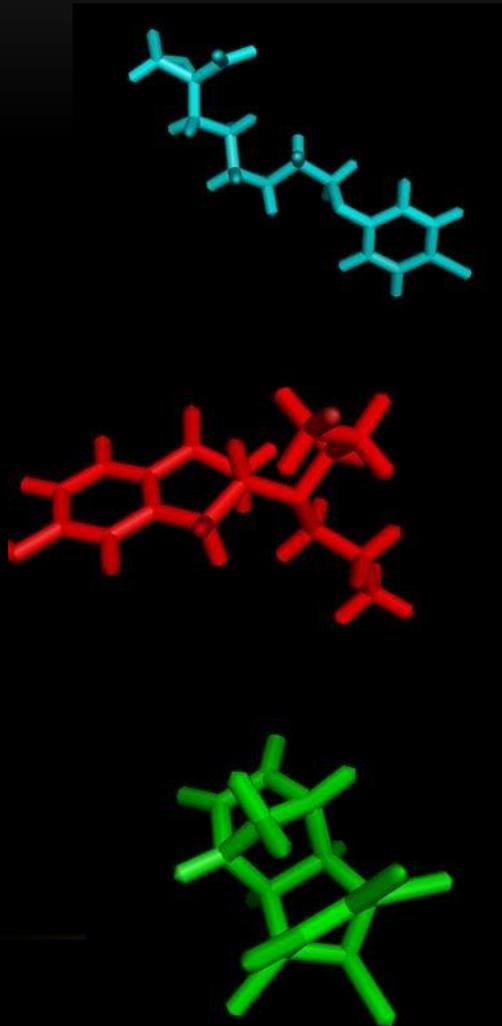
## IMPORTANT TERMS

- **Target**- a molecule important in a disease-usually a protein
- **Ligand**- a small molecule binds to a larger one
- **Active site**- ligand binding site
- **Hit**- a ligand which can geometrically fit to the binding site
- **Lead**- hit with biological activity
- **DRUG**- Ligand that can modulate the function of target in desired way

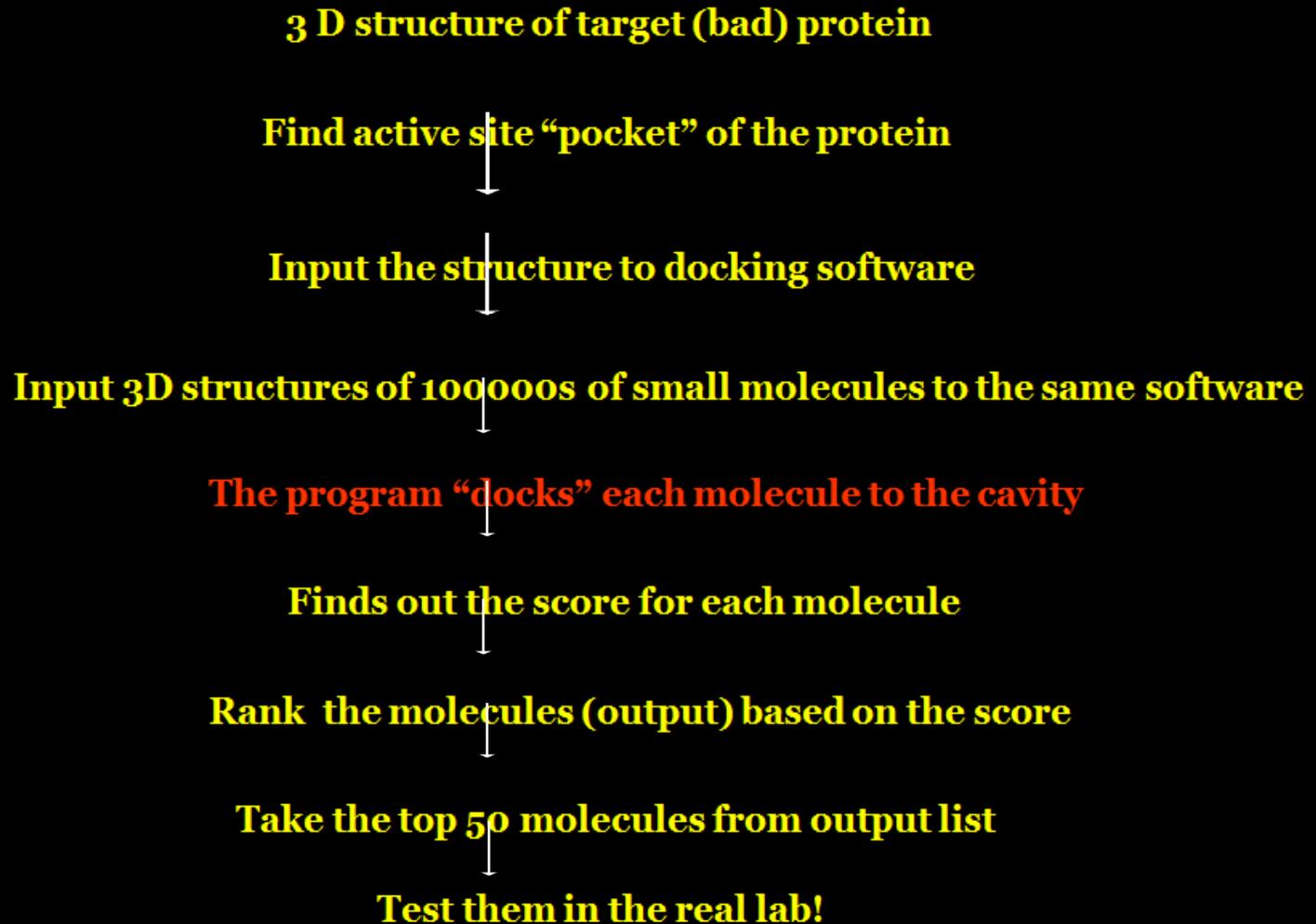
**20000 molecules**



**30 - 50**

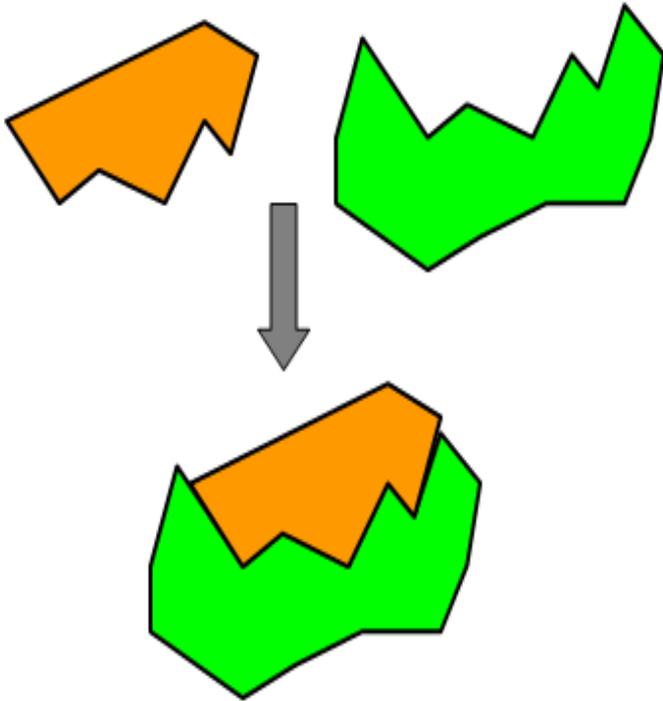


# STEPS



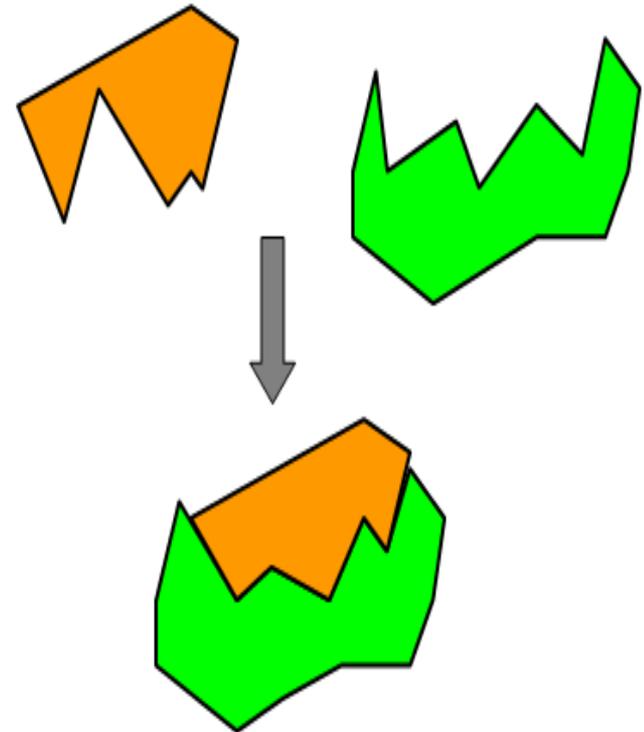
# ENZYME – SUBSTRATE BINDING: 2 MODELS

*Substrate (ligand)* + *Enzyme (receptor)*



**Lock and Key**

*Substrate (ligand)* + *Enzyme (receptor)*



**Induced Fit**

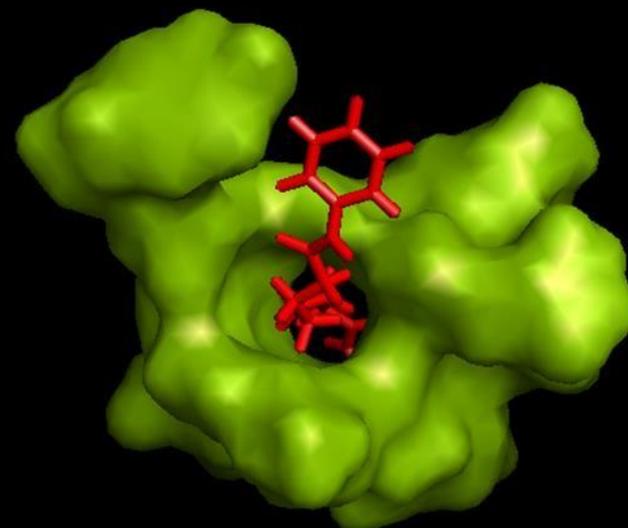
- **Docking Software-**

- ✓ Discovery Studio, Schrodinger
- ✓ Auto Dock, Phyredock, Patch dock

- Mostly drug activity is obtained through binding of one molecule to the pocket of another.

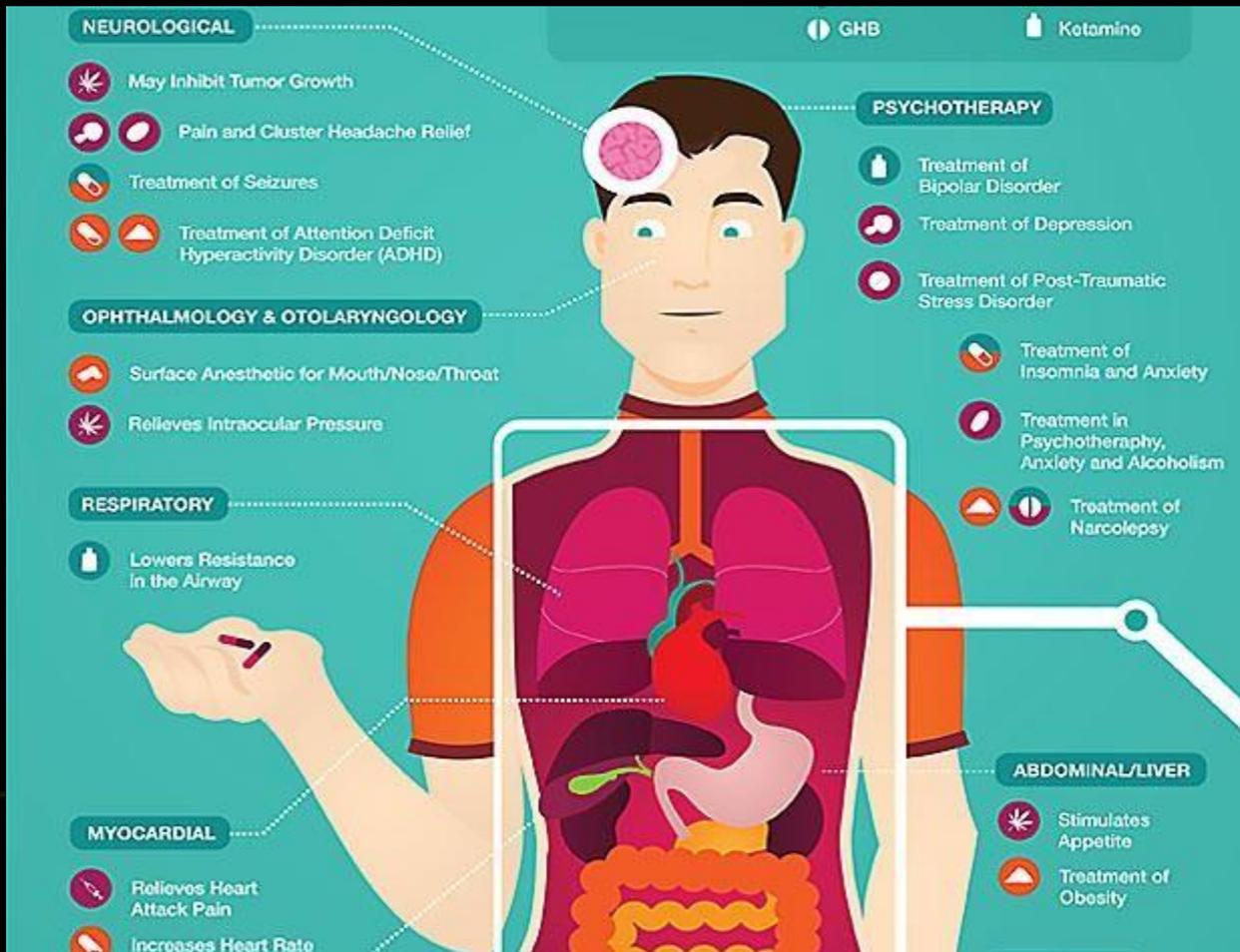
- **ADME Test**

- ✓ Absorption, Distribution, Metabolization, & Excretion



# MORE IS NOT ALWAYS BETTER

- Be careful about dosage amounts





*Thank You ...*

# **INDIAN ACADEMY**

Degree College - Autonomous

## **DEPARTMENT OF MICROBIOLOGY**



## **FOUNDATION COURSE IN MICROBIOLOGY**

**FOR I YEAR BSc MICROBIOLOGY(CMB)**

**ACADEMIC YEAR 2022 - 2023**

**OCTOBER – NOVEMBER 2022**

## OBJECTIVES

- To bridge basic knowledge of biological and chemical principles with Microbiology.
- To enhance the integrated learning experience with other subjects in Life Science during bachelor's degree.
- To gain a broader perspective on Microbiology including the relevance of microbes in medicine, public health, safety and industry

## PEDAGOGY

- Power point presentation
- Animated and simulation videos
- Lecture notes

## SYLLABUS

Sl.No.	Syllabus	Hours allotted	Teacher in charge
1.	<b>Aim</b> To acquire the knowledge of different branches of Microbiology	01	Dr. Sahithya K.
	<b>Topic</b> Introduction to diverse domains of Microbiology		
	<b>Outcome</b> Students become familiar with basic and applied branches of Microbiology		
2.	<b>Aim</b> To understand the importance of elementary principles in microscopy	01	Prof. P Rajarajan
	<b>Topic</b> Introduction to the basic principles of microscopy		
	<b>Outcome</b> Students become familiar with basic principles of microscopy		
3.	<b>Aim</b> To study the ultra-structure, virulence and its importance in microorganisms	03	Dr. Anu Kiruthika S.
	<b>Topic</b> Ultra-structure of microorganisms and virulence		
	<b>Outcome</b> Students obtain clarity on morphology, internal structure and virulence of microbes		
4.	<b>Aim</b> To study normal microflora and entry of pathogens		

		03	Dr. Malaiyarasa Pandian
	<b>Topic</b> Microbial interactions with human – mode of entry by etiological agents and infection		
	<b>Outcome</b> Students get a fair idea of the role of microorganism in human body, its entry, disease causing mechanism.		
5.	<b>Aim</b> To study human body's resistance to microorganisms	02	Prof. P Rajarajan
	<b>Topic</b> Immune system, immunity, antigens and antibodies, vaccines		
	<b>Outcome</b> Students get to understand the basics of immunity, prevention of diseases and the need for vaccines		
6.	<b>Aim</b> To learn the passage genetic information of microbes	03	Dr. Anu Kiruthika S.
	<b>Topic</b> Central dogma and its relevance to microbial cell functions		
	<b>Outcome</b> Students get the idea of inherited DNA translating into a protein		
7.	<b>Aim</b> To study the applications of rDNA technology	04	Dr. Malaiyarasa Pandian P
	<b>Topic</b> Introduction on basics and applications of genetic engineering in human welfare (medicine and agriculture)		
	<b>Outcome</b> Students understand the concept of technological advancements in human welfare		
8.	<b>Aim</b> To explore the pathways involved in fermentation by microbes	02	Dr. Sahithya K.
	<b>Topic</b> Microbial physiology – fermentation, Pasteur's effect, bacterial photosynthesis		
	<b>Outcome</b> Students attain clarity on the production of high energy molecule production through pathways		

9.	<b>Aim</b> To study industrially important microbes, fermentor and important products	02	Dr. Sahithya K
	<b>Topic</b> Introduction to Industrial Microbiology		
	<b>Outcome</b> Learners obtain basic knowledge of Microbes in industry, summary of upstream and downstream processes.		
10.	<b>Aim</b> To understand the scope of the subject	01	Prof. P Rajarajan
	<b>Topic</b> Scope of Microbiology		
	<b>Outcome</b> Learners get to know the thrust area in the fields to get job and progression to higher studies		

### OVERALL OUTCOMES

- Students can easily relate and understand the concepts in Microbiology
- Students acquire knowledge of microorganisms in multifarious applications and connect well during lectures.

### EVALUATION METHODS

- Conducting quiz
- Snap test

### REFERENCE BOOKS

1. Prescott's Microbiology 9th edition Edited by Willey, Sherwood and Woolverton and Published by McGraw-Hill Education
2. A Textbook of Microbiology by R. C. Dubey and D. K. Maheshwari 5<sup>th</sup> edition and Published by S. Chand & Company Ltd.
3. Textbook of Microbiology by Ananthanarayan and Jayaram Paniker 8<sup>th</sup> edition Published by Orient Blackswan

# Basics of Microscopy

## Physical Principles

- A microscope (Greek: *mikron* = small and *scopeos* = to look).
- **MICROSCOPE:** Is an instrument for viewing objects that are too small to be seen by the naked or unaided eye.
- **MICROSCOPY:** The science of investigating small objects using such an instrument is called microscopy.

# Two Important Principles

- \* Magnification
- \* Resolution

# Comparing Powers of Magnification



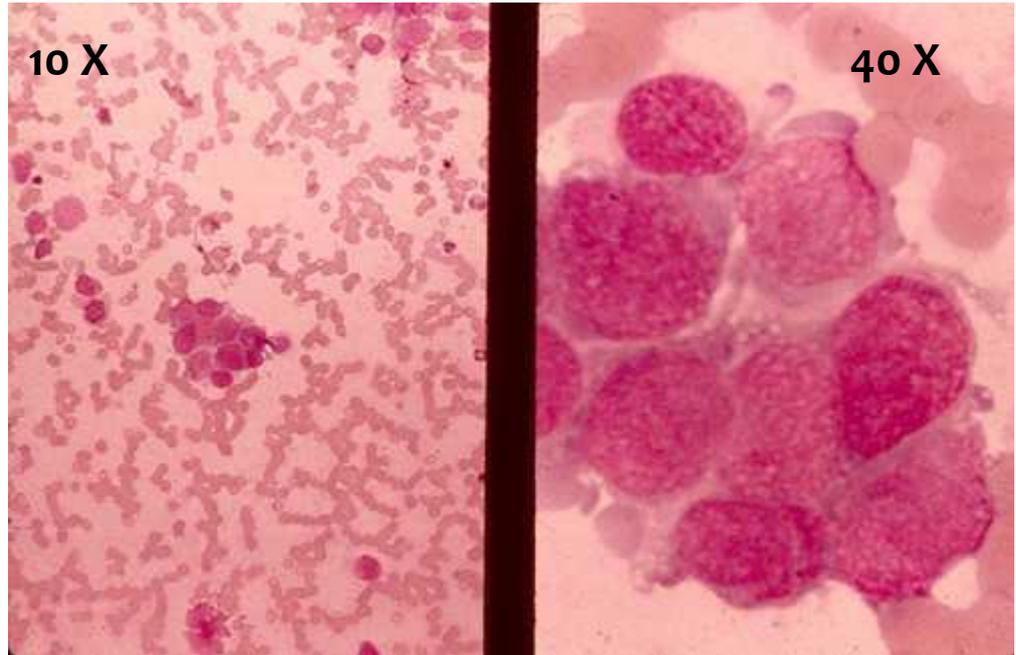
7x

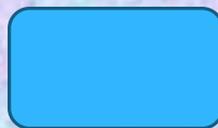


10x

We can see better details with higher the powers of magnification, but we cannot see as much of the image.

Which of these images would be viewed at a higher power of magnification?

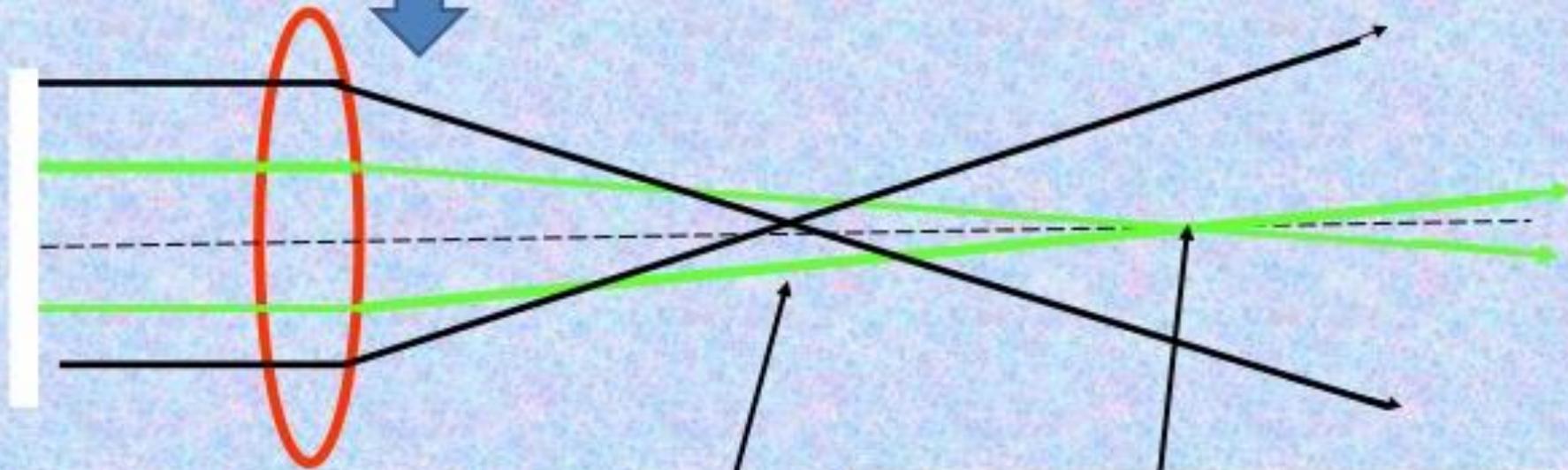




# ABERRATION

SPHERICAL

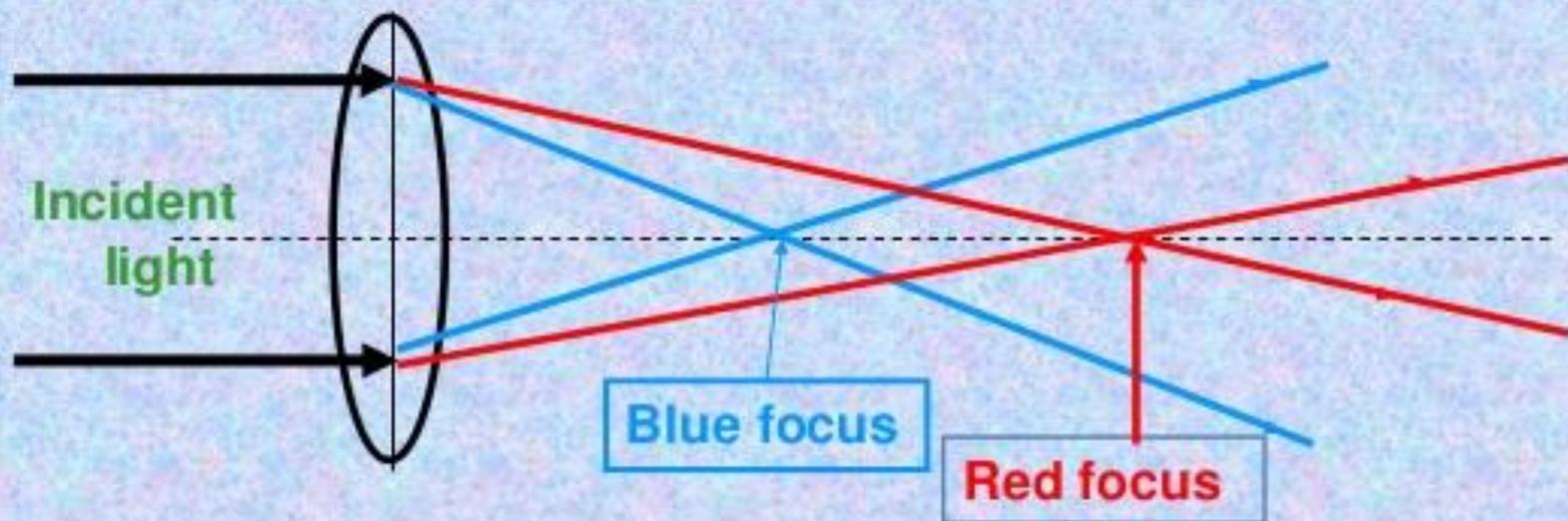
CHROMATIC



Focus of **axial** rays

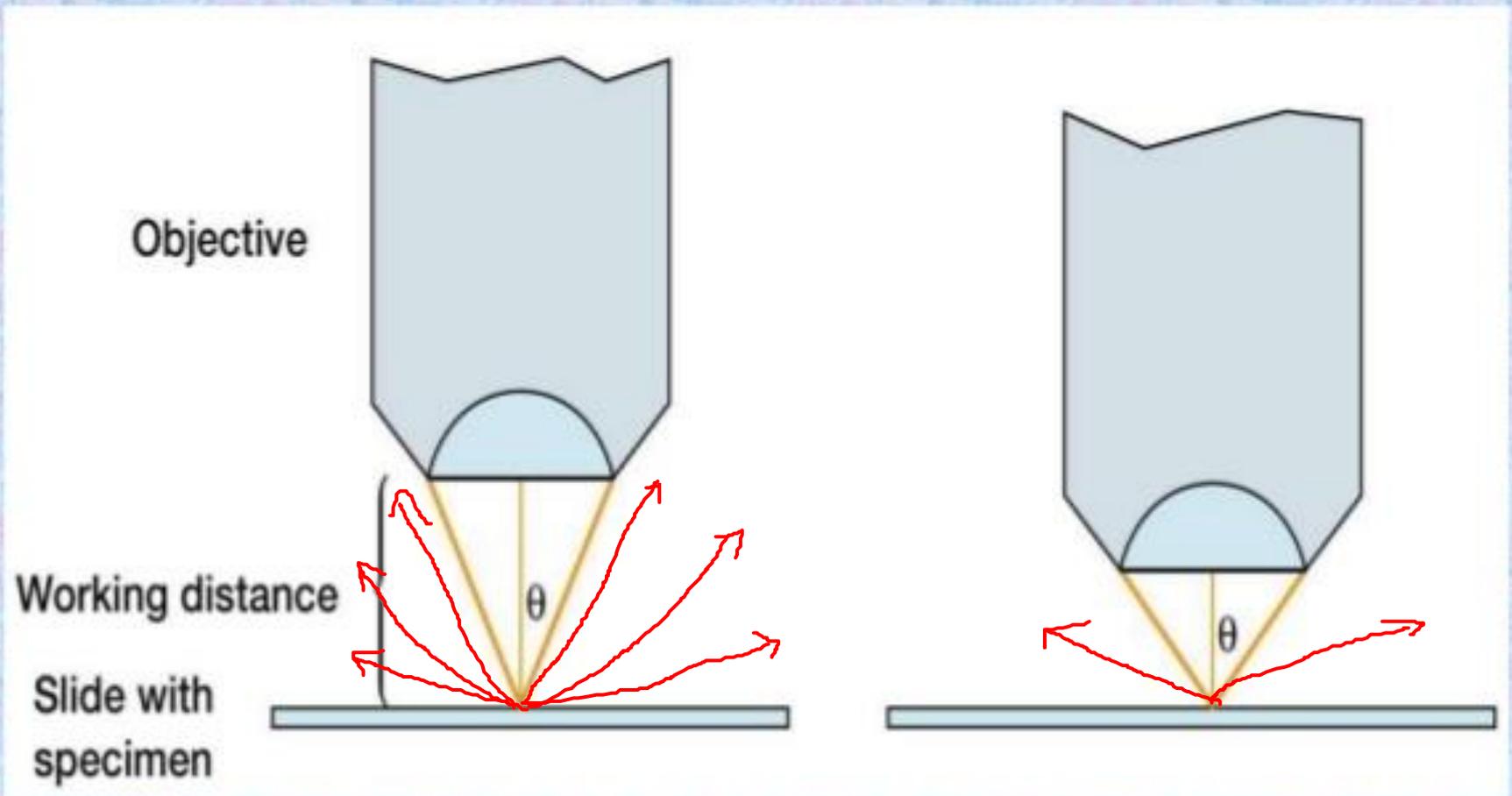
Focus of **marginal** rays

# - Chromatic aberration

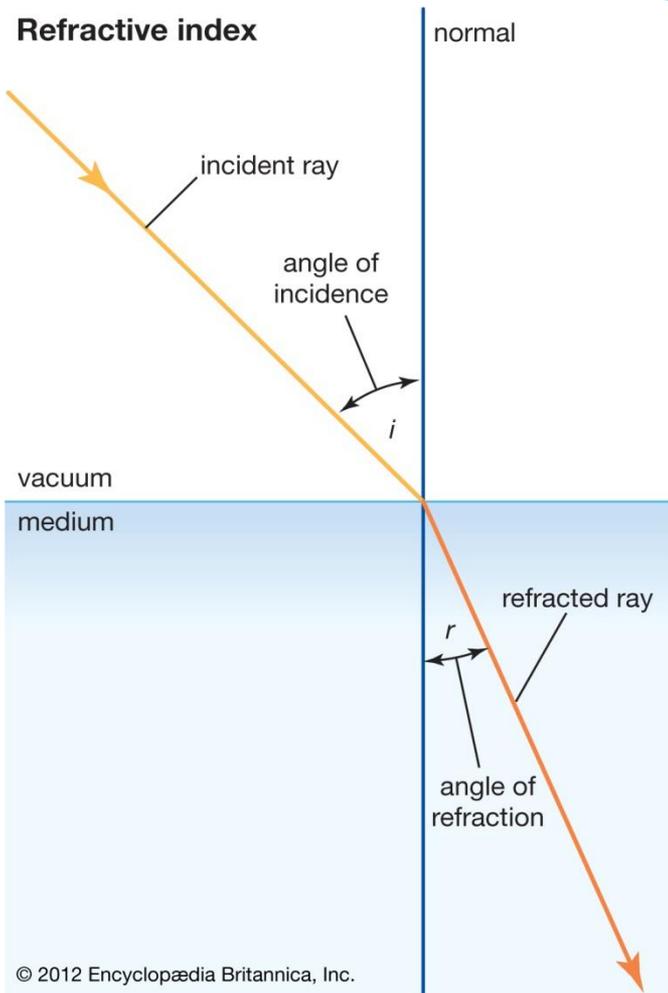


# WORKING DISTANCE

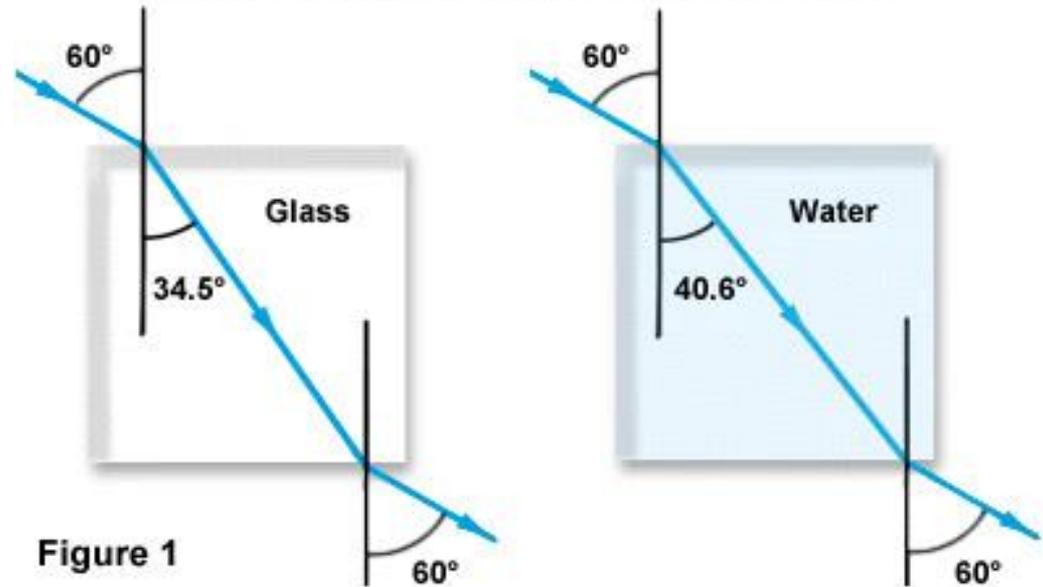
Distance between the front surface of lens and surface of cover glass or specimen.



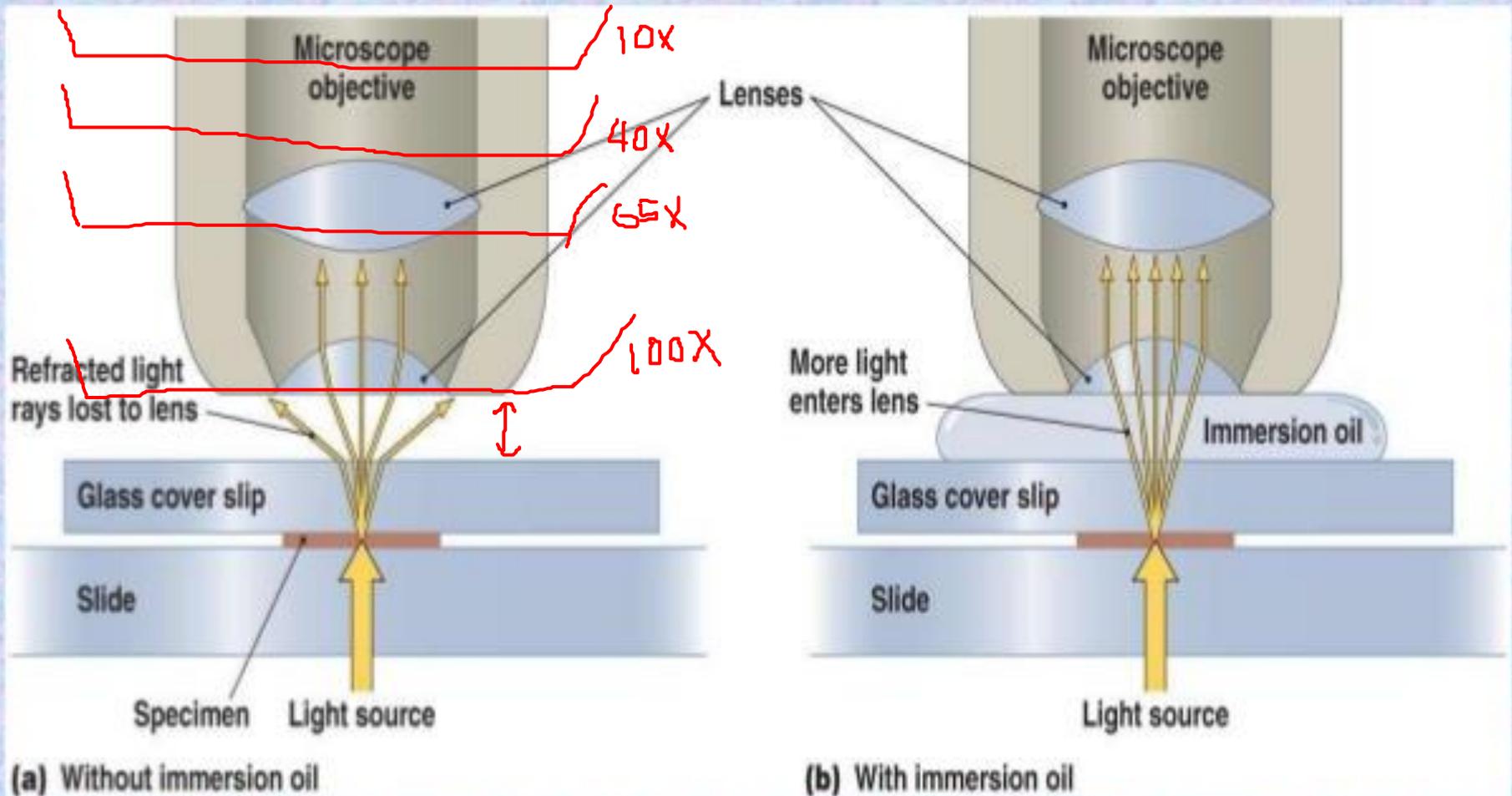
# Refractive Index



**Light Refraction Through Glass and Water**



# THE EFFECTS OF IMMERSION OIL ON RESOLUTION



# **Immune System, Immunity & Vaccines**

An overview of Immune System,  
Immunity & Vaccines

# Types of Immunity

- **Inborn or innate immunity:** It is present at birth; This is our First Line Of Defense.
- **Acquired or specific:** It is not present at birth but becomes part of our immune system as the lymphoid system develops.
- **1970: WHO defined immunity as immune response to antigen/pathogen ( Foreign body) in form of**
- **Humoral** ( activation of B-lymphocytes)
- **Cellular** (activation of T-lymphocytes)

# Two types of immunity

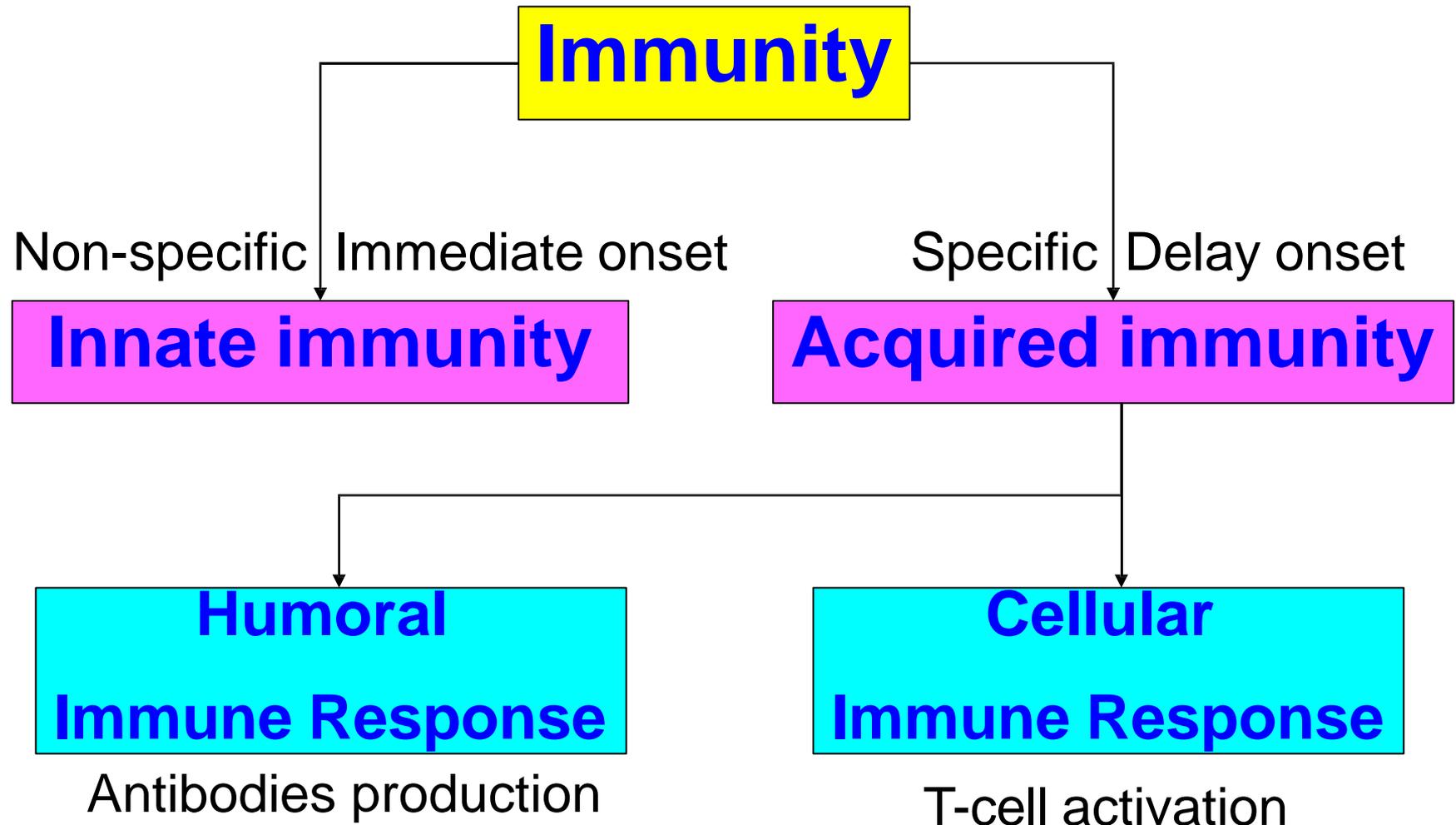
## 1. Innate (non-adaptive)

- first line of immune response
- relies on mechanisms that exist before infection

## 2. Acquired (adaptive)

- Second line of response (if innate fails to control the situation)
- relies on mechanisms that adapt after infection
- handled by T- and B- lymphocytes
- one cell determines one antigenic determinant

# THE EVOLUTION OF IMMUNITY

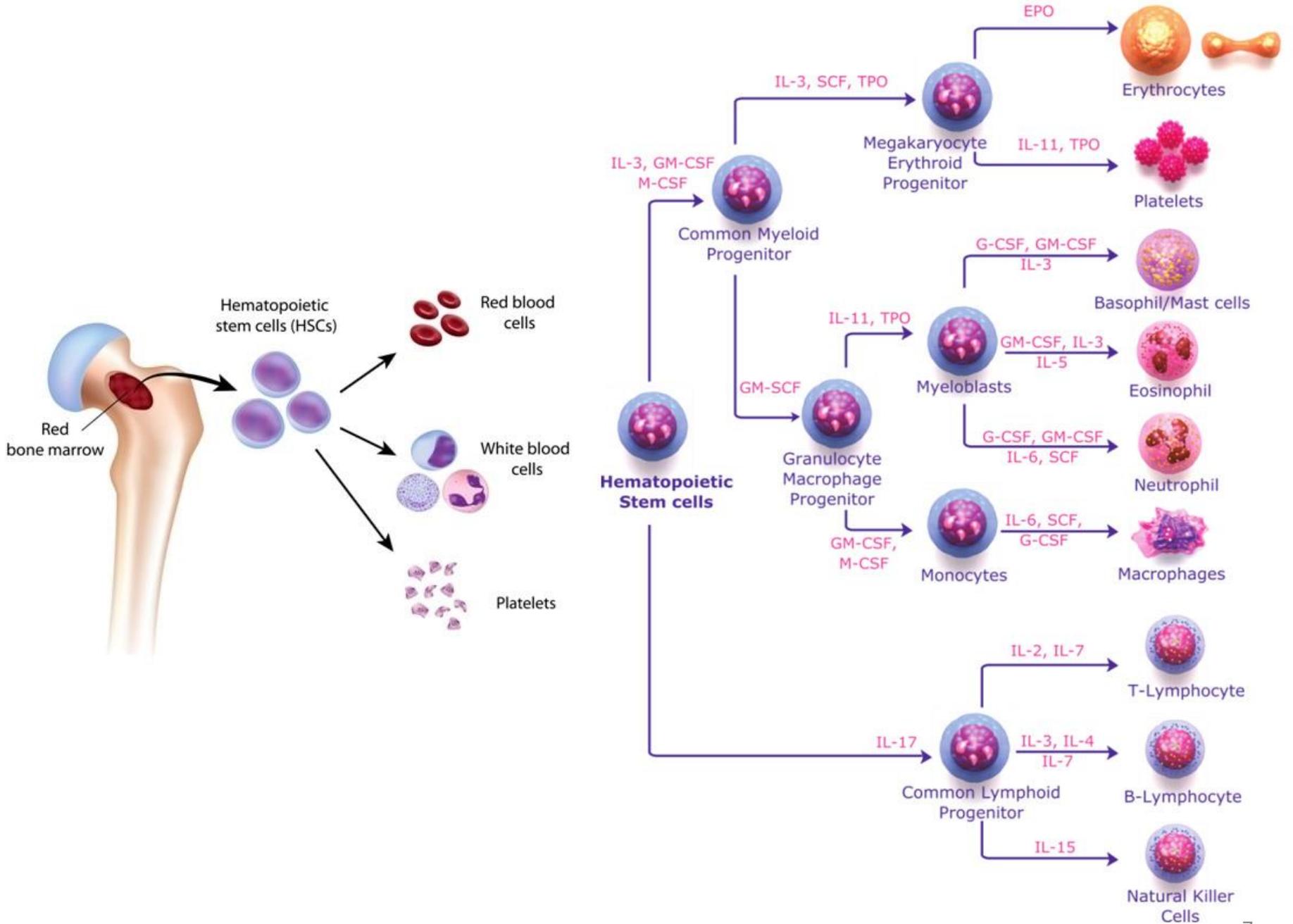


# Lymphoid organs (Immune system)

- Primary Lymphoid Organs
  - Bone Marrow and Thymus
  - Maturation Site
- Secondary Lymphoid Organs
  - Spleen, lymph nodes,
  - MALT (mucosal associated lymph tissue)
  - GALT (gut associated lymph tissue)
  - Trap antigen, APC, Lymphocyte Proliferation

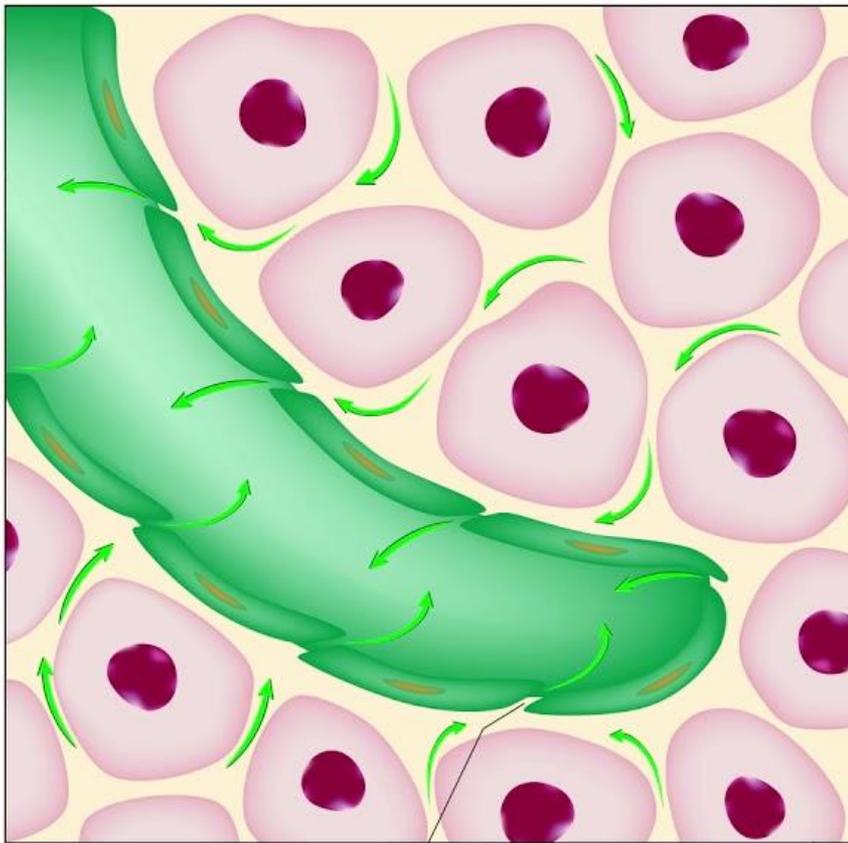
# ORIGIN OF CELLS OF THE IMMUNE SYSTEM

- Derived from common progenitor cell in bone marrow
  - Pluripotent hematopoietic stem cell
- **Progenitor Stem Cells**
  - **Erythroid lineage**
    - Erythrocytes and Megakaryocytes
  - **Myeloid lineage**
    - Monocyte/macrophage, dendritic cells, PMN's, mast cells
  - **Lymphoid lineage**
    - Small and large lymphocytes



# LYMPHATICS

## lymphatic capillary



opening

