Chapter-01

Classification of Living Organism

1. The book 'Genera Plantarum' was written by–

(A) Linnaeus (B) Bentham and Hooker
(C) Engler and Prantle (D) Hutchinson

Ans. (A) **(SSC CGL 2014)**

Exp: 'Genera Plantarum' is a collection of brief description of the 935 plant genera, this book was written by Swedish Naturalist Carl Linnaeus (1707-1778).

2. Where is the Botanical Survey of India Headquartered?

(A) Lucknow (B) Darjeeling
(C) Kolkata (D) Oottaccamund

Ans. (C) **(SSC CGL 2002)**

Exp: Botanical survey of India is the apex research organisation under Ministry of Environment & Forests, Govt of India for carrying out taxonomic and floristic studies of wild plant resourced of country. Its headquarter situated in Kolkata.

3. Plants differ from animals in having-

(A) Locomotion (B) Metabolism
(C) Localised growth (D) Catabolism

Ans. (C) **(SSC Matric Level Exam 2008)**

Exp: Plants and Animals are Eukaryotic Cells both are living organisms. They are differ to each other on the basis chloroplast, cell wall, localised growth. Localised growth depend on change in pH of the particular area.

4. The age of trees is determined by its:

(A) Birth (B) Height
(C) Growth rings (D) General appearance

Ans. (C) **(SSC CGL 1999)**

Exp: Trees are living organisms they grow on the basis of nutrient and environment conditions. Age of trees is determined by growth rings. The study of plant age by growth ring called as Dendrochronology.

5. The presence of what distinguishes a plant cell from an animal cells?

(A) Chloroplasts (B) Cell wall
(C) Cell membrance (D) Nucleus

Ans. (A) **(SSC CGL 2003)**

Exp: Plant cell distinguished from Animal cell on the basis of chloroplast. Animal do not have chlroplasts but plants have. Chloroplasts are organelles found in plant cell and that conduct photosynthesis and other chemical reactions. Chloroplast capture the sun's light energy and store it in the energy storage molecules. as ATP and NADPH used in process of photosynthesis.

6. What is a sponge?

(A) A fossil (B) A plant
(C) An animal (D) A fungus

Ans. (C) **(SSC (10+2) Data Entry Operator & LDC 2012)**

Exp: A sponge is an aquatic animal of the phylum porifera with porous bag like body structure and a rigid or elastic internal skeleton. Sponges do not have nervous, digestive or circulatory system.

7. Flowerless plants are termed as:

(A) Phanerogams (B) Bryophytes
(C) Thallophytes (D) Cryptogams

Ans. (D) **(SSC (10+2) Level Date Entry Operator 2012)**

Exp: Flowerless plant are called as Cryptogams. They reproduce by spores without flowers or non-seed bearing plant. eg Fern, Moss, Brown algae, Fungus etc.

8. Bryophytes are often called as amphibian plant because they-

(A) Appear like frog
(B) Are found both in water and on land
(C) Do not have habitat preference
(D) Can eat insects

Ans. (B) **(SSC MTS 2013)**

Exp: Bryophytes are a group of small, simple, green land dwelling plants in which few are aquatic comprising of Hornworts and some are terrestrial.

9. Taxonomy is a science that deals with

(A) Morphology
(B) Anatomy
(C) Classification
(D) Economic uses

Ans.(C) **(SSC Sec. Officer 2001)**

Exp: Taxonomy is the branch of science which deals with the description, identification and classification of organisms.

10. Stamens are fused with each other by their anthers and also with petals in:

(A) Leguminosae (B) Liliaceae
(C) Compositae (D) Euphorbiaceae

Ans. (D) **(SSC CGL Tier-I 2014)**

Exp: Stamens are the male sex organ of plants. When anthers are fused with each other, this condition is described as Syngenesious this type of character occur in family Euphorbiaceae and this fusion is called as Cohesion. When there is fusion of stamens with petals, they are called as epipetalous e.g. Gamopetale.

11. Pulses are obtained from the family.

(A) Liiacese (B) Leguminosae

(C) Cycadaceae (D) Fungi

Ans. (B) **(SSC CGL Tier-I 2015)**

Exp: Pulses are more protenious crop in the agriculture. These are the members of family Fabaceae (Leguminaceae). They have high protein contents. They also have key role in Nitrogen fixation.

12. Which word is common in the botanical names of trees like Ashoka,Tamarind or coral ?

(A) Terminalia (B) Salix

(C) Indica (D) Acacia

Ans. (C) **(SSC CPO 2016)**

Exp: Terminalia tree (Terminalia Indica), Ashoka tree (Saraca indica) , Indian coral tree (Erythrina indica) have Indica is common in their botanical name in taxonomy.

13. What do you call the study of fungi?

(A) Mycology (B) Parasitology

(C) Bacteriology (D) Ecology

Ans. (A) **(SSC CPO SI, ASI 2016)**

Exp: Fungus are a cryptogamous plant, they are saprophytes. Study of fungus is called as Mycology.

14. 'Agronomy' is the practice of raising_____.

(A) Plants and Animals (B) Crop plants

(C) Agriculture (D) Fruit plants only

Ans. (B) **(SSC CGL Tier-I 2016)**

Exp: Agronomy is a latin word which mean 'agros'. - agriculture and 'nomos' means rule here we study all agriculture practices in agronomy.

15. What is a Pepper plant ?

(A) Bush (B) Shrub

(C) Vine (D) Tree

Ans. (C) **(SSC CHSL 2016)**

Exp: Pepper plants are perennial woody vine plants. They are long duration crops plant, eg Black pepper.

16. Ferns belong to which division of plants?

(A) Gymnosperms (B) Angiosperms

(C) Thallophyta (D) Pteridophyta

Ans. (D) **(SSC CHSL 2016)**

Exp: Ferns are small Pteridophytic plant. They are seedless, non flowering vascular plants.

17. Which of the following is not true about Pteridophyta?

(A) Dominant phase is saprophytes

(B) Main plant body is diploid

(C) Seeds are present (D) Flowers are absent

Ans. (C)

Exp: Pteridophyta have seedlees plants. They form spore for germination in sporangia. eq Fern, Azolla.

18. Which of the following is not true about Bryophyta?

(A) Dominant phase is gametophytes

(B) Main plant body is haploid

(C) Spores are homospores

(D) Flowers are present

Ans. (D)

Exp: Bryophyta is a cryptogamous plants, they are also known as non-flowering plants.

19. For the aquatic organisms, the source of food is

(A) Phytoplankton (B) Sea Weed

(C) Aqua plankton (D) Zooplankton

Ans. (A)

Exp: Aquatic organisms are those organism which lives in aqueous environment as pond, river and lakes. They are also called as phytoplankton.

20. Who among the following is known as 'Father of Biology'?

(A) Darwin (B) Aristotle

(C) Heckle (D) Edward Jenner

Ans. (B) **(SSC CPO 2017)**

Exp: Aristotle is known as 'Father of Biology'.

21. Bamboo is a type of _____.

(A) Herb (B) Tree

(C) Shrub (D) Grass

Ans. (D) **(SSC CPO 2017)**

Exp: Bamboo is a type of grass and belongs to family poaceae. Bamboo is one of the fastest growing plant and flowers only once in 12 years.

22. Who proposed five kingdom classification?

(A) Ernst Mayr (B) R. H. Whittaker

(C) M. W. Beijerinck (D) D. I. Ivanovsky

Ans. (B) **(SSC CGL 2017)**

Exp: R.H. Whittaker in 1969, gave the five kingdom classification. Whittaker classified the organisms on the basis of their cell structure, division of labour and mode of nutrition. Whittaker classified the organism into Monera, Protista, Fungi, Plantae and Animalia.

23. Potato, tomato and brinjal are three different species but all belong to which genus?

(A) Solanum (B) Panthera

(C) Felis (D) Tigris

Ans. (A) **(SSC CGL 2017)**

Exp: Patoato, tomato and brinjal are three different species belong to genus Solanum family- Solanaceae. These species are annual, prenneials, subshrubs, shrubs and trees.

24. In the names Mangifera indica (mango), Solanum tuberosum (potato) and Panthera leo (lion), what does the three names, indica, tuberosum and leo, represent?

(A) Binomial Nomenclature (B) Taxonomic Hierarchy

(C) Identification (D) Specific Epithet

Ans. (A) **(SSC CGL 2017)**

Exp: Binomial nomenclature is the system of classification given by Carolus Linnaeus. In Binomial nomenclature the naming is done on the basis of the genus and species. The first name is genus and the other is species epithet.

25. _____ are chlorophyll-bearing, simple, thalloid, autotrophic and largely acquatic (both fresh water and marine) organisms.

(A) Pteridophytes (B) Bryophytes
(C) Algae (D) Gymnosperms

Ans. (C) **(SSC CGL 2017)**

Exp: Algae are the chlorophyll-bearing thalloid autotrophic and mostly aquatic organism.

26. In the names Mangifera indica (mango), Solanum tuberosum (potato) and Panthera leo (lion), the terms Mangifera, Solanum and Panthera represent the higher level of?

(A) Taxon (B) Taxonomic Hierarchy
(C) Specific Epithet (D) Binomial Nomenclature

Ans. (A) **(SSC CGL 2017)**

Exp: Taxon is taxonomic group of any rank, such as a species, family or class. The first epithet in scientific name represents the genus. Taxon represent a rank in biological classification.

27. Which of the following is not among the 3 main classes of Algae?

(A) Chloro phyceae (B) Rhodop hyceae
(C) Phaeo phyceae (D) Gymno sperms

Ans. (D) **(SSC CGL 2017)**

Exp: Chlorophycea (green algae), Rhodophyceac (red algae) and pheophyceae (brown algae) are the three main classes of Algae. Gymnosperm is a divison of spermatophyta in plant kingdom.

28. The members of rhodophyceae are commonly called _____ algae.

(A) Green (B) Brown
(C) Red (D) Yellow

Ans. (C) **(SSC CGL 2017)**

Exp: The member of rhodophyceae algae are commonly called as red algae. Rhodophyceae has the phycoerythrin, phycocyanin and chlorophyll pigment, which impart red colour to the algae.

29. The members of phaeophyceae are commonly called _____ algae.

(A) Green (B) Brown
(C) Red (D) Yellow

Ans. (B) **(SSC CGL 2017)**

Exp: Brown algae are called as phaeophyceae. mostly marine multicelluar algae, including many seaweeds. They play very important role in marine environment, both for food and habitats.

30. Among plants, three different genera Solanum, Petunia and Datura are placed in which family?

(A) Cancidae (B) Solanaceae
(C) Felis (D) Felidae

Ans. (B) **(SSC CGL 2017)**

Exp: The solanaceae or nightshades are an economically important family of flowering plants. The family ranges from annual and perennial herbs, vines, epiphytes, Shrubs and trees. Numbers of important agricultural plants, medicinal plants, spices, weeds and ornamental. Some member of family contain potent alkaloids and some are highly toxic.

31. The members of chlorophyceae are commonly called _____ algae.

(A) Green (B) Brown
(C) Red (D) Yellow

Ans. (A) **(SSC CGL 2017)**

Exp: The chlorophycae is one of the class of green algae. Plant body is unicellular, colonial, filamentous or multicellular. They are usually green due to presence of chlorophyll. Cell wall of algae is made up of cellulose. Have the ability for starch deposition.

32. Which of the following is not correct?

(A) Membe rs of Chlorophyceae are commonly called green algae
(B) Members of Phaeophyceae are commo nly called red algae
(C) Members of Rhodophyceae are commo nly called red algae
(D) Members of Phaeophyceae are commo nly called brown algae

Ans. (B) **(SSC CGL 2017)**

Exp: Algae are classified into various types on the basis of their pigments

1. Chrysophyta - Golden brown algae and diatones.
2. Chlorophyta - Green algae
3. Rhodophyta - Red algae
4. Phaeophyta - Brown algae

33. The predominant stage of the life cycle of a moss is the gametophyte which consists of two stages. The second stage is the _____ stage.

(A) Agar (B)Leafy
(C) Chlorella (D)protonema

Ans. (B) **(SSC CGL 2017)**

Exp: Bryophytes are non-flowe ring, non-vascular land plants known as embryophytes. The predominant stage of life cycle is gametophyte where the first stage is haploid phase and second is leafy stage.

34. Bryophytes are also called _____ of the plant kingdom.

(A) Mammals (B) Amphibians
(C) Reptiles (D) Insecta

Ans. (B) **(SSC CGL 2017)**

Exp: Bryophytes are also called as amphibians of the plant kingdom. Amphibian word means to posses two lives i.e. both terestrial and aquatic.

Chapter-02

Cell & Cell structure/Cell Biology

1. The branch of biology dealing with the study of cells is known as–

(A) Cytology (B) Histology
(C) Psychology (D) Physiology

Ans. (A) **(SSC CGL Exam, 2007)**

Exp: Cell is the fundamental unit of life. The branch of biology which deals with the study of cell called as Cytology. Robert Hook is known as father of Cytology.

2. The basic structural and functional unit of living organisms is–

(A) Cell (B) Tissue
(C) Organ (D) Systems

Ans. (A) **(SSC CGL 2012)**

Exp: Cell is the basic structural, fundamental, and functional unit of living organisms of life.

3. Plasma membrane in Eukaryotic cells is made up of–

(A) Phospholipid (B) Lipoprotein
(C) Phospholipo-protein (D) Phospho-protein

Ans. (A) **(SSC CGL 2010)**

Exp: Plasma membrane is a semi permeable membrane in Eukaryotic cell which is made up of phospholipids. Phospholipid form a bilayer around cell. Most of the phospholipid contain a diglyceride, a phosphate group and a simple organic molecule such as Choline. First time it is identified in biological system of egg yolk.

4. Which of the following cytoplasmic organelles are treated as Prokaryotic cells within the Eukaryotic cells?

(A) Mitochondria (B) Golgi bodies
(C) Lysosomes (D) Glyoxysomes

Ans. (A) **(SSC (10+2), OEO & LDC 2010)**

Exp: Mitochondria is a cytoplasmic organelles which is regarded as prokaryotic cells within the Eukaryotic cells. According to Investigation Theory proposed by Lynn Margnlis both mitochondria and chloroplast have form in Eukaryotic cell during evolutionary process by endosymbiosis of Prokaryotic cell.

5. Cell or Tissue death within a living body is called as–

(A) Neutrophils (B) Nephrosis
(C) Necrosis (D) Neoplasia

Ans. (C) **(SSC Tax Asst. 2009)**

Exp: Tissue is the collection of cells which forms an organ, Death of tissue within a living body called as Necrosis. It is a unprogrammed death of living tissue. After necrosis, the cell or tissues may release harmful chemicals that damage other cells and cause inflammation to neighbouring tissues.

6. The structure in cells which contains light absorbing pigment is–

(A) Endoplasmic Reticulum
(B) Nucleus
(C) Chloroplast (D) Chromoplast

Ans. (C) **(SSC Matric Level 2002)**

Exp: Chloroplasts are the cell organells that contains light absorbing pigment as chlorophyll. They are present in green algae and higher plants. They are also called as "Kitchen of the cell" because they involved in photosynthesis.

7. Which one of the following is also called the 'Power Plants' of the cell?

(A) Golgi body (B) Mitochondria
(C) Ribosome (D) Lysosome

Ans. (B) **(SSC CGL Exam, 2010)**

Exp: Mitochondria is a cell organelles which is called as the 'Power House of Cell'. Mitochondria produce energy in the forms of ATP (Adenosine triphosphate) through Aerobic respiration in Eukaryotic cell. It also has its own DNA found in Eukaryotic cells.

8. Which of the following is true?

(A) DNA is the genetic material in most of the organism
(B) RNA is the genetic material in most viruses and bacteria
(C) DNA is the genetic material in all the viruses
(D) RNA is the gentic material in all the viruses

Ans. (A) **(SSC Sec. offiicer 2001)**

Exp: DNA (De-oxyribose Nuclic Acid) is a genetic material in most of the organisms. It contains genetic information in the form of nucleotides (A,T,G,C) sequences. DNA have double helical strands structure. DNA is one of the three major macromolecules that are essential for all known form of life.

9. Who among the following analysed DNA for the first time?

(A) Arthur Kornberg (B) Hargobind khurana
(C) M. W. Nirenberg (D) Waton and Crick

Ans. (A) **(SSC Officer 2008)**

Exp: Arthur Kornberg was a biochemist who won the noble prize in physiology or medicine in 1959. He discovered "the mechanism in the biological synthesis of DNA. He was first to analysed DNA.

10. Which among the following bears smallest living cell?

(A) Bacterium (B) Mycoplasma

(C) Virus (D) Yeast

Ans. (A) **(SSC Officer 2003)**

Exp: The world smallest cells are mycoplasma is also called as PPLO (Pleura pneumonic like-organism) cell. Mycoplasma is a genus of bacteria that lack cell wall around their cell membrane.

11. Which of the following is a correct description of 'tissue culture'?

(A) Conservation of forests and plantation
(B) Growth and propagation of horticultural crops
(C) Science of cultivating animal tissue in artificial medium
(D) Protection of wild animls

Ans. (C) **(SSC CGL 2005)**

Exp: Tissue culture is a techniques in which we grow the cell in artificial medium. These cells are separate from the organism commonly used in animal tissues. German botanist Haberlandt known as 'Father of Tissue Culture'.

12. Bark of this tree is used as a condiment-

(A) Cinnamon (B) Clove
(C) Neem (D) Palm

Ans. (A) **(SSC CGL 2011)**

Exp: Bark is the outermost layer of the stems and roots of woody plants. It refer all tissue outside the vascular cambiams. Cinnamon is spice obtain from inner bark used in both sweet and savoury foods.

13. Name the tiny pores present on the surface of leaves in plants.

(A) Pits (B) Stomata
(C) Trichomes (D) Hydathodes

Ans. (B) **(SSC (10+2) Data Entry Operator % LDC 2007)**

Exp: Stomata are small opening or pore present in the epidermis of leaves and other organs of the plant that help in gas exchange.

14. The plant that behaves as a root parasite is

(A) Ficus (B) Santalum
(C) Cuscuta (D) Euphorbia

Ans. (C) **(SSC (10+2) Level Data Entery 2013)**

Exp: Cuscuta is also called as dodder. They are yellow, orange or red prasitic plants. They absorb water and minerals from other plants to prepare own organic food.

15. In which of the following multiple epidermis is found?

(A) Boerhavia (B) Amaranthus
(C) Helianthus (D) Nerium

Ans. (D) **(SSC CGL Tier-I 2014)**

Exp: Many layers of epidermis usually called multiple epidermis. Epidermis is the single outer layer of leaves, flower, roots and stems of plants. Multiple epidermis found in some organs like leaves of Nerium, ficess etc.

16. The concept of tissue culture was introduced by

(A) Halfmeister (B) Hanstein
(C) Haberlandt (D) Hanning

Ans. (C) **(SSC CAPF's SI, CISf ASI & Delhi Police 2014)**

Exp: Concept of Tissue Culture was first introduced in plant by German Botanist Habertandt in 1902.

17. The cuticle is absent in

(A) Leaf (B) Stem
(C) Root (D) Fruit

Ans. (C) **(SSC CGL Re-Exam 2013)**

Exp: Cuticle is a protecting layer on the epidermis of stem, leaves, young shoots of plants. It consists of lipid and hydrocarbon polymers with wax. So, they prevent the excessive evaporation of water. It is absent in roots epidermis.

18. The special modified epidermal cells surrounding stomatal pore are called

(A) Epithelial cells (B) Guard cells
(C) Subsidiary cells (D) Accessory cells

Ans. (B) **(SSC CGL Tier-I 2014)**

Exp: Stomatal pore are present on the epidermis layer of leaves, stem of the plant. These pores are bound by a pair of parenchymatous cell known as Guard cells, which are responsible for opening the stomata.

19. Intercalary meristems are found in

(A) Node (B) Lateral bud
(C) Terminal bud (D) Inter node

Ans. (D) **(SSC CGL Tier-I 2013)**

Exp: Meristesm is the region of undifferentiated cells, occur in the plant growth zone. There are three types - Apical Meristem, Intercalary Meristem and Lateral Meristem. Intercalary Meristem present in Internode or stem regions.

20. Leaves of many grasses are capable of folding and unfolding because

(A) Their mesophyll is not diffentiated into palisade and spongy parenchyma
(B) They have stomata on both sides of the leaf
(C) They have high levels of silica
(D) They have specialised bulli form cells

Ans. (D) **(SSC CGL Tier-I 2014)**

Exp: In monocot leaves of grass plant, bulliform cells are present on the upper epidermis. They help in the rolling or folding and unfolding of leaves. They also help in the process of transpiration.

21. From which part of opium plant we get morphine?

(A) Leaves (B) Stem
(C) Bark (D) Fruit coat

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Morphine is an alkaloids found in different variety of poppy plant. It is extracted from poppy capsule or fruit coat.

22. Outside the nucleus DNA is found in-

(A) Golgi bodies (B) Mitochondria
(C) Ribosome (D) Endoplasmic reticulum

Ans. (B) **(SSC CGL Tier-I 2015)**

Exp: DNA (Deoxyribose Nucleic Acid) is a genetic material mostly found in nucleus, exception to this being the small amount of DNA found in organelles outside the nucleus e.g. Mitochondria, Chloroplasts but 99% Genomic DNA present in Nucleus.

23. Morphology of Chromosomes can be best studied at

(A) Interphase (B) Prophase
(C) Metaphase (D) Zygotene

Ans. (C) **(SSC CGL Tier-I 2014)**

Exp: During the cell division different stages occur, Metaphase is one of them in which best studies of chromosome can be done because at this stage chromosomes are highly condensed and become thick and well arrange on plate.

24. Stem cells which are capable of developing into other types of cells come from the

(A) Roots (B) Stem
(C) Embryo (D) Flower

Ans. (C) **(SSC Combined Matric Level 2002)**

Exp: Stem cells are undifferentiated cell of a multicellular organism which have capability to give rise to indefinitely more cells of the same type, commonly stem cells come from two main source Embryo stem cells form Blastocyst and Adult tissue (bone marrow).

25. Plant cell wall is made up of

(A) Cellulose (B) Glucose
(C) Fructose (D) Sucrose

Ans. (A)

Exp: Plant cell wall is the outermost layer of cell. It is made by polysaccharide of glucose called as cellulose.

26. Which of the following organisms does not fit into the Cell Theory?

(A) Bacteria (B) Virus
(C) Fungi (D) Plants

Ans. (B)

Exp: Cell theory is a fundamental theory in biology that makes generalisation about cells, living organism are made up of cells. Cells are basic unit of structure in all organism and also the basic unit of reproduction. It was given by Schleiden and Schwann. Here virus organism does not follow this theory. Virus is the connecting link between Living things and Non-living things.

27. _____ are a group of chemicals that influence cell division and shoot formation.

(A) Cytokinins (B) Gibberellins
(C) Domins (D) Auxins

Ans. (A)

Exp: Cytokinins are plant growth hormones or phytohormones that initiated the cell division in plant roots and shoots.

28. In eukaryotic cells sythesis of RNA takes place in the____.

(A) Mithochondria (B) Centrioles
(C) Ribosomes (D) Nucleus

Ans. (D)

Exp: In eukaryotic cell, synthesis of RNA from transcription process completes in Nucleus.

29. Which of the following is the Controlling Center of the Cell?

(A) Nucleus (B) Plasma
(C) Lysosome (D) Chromosome

Ans. (A)

Exp: Cell is the fundamental unit of life. It is controlled by Nucleus. Nucleus control all metabolic reactions of the cells.

30. The suicidal bags of the cell are-

(A) Lysosomes (B) Ribosomes
(C) Dictyosomes (D) Phagosomes

Ans. (A)

Exp: Lysosome is a cell organelles which is also called as 'Suicidal Bags' because it ruptured and release some enzyme eg. Hydrolase, that hydrolyze the cellular waste material. It is discovered by the scientist De-Duve.

31. What is the transplantation of graft between genetically identical individuals ?

(A) Autograft (B) Isograft
(C) Allograft (D) Xenograft

Ans. (B)

Exp: Isograft is process in which grafting occur between two individuals who are genetically identical eg. Monozygotic twins.

32. The xylem in plants are responsible for:

(A) Transport of water
(B) Transport of food
(C) Transport of amino acids
(D) Transport of oxygen

Ans. (A)

Exp: Xylem is a transport tissue that transport water to different part of the plant. It is present in vascular plants.

33. Which liquid is contained inside the nucleus of a cell?

(A) Cytoplasm (B) Protoplasm
(C) Nucleoplasm (D) Nucleosome

Ans. (C) **(SSC CPO 2017)**

Exp: Nucleoplasm is the liquid present inside the nucleus of cell. Nucleoplasm contains the chromosomes and nucleus with various molecules of proteins and dissolved ions.

34. Which of the following cell organelle is present only in plant cell?

(A) Mitochondria (B) Cell wall
(C) Cell membrane (D) Vacuole

Ans. (B) **(SSC CPO 2017)**

Exp: Cell wall is an important characteristic feature of plant cell which separate it from animal cell. Cell wall is made up of calcium pectate. It provides the support and rigidity to the cell.

35. Endoplasmic Reticulum are rough because of _____ present on their surface.

(A) Golgi bodies (B) Plastids
(C) Lysosomes (D) Ribosomes

Ans. (D) **(SSC CPO 2017)**

Exp: Endoplasmic reticulum is an important cell organelle which helps in synthesis of protein, storage of lipids, proteins etc. some part of endoplasmic recticulum is rough due to the presence of ribosomes.

36. Which of the following cell organelle is present in both plant and animal cell?

(A) Cell wall (B) Lysosomes
(C) Chloroplasts (D) Mitochondria

Ans. (D) **(SSC CPO 2017)**

Exp: Mitochondria is the cell organelle present in both plant and animal. Mitochondria generates the ATP from the glucose present in cytoplasm of cell. Mitochondria are known as 'Power House of the cell.'

37. What is the nature of cell membrane?

(A) Permeable (B) Semi-permeable
(C) Non-permeable (D) Freely permeable

Ans. (B) **(SSC CPO 2017)**

Exp: Cell membrane is the outermost covering of cell, which separates the exoplasm from cytoplasm. Cell membrane is semi-permeable i.e., it allow the entry of only those molecule which are required to maintain the concentration.

38. Which of the following cell organelle is responsible for cellular respiration?

(A) Golgi bodies (B) Mitochondria
(C) Nucleus (D) Lysosomes

Ans. (B) **(SSC CPO 2017)**

Exp: Cellular respiration is the part of respiratory system, where mitochondria in aerobic conditions convert the glucose into ATP by the process known as Tricarboxylic acid (TCA) cycle.

39. Which of the following cell organelle is also called as 'Suicidal Bag of Cell'?

(A) Mitochondria (B) Nucleus
(C) Nucleolus (D) Lysosomes

Ans. (D) **(SSC CPO 2017)**

Exp: Lysosomes are packed vesicles present in the cell. Lysosomes contains the waste material produced by functioning of cell, thus are acidic in nature. Lysosomes are also called as 'Suicidal Bag of Cell' due to their acidic nature.

40. Which of the following cell organells are present only in plant cell?

(A) Cell membrane (B) Cell wall
(C) Mitochondria (D) Lysosomes

Ans. (B) **(SSC CPO 2017)**

Exp: Cell wall is the cell organelle which is present only in plant cell.

41. Cellulose is an example of which kind of nutrient?

(A) Fat (B) Carbohydrate
(C) Protein (D) Vitamin

Ans. (B) **(SSC CPO 2017)**

Exp: Cellulose is a type of polysaccharide carbohydrate. It consist of linear chain of D-glucose. Cellulose is an important structural component of cell wall.

42. Which of the following cell organells are present only in plant cell?

(A) Lysosomes (B) Plastids
(C) Cell membrane (D) Mitochondria

Ans. (B) **(SSC CPO 2017)**

Exp: Plastids are the pigments present in plant only. These plastids provides the different colours to the plant. There are three types of plastids; chromoplast, chloroplast and leucoplastids.

43. What is the name of a group of similar cells performing a specific function?

(A) Tissue (B) Organ
(C) Organ system (D) Cellular organization

Ans. (A) **(SSC CGL 2017)**

Exp: Tissue is a cellular organizational level between cells and organs. A tissue is an assemble of cell which are of same shape and perform similar functions. The study of tissue is known as 'Histology'. All organs are made of layers of cells.

44. Plant tissues are of how many types?

(A) 3 (B) 2 (C) 5 (D) 6

Ans. (A) **(SSC CGL 2017)**

Exp: Plant tissues can be divided into three types

(i) Meristematic tissues - They give rise to new cells in root and shoot area.

(ii) Permanant tissues - Gives rise to xylem and phloem and make vascular bundles.

(iii) Ground tissues

45. What is plant cell wall mainly composed of?

(A) Lipids (B) Vitamin
(C) Cellulose (D) Protein

Ans. (C) **(SSC CGL 2017)**

Exp: Plant cell wall is composed of cellulose It is a tough organic polysaccharide compound. Cellulose cell wall helps to provide structural and mechanical support.

46. The meristem which occurs between mature tissues is known as _____meristem.

(A) Intercalary (B) Primary
(C) Lateral (D) Apical

Ans. (A) **(SSC CGL 2017)**

Exp: Meristem are the primary tissues containing undifferentiated cells. Meristem cells give rise to various organs of the plants. There are three types

(i) Meristematic tissues - Apical, Intercalary and lateral. Intercalary tissues occurs between mature tissues and helps in increasing the girth of stem.

(ii) Permanant tissues - Gives rise to xylem and phloem and make vascular bundles.

(iii) Ground tissues

Chapter-03

Micro-Organism
(Algae, Fungi, Bacteria, Virus)

1. Of all microorganisms, the most adaptable and versatile are–

(A) Viruses (B) Bacteria
(C) Algae (D) Fungi

Ans. (A) **(SSC SO Exam 2007)**

Exp: Viruses are micro-organisms they can live in both living and living system because of its cellular structure. So, they are most adaptable and versatile in nature.

2. Virus contains–

(A) Protein and Lipid (B) Nucleic Acid and Protein
(C) Lipid and Carbohydrate
(D) Carbohydrate and Nucleic Acid

Ans. (B) **(SSC CGL 2002)**

Exp: The word virus means poisnous fluid. Viruses are nucleoprotins containing a nucleic acid (RNA/DNA) surrounded by a protin coat called capsid. DNA/RNA may be single stranded or double stranded. Ivanowsky (1892) discovered Tobaco mosaic virus. Viruses which causes disease in tobacco plant.

3. The chemical used for destroying fungi in water tanks is–

(A) Copper sulphate (B) Magnesium sulphate
(C) Zinc sulphate (D) Nitric acid

Ans. (A) **(SSC SO 2003)**

Exp: Copper Sulphate is an organic compound that kill bacteria, fungus, It is also used in Leather industry and Electroplating processes.

4. Which among the following is used in the treatment of tuberculosis?

(A) Penicillin (B) Aspirin
(C) Paracetamol (D) Dettol

Ans. (A) **(SSC Tax Asst. 2006)**

Exp: Tuberculosis is a disease caused by bacteria Mycobacterium tuberculosis. Tuberculosis is treated by the antibiotics such as Penicillin. Penicillin is a collection of antibiotics that kills the bacteria. This is synthesized by fungus Penicillium notatum.

5. What is true about viruses without exception?

(A) They contain a core of RNA
(B) They can infect bacteria
(C) They cannot produce antibodies
(D) They can multiply only in host cells

Ans. (D) **(SSC MTS 2000)**

Exp: Virus do not have reproduction mechanism or multiplication process So they, have need a host for multiplication. During this process virus used the machinery of host eg. metabolic enzyme, RNA synthesis mechanism etc.

6. Which of the following group of organisms reproduce faster?

(A) Algae (B) Fungi
(C) Bacteria (D) Protozoa

Ans.(C) **(SSC MTS 2000)**

Exp: Bacteria reproduce fast by asexual reproduction (binary fission) within 15-20 minutes of time. They reproduce in binary nature.

7. AIDS virus has–

(A) Single-stranded RNA
(B) Double-stranded RNA
(C) Single-stranded DNA
(D) Double-stranded DNA

Ans. (A) **(SSC CGL 2000)**

Exp: AIDS (Acquired Immuno Deficiency Syndrome) virus has two copies of single stranded RNA which is enclosed in capsid protein.

8. Some viruses have RNA, but no DNA. This would indicate that–

(A) These viruses can not replicate
(B) These viruses have no heritable information
(C) RNA transmits the hereditary information in these viruses
(D) Their nucleic acids can be crystallised

Ans. (C) **(SSC MTS 1999)**

Exp: On the basis of genetic material there are two category of viruses -
(A) Adenoviruses DNA containing
(B) Retroviruses RNA containing
In RNA viruses genetic information contain in RNA which is hereditary in nature.

9. The causal organism of polio is–

(A) Worm (B) Bacteria
(C) Fungi (D) Virus

Ans.(D) **(SSC CISF, ASI 2013)**

Exp: Polio is a viral disease, it spread from water, faecal oral route. It is caused by enterovirus knows as Polio Viruses. Infected person got paralysed mostly effects children.

10. Tuberculosis is transmitted through–

(A) Droplet Transmission (B) Blood Transfusion
(C) Contaminated Water (D) Sexual Contact

Ans. (A) **(SSC (10+2) 2013)**

Exp: Tuberculosis disease that is caused by Mycobacterium tuberculosis. It spread from person to person through tiny droplets primarily it affects the lungs.

11. Rabies is a–

(A) Helminthic Disease (B) Viral Disease
(C) Bacterial Disease (D) Protozoan Disease

Ans. (B) **(SSC CISF, ASI 2013)**

Exp: Rabies is a viral disease caused by Lyssa viruses. It is spread when a infected animal bites another animal or human mostly by dogs. It is present in saliva

12. Dengue is spread by–

(A) Housefly (B) Fruitfly
(C) Mosquito (D) Butterfly

Ans. (C) **(SSC CISF, ASI 2013)**

Exp: Dengue (break bone fever) refers to a tropical disease caused by four different types of viruses (RNA containing arbovirus of flavi group). It is usually transmitted by mosquitoes and the common symptoms includes. fever, headache, muscle and joint pain and skin rash. There is no vaccine for dengue and only way to reduce infection is to improve hygiene.

13. Viruses are–

(A) Cellular (B) Acellular
(C) Unicellular (D) Multicellular

Ans. (B) **(SSC MTS 2013)**

Exp: Viruses are Acellular micro organisms. They are very tiny, much smaller than bacteria. They causes familiar infectious disease such as the common cold, flu, warts and fever. A protein coat or capsid sometime enclosed within a membrane, i.e., envelope called as capsid.

14. All are protozoan diseases except–

(A) Elephantiasis (B) Oriental sores
(C) Sleeping sickness (D) kala-azar

Ans. (A) **(SSC CGL 2012)**

Exp: Elephantiasis is gross enlargement of a limb or any organ of the body.There is an abnormal accumulation of watery fluid in affected part, in the tissues causing severe swelling (oedema). It may affect male or female genital organs. It is caused by Nematode Wuchereria bancrofti.

15. The disease that is caused by virus is–

(A) Typhoid (B) Cholera
(C) Common cold (D) Malaria

Ans. (C) **(SSC (10+2) 2010)**

Exp: Common cold is a mild viral infection of the nose, throat and sinuses. It can cause a blocked nose followed by a running nose. The cold will usually last for about a week till the body fights from the infection. The disease can be spread through direct and indirect contact with line droplets during coughing and sneezing etc.

16. Typhoid is caused by–

(A) Pseudomonas (B) Staphylococcus
(C) Bacillus (D) Salmonella Typhi

Ans. (D) **(SSC CPO 2009)**

Exp: Typhoid is a common, worldwide bacterial disease transmitted by the ingestion of food or water contaminated with the faeces of an infected person. It is caused by Salmonella typhi. Headache cough and bleeding nose (epitaxis) are the main symptoms of disease.

17. Which one of the following is a viral disease in man?

(A) Mumps (B) Plague
(C) Cholera (D) Syphilis

Ans.(A) **(SSC SO 2008)**

Exp: Mumps is a viral disease of humans, caused by the mumps virus. Painful swelling of the salivary glands (parotid) is the most typical presentation. Painful testicular swellings (orchitis) and rash may also occur.

18. Chicken pox is caused by–

(A) Protozoa (B) Bacteria
(C) Virus (D) Fungus

Ans. (C) **(SSC Matric Level 2002)**

Exp: Chicken pox is a highly contagious disease caused by primary infection with Vericella Zoster Virus (VZV). It usually starts with vascular skin rash mainly on the body and head rather than the periphery that later become itchy. It is an air borne disease.

19. Pathogenic bacteria secrete–

(A) Antigens (B) Antibodies
(C) Hormones (D) Interferons

Ans. (A) **(SSC SO 2001)**

Exp: Antigens are foreign substance, which when introduced into the body of host, are capable of stimulating an immune response, specifically activating lymphocytes, which are body's infection fighting white blood cells.

20. Blue-green algae are included in the group of–

(A) Eubacteria (B) Cyanobacteria
(C) Protozoa (D) Fungi

Ans. (B) **(SSC Constable (GD) 2012)**

Exp: Cyanobacteria are aquatic and photosynthetic organisms. Cyanobacteria live in terrestrial, fresh, brackish or marine water. They are usually too small to be seen and also known as Blue Green Algae (BGA). They form the oldest record of fossils on Earth. BGAs also work as nitrogen fixers in the soil.

21. Which is the effect of antigen in an ill person?

(A) It increases the production of W.B.C
(B) It increases the production of antibiotics
(C) It increases the production of anti-serum against bacteria
(D) It prevents the growth of bacteria

Ans.(B) **(SSC Sec. officer 1997)**

Exp: Antigens are foreign substances which induces the immune response in the body and increase the production of antibodies.

22. Rod shaped bacteria is called

(A) Bacillus (B) Spirillum
(C) Coccus (D) Coma

Ans. (A) **(SSC Sec. offier 2001)**

Exp: Bacillus is a genus of gram-positive rod shaped bacteria. Bacillus species can be obligate aerobes or facultative anaerobes.

23. Who discovered Cholera germs?

(A) Robert koch (B) Rene Laennec
(C) Dreser (D) Hansen

Ans. (A) **(SSC CGL 2002)**

Exp: Cholera disease caused by Vibrio Cholera. It was first identified by Robert koch.

24. Edward Jenner is associated with

(A) Cholera (B) Typhoid
(C) Small Pox (D) Paralysis

Ans. (C) **(SSC CPO SI 2003)**

Exp: Edward Jenner was an English physician and scientist who is the pioneer of small pox vaccine. It was the world's first vaccine.

25. BCG vaccination is to be given to a new-born child

(A) Immediately after birth (B) Within 48 hours
(C) Within seven days (D) Within sex months

Ans. (B) **(SSC Sec. officer 2003)**

Exp: BCG Vaccine (Bacillus Calmette - Guerin) used against tuberculosis. BCG vaccine is a live bacterial vaccine. New borns childs are vaccinated within 48 hours of birth.

26. Bacterial diseases are found in

(A) Plants (B) Animals
(C) Humans (D) All of these above

Ans. (D) **(SSC Combined Matric Level 2001)**

Exp: Bacteria cause diseases in all living organism eg. plant, animals and humans. Plant bacteria are saprophytic and cause plant disease. Human and animal pathogenic bacteria cause many disease such as typhoid, diptheria, syphilis etc.

27. Which of the following diseases is caused by a virus?

(A) Influenza (B) Pneumonia
(C) Cholera (D) Whooping cought

Ans. (A) **(SSC Combined Matric Levle 2002)**

Exp: Influenza is viral disease of birds and mammals caused by RNA viruses. The most common symptoms are chills, fever, sore throat, muscle pains, headache, cold etc. Influenza is transmitted through the air by coughs or sneezs, cresting aerosols containing the virus.

28. Which virus from the following combinations is contagious for human beings?

(A) H5N1 (B) H1N5
(C) H2N3 (D) H4N2

Ans. (A) **(SSC Combined Matric Level 2006)**

Exp: H5N1 is a subtype of the influenza. A virus which can cause illness in human beings.

29. Which of the following is known as 'grave yard' RBCs?

(A) Liver (B) Bone marrow
(C) Spleen (D) Appendix

Ans. (C) **(SSC Combined Matric Level 2001)**

Exp: Spleen, an abdominal organ involved in production and removal of blood cells (WBC) and forming part of the immune system.

30. Mycobacterium leprae is

(A) Bacillus (B) Coccus
(C) Spiral (D) Spore

Ans. (A) **(SSC Level Data Entry 2012)**

Exp: Mycobacterium leprae is a bacteria that cause Leprosy disease. Mycobacterium is a bacillus shaped gram (+) bacteria.

31. The smallest size of a cell that can be seen with naked eye is:

(A) 1 micron (B) 10 micron
(C) 100 micron (D) 1000 micron

Ans. (C) **(SSC MTS 2013)**

Exp: The smallest object are those object they can be seen with unaided eye are about 0.1 mm long. Micron( )is an alternative name of micrometer.

32. Which of the following micro-organisms is used in milk curdiling?

(A) Acetobacter (B) Leuconostoc
(C) Bacillus (D) Lactobacillus

Ans. (D) **(SSC MTS 2013)**

Exp: Milk curdling is a process by which a Liquid is transformed to a soft semisolid. Lactobacillus is a acidic bacteria that is used in milk curdling.

33. 'Plague' is caused by _____.

(A) Bacteria (B) Protozoa
(C) Virus (D) All of the above

Ans. (A) **(SSC MTS 2013)**

Exp: Plague is a bacterial disease caused by the enterobacteria Yersinia pestis. It is usually found in small mammals and their fleas.

34. An Antigen is

(A) The result of Antibody
(B) The opposite of Antibody
(C) The stimulus of Antibody
(D) The residue of an Antibody

Ans. (C) **(SSC Graduate Level Tier-1 2013)**

Exp: Antigens are foreign substance which stimulate the production process of antibody. Antibodies are proteins produced by Lymphocytes as a result of stimulation by an antigen.

35. AIDS virus destroys

(A) Lymphocytes (B) Monocytes
(C) Neutrophils (D) Basophils

Ans. (A) **(SSC Graduate Level Tier-1 2013)**

Exp: AIDS virus destroys the T. Lymphocytes belong to a group of white blood cells known as Lymphocytes that play a central role in cell-mediated immunity.

36. Which bacterial strain developed from natural isolates by genetic manipulations can be used for treating oil spills?

(A) Pseudomonas (B) Agrobacterium
(C) Clostridium (D) Nitrosomonas

Ans. (A) **(SSC Graduate Level Tier-1 2013)**

Exp: Oil-eating bacteria, Pseudomonas putida is an aerobic bacteria. The generic name Pseudomonas created for organism like oil-eating bacteria was defined as a group of Gram Negative, rod shaped and polar-flagella bacteria.

37. Rinderpest disease of Cattle is caused by

(A) Insects (B) Bacteria
(C) Virus (D) Protozoa

Ans. (C) **(SSC Graduate Level Tier-1 2013)**

Exp: Rinderpest virus member of genus Morbillivirus is closely related to the measles and canine distemper virus, which cause disease in cattles.

38. Bacteriophage was discovered by-

(A) Felix d' Herelle and Frederick Twort
(B) Kluyver and Niel
(C) Paul Ehrlich (D) Burrill and Smith

Ans. (A) **(SSC CAPFs SI, CISF ASI & Delhi 2014)**

Exp: Bacteriophage refers a virus that infect bacteria. Bacteriophages are composed of proteins that encapsulate a DNA or RNA genome. It was first discovered by Frederick W. Twort and Felix d' Herelle in 1917.

39. Bacterial cells do not have-

(A) Cell wall (B) Plasma membrane
(C) Ribosome (D) Mitochondria

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Bacteria being a prokaryotic cell does not have nucleous and other cell organelles. So bacterial cell do not have mitochondria, thus bacteria gain energy from food such as glucose and other carbohydrate.

40. Rhizobium is a kind of

(A) Photosynthetic bacteria (B) Symbiotic bacteria
(C) Parasitic bacteria (D) Saprophytic bacteria

Ans. (B) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Rhizobium is a symbiotic gram (–) nitrogen fixation bacteria. They mostly occur in leguminous plants. Crops such as legumes peas, beans, clover and soy etc.

41. Number of mitochondria in bacterial cell is

(A) One (B) two
(C) many (D) zero

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Bacterial cells are prokaryotic cell, don't have membrane bound organells but mitochondria are membrane bound organelles.So prokaryotic cell do not have any mitochondria.

42. The harmuful substances Produced by the microbes are known as

(A) Antibiotics (B) Pollutants
(C) Hormones (D) Toxins

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Harmful microbes secrete toxins which effect the human immune systems and cause many diseases.

43. Interferons are synthesized response in

(A) Bacteria (B) Fungi
(C) Mycoplasma (D) Virus

Ans. (D) **(SSC CAPFs SI, ASI & Delhi Polic SI 2015)**

Exp: Interferons are signaling proteins that are produced by the body's cell as defensive response to viruses. Interferon can also combat bacterial and parasitic infections, inhibit cell division and promote or impede the differentiation of cells.

44. Pneumonia is a bacterial disease caused by the type of bacteria called _____ .

(A) Bacilli (B) Cocci
(C) Sprilli (D) Vibrio

Ans. (B) **(SSC CGL Tier-I 2016)**

Exp: Pneumonia disease caused by bacteria Streptococcus pneumonia, it is a gram (+) bacteria. It lives in nose and throats of healthy people. They occur in form of coccus.

45. The chemical component that is invariably found in all viruses is:

(A) Proteins (B) Lipids
(C) DNA (D) RNA

Ans. (A) **(SSC CGL Tier-I 2016)**

Exp: All Viruses contain the following two components Nucleic acid genome and a protein capsid that covers the genome this is called as Nucleocapsid.

46. Bacterial decomposition of biological material under anaerobic condition is

(A) Fermentation (B) Fertilization
(C) Contamination (D) Composting

Ans. (A) **(SSC CGL Tier-I 2016)**

Exp:Bacteria decompose all biological material (Carbohydrate) under anaerobic condition this process is called as Fermentation. In fermentation organic compound such as glucose broken by enzymes into simple compound in the absence of oxygen eg. Yeast can convert sugars to alcohol and carbon dioxide by fermentation.

47. Bacteria was discovered by

(A) Antonie von Leeuwenhoek
(B) Belarus
(C) Hugo de Vries (D) Robert Brown

Ans. (A)

Exp: Bacteria are very small, single cell prokaryotic micro-organisms. It is discovered by Scientist Antonie von Leeuwenhoek who is also known as 'Father of Microbiology'.

48. Which of the following induces nitrogen fixation in soil?

(A) Protozoa (B) Bacteria
(C) Fungi (D) Algae

Ans. (B)

Exp: Nitrogen fixation is a process in which atmosphere nitrogen is convert into Ammonia (NH_3). This process is completed by the nitrogen fixing bacteria such as Azobacter, Rhizobium etc.

49. Which of the following organisms are considered to be both Living and Non-living?

(A) Bacteria (B) Fungi
(C) Algae (D) Virus

Ans. (D)

Exp: Viruses are the micro-organisms which are considered as both Living and Non-living. So, we called virus as a connective link between living and non-living organisms.

50. Which type of pathogen causes the waterborne disease Salmonellosis?

(A) Algal (B) Parasitic
(C) Bacterial (D) Viral

Ans. (C)

Exp: Salmonellosis is a water born disease which caused by gram (-) bacteria Salmonella typhi.

51. DPT vaccine is categorized as which of the following?

(A) Anti viral vaccine (B) Anti protozoan vaccine
(C) Anti rickettsial vaccine (D) A combined vaccine

Ans. (D)

Exp: DPT vaccine is used against diseases Diphtheria, Pertussis (Whooping cough) and Tetanus. They are refer to a class of combination vaccine.

52. Early blight is a common disease seen in which of the following?

(A) Potato (B) Ginger
(C) Cabbage (D) Cauliflower

Ans. (A) **(SSC CPO 2017)**

Exp: Early blight of potato is a disease caused by fungus Alternaria solani. It results in the reduction of tuber yield.

53. Red rot is a disease caused by which of the following plant?

(A)Paddy (B) Sugarcane
(C)Mustard (D) Wheat

Ans. (B) **(SSC CGL 2017)**

Exp:Red rot disease is found in sugarcane plant The symptoms of this disease are drooping, with withering and finally yellowing of the upper leaves and wilting of the entire crown & finally dies. Infection in the stem is internal, the presence of the disease is not visible externally.

54. Which of the following is/are plant disease:

I. Citrus canker II. Hepatitis B
III. Cholera

(A) Only I (B) Only II
(C) Only I and III (D) Both I and II

Ans. (A) **(SSC CPO 2017)**

Exp: Citrus Canker is a plant disease. Bacterium Xanthomonas axonopodis affects the citrus plants. Hepatitis B and Cholera are the human disease.

55. Which of the following is/are plant disease:

I. Citrus Canker
II. Rust of Wheat
III. Yellow vein Mosaic of bhindi

(A) Only I (B) Only II
(C) Only I and III (D) All are correct.

Ans. (D) **(SSC CPO 2017)**

Exp: Citrus canker is a bacterial disease. Rust of wheat is a fungal disease. Yellow vein mosaic of bhindi is a viral diseas.

56. Which of the following is one of the commercial products obtained from Gelidium and Gracilaria and are used to grow microbes and in preparations of icecreams and jellies?

(A) Agar (B) Chlorella
(C) Spirullina (D) Gymnosperms

Ans. (A) **(SSC CGL 2017)**

Exp: Agar is gelatin like product obtained from certain seaweeds named as geliduim and gracilaria. Agar is used as a nutrient medium for the growth of microorganisms like bacteria and fungi.

Chapter-04

Algae and Fungi

1. Fungi that grow on bark are said to be–

(A) Xylophilous (B) Saxicolous
(C) Coprophilous (D) Corticolous

Ans. (D) **(SSC (10+2) Nov. 2014)**

Exp: Fungus is a eukaryotic micro-organism, non-phototrophic with rigid cell wall includes mushrooms, molds and yeast. They are saprophytic organism grow on dead or decomposting materials. Corticolous fungi grow on the bark of the trees

2. Pink mould is the common name for–

(A) Aspergillus (B) Rhizopus
(C) Neurospora (D) Mucor

Ans. (B) **(SSC (10+2) Nov. 2014)**

Exp: Rhizopus a saprophytic fungi on plants and some specialized parasites on animals. They form a thin pink mycelial growth. So, it's common name is pink mould.

3. Which among the following is a large spectrum Antibiotic ?

(A) Paracetamol (B) Pencillin
(C) Ampicillin (D) Chlormphenicol

Ans. (B) **(SSC Section Officer (Audit) 1997)**

Exp: Penicillin is an anti-biotic or a lactam antibiotics used in the treatment of bacterial infections. Penicillin is extracted from fungus Penicillium notatum.

4. Bakeries use yeast in breadmaking because it

(A) Makes the bread hard
(B) Makes the bread soft and spongy
(C) Enhances the food values
(D) Keeps the bread fresh

Ans. (B) **(SSC Combined Matric Level 2001)**

Exp: Bread is usually made from wheat flour dough that is cultured with yeast. Yeast is used for ferementation which makes the bread soft and spongy.

5. A disease caused by fungus is

(A) Round worm (B) Ringworm
(C) Tapeworm (D) Filaria

Ans. (B) **(SSC Combined Matric Level 2002)**

Exp: Ringworm is a fungal disease or infection of the skin in human it is also called as Dermatophytosis. The fungi that cause parasitic infection feed on Keratin that found in the outer layer of skin, hair and nails.

6. An organsim which can monitor air pollution is

(A) Bacteria (B) Lichen
(C) Algae (D) Fungi

Ans. (B) **(SSC (10+2) Level Date Entry Operator & LDC 2012)**

Exp: Lichen is a composite organism that arise from algae and fungi in a symbiotic relationship. It is used as air pollution indicators especially for concentration of sulphur dioxide in atmosphere. So,we called it as a natural indicator of air pollution.

7. Which of the following is an example of parasitic alga?

(A) Ulothrix (B) Cephaleuros
(C) Oedogonium (D) Sargassum

Ans. (B) **(SSC GL Tier-I 2014)**

Exp: Parasitic algae are disease most commonly seen in warm humid climates or in green houses. Commonly Chepheuros is a genus of parasitic thalloid green algae, common name is red rust. The algeae is parasite on tea, coffee, mango and guava.

8. Yeast is a _____.

(A) Bacteria (B) Fungi
(C) Algae (D) Bryophyte

Ans. (B) **(SSC CGL Tier-I 2016)**

Exp: Yeasts are eukaryotic, single cell micro-organisms classified as member of fungus kingdom. Yeast such as Candida, lbicans are pathogens and can cause infection in humans.

9. Which organism is responsible for alcohol fermentation?

(A) Chlorella (B) Yeast
(C) Agaricus (D) Puccinia

Ans. (B)

Exp: Alcohol fermentation is a biological process by which. Sugar eg. Glucose is converted into Ethanol. Alcohol fermentation process complete in the presence of Yeast.

10. The sexual reproductive organs of aspergillus are:

(A) Spermatium and Oogonium
(B) Antheridium and Oogonium
(C) Spermatium and Ascogonium
(D) Antheridium and Ascogonium

Ans. (D) **(SSC CGL Tier-I 2016)**

Exp: Aspergillums is a fungi also called as Black Mold are Saprophytic and grow on decomposing organic substances such as fruits, jam, word, feathers etc.Sexual reproduction present in heterothallamus with female and male sex organ Ascogonium and Antheridium respectively.

11. The antibiotic pencillin is obtained from which of the following?

(A) Synthetic process (B) A bacterium
(C) Fungus (D) Virus infected cells

Ans. (C) **(SSC CGL 2016)**

Exp: Penicillin is a antibiotic obtained from fungus Penicillium notatum discoved by Alexander Fleming.

12. Which of the following is a fungal disease?

(A) Dermatitis (B) Cholera

(C) Jaundice (D) Indigofera

Ans. (A) **(SSC CGL Tier-I 2016)**

Exp: Dermatitis is a fungal disease which is caused by Dermatitis herpetiformis.

13. Sexual reproduction in Algae that takes place through fusion of two dissimilar size gametes is called?

(A) Zoospores (B) Anisogamous

(C) Isogamous (D) Oogamous

Ans. (B) **(SSC CGL 2017)**

Exp: Sexual reproduction of algae takes place through fusion of spores. The morphologically and structurally similar spores are known as isogamous and different or dissimilar size gametes are known as anisogamous.

14. Sexual reproduction in Algae that takes place through fusion of two similar size gametes is called?

(A) Zoospores (B) Anisogamous

(C) Isogamous (D) Oogamous

Ans. (C) **(SSC CGL 2017)**

Exp: Isogamous is a from of sexual reproduction that involves gametes of similar morphology (similar in shape and size). Both gametes look alike, they cannot be classified as "male" or "female".

15. What is study of fungus known as?

(A) Physiology (B) Phrenology

(C)Mycology (D) Biology

Ans. (C) **(SSC CGL 2017)**

Exp: Mycology is the study of fungus including their genetic and biochemical proprties. Pier Antonio micheli is known as father of modren mycology.

Chapter-05

Angiosperms, Gymnosperm & Plant Development Biology

1. The rootless plant is –

(A) Lemna (B) Banana
(C) Ginger (D) Lemon

Ans. (C) **(SSC Steno. Sep. 2014)**

Exp: Rootless plant are those plant which don't have root system. They develop rhizomes refer to rootless plant. eg. Ginger, Bermuda grass, Bamboo etc. Underground stem work as root.

2. Sporangia bearing leaf of a fern is called as–

(A) Ramentum (B) Indusium
(C) Sorus (D) Sporophyll

Ans. (D) **(SSC Steno. Sep. 2014)**

Exp: Sporangia is a structure in certain plants and other organism that is charged with making and storing spores. eg - Megasporangia and Microsporangia. Fern do not have flowers. They reproduce through spores. which are produced in sporangia, these sporangia are present on the leaf of fern called as Sporophyll as cone like structure.

3. 'Coralloid Root' of Cycas helps in–

(A) Absorption of water
(B) Absorption of water and fixation of nitrogen
(C) Anchorage
(D) Transport of food

Ans. (B) **(SSC (10+2) Nov. 2014)**

Exp: Coralloid root is the cynobacterial zone, which is the region inhabited by cyanobacteria. This has unique characteristics which facilitate a close relationship between cycads and cyanobacteria. The absorption of water and fixation of nitrogen occur in these root.

4. Flowerless plants are termed as–

(A) Phanerogams (B) Bryophytes
(C) Thallophytes (D) Cryptogams

Ans. (D) **(SSC (10+2) 2012)**

Exp: Flowers are frame work of most plants, used for sex-related duplication, generating seeds that ensure successive generations but some plants are flowerless they are called Cryptagoms, they reproduces by spores.

5. The smallest flowering plant is–

(A) Wolffia (B) Lemma
(C) Azolla (D) Ficus

Ans. (A) **(SSC CPO 2011)**

Exp: Wolffia is an aquatic flowering plant also known as Watermeal of the family Araceae. It generally floats on the surface of the water.

6. The tallest plant in the world is–

(A) Eucalyptus (B) Pierocarpus
(C) Polyalthia (D) Tectona

Ans. (A) **(SSC Steno. 2011)**

Exp: Eucalyptus is the tallest flowering plant in among these. But the recent researchers confirm its status as environment hazardous.

7. An Example of false fruit is–

(A) Apple (B) Guava
(C) Mango (D) Tomato

Ans. (A) **(SSC CGL 2011)**

Exp: False fruit are those fruit which are not developed from ovary. Here apple is developed by thalamus.So it is Considered as false fruit.

8. Animals living in the tree trunks are known as–

(A) Arboreal (B) Volant
(C) Amphibious (D) Aquatics

Ans. (A) **(SSC CGL 2010)**

Exp: Arboreal come from Latin word, which means 'pertaining to trees' means Living in trees. Arboreal animals spend most of time on trees. They eat, sleep, and play in tree of canopy. Sometimes they have long tail to grip the branches.

9. Ginger is a stem and not a root because–

(A) It stores food material
(B) It grows horizontally in the soil
(C) It has nodes and internodes
(D) It lacks chlorophyll

Ans. (C) **(SSC SO 2005)**

Exp: Ginger is a rhizome like structure, they have node and internode which is the character of stem. Ginger is root less plant mostly used as medicinal plant.

10. A plant with compound leaves is–

(A) Papaya (B) Coconut
(C) Peepal (D) Hibiscus

Ans. (B) **(SSC CPO 2003)**

Exp: A leaf composed of a number of leaflets on a common stalk, arranged either palmetely, these type of leaf called as Compound Leaf. Coconut leaves are closer to shoots than simple leaves same as compound leaf.

11. The tallest and thickest type of grass is–

(A) Alfalfa (B) Fodder
(C) Bamboo (D) Lichens

Ans. (C) **(SSC FCI 2012)**

Exp: Grass is belongs from Graminae family same as Bamboo is also from Graminae family, it is a perennial plant of grass family with height of up to 100 feet. Bamboo is the fastest growing plant in world.

12. Which of the following is a Parthenocarpic fruit?

(A) Banana (B) Apple
(C) Mulberry (D) Strawberry

Ans. (A) **(SSC CGL 2013)**

Exp: Parthenocarpic is a process in which fruit developed without fertilization. These fruits resembles a normally produce fruit but is seedless. Varieties of the pineapple and banana naturally occuring partherocarpic

13. Cuscuta is a–

(A) Partial stem parasite (B) Complete stem parasite
(C) Partial root parasite (D) Complete root parasite

Ans. (C) **(SSC Matric Level 2008)**

Exp: Cuscuta (dodder or Amarbail) is a genus which have about 100-170 species. It is a parasitic plant of yellow, orange or red colour.Reduced in form of thin spirally thread, dodders have shown the best adaptation capability. If present its sucker up to the conducting tissue (xylem and phloem) of the host and get nourishment.

14. The floral part that produces pollen grains is–

(A) Sepal (B) Petal
(C) Anther (D) Ovary

Ans. (C) **(SSC Matric Level 2006)**

Exp: Pollen grain is a microscopic body that contains the male reproductive cell of the plant. Stamens are structure that produce pollen in terminal sac like structure called Anthers in which pollen grain exist.

15. In cauliflower plant, the useful part is–

(A) Underground stem (B) Root
(C) Young Inflorescence (D) Leaves

Ans. (C) **(SSC (10+2), LDC 2011)**

Exp: Cauliflower is the plant of Brassicacea family. Cauliflower head is composed of a white inflorescence meristem. It occurs in various colours eg. Purple cauliflower contain anthocyinin.

16. The dried flower buds are used as a spice in–

(A) Cardamom (B) Cinnamon
(C) Cloves (D) Saffron

Ans. (C) **(SSC CGL 2011)**

Exp: Cloves are the aromatic flower bud of Myrtaceac family. It is used as spices in Asian countries. The tree is of the height around 12-15 m.

17. From which one of the following is quinine extracted?

(A) Sarpagandha (B) Opium
(C) Cinchona (D) Datura

Ans. (C) **(SSC Steno 2011)**

Exp: Quinone is a drug which is used to treat malaria disease which caused by Plasmodium falcifarum. Quinine is extracted by Cinchona plant bark.

18. The bark of this plant is used as a condiment–

(A) Cinnamon (B) Clove
(C) Neem (D) Palm

Ans. (A) **(SSC CGL 2011)**

Exp: Cinnamon is a spice obtained from the inner bark of several trees from the genus Cinnamomum that is used in both sweet and savoury foods. It is used in spices, chocolates and other confectionaries. Sometimes it is used in liqueurs.

19. In coriander, the useful parts are–

(A) Roots and Leaves
(B) Leaves and Flowers
(C) Leaves and Dried fruits
(D) Flowers and Dried fruits

Ans. (C) **(SSC CGL 2011)**

Exp: Coriandar or Dhania is a annual herbs of the family Umbellifery. These leaves are variable in shape, broadly lobed and at the base of the plant. The flowers are in small umbels. Leaves and dried fruits are useful part of the coriander.

20. Clove, the commonly used spice is obtained from the–

(A) Root (B) Stem
(C) Flower Bud (D) Fruit

Ans. (C) **(SSC CPO, SI 2005,2003, CGL 2000)**

Exp: Cloves are the dried flower bud of a plant, Syzygium aromaticum of family-Myrtaceae. The tree is of the height around 12-15 m. Cloves are native to the Maluku Island, Indonesia and used as a spice

21. Hashish is obtained from a plant. From which part of the plant is it obtained?

(A) Leaves (B) Stem
(C) Exudate from leaves and female inflorescences
(D) Exudate from stem and male inflorescences

Ans. (C) **(SSC CGL 2003)**

Exp: Hashish is a sticky, thick, dark coloured resin which is made from the flower of the female cannabis plant. The cannabis plant's leaves and flowers contain chemicals, know has cannabinoids.

22. From which part of a plant is turmeric obtained?

(A) Root (B) Stem
(C) Fruit (D) Flower

Ans. (B) **(SSC Matric Level 2002)**

Exp: Turmeric is a rhizomatous or underground stem of a ginger family. It comes under family zingiberacea. It is commonly used as a colouring and flavoring agent in India, Pakistan etc.

23. Ginger is a modified with–

(A) Roof (B) Leaf
(C) Tendril (D) Stem

Ans. (D) **(SSC Matric Level 2002)**

Exp: Ginger is a plant with a specialised stem is called a Rhizome, which is a horizontal underground stem that often emerges root and shoots from its nodes. These roots can develop into stem tubers for storage and root tubers for asexual reproductions.

24. 'Comose' seeds are seeds with–

(A) Long hairs (B) Wings
(C) Bristles (D) Hooks

Ans. (A) **(SSC Const. (GD) 2012)**

Exp: Comose seeds having a tuft or tuft of hair, mostly in the plant which are haemophilic in nature. eg- in cotton seed Hillia (Rubiacea family).

25. A plant which reproduces by means of spores–

(A) Mustard (B) Coriander
(C) Ferns (D) Petunia

Ans. (C) **(SSC MTS 2002)**

Exp: Ferns are cryptogamous plant which are non-flowering, vascular plant. They reproduced by spore. They belong to lower vascular plants as the bryophyte and pteridophyta.

26. Which of the fruit develops from an inflorescence?

(A) Apple (B) Guava
(C) Pineapple (D) Grape

Ans. (C) **(SSC Matric Level 2001)**

Exp: A pineapple is a angiospermic monocot plant. Its edible part or fruit developed from an Inflorescence. Its fruit called as berries.

27. A plant with fibrous root system is–

(A) Wheat (B) Pea
(C) Mustard (D) Bean

Ans. (A) **(SSC Matric Level 2001)**

Exp: Root system is the important part of the plant that absorb the mineral from soil. Fibrous roots are hair like, they are mostly present in monocot plants. Wheat is a suitable example in all of above, it comes under Graminae family or Grass family.

28. The age of trees is determined by its–

(A) birth (B) Height
(C) Growth Rings (D) General Appearance

Ans. (C) **(SSC CGL 1999)**

Exp: Trees are angiospenmic plants which grow in both length and width. They are perennial plant. Age of tree is determined by its Growth ring or Annual Rings, counting of these rings called as dendrochronology. One lines usually marks the passage of one years in the life of trees.

29. Study of field crops is called

(A) Pomology (B) Agronomy
(C) Olericulture (D) Floriculture

Ans. (B) **(SSC Tax Assit. (Income Tax & Central Excise) 2005)**

Exp: Agronomy is a branch of agricultural science that deals with the study of crops and the soils in which they grow.

30. Carrot is orange in colour because

(A) It grows in the soil
(B) It is not exposed to sunlight
(C) It contains carotene
(D) The entire plant is orange in colour

Ans. (C) **(SSC Tax Assit. (Income Tax & Central Excise) 2005)**

Exp: Carrot is orange in colour because it contains pigment carotene which is partially metabolised into vitamin-A in human. Carotene is an orange photosynthetic pigment important for photosynthesis. They are also responsible for the colours of many other fruits and vegetables. For examples sweet potatoes and oranges.

31. The floral part that receives pollen-grains during pollination is

(A) ovaiy (B) style
(C) stigma (D) ovules

Ans. (C) **(SSC Combined Matric Level 2002)**

Exp: Stigma is a sticky tip of a flower pistil or carpel, on which pollen is deposited at the beginning of pollination.

32. An edible underground stem is

(A) Ginger (B) Sweet-potato
(C) Sugarcane (D) Radish

Ans. (A) **(SSC Combined Matric Level 2002)**

Exp: Underground stems are modified plant structure of stem tissues. Some structure are called as rhizome, tubes, bulbes etc eg. onion, potato, ginger, yam

33. Plants which flower only once in their life time are known as

(A) polycarpic (B) monocarpic
(C) monogamous (D) monogeneric

Ans. (B) **(SSC (10+2) Level Data Entry Operator & LDC 2011)**

Exp: Plants having flowers once in their lifetime are called monocarpic plants. These plants die after flowering.

34. In dicots the pollen-grains possess-

(A) Two germ pores (B) Three germ pores
(C) Four germ pores (D) One germ pore

Ans. (B) **(SSC Graduate Level Tier-I 2013)**

Exp: Pollen grains of monocots have one opening while pollen grains of dicots have three opening. Pollen grains can be monocolpate (having one germ pore called germinal furrow eq. Monocots), bicolpate (2 germ pore) and tricolpate (3 germ pores e.q dicots)

35. The plant from which cocoa and chocolate are obtained is a-

(A) Herb (B) Shrub
(C) Small tree (D) Very big tree

Ans. (C) **(SSC CGL Tier-I 2014)**

Exp: Chocolate and cocoa obtained from small tree of cocoa trees such as Theoroma cocoa. These trees found in tropical forests.

36. Resin is a product of

(A) Grapes (B) Coniferous trees
(C) Rubber are (D) Banyan tree

Ans. (B) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Any natural organic compound consisting of a non crystalline or viscous liquid substance called as Resin. They are formed in plant secretions and are soluble in various organic liquids but not in water. Most natural resins are excreted from trees (coniferous trees) especially pines and firs.

37. Water of coconut is

(A) Liquid nucellus (B) Liquid mesocarp
(C) Liquid endocarp
(D) Degenerated liquid endosperm

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Coconut water is the liquid clear matter inside the young green coconuts. It is also called as liquid endosperm. It contains sugars, Vitamins, minerals, proteins free amino acids and growth promoting factors.

38. Bulbils takes part in-

(A) Sexual reproduction (B) Vegetative reproduction
(C) Food storage (D) Respiration

Ans. (B) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Bulbils are small outgrowth of cells on the leaf axis or on flower stalks of the plants. It is a reproductive organ that take part in vegetative reproduction.

39. Stem is usually-

(A) Positively Phototropic
(B) Negavtively Phototropic
(C) Negativiely geotropic
(D) Positively acrotropic

Ans. (A) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Stem is the upper part of the plant they are positively phototrophic while most roots are negatively phototrophic.

40. Root hairs arise from

(A) Cortex (B) Pericycle
(C) Epidermis (D) Endoldermis

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Roots are the underground part of the plant, they are developed from epidermal cells known as trichoblasts behinds the tips of young roots.

41. The gametophyte is called prothallus in

(A) Pteriodophyta (B) Bryophyta
(C) Spermatophyta (D) Thallophyta

Ans (A) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Prothallus is usually a gametophyte stage in the life cycle of Pteridophyte (Ferns). Prothallus develope from the germinating spore, they are short lived and heart-shaped structure.

42. The best example of Polyembryony is-

(A) Cocoa (B) Capsicum
(C) Citrus (D) Cycas

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Polyembryony is the stage in which more than one embryo inside each ovule or a single fertilized egg. This process is mostly occur in citrus fruits as Lemon, Orange etc.

43. The oilseed of which plant is not edible-

(A) Sunflower (B) Cotton seed
(C) Sesamum (D) Groundnut

Ans. (B) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Cotton seed is a non edible oilseed because it contain toxic compound Gossypol found in cotton plant. Gossypol mostly affects the heart.

44. Which fruit has its seed outside?

(A) Strawberry (B) Banana
(C) Groundnut (D) Cashew nut

Ans. (A) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: The strawberry, however has its dry, yellow 'seed' on the outside (each of which is actually considered as separate fruit). The 'seed' seen on the outside of a strawberry are actually the plant's ovaries are called 'achenes'.

45. Cactus is referred to as

(A) Hydrophyte (B) Mesophyte
(C) Xerophyte (D) Epiphyte

Ans. (C) **(SSC CGL Tier -I 2014)**

Exp: Cactus is a xerophytes plant, surviving in hot and dry environments, they need little water.

46. How many neck canal cells are found in the archegonium of a fern?

(A) One (B) Two
(C) Three (D) Four

Ans. (A) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Archegonium is the female reproductive organ in fern and mosses. The upper part of the archegonium called as neck, consist of four rows of cell. The upper most of the neck cells are the neck canal cells. It has one neck canal cell with two nuclei.

47. Which angiosperm is vessel less?

(A) Hydrilla (B) Trochodendron
(C) Maize (D) Wheat

Ans. (B) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Trochodendron is a flowering plant which have secondary xylem without vessel elements which are quite rare in angiosperm.

48. Water conduction take place in mosses through

(A) Xylem and Phloem (B) Xylem
(C) Collenchyma (D) Parenchyma

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Mosses are non-vascular plant. So, xylem cells are absent. They use parenchymatous cells as conducting tissue for water

49. Sporangia bearing leaf of a fern is called

(A) Ramentum (B) Indusium
(C) Sorus (D) Sporophyll

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Sporangia are reproductive structure of fern and fern allies. They are in capsule form that produce dust like spores that are the seeds by which fern are propagated. Several sporangia grouped together are called sorus.

50. The sexual reproductive organs of aspergillus are-

(A) Spermatium and Oogonium
(B) Antheridium and Oogonium
(C) Spermatium and Ascogonium
(D) Antheridium and Ascogonium

Ans. (D) **(SSC CGL Tier-I 2016)**

Exp: Aspergillus is a fungus which have rare sexual reproduction occurs because mostly they are homothallic. They have male sex organ known as Anthredium and female sex organ is called Ascogonium.

51. The pollination of maize takes place by-

(A) Self- pollination (B) Pollination by insects
(C) Pollination by air (D) Pollination by rain

Ans. (C) **(SSC Sec. Officer 1997)**

Exp: Pollination is a process in which the pollen grains transfer to the male anther of a flower to female stigma. In maize, pollination take place by air, wind pollination is called as Anemophily.

52. Companion cells are unique to

(A) Bryophytes (B) Pteridophytes
(C) Angiosperms (D) Gymnosperms

Ans. (C) **(SSC CGL 2016)**

Exp: Companion cells are parenchyma cell present in phloem of flowering Angiospermic plant and function as seive-tube element.

53. Potato is a ?

(A) Root (B) Stem (C) Bud (D) Fruit

Ans. (B) **(SSC CGL 2016)**

Exp: Plants are divided in three parts (A) Root (B) Stem (C) Leaf. Potato is a tuber for stem because it has node and inter-node which are present in stem.

54. Mangroves are plants that have-

(A) Modified Roots (B) Modified Stems
(C) Respiratory Roots (D) Respiratory Stems

Ans. (C) **(SSC CHSL 2016)**

Exp: Mangroves are trees or shrubs that grows in salt water so they are also called as Halophytes plants. They also have respiratory roots called as Pneumatophores.

55. Which of the following plants have root nodules ?

(A) Leguminous plants (B) Parasitic plants
(C) Epiphytic plants (D) Aquatic plants

Ans. (A) **(SSC CHSL 2016)**

Exp: Root nodules are the out growth of the cells in roots due to the presence of Nitrogen fixation bacteria. Bacteria live with symbiotic relationship known as rhizobia. They occur in Leguminous plant.

56. The auxiliary buds _____.

(A) Grow endogenously from the pericycle
(B) Arise endogenously from the main growing point
(C) Is an embryonic shoot located in the axil of a leaf
(D) Arise exogenously from the epidermis

Ans. (C) **(SSC CHSL 2016)**

Exp: Auxiliary bud that grow at the axis of a leaf and is capable of developing into a branch shoot or flower cluster. They are also called as embryonic shoot.

57. Organisms that use light to prepare food are known as _____.

(A) Autotrophs (B) Heterotrophs
(C) Omnivores (D) Decomposers

Ans. (A) **(SSC CHSL 2016)**

Exp: Autotrophs are organism that are capable of synthesizing its own food from inorganic substances using light energy. Green plants and algae are the best example of Autotrophs.

58. Which of the following bears flowers?

(A) Bryophyta (B) Pteridophyta
(C) Gymnosperms (D) Angiosperms

Ans. (D) **(SSC CHSL 2016)**

Exp: Angiosperms are flower bearing plants. They develop their ovules within an enclosed ovary so they are called as true plants.

59. Parallel venation is found in _____ .

(A) Plants which are monocots
(B) Plants which have a dicot stem
(C) Plants with leaves similar to Tulsi
(D) Plants with tap roots

Ans. (A) **(SSC CHSL 2016)**

Exp: Venation is the arrangement pattern of the veins of the leaf. In parallel venation, veins are arrange parallel to each other from base to tip. Parallel venation is a characteristic feature of monocotyledons or monocot plants.

60. Which of the following is not true about Gymnosperms?

(A) Dominant phase is saprophytes
(B) Vascular bundles are absent
(C) Spores are heterospores
(D) Flowers are absent

Ans. (B) **(SSC CHSL 2016)**

Exp: Gymnosperms are vascular plants but they do not have outer covering or shell around their seed. They do not produce flowers, fruits.

61. Which of the following is not true about Angiosperms?

(A) Dominant phase is gametophytes
(B) Vascular bundles are present
(C) Spores are heterospores
(D) Seeds are covered

Ans. (A) **(SSC CHSL 2016)**

Exp: Angiosperms are flowering plant so they do not form gamete or spore, gametophytes mostly present in algae and cryptogamous plants.

62. _____ is a leaf where the leaflets are arranged along the middle vein.

(A) Pinnately compound leaf
(B) Palmately compound leaf
(C) Compound leaf (D) Simple leaf

Ans. (C) **(SSC CHSL 2016)**

Exp: In infinitely compound leaves, a row of leaflets form on either side of an extensions of the petiole called the rachis.

63. Which among the following type of trees are also called as sun loving trees?

(A) Xerophytes (B) Heliophytes
(C) Saprophytes (D) Halophytes

Ans. (B) **(SSC CPO 2017)**

Exp: Heliophytes are the types of trees which are adopted to the solar radiation. These plants are also called as 'sun loving trees'.

64. The chicory powder which is mixed with coffee powder is obtained from which of the following part of plant?

(A) Stem (B) Fruit
(C) Flower (D) Root

Ans. (D) **(SSC CPO 2017)**

Exp: Chicory powder is obtained from root of plant Cichorium intybus. It is mixed with coffee powder. It helps to cure gastro-enteritis.

65. Onion is an example of bulb, which is a modified _____.

(A) Stem (B) Root
(C) Leaf (D) Flower

Ans. (A) **(SSC CPO 2017)**

Exp: Onion is a modification of stem. Onion belongs to genus allium.

66. Potato is an example of _____.

(A) Tuber (B) Bulb
(C) Corms (D) Rhizome

Ans. (A) **(SSC CPO 2017)**

Exp: Potato is an example of tuber. Potato is the modification of stem, which helps in storage of food.

67. Which of the following is the highest source of protein?

(A) Sun flower (B) Soyabean
(C) Grams (D) Wheat

Ans. (B) **(SSC CPO 2017)**

Exp: Soyabean is the highest source of protein. It contain 26 gm of protein per 100 gms. Soyabean also contain phytic acid, dietary minerals and vitamin B.

68. Turmeric is a modified _____.

(A) Stem (B) Root
(C) Leaves (D) Fruit

Ans. (A) **(SSC CPO 2017)**

Exp: Turmeric is modified stem. The stem is distinguished by the presence of nodes and internodes, scale leaves at the nodes, axillary buds. The underground stems are of four types namely rhizome, tuber, bulb and corn.

69. Arrangement of leaves in a plant is called as _____.

(A) Phyllotaxy
(B) Phototaxy
(C) Phytotaxy
(D) Lianataxy

Ans. (A) **(SSC CPO 2017)**

Exp: Arrangement of leaves in a plants is called as phyllotaxy. The basic three types of leaf arrangement are opposite, parallel and whorled. The leaves arises from nodal region of stems.

70. Which among the following is an example of dicot seed?

(A) Rice (B) Wheat
(C) Pulses (D) Maize

Ans. (C) **(SSC CPO 2017)**

Exp: Angiosperms on the basis of their seeds are classified in two categories dicotyledons and monocotyledons. Dicotyledons are those seeds whose endosperm is divided into two cotyledons. Pulse, gram are the example of dicot seeds.

71. Wheat is a _____.

(A) Creeper (B) Herb
(C) Shrub (D) Tree

Ans. (B) **(SSC CGL 2017)**

Exp: Wheat is monocotyledon herb plant. Wheat belongs to grass famaily- poaceae. Wheat is a staple food and is grown on more land area than any other food crop. Botanical name of wheat is Tritium aestivum.

Chapter-06

Plant Physiology and Pollination

1. Which among the following elements increases the absorption of water and calcium in plants?

(A) Manganese (B) Boron
(C) Copper (D) Molybdenum

Ans. (B) **(SSC Section Officer (Audit) 1997)**

Exp: Plant nutrients are the elements that regulate the plant metabolic activity. They are of two types Micronutrients and Macron utrients. Boron is a micro-nutrient that increase the absorption of water and calcium in plants.

2. Which wood will become useless soon after exposing in the open air?

(A) Softwood (B) Fibrous wood
(C) Wet wood (D) Hard wood

Ans (C) **(SSC Section Officer (Audit) 1997)**

Exp: Wood is a porous, hard fibrous material that form by the stem and branches of a tree or shrub. Wet wood is useless soon after exposing in the open air because it absorb water and start to decaying.

3. Onion is a modified form of

(A) Leaf (B) Stem
(C) Root (D) None of these

Ans. (B) **(SSC Section Officer (Audit) 1997)**

Exp: An onion has a modified form of stem called as bulb, stem is enclosed by a covering of leaves which is underground. Nutrients for the plant are stored in the bulb.

4. Fruits of this plant are found underground :

(A) Potato (B) Carrot
(C) Groundnut (D) Onion

Ans. (C) **(SSC CGL1999)**

Exp: Groundnut is a species in the legume "bean" family Fabaceae. Its fruit grow underground as nuts or legumes.

5. All the progeny obtained from a single plant by vegetative propagation are called-

(A) Clones (B) Pure line
(C) Inbreed line (D) Pedigree line

Ans (A) **(SSC Section Officer (Audit) 09.09.2001)**

Exp: A clone is a identical copy of parents. Clone develop as a progeny from a single plant by vegetative propogation.

6. Water in plants is transported by-

(A) Cambium (B) Phloem
(C) Epidermis (D) Xylem

Ans. (D) **(SSC CPO SI 2003)**

Exp: Water in plants is transported by xylem. Xylem is a parenchymatous tube which is present in plant vascular system.

7. Rod shaped bacteria is called-

(A) Bacillus (B) Spirillum
(C) Coccus (D) Coma

Ans. (A) **(SSC CPO SI 2003)**

Exp: Bacteria occur in different sizes in the environment as Rod shaped, coccus, coma, spirillum shaped etc. Bacillus is a genus of gram (+) rod shaped bacteria.

8. Which of the following is not required for seed germination?

(A) Water (B) Air
(C) Sunlight (D) Suitable temperature

Ans. (C) **(SSC CGL 2003)**

Exp: Seed do not need sunlight for germination. However, the warmth from sunlight can create a soil environment more conductive for germination. But sunlight is more important for carbohydrate making process called Photosynthesis.

9. Which of the following foodcrops has the maximum content of proteins ?

(A) Cassava (B) Soyabean
(C) Wheat (D) Maize

Ans. (B) **(SSC Section Officer (Commercial Audit) 2003)**

Exp: Soyabean is a good source of protein. Soyabean produce significantly more protein per acre. The bean contain significant amounts of phytic acid, alpha-linolenic acid and isoflavones.

10. The source of oxygen generated during photosynthesis is :

(A) Water (B) Carbon dioxide
(C) Chlorophyll (D) Mesophyll cells

Ans. (A) **(SSC CGL 2004)**

Exp: Oxygen liberate after the splitting of water molecule into hydrogen and oxygen. In the photosynthesis this liberate oxygen in atmosphere.

11. Carbohydrate is stored in the body as

(A) Glucose (B) Starch
(C) Glycogen (D) Sucrose

Ans. (C) **(SSC Tax Asst. (Income Tax & Central Excise) 2004)**

Exp: Glycogen is a multibranched polysaccharide that serves as a form of energy storage in animals and fungi. In humans, glycogen is made and stored primarily in the cells of the liver and the muscles.

12. Which components of light are absorbed by chlorophyll ?

(A) Violet and red (B) Indigo and orange
(C) Blue and red (D) Violet and yellow

Ans. (C) **(SSC Section Officer 2005)**

Exp: Chlorophyll is a green pigment which is helpful for photosynthesis in the presence of sunlight. Chlorophyll absorbs light in red (long wavelength) and the blue (short wavelength) regions of the visible light spectrum.

13. During photosynthesis green plants absorb

(A) Nitrogen (B) Carbon dioxide
(C) Carbon monoxide (D) Oxygen

Ans. (B) **(SSC Section Officer 2005)**

Exp: Photosynthesis is the process of converting light energy to chemical energy and storing it in the bonds of sugar or Carbohydrate and liberate oxygen in atmosphere. During photosynthesis green plant absorb Carbon dioxide.

$$6CO_2+6H_2O \xrightarrow[\text{Chlorophyll}]{\text{Sunlight}} \underset{\text{(glucose)}}{C_6H_{12}O_6}+\underset{\text{(oxygen)}}{6O_2}$$

14. Quarantine regulation is concerned with-

(A) Growing of better varieties of plant
(B) Prevention of entry of diseased organism
(C) Spraying of insecticide over diseased plants
(D) Identification of diseased organism

Ans. (B) **(SSC Tax Assistant (Income Tax & Central) 2006)**

Exp: Quarantine regulation has been made by Department of Agriculture, Cooperation & Farmers welfare, that prevent the entry of diseased organism in the farming.

15. Ripe grapes contain

(A) Fructose (B) Sucrose
(C) Galactose (D) Glucose

Ans. (A) **(SSC Section Officer (Audit) 2006)**

Exp: Fructose is a simple sugar found in all ripe fruits. Ripe grapes also contain fructose sugar.

16. The enzyme in whose presence glucose and fructose are converted into alcohol is

(A) Diastase (B) Maltase
(C) Invertase (D) Zymase

Ans. (D) **(SSC CGL 2007)**

Exp: Zymase enzyme converts glucose and fructose into alcohol by Fermentation process.

17. The element which is rich in most leafy vegetables is

(A) Phosphorous (B) Zinc
(C) Iron (D) Calcium

Ans. (C) **(SSC Combined Matric Level 1999)**

Exp: Green Leafy vegetables are good source of many vitamins (Such as Vit-A, C and K and Folate) and minerals (such as iron and calcium). They are also good source of fibres.

18. Plants get water through the roots because of—

(A) Elasticity (B) Capillarity
(C) Viscosity (D) Photosynthesis

Ans. (B) **(SSC Combined Matric Level 2001)**

Exp: Plants absorbs water from their root hairs. They transport the water through xylem cells to other part of the plants. They absorb water against the gravity called as capillary action.

19. A plant with fibrous root system is :

(A) Wheat (B) Pea
(C) Mustard (D) Bean

Ans. (A) **(SSC Combined Matric Level 2002)**

Exp: Plant is divided in three part as Root, Stem and Leaf. Root is the important part of the plant that absorb the nutrient and water from soil. Fibrous root system mostly occurs in monocots or Gramineae family plant. Eg Wheat, Grass etc.

20. The part of the flower that can carry out photosynthesis is

(A) Androecium (B) Gynoecium
(C) Calyx (D) Corolla

Ans. (C) **(SSC Combined Matric Level 2002)**

Exp: Flower has divided in following four part : Calyx, Corolla Ardroecium, Gynoecium. Calyx is the outer whole part of the plant they are mostly in green color. So they take part in photosynthesis.

21. Pulses are a good source of

(A) Carbohydrates (B) Vitamins
(C) Proteins (D) Fats

Ans. (C) **(SSC Combined Matric Level 2002)**

Exp: Pulses are a good source of proteins.They are often relatively poor in the essential amino acid named as Methionine.

22. The form of carbohydrate which is synthesised in plants is

(A) Starch (B) Glucose
(C) Fructose (D) Cellulose

Ans. (B) **(SSC Combined Matric Level 2002)**

Exp: Carbohydrates are synthesized in plants by photosynthesis. Glucose as the main part of carbohydrate in plant because glucose is synthesized in photosynthesis.

23. The reagent used to test the presence of starch in leaves is

(A) Fehling's solution (B) Iodine solution
(C) Million's reagent (D) Benedict's solution

Ans. (B) **(SSC Combined Matric Level 2002)**

Exp: Iodine test used to identify the presence of starch. Iodine solution dissolved in a aqueous solution of starch producing a purple black color.

24. The gas released during photosynthesis :

(A) Carbon dioxide (B) Oxygen

(C) Carbon monoxide (D) Sulphur dioxide

Ans. (B) **(SSC Combined Matric Level 2002)**

Exp: Oxygen gas released during photosynthesis which generate after photolysis of water.

25. Carrot is a rich source of vitamin

(A) A (B) C

(C) D (D) E

Ans. (A) **(SSC Combined Matric Level 2002)**

Exp: Carrot is an extremely rich source of vitamin A. It contain carotene which is present in the form of pro-vitamin A, which has been derived from carrot. Carotene is converted in to Vitamin A by the liver and stored in our body.

26. Plants release energy during

(A) Photosynthesis (B) Respiration

(C) Transpiration (D) Germination

Ans. (A) **(SSC Combined Matric Level 2002)**

Exp: Plants release energy during photo-respiration, they trap the energy from sunlight. During the photo respiration energy release in the form of ATP.

27. Which of these is a micronutrient for plants?

(A) Carbon (B) Oxygen

(C) Nitrogen (D) Boron

Ans. (D) **(SSC Combined Matric Level 2002)**

Exp: There are 7 essential plants nutrient elements as micronutrients - Boron (B), Zinc (Zn), Manganese (Mn), Iron (Fe), Copper (Cu), Molybdenum (Mo), Chlorine (Cl). Primary function of Boron is related to cell formation and pollen germination.

28. Root nodules are commonly found in-

(A) Parasitic plants (B) Epiphytic plants

(C) Leguminous plants (D) Aquatic plants

Ans. (C) **(SSC Combined Matric Level 2006)**

Exp: Root nodules are the out growth of the cells in roots due to Leguminous bacteria. They found mostly in leguminous plant for Nitrogen fixation as symbiotic relationship eg Pea, Bean, Gram etc.

29. Which of the following metals is present in chlorophyll?

(A) Beryllium (B) Magnesium

(C) Calcium (D) Barium

Ans. (B) **(SSC Combined Matric Level 2006)**

Exp: Chlorophyll is a green pigment which in chloroplast. Magnesium is the central metal ion of the chlorophyll ($C_{55}H_{72}O_5N_4Mg$) which is essential for photosynthesis.

30. Cuscuta is a

(A) Partial stem parasite

(B) Complete stem parasite

(C) Partial root parasite

(D) Complete root parasite

Ans. (A) **(SSC Combined Matric Level 2006)**

Exp: Cuscuta is a partial stem parasite. It is a parasitic plant of yellow, orange or red colour and reduced in form of thin spirally thread like Structure. These are also called as dodder plant.

31. A potato tuber has been cut into two halves. A few drops of iodine solution are placed on the cut surface of one of the halves. What colour change will be noticed?

(A) From brown to blue-black

(B) From brown to orange-red

(C) From blue to pink

(D) From pink to blue-green

Ans. (A) **(SSC DEO 2008)**

Exp: Potato have high concentration of starch as Carbohydrate. Starch is a polymer of glucose joined by glycoside bond and branched chain of amylase Starch, due to presence of amylase react with iodine (I) and give blue color in solution.

32. Dormancy period of animals during winter season is called-

(A) Aestivation (B) Hibernation

(C) Regeneration (D) Mutation

Ans. (B) **(SSC MTS Staff 2011)**

Exp: Hibernation is a state of inactivity and metabolic depressing in some organisms to survive cold, dark winters without storage of food.Instead they turn down their metabolic activity and save energy.

33. Yellow spots on citrus leaves is due to the deficiency of-

(A) Zinc (B) Magnesium

(C) Boron (D) Iron

Ans. (B) **(SSC (10+2) Level Data Entry Operator & LCD 2011)**

Exp: Yellow spot on citrus leaves is due to deficiency of Magnesium. Magnesium is a macro plant nutrient which is necessary for plant growth.

34. A seed can germinate in the absence of

(A) Adequate light (B) Supply of oxygen

(C) Suitable moisture (D) Suitable temperature

Ans. (A) **(SSC (10+2) Level Data Entry Operator & LDC 2012)**

Exp: For germination,seed do not require any type of light. They require only oxygen, moisture, temperature for suitable germination.

35. Excess amount of absorbed water by plants is liberated out by

(A) Evaporation (B) Osmosis

(C) Diffusion (D) Transpiration

Ans. (D) **(SSC (10+2) Level Data Entry Operator & LDC 2012)**

Exp: Water absorbed by plants from moist soil and liberated in atmosphere by transpiration through pores (stomata) in the surface of plant's leaves.

36. The red, orange and yellow colours of leaf is due to-

(A) Aldehydes (B) Tannis

(C) Lignins (D) Carotenoid

Ans. (D) **(SSC MTS Staff 2013)**

Exp: Carotenoids are plant pigments responsible for bright red, yellow and orange colour in many fruits and vegetables leaf.

37. Which of the following is not an insectivorous plant?

(A) Nepenthes (B) Utricularia
(C) Droseara (D) Cuscutta

Ans. (D) **(SSC MTS Staff 2013)**

Exp: Insectivorous plants are those plants who captures and digests insects either passively or by the movement of certain organs. There are some insectivorous plant Aldrovanda, Archaeamphora, Brocchinia, Byblis, Catopsis, Dional Utricularia. Drosera, Nepenthes etc. Cuscuta is a stem parasite plant.

38. Which of the following is an insectivorus plant?

(A) Balanophora (B) Rafflesia
(C) Orobanche (D) Drosera

Ans. (D) **(SSC MTS Staff 2013)**

Exp: Explain as above question.

39. Seed dormancy is regulate by

(A) Abscisic acid (B) Gibberellic acid
(C) Indole acetic acid (D) Ethylene

Ans. (A) **(SSC MTS Staff 2013)**

Exp: Seed dormancy is defined as a state in which seeds are prevented from germination. Seed dormancy influenced by abscisic acid (ABA). But Gibberellins, Ethylene and Cytokinin break the seed dormancy.

40. In plant-water relationship, symbol 'ψ_w' is used to represent

(A) Osmotic pressure (B) Water potenial
(C) Solute potential (D) Osmosis

Ans. (B) **(SSC Graduate Level Tier-I 2013)**

Exp: Water potential quantifies the tendency of water to move from one area to another due to osmosis gravity, mechanical pressure or matrix effects such as surface tension. Water potential typically expressed by greek letter psi (ψ).

41. Membrane lipids of chill sentitive plants contain

(A) Low proportion of saturated fatty acids
(B) Low proportion of unsaturated fatty acids
(C) Equal proportion of saturated and unsaturated fatty acids
(D) High proportion of unsaturated fatty acids.

Ans. (B) **(SSC Graduate Level Tier-I 2013)**

Exp: Chill sensitive plant contain low proportion of unsaturated fatty acid. They protect plant from low temperature.

42. The curcumin is isolated from

(A) Garlic (B) Turmeric
(C) Sunflower (D) Rose flower

Ans. (B) **(SSC Graduate Level Tier-I 2013)**

Exp: Curcumin which has powerful antioxidant and anti-inflammatory properties is the most active constituent of turmeric.

43. Which of the following plant pigments absorbs in red and far-red region of light?

(A) Carotenoid (B) Chlorophyll
(C) Phytochrome (D) Cryptochrome

Ans. (C) **(SSC Graduate Level Tier-I 2013)**

Exp: Phytochrome molecule is the photoreceptor for red light responses. They are protenious molecules. It detect mainly red and far-red region of the visible spectrum and regulate germination of seeds.

44. The process through which excess of light energy is dissipated in photosynthesis is known as-

(A) Quenching (B) Scavenging
(C) Photolysis (D) Photophosphorylation

Ans. (A) **(SSC Graduate Level Tier-I 2013)**

Exp: Quenching is a process in which absorbed light energy is dissipated as heat and does not take part in photochemistry. The phenomenon is involved in photosynthesing.

45. Wilting of plants occurs due to excessive

(A) Respiration (B) Guttation
(C) Absorption (D) Transpiration

Ans. (D) **(SSC CAPF's SI & CISF ASI 2013)**

Exp: Wilting is the loss of rigidity of non-wood parts of plant. The rate of loss of water from the plant is greater then the absorption of water in the plant this process is called as Transpiration.

46. Which of the following three R's are regarded as environment friendly?

(A) Reduce, Rebuild, Restrict
(B) Random, Reduce, Recall
(C) Read, Register, Recall
(D) Reduce, Reuse, Recycle

Ans. (D) **(SSC 10+2) Level Data Entry Operator & LDC 2013)**

Exp: Reduce, Reuse and Recycle are three R's regarded as enviormental friendly.

47. Chlorophyll containing autorophic thallophytes is called as

(A) Algae (B) Lichens
(C) Fungi (D) Bryophytes

Ans. (A) **(SSC (10+2) Level Data Entry Operator & LDC 2013)**

Exp: Autotrophs are those plants who make own food as carbohydrate in the presence of sunlight. Autotrophic thallophytes are algae which have chlorophyll contain for photosynthesis.

48. 'Table sugar' is which type of sugar?

(A) Frutose (B) Galactose
(C) Glucose (D) Sucrose

Ans. (D) **(SSC (10+2) Level Data Entry Operator & LDC 2013)**

Exp: Sucrose is polymer of glucose and fructose. Sucrose is often extracted and refined from either Sugar cane or sugar beet for human consumption. This refined form of sucrose is commonly referred to as table sugar.

49. Chlorophyll contains

(A) Iron (B) Magnesium
(C) Cobalt (D) Zinc

Ans. (B) **(SSC (10+2) Level Data Entry Operator & LDC 2013)**

Exp: Chlorophyll is a green pigment which is helpful for photosynthesis. Chlorophyll contains magnesium element as central metal ions.

50. Hydroponics is a method of culture of plants without using

(A) Water (B) Light (C) Sand (D) Soil

Ans. (D) **(SSC (10+2) Level Data Entry Operator & LDC 2013)**

Exp: Hydroponics is a process in which plants grow in water, all nutrients are added in water for growth. Here we do not use any type of soil.

51. Self pollination will lead to

(A) Inbreeding (B) Rare breeding
(C) Over breeding (D) Out breeding

Ans. (A) **(SSC (10+2) Level Data Entry Operator & LDC 2013)**

Exp: Self pollination is a process in which pollen from the same flower reaches to the stigma of same flower of the same plant. Successive self pollination will lead to inbreeding depression that leads to sterility.

52. Flowers emit fragrance to:

(A) Purify air (B) Drive away flies
(C) Attract insects (D) Perform all the above

Ans. (C) **(SSC (MTS 2014)**

Exp: Emission of fragrance is an important characteristics feature of Entomophily, that is pollination of flower by insect.

53. Which of the following is not a stem modification?

(A) Bulb of Onion (B) Corm of Arvi
(C) Tuber of Sweet-potato (D) Tuber of Potato

Ans. (C) **(SSC MTS 2014)**

Exp: A modification of stem is a part of a plant which is the special feature of plant, they form special type structure or modified structure of stem as bulbs, corms, rhizomes, tubers etc., but sweet potato is an example of a tuberous root.

54. The type of fruit obtained from a multicarpellary apocarpous gynoecium is

(A) Composite (B) Aggregate
(C) Simple (D) Multiple

Ans. (B) **(SSC CGL Tier-I 2014)**

Exp: Carpel is the unit of ovary which is the female reproductive part of flower, when multiple carpals are merged called as apocarpous and form separate aggregate fruits. For example - Black berries and strawberries, samara, kiwi etc.

55. The plants which grow under water stress conditions of deserts are

(A) Epiphytes (B) Xerophytes
(C) Heliophytes (D) Sciophytes

Ans. (B) **(SSC CGL Tier-I 2014)**

Exp: Xerophytes are those plant which grow under water stress conditions of deserts. They have no stomatal opening for transpiration.

56. Where does the cabbage store food?

(A) Leaves (B) Stem
(C) Fruit (D) Scurvy

Ans. (A) **(SSC CGL Tier-I 2014)**

Exp: Cabbage or headed cabbage is a leafy green or purple biennial plant. They produce food in the leaves of the plants and would utilize short-term storage (in the leaves) for simple metabolic processes.

57. The first stable product of photosynthesis is

(A) Starch (B) Sucrose
(C) Phosphoglyeric acid (D) Glucose

Ans. (C) **(SSC CGL Tier-I 2014)**

Exp: Final product of photosynthesis is glucose but it is not stable, Three carbon compound called phosphoglyceral acid and phosphoglyceraldehyde a stable product, in C_3 Plants. same as C_4 plants the first stable product is oxaloacetate (OAA)

58. The plants which grow well, only in light are known as-

(A) Sciophilous (B) Xerophytes
(C) Heliophytes (D) Epiphytes

Ans. (C) **(SSC CGL Tier-I 2014)**

Exp: In Botany, heliophytes refer to plant that grows well only in light or bright sunlight, while those growing best in shade are known as sciophyte. Heliophytes are capable of a more efficient use of high light intensities. Example - of Heliophytes are Sugar cane sunflower and maize.

59. Phototropic movement is controlled by

(A) Auxin (B) Gibberellin
(C) Cytokinin (D) Ethylene

Ans. (A) **(SSC (10+2) Level Date Entry Operator & LDC 2013)**

Exp: Phototropism is the growth of plants which grow-well only in light. Phototropism is a response of blue wavelengths of light and effect of Auxin from the light side to dark side of the shoot, resulting quick growth in dark side and bending the shoot toward the source of light.

60. When we touch leaves of "Touch me not plant" they close these movements are called

(A) Photonastic movements
(B) Nyctinastic movements
(C) Seismonastic movements
(D) Chemonastic movements

Ans. (C) **(SSC CAPF SI, CISF ASI & Delhi 2014)**

Exp: Seismonastic movement are the responses of plants or fungi to touch, vibration, slight warning, chemical or electrical stimuli. Eg Mimosa pudica (Touch me not plant).

61. Cell becomes turgid because of

(A) Plasmolysis (B) Fish
(C) Endosmosis (D) Diffusion

Ans. (C) **(SSC CAPF SI, CISF ASI & Delhi 2014)**

Exp: Turgid is a situation of a cell when it absorb or take up water from hypotonic solution which swell the cell, this process is called as endosmosis and that cell becomes turgid.

62. The process of imbibition involves

(A) Diffusion (B) Capilary action
(C) Absorption (D) Both 1 and 2

Ans. (C) **(SSC CAPF SI, CISF ASI & Delhi 2014)**

Exp: Imbibition is a process in which water absorb from solid substance, the substance which absorb water are called as imbitant which do not dissolve in water. It is the initial step in the germination of seeds.

63. A cell increases in volume when it is placed in

(A) Hypertonic solution (B) Hypotonic solution
(C) Isotonic solution (D) None of these

Ans. (B) **(SSC CAPFs SI, CISF ASI & Delhi 2014)**

Exp: A cell increases in volume when it is placed in hypotonic solution, in hypotonic solution water rushed into membrane and increase the size of cell or volume's of the cell.

64. Translocaton of water is

(A) Apoplastic (B) Symplastic
(C) Both 1 and 2 (D) None of the above

Ans. (C) **(SSC CAPFs SI, CISF ASI & Delhi 2014)**

Exp: Translocation is the movement of materials from Leaves to other tissues throughout the plant. The transport of soluble organic substances by both symplast and apoplant function in transport within tissues and organs. Water passes into the stele through symplastic route, water passes in to the xylem through apoplastic route.

65. The kidney shaped guard cells are present in

(A) Dicot plants (B) Monocot plants
(C) Both the above (D) Algae

Ans. (C) **(SSC CAPF sSI, CISF ASI & Delhi 2014)**

Exp: Guard cells are found in stomata, they are in different size as kidney shape, dumb bell shape, comma shaped. Kidney shape guard cell mostly occur in dicot plant and dumb bell shape in monocot plants. They are helpful in gas exchange process.

66. Dumb-bell shaped guard cells are present in

(A) Groundnut (B) Gram
(C) Wheat (D) Mango

Ans. (C) **(SSC CAPFs SI, CISF ASI & Delhi 2014)**

Exp: Dumb-bell shaped guard cell are present in monocot plants. Wheat is a monocot family plant have Dumb-bell shaped guard cell.

67. Stomatal opening is based on

(A) Exosmosis (B) Endosmosis
(C) Plasmolysis in guard cells
(D) Decrease in concentration of cell sap

Ans. (B) **(SSC CAPFs SI, CISF ASI & Delhi 2014)**

Exp: Stomatal opening and closing are controlled by guard cells. In Light, guard cells take up water by endo-osmosis and become turgid. The turgidity is caused by the accumulation of K (Potassium ions) in the guard cells.

68. 2, 4-D is used as-

(A) Weedicide (B) Vitamin
(C) Fertillizer (D) Insecticide

Ans. (A) **(SSC CGL Tier- 2014)**

Exp: 2–4 Dichlorophenoxy acetic acid is wide range selective weedicide, that mostly affect broad leaf dicot plants eg, Congress grass etc. It is one of the most widely used herbicides in the world.

69. Movement of hairs in Drosera is referred to as-

(A) Heliotropism (B) Thigmotropism
(C) Photonastic (D) Sesismonastic

Ans. (B) **(SSC CAPF SI, CISF ASI & Delhi 2014)**

Exp: Thigmonasty or Thigmotropism refers to plant movement in response to touch or physical contact without regard to the direction of stimulus. Drosera is an insect eating plant with glandular hairs, which are suitable for Thigmonasty.

70. Transpiration through leaves is called as

(A) Cauline transpiration
(B) Foliar transpiration
(C) Cuticular transpiration
(D) Lenticular transpiration

Ans. (B) **(SSC CL Tier- 2014)**

Exp: Transpiration is a water loss mechanism. Most of the transpiration occurs through foliar surface or surface of leaves. It is known as foliar transpiration. Foliar transpiration accounts for over 90% of the total transpiration.

71. Process through which plants reproduce

(A) Pollination (B) Condensation
(C) Eating (D) Evaporation

Ans. (A) **(SSC GL Tier-I 2014)**

Exp: Pollination is the process of transferring pollen grain from male anther of a flower to female stigma. It is also a process of reproduction.

72. Water of coconut is-

(A) Liquid nucellus (B) Liquid mesocarp
(C) Liquid endocarp (D) Degenerated liquid endosperm

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Liquid endosperm of coconut is cocunut water on milk, In early development, it serves as a suspension for the endosperm of the coconut during their nuclear phase of development. It contains sugar, vitamins, minerals, proteins, free amino acids and growth promoting factors.

73. Root hairs arise from-

(A) Cortex (B) Pericycle
(C) Epidermis (D) Endodermis

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Root hair is a tubular outgrowth of hair-forming cell on the epidermis of a plant root. They are lateral extensions of single cell, and invisible to naked eye.

74. A Parenchyma cell which stores ergastic substance is known as-

(A) Phragmoblast (B) Idioblast
(C) Conidioplast (D) Chloroplast

Ans. (B) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Ergastic substances are non protoplasm material eg Reserve material, Secretary material. They are present in parenchymatous cells called as idioblasts eg Tannin pigments etc.

75. In cactus, the spines are the modified

(A) Stem (B) Stipulse
(C) Leaves (D) Buds

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Cactus are xerophytic plants, they mostly grow in desert. The spines on cactus are modification of leaves which help in reduction of water loss.

76. Which fruit has its seed out side?

(A) Strawberry (B) Banana
(C) Groundnut (D) Cashew nut

Ans. (A) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Strawberry is the only fruit that bear their seeds outside. The average berry is adorned with some of them. Strawberries are not true berries like blueberries or even graps. Strawberries fruits called as achenes.

77. Which one of the following is not a photosynthetic pigment?

(A) Chlorophyll (B) Phycobilin
(C) Carotenoid (D) Anthocyanin

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Photosynthic pigment are helpful in photosynthesis and make food as carbohydrate in presence of light, photosynthetic pigment as Chlorophylls (green pigment Carotenoids (red, orange, yellow pigments) and phycobillins. But anthocaynin is blue and purple color pigment they don't take part in photosynthesis.

78. The cells which are closely associated and interacting with guard cells are

(A) Transfusion tissue (B) Complementary cells
(C) Subsidiary cells (D) Hypodermal cells

Ans. (C) **(SSC CGL Tier-I 2014)**

Exp: Guard cell are present in stomata, they control the gas exchange in plant and stomatal opening. But subsidiary cells are those which support the guard cells and do not have chloroplast.

79. Conversion of starch to sugar is essential for

(A) Stomatal opening (B) Stomatal closing
(C) Stomatal formation (D) Stomatal growt

Ans. (A) **(SSC CGL 2014)**

Exp: Conversion of starch to sugar release energy in the form of ATP which are used in stomata growth opening to regulate K^+ ion channel.

80. The main function of palisade parenchyma in leaf is

(A) Antibiotics (B) Pollutants
(C) Hormones (D) Toxins

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Palisade parenchyma are present in leaf mesophyll of upper layer. It contains the cylinder shaped cells hold chloroplast and constitutes the primary area of photosynthesis that converts the light energy to chemical energy of Carbohydrate. Some toxin are also made from Carbohydrate in plant synthesis eg Nalijana, poppy etc.

81. Red rot of sugarcane is caused by-

(A) Alternaria alternata
(B) Phylopthora infestants
(C) Colletotrichum falcatum
(D) Cercospora personata

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Red Rot is a fungal disease caused by fungus Glomeralla tucumanensis or another name is Colletrotrichum falcatum. Red Rot occurs in various part of Sugarcane.

82. The maximum fixation of solar energy is done by-

(A) Protozoa (B) Bacteria
(C) Fungi (D) Green Plants

Ans. (D) **(SSC CGL Tier-I 2015)**

Exp: Green plants fix the maximum solar energy in the form of chemical energy. The maximum 20% of the input solar energy falling on leaves is utilized in photosynthesis for synthesize sugar or carbohydrate

83. Molybdenum deficiency affects the activity of

(A) All of the given options
(B) Chlorate reductase
(C) Nitrogenase (D) Nitrate reductase

Ans. (C) **(SSC CGL Tier-I 2015)**

Exp: Molybdenum is a catalytic element that is used in nitrogen fixation enzyme Nitrogenase. Nitrogen is extracted from Azotobacter. Fe-Mo complex used in Nitrogenase for nitrogen fixation.

84. Which of the following plant shows chloroplast dimorphism?

(A) Sugar beet (B) Rice
(C) Wheat (D) Sugarcane

Ans. (D) **(SSC CGL Tier-I 2015)**

Exp: Chloroplast is present in mesophyll sheath, all C_4 plants show such structural dimorphism of their chloroplasts. Sugarcane is a C_4 plant which shows chloroplast dimorphism.

85. Azolla increases soil fertility for

(A) Maize cultivation (B) Wheat cultivation
(C) Barley cultivation (D) Rice cultivation

Ans. (D) **(SSC CGL Tier-I 2016)**

Exp: Azolla is a water fern, which is used as bio-fertilizer to increase soil fertility in rice cultivation.

86. Which of the following is responsible for transport of food and other susbtances in plants?

(A) Xylem (B) Phloem
(C) Chloroplast (D) None of these

Ans. (B) **(SSC CGL Tier-I 2016)**

Exp: Transport of water, food and other nutrient from one part of a plant to another is called as translocation. While phloem transports synthesized food from leaves to the rest of the plant body same as water and mineral are transported from the roots upwards through the xylem tubes.

87. The substrate of photorespiration is

(A) Fructose (B) Pyruvic acid
(C) Glycolate (D) Glucose

Ans. (B) **(SSC CGL Tier-I 2016)**

Exp: Photorespiration takes place in chloroplast in presence of light also called as oxidative photosynthetic carbon cycle. Glycolate (glycolic acid) is the chief metabolite of photorespiration and also its substrate.

88. Which of the following bacterium causes crown gall disease in plants?

(A) Bacillus thurigiensis
(B) Agrobacterium tumefaciens
(C) Pseudomonas fluorescens
(D) None of these

Ans. (B) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Agro-bacterium tumefaciens is a gram (–) bacteria that causes crown gall disease in plants. It enter through wounds in root and stem and stimulate the plant tissues to grow in a disorganised way.

89. The elements known as primary nutrients for plants

(A) Nitrogen, Phosphorus and Potassium
(B) Nitrogen, Oxygen and Silicon
(C) Potassium, Boron and Nitrogen
(D) Nitrogen, Phosphorus and Iron

Ans. (A) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Primary nutrients are those nutrients which are most essential for growth such as Nitrogen (N), Phosphorus (P) and Potassium (K), they make up the N.P.K ratio composition of which is very important for crops.

90. Which light is least effective in photosynthesis?

(A) Blue light (B) Green light
(C) Red light (D) Sunlight

Ans. (B) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Green light is least effective in photosynthesis because plants have chlorophyll pigment which reflect the green light in photosynthesis. During photosynthesis plants produce Carbohydrate as glucose.

91. Which of the following plays an important role in photosynthesis-

(A) Chloroplast (B) Centrosome
(C) Tonoplast (D) Nematoblast

Ans. (A) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Photosynthesis is a process in which plant synthesize food in presence of green pigment chlorophyll and sunlight. Green pigment chlorophyll present in Chloroplast so they plays an important role in photosynthesis.

92. _____ is a multibranched polysacharide of glucose that serves as a form of energy storage in animals and fungi.

(A) Cellulose (B) Glycogen
(C) Pectin (D) Chitin

Ans. (B) **(SSC CHSL (10+2) Tier-I (CBE) 2017)**

Exp: Glycogen is a multibranched polysaccharide unit of glucose that serves as a form of energy storage in animal and fungi. Glycogen is analogue of starch, a glucose polymer that functions as energy storage in plants.

93. The source of oxygen in atmosphere is due to

(A) Photosynthesis (B) Excretion
(C) Nitrogen fixation (D) Respiration

Ans. (A) **(SSC MTS 2017)**

Exp: In photosynthesis oxygen liberated in atmosphere through the photolysis of water. It is the main source of oxygen in the atmosphere.

94. 'Insectivorus plant' trap insects for

(A) Nitrogen (B) Fats
(C) Vitamins (D) Carbohydrates

Ans. (A) **(SSC MTS 2017)**

Exp: Insectivores plant are those plant who trap the insects for nitrogen. Mostly insectivorous plant grow in the nitrogen deficient soil so they take nitrogen from insect.

95. Microbial degradation of nitrates into atmospheric nitrogen is known as:

(A) Ammonification (B) Nitrification
(C) Denitrification (D) Putrefaction

Ans. (C) **(SSC CGL Tier-I 2015)**

Exp: Dentrification is a biological conversion of nitrate to nitrogen gas, nitric oxide or nitrous oxide. It refers to nitrate reduction by bacterial species such as Pseudomonas and Clostridium.

96. Damping off of seedings is caused by

(A) Peronospola parasitica
(B) Albugo Candida
(C) Phytophthora infestans
(D) Pythium debaryanum

Ans. (C) **(SSC CHSL (10+2) DEO & PA/SA 2015)**

Exp: Damping off is a disease caused by a number of different pathogens that kills or weaken seeds before germination. Some of species of rhizoctonia, fusarium and phytopthora affect the seedling.

97. Transpiration increases in:

(A) Hot, dry and windy condition
(B) Hot, damp and windy condition
(C) Cool, damp and windy condition
(D) Cool, dry and still condition

Ans. (A) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Transpiration increase in hot, dry and windy condition. Transpiration mostly occur in humid condition.

98. If xylem and phloem are arranged in the same radius, such a vascular bundle is called"

(A) Collateral (B) Bicollateral
(C) Concentric (D) Radial

Ans. (A) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Vascular bundle are component of vascular tissue system in plants. They are the part of transport system in plant. They consists of two main parts as xylem and Phloem. The arrangement of xylem and phloem in different way is Radial and conjoint. Collateral is the conjoint type vascular bundle that arrange radial form.

99. Commercially valued cork is obtained from:

(A) Quercus spp (B) Cedrus Deodara
(C) Ficus (D) Cycas

Ans. (A) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Cork is phellem layer of bark tissue that harvested for commercial use primarily obtained from Quercus suber (Cork oak).

100. Intensive cultivation refers to

(A) Production with intensive use of labour
(B) Production with intensive use of fertilzer
(C) Raising production by intensive use of existing land
(D) Raising production by large scale use of imported inputs

Ans. (C) **(SSC CGL Tier-I 2016)**

Exp: Intensive farming is a kind of agriculture, in which a lot of capital and labour is used to increase the yield that can be get.

101. Which of the following statements about pholem transport is correct?

(A) Phloem transport occurs unidirectionally
(B) Gravity influences phloem transport
(C) Ca+ is the most abundantcation
(D) Sugar is transported in phloem as non-reducing sugar

Ans. (D) **(SSC CAPFs (CPO) SI & ASI, Delhi Police SI 2016)**

Exp: Phloem is a parenchymatous transport tissue that transport the food or carbohydrate from leaf to other part of plants , sugar is transported in phloem as non-reducing sugar.

102. Which of the following plant hormones are incorrectly paired?

(A) Abscisic acid-transpiration
(B) Auxins-apical dominance
(C) Cytokinins-senescence
(D) Gibberlins-bud and seed dormancy

Ans. (D) **(SSC CAPFs (CPO) SI & ASI, Delhi Police SI 2016)**

Exp: Gibberelines is a plant hormone that regulate growth and influence various developmental process such as seed dormancy flowering, sex expression etc but do not effect on budding.

103. Inhibition of photosynthesis in the high presence of O_2 in C_3 plants is called:

(A) Hexose monophosphate
(B) Pasteur effect
(C) Decker effect (D) Warburg effect

Ans. (D) **(SSC CAPFs (CPO) SI & ASI, Delhi Police SI 2016)**

Exp: The Warburg effect is the decrease in the rate of photo synthesis by high oxygen concentration. Oxygen is a competitive inhibitor of the CO_2 fixation by RuBisco which initiates photosynthesis

104. Plants which can survive in very less water are called as _____.

(A) Halophytes (B) Xerophytes
(C) Heliophytes (D) Saprophytes

Ans. (B) **(SSC CPO 2017)**

Exp: Xerophytic plants are desert plant which are adopted to survive in very less water. These plants modify their leaves to spines, which helps in reduction of water loss.

105. Guard cells surrounds _____.

(A) Nucleus (B) Stomata
(C) Golgi apparatus (D) Mitochondria

Ans. (B) **(SSC CPO 2017)**

Exp: Guard cells surround the stomata. Stomata are the tiny pores present on the upper and lower epidermis. Stomata helps in exchange of gases and transpiration. Guard cells control the opening and closing of stomata.

106. In a majority of flowering plants, out of the four megaspores, what is the ratio of functional and degenerate megaspores?

(A)2:2 (B)1:3 (C)3:1 (D)4:0

Ans. (B) **(SSC CGL 2017)**

Exp: During the formation megaspore or mother cell. Only one out of four cells gain the more nutrient and become functional cell. other three cell degenerate.

107. Opposite the micropylar end, is the _____, representing the basal part of the ovule.

(A) Hilum (B) Funicle
(C) Chalaza (D) Nucellus

Ans. (C) **(SSC CGL 2017)**

Exp: Ovule or female gametophyte develops from the megaspore mother cell. According to the symmetry of ovule, micropylar end connects the polarity with funicle and chalaza is on the opposite end.

108. Auxiliary bud develops into which of the following part of the plant?

(A) Fruit (B) Leaf (C) Branch (D) Roots

Ans. (C) **(SSC CGL 2017)**

Exp: Main stem of the plant has the nodes, internodes and auxiliary bud or later. Auxiliary bud are the embryonic shoot located in axil of leaf. Auxiliary bud results in the growth of branches.

109. Xylem helps in transportation of which of the following?

(A) Food (B) Water
(C) Nutrients (D) Both food and water

Ans. (B) **(SSC CGL 2017)**

Exp: Xylem is a type of complex permanent tissue xylem helps in transportation of water and nutrient. Xylem is composed of vessels, tracheids, xylem parenchyma and xylem fibre Xylem works against the gravity.

110. Which part of the plant gives us saffron?
(A) Roots (B) Petals
(C) Stem (D) Stigma
Ans. (D) **(SSC CGL 2017)**
Exp: Stigma is the upper part of female reproductive part of a flower, saffron is a spice and it is also used as a colouring agent in food.

111. Which of the following transports water from the roots of the plant to its leaves?
(A) Xylem (B) Phloem
(C) Both xylem and phloem
(D) Cortex
Ans. (A) **(SSC CGL 2017)**
Exp: Xylem help in transportation of water from the roots to shoots and leaves but it also transports some nutrients. Xylem is a greek word meaning "wood". it is found through hart the plant

112. Photosynthesis takes place in the presence of chlorophyll and _____.
(A) Water (B) Nutrients
(C) Carbon-dioxide (D) Sunlight
Ans. (D) **(SSC CGL 2017)**
Exp:Photosynthesis is a process by which plant prepare their food with the help of CO_2 and water in the presence of sunlight.

$$CO_2+H_2O \xrightarrow[\text{Chlorophyll}]{\text{sunlight}} C_6H_{12}O_6 + O_2$$

113. Cinnamon is obtained from which part of the plant?
(A) Stem (B) Bark
(C) Roots (D) Fruits
Ans. (B) **(SSC CGL 2017)**
Exp: Cinnamon is obtained from bark of plant Cinnamomun. Cinnamon contain the aromatic essential oil and is used as spice.

114. What is the role of Pneumatophores?
(A) Protect plant from animals
(B) Get oxygen for respiration
(C) Supports plant in standing upright
(D) Helps plant for pollination
Ans. (B) **(SSC CGL 2017)**
Exp: Pneumatophores are the aerial roots that grow out of the water surface and facilitate the aeration necessary for root respiration in hydrophytic trees such as halophytes.

115. The first formed primary xylem elements are called _____.
(A) Metaxylem (B) Protoxylem
(C) Xylem fibres (D) Xylem parenchyma
Ans. (B) **(SSC CGL 2017)**
Exp: Protoxylem are the first xylem to be develop. Protoxylem is less prominent and is develops before the plant organ has completed its growth.

116. The later (second) formed primary xylem elements are called _____.
(A) Protoxylem (B) Metaxylem
(C) Xylem parenchyma (D) Xylem fibres
Ans. (B) **(SSC CGL 2017)**
Exp: Metaxylem is the part of the primary xylem that differentiates after the protoxylem and is distinguished by broader tracheid's and vessels with pitted or reticulate walls.

117. In stems, the protoxylem lies towards the centre and the metaxylem lies towards the periphery of the organ. This type of primary xylem is called_____.
(A) Xylem fibres (B) Xylem parenchyma
(C) Exarch (D) Endarch
Ans. (D) **(SSC CGL 2017)**
Exp: Endarch xylem is the arrangement in which the proto xylem is directed towards the periphery. The development of the xylem in this arrangement follows the centrifugal pattern. It is a characteristics of the stem of flowering plants.

118. _____ are made up of sclerenchymatous cells. These are generally absent in the primary phloem but are found in the secondary phloem.
(A) Xylem fibres (B) Xylem parenchyma
(C) Phloem parenchyma (D) Phloem fibres
Ans. (D) **(SSC CGL 2017)**
Exp: Phloem fiber's (bast fibers) is the feature of dicotyledonous plants . Fibres are madeup of sclerenchymatous cells. Phloem fibers are present in secondary phloem and support the conductive cells of phloem and provide strength to the stem.

119. In roots, the protoxylem lies towards periphery and metaxylem lies towards the centre. Such arrangement of primary xylem is called _____.
(A) Xylem fibres (B) Xylem parenchyma
(C) Exarch (D) Endarch
Ans. (C) **(SSC CGL 2017)**
Exp: Exarch is the arrangement in which the protoxylem is directed towards the periphery and metaxylem towards the centre. The development of xylem in this arrangement follows the centripetal pattern. It is the characteristic feature of roots.

120. The male sex organs in a flower is the _____.
(A) Zoospores (B) Stamen
(C) Pistil (D) Chlorophyceae
Ans. (B) **(SSC CGL 2017)**
Exp: The male sex organ in the flowers is called as stamen. Stamen is comprised of filament and anther .The male sex organ is also known as androecium.

121. The female sex organs in a flower is the _____.
(A) Zoospores (B) Stamen
(C) Pistil (D) Chlorophyceae
Ans. (C) **(SSC CGL 2017)**
Exp: Female sex organs or gynoecium in a flower is also known as pistil. Pistil is comprised of stigma, style and ovaries. Ovaries contain the ovule, which get fertilised by the male spore.

Chapter-07

Ecology, Evolution Agriculture Biodivesity

1. Nutrients are recycled in the atmosphere with the help of certain microorganisms referred to as–

(A) Producers (B) Consumers

(C) Decomposers (D) None of these

Ans. (C) **(SSC (10+2), DEO&LDC 2012)**

Exp: Decomposers are microorganism that decompose the dead material into gases and nutrients. Decomposers depends on dead and decay material for their food. gases and nutrients. It is a biological process of recycling where nutrients are released free into the ecosystem.

2. The green manure is obtained from–

(A) Fresh animal excreta

(B) Decomposing green legume plants

(C) Domestic vegetables waste

(D) Oil seed husk cakes

Ans. (B) **(SSC CGL 2012)**

Exp: Green manure is formed by decomposing with leguminous plant. Leguminous plant forms the root nodules which helps in nitrogen fixation with the help of Nitrogen fixation bacteria. Thus green manure improve the soil fertility in organic farming.

3. The method which is not used as a biological control–

(A) Use of predators of a pest

(B) Pheromone traps

(C) Use of pesticides (D) Use of neem extracts

Ans. (C) **(SSC FCI 2012)**

Exp: Biological control is a method of controlling pests such as insects, mites, weeds by using the other organisms or plants. Using pesticides, insecticides are the chemical control.

4. Mushroom cultivation is not useful in–

(A) Biogas Production

(B) Biological control of crop diseases

(C) Recycling of agricultural wastes

(D) Preventing Cancer

Ans. (B) **(SSC (10+2), DEO & LDC 2012)**

Exp: Mushroom cultivation is not useful in Biological control of crop diseases. Biological control involves the manual cleaning and using other organisms or plants. Mushroom cultivation is useful in Biogas production, Recycling and cancer prevention.

5. A large number of identical plants can be obtained in a short span of time through–

(A) Large number of seeds of a single plant

(B) Stem cuttings

(C) Tissue culture technique

(D) Hydroponics method

Ans. (C) **(SSC CPO 2011)**

Exp: Tissue culture technique or totipotency is a method by which large number of clones are obtained under controlled condition and within short period of time. This Method was explained by Haberlandt in 1902.

6. Bt seed is associated with–

(A) Rice (B) Wheat

(C) Cotton (D) Oil seeds

Ans. (C) **(SSC CGL 2011)**

Exp: BT seeds are related to cotton and Brinjal. BT seeds are Genetically modified crops, produced by Bacteria Bacillus thuringienses. BT seeds produces pest resistance crops.

7. The study of field crops is called–

(A) Pomology (B) Agronomy

(C) Olericulture (D) Floriculture

Ans. (B) **(SSC Tax Asst. 2005)**

Exp: Olericulture - Science of vegetable growing.
Floriculture - cultivation of flowers and ornamental trees.
Pomology - Study and cultivation of fruits
Agronomy - Science of soil management and crop production

8. Select the biofertilizer in the following–

(A) Compost (B) Ammonium Sulphate

(C) Cattle Dung

(D) Algae and Blue-Green Algae

Ans. (D) **(SSC Tax Asst. 2005)**

Exp: Biofertilizers - are the large population of a specific beneficial living microorganism cuture for enhancing the productivity of soil. Algae and Blue green algae are used as biofertelizers because they helps in N_2 fixation.

9. Which of the following is a correct description of 'Tissue Culture'?

(A) Conservation of forests and plantation

(B) Growth and propagation of horticultural crops

(C) Science of cultivating animal tissue in artificial medium

(D) Protection of wild animals

Ans. (B) **(SSC CGL 2005)**

Exp: Plant tissue culture helps in growth and propogation of horticulture crops under sterile conditions. Tissue culture is widely used to produce clones of a plant. Tissue culture is also termed as micropropogation.

10. Natural organic fertilizers are found to be better than chemical fertilizers because–

(A) Chemical fertilizers are less productive
(B) Organic fertilizers are more productive
(C) Organic fertilizers sustain soil productivity
(D) Chemical fertilizers are toxic

Ans. (C) **(SSC Matric Level 2000)**

Exp: Organic fertilizers are derived from animal matter, animal excreta, human excreta and vegetable matters. These fertilizers increases physical and biological nutrients storage of soil and helps in soil rejuvenation.

11. The medicinal plant used in preparations for skin care is–

(A) Cinchona (B) Amla
(C) Aloevera (D) Rauwolfia

Ans. (C) **(SSC Steno. Sep. 2014)**

Exp: Aloe vera is a medicinal plant used in preparation of skin care. Aloe vera belongs to Family Asphodelacea. Aloe vera contain phytochemicals due to which is good for inflamed skin, helps in healing the wounds and rejuvenate the skin.

12. Growing more than one crop on a piece of land during the year is known as–

(A) Uni Cropping (B) Multiple Cropping
(C) Double Cropping (D) Triple Cropping

Ans. (B) **(SSC FCI 2012)**

Exp: Multiple cropping is the practice of growing two or more crops in the same piece of land simultaneously during a single growing season. It helps in increasing the food production per unit area and maintains the fertility of soil.

13. The production of alcohol from organic compounds by micro organisms is known as–

(A) Combustion (B) Fermentation
(C) Anaerobic Respiration (D) Aerobic Respiration

Ans. (B) **(SSC (10+2), LDC 2012)**

Exp: Fermentation is a process in which microorganism breaks down larger molecules into simpler ones. The process is completed by the help of enzymes. Louis Pasteur in 1857, explained it with the help of lactic acid fermentation.

14. Bio-diesel mostly produced by–

(A) Myrtaceae (B) Malvaceae
(C) Liliaceae (D) Euphorbiaceae

Ans. (D) **(SSC (10+2) 2012)**

Exp: Biodiesel is extracted from jatropha plants. Jatropha belongs to family Euphorbiaceae. It produces jatropha oil Methyl ester.

15. The enzyme that coagulates milk into curd is–

(A) Rennin (B) Pepsin
(C) Resin (D) Citrate

Ans. (A) **(SSC Steno. 2011)**

Exp: Rennin a protein digesting enzyme that coagulate milk by digesting caseinogen into insoluble casein. it is present in stomach of calf.

16. From the bark of which plant is Quinone extracted?

(A) Eucalyptus (B) Cinchona
(C) Neem (D) Cedar

Ans. (B) **(SSC (10+2) 2010)**

Exp: Quinone is obtained from Bark of cinchona plant Cinchona belongs to family Rubiaceae. Quinone drug is used in treatment of malaria.

17. Chewing gum is made from–

(A) Resin (B) Tannin
(C) Latex (D) Gum

Ans. (C) **(SSC SAS 2010)**

Exp: Latex is stable dispersion of polymer micro particle in aqueous medium. Found in nature as milky white substance is about 10% of flowering plant. It is generally exudates after tissue injury.

18. Which one of the following animal is called farmer's friend?

(A) Ant (B) Earthworm
(C) Bee (D) Butterfly

Ans. (B) **(SSC Tax Asst. 2007)**

Exp: Earthworms are called as farmer's friend. Earthworms are classifieds as decomposers which degrade the larger molecules into smaller. This makes the soil porous and helps in proper penetration of water.

19. The enzyme in whose presence glucose and fructose are converted into alcohol is–

(A) Diastase (B) Maltase
(C) Invertase (D) Zymase

Ans. (D) **(SSC CGL 2007)**

Exp: Glucose and fructose are primary unit of sugar and gets converted to alcohol by the process of fermentation. Enzyme Zymase helps in the process of conversion.

20. Butter is–

(A) Fat dispersed in milk
(B) Water dispersed in fat
(C) Water dispersed in oil
(D) Fat dispersed in water

Ans. (B) **(SSC Matric Level 2002)**

Exp: Butter is an emulsion of Butterfat (80%) and water (15%). Butter is formed by fermented cream or milk to separate Butterfat.

21. Fermentation is a process of decomposition of an organic compound by–

(A) Catalysts (B) Enzymes
(C) Carbanions (D) Free radicals

Ans. (B) **(SSC CGL 2002)**

Exp: Fermentation is a process by which organic substances are converted into Alcohol with the help of enzymes. Enzymes in the fermentation process are obtained through natural sources such as yeast or bacteria (Microbial).

22. Bone is used as a fertiliser because it contains the plant nutrient–

(A) Nitrogen (B) Phosphorus
(C) Sodium (D) Calcium

Ans. (B) **(SSC Matric Level 2002)**

Exp: Bones are the rich source of phosphorous which is a macronutrient for the plant. Bones acts as a organic fertilizers which enables plants to store and transfer energy to developing parts.

23. Bakeries use yeast in bread making because it–

(A) Makes the bread hard
(B) Makes the bread soft and spongy
(C) Enhances the food values
(D) Keeps the bread fresh

Ans. (B) **(SSC Matric Level 2001)**

Exp: Yeast and Bacteria acts as microbial fermentation, converts the organic compound into alcohol with CO_2 . With the help of yeast, bread becomes soft and spongy.

24. Which of the following is Biodegradable?

(A) Leather Belts (B) Silver Foil
(C) Iron Nails (D) Plastic Mugs

Ans. (A)

Exp: Bio-degradable are the substances or organic matter which can be broken down into Co_2, water and methane with the help of micro-organism. Eg. Leather, paper, leaves, clothes.

25. The coating of solid waste with impervious material is known as–

(A) Chemical Fixation (B) Landfill
(C) Capping (D) Encapsulation

Ans. (D) **(SSC CGL April 2014)**

Exp: Encapsulation is the process of transportation and disposal of solid waste generated in a chemical or biological events. Solid waste is coated with a thermosetting resins.

26. The rapidly growing mass of phytoplankton covering the surface water of a lake or pond is known as–

(A) Water Pollution (B) Water Hyacinth
(C) Eutrophication (D) Water Bloom

Ans. (C) **(SSC CGL April 2014)**

Exp: Eutrophication is the ageing of water bodies generally of lakes and ponds, it is the result of growing mass of phytoplankton covering the surface water of lake or pond and formation of Algal bloom which increase the BOD, this situation is also called as Hypoxia.

27. The main pollutant responsible for Bhopal Gas Tragedy is–

(A) Methyl Isocyanate (B) Bromine
(C) Chlorofluorocarbon (D) Chlorine

Ans. (A) **(SSC CGL April 2014)**

Exp: Methyl Isocyanate was the main pollutant responsible for Bhopal gas tragedy. The tragedy took place on 3rd December 1984. The pollutant leaked from Union Carbide's Bhopal plant.

28. The natural environment refers to–

(A) The living organisms and non-living objects or factors in an area undistrubed by human activity
(B) The atmosphere in a forest
(C) The plants and animals in a forest
(D) The atmosphere of an area-a forest, lake or an oceans

Ans. (A) **(SSC CGL April 2014)**

Exp: Natural environment refers to total living (Biotic) and non-living (A biotic) component in an area or environment around us.

29. Asiatic lion is now–

(A) Critically Endangered (B) Endangered
(C) Extinct in Wild (D) Vulnerable

Ans. (B) **(SSC MTS 2013)**

Exp: Asiatic Lion is an endangered animal listed in IUCN's Red Data Book.
[NOTE - In the 2016 list of IUCN, Asiatic Lions was removed from endangered list]

30. In which ecosystem, grassland is included?

(A) Marine (B) Freshwater
(C) Terrestrial (D) Artificial

Ans. (C) **(SSC CGL 2013)**

Exp: Grassland is a type of terrestrial ecosystem. It includes Savannas, Praries and Pampas Grassland consist of grass only and not the plants, due to this grasslands are less productive.

31. Which of the following agricultural practices have been primarily responsible for pollution of our water resources?

1. Use of live-stock manure
2. Use of chemical fertilizers
3. Excessive use of chemical pesticides
4. Deforestation

Select the correct answer using the codes given below

(A) 2 and 3 (B) 1, 3 and 4
(C) 1 and 2 (D) 1, 2 and 4

Ans. (A) **(SSC (10+2), DEO, LDC 2012)**

Exp: Use of chemical fertilizers and pesticides are primarily responsible for water pollution. Pesticides enters into water bodies by surface run off which increase the concentration of pesticides in water bodies and leads to 'Bio magnification'.

32. Which one of the following is an indicator of air pollution?

(A) Cycas (B) Algae
(C) Bryophytes (D) Lichens

Ans. (D) **(SSC (10+2), DEO & LDC 2012)**

Exp: Lichens are the association of Algae and Fungi. Lichens are sensitive to pollution of automobiles and industrial effluents. The absence of Lichens in an area shows the Higher level of pollution.

33. Which of the following item is not included in Environmental Auditing?

(A) Pollution monitoring schemes
(B) Scrutiny by the government agencies
(C) Safety provisions for industrial workers
(D) Storage of toxic chemicals

Ans. (B) **(SSC CGL 2012)**

Exp: Environmental auditing does not include scrutiny by government agencies. It is a tool of systematic evolution for pollution monitoring safety provision and storage of toxic chemicals

34. Which of the following does not cause pollution?

(A) Burning of petrol (B) Use of solar energy
(C) Burning of rubber (D) All of the above

Ans. (B) **(SSC CGL 2012)**

Exp: Solar energy is a non-polluted and renewable source of energy, while burning of petrol, rubber and fossil fuel cause the pollution.

35. Environmental pollution can be controlled by–

(A) Checking atomic blasts
(B) Manufacturing electric vehicles
(C) Sewage treatment (D) All of the above

Ans. (D) **(SSC (10+2), DEO & LDC 2012)**

Exp: Environmental pollution can be controlled by
- Checking atomic blast
- Pollution of automobiles and industries
- Excessive and undesirable burning of vegetarian
- Cut back in the use of fertilizers, pesticides etc.

36. Carbon Monoxide poisoning can be cured by–

(A) Exposing the affected person to fresh oxygen
(B) Eating butter
(C) Drinking lemon-water
(D) Consuming multi-vitamin tablet

Ans. (A) **(SSC (10+2), DEO & LDC 2012)**

Exp: Carbon monoxide (CO) is a odourless, colourless and a highly poisonous gas. The affected person can be cured by exposing them to fresh oxygen

37. The total number of biosphere reserves present in India are–

(A) 11 (B) 18 (C) 15 (D) 12

Ans. (B) **(SSC FCI 2012)**

Exp: Number of Biosphere reserve present in India are - 18. Biosphere reserves are ecosystem with unique flora and fauna.

38. Which of the following weed has been found useful to check water pollution caused by industrial effluents?

(A) Parthenium (B) Elephant grass
(C) Water hyacinth (D) Both 'a' and 'b'

Ans. (C) **(SSC (10 + 2), DEO & LDC 2012, MTS 2011, CGL 2005)**

Exp: Water hyacinth (Eichhornia crassipes) is an aquatic, freely, floating weed. Its growth increase tremendous times when the water gets polluted. Water hyacinth is commonly called as 'Terror of Bengal'.

39. Biodegradable wastes can usually be converted into useful substances with the help of

(A) Nuclear Proteins
(B) Radio-Active Substances
(C) Viruses (D) Bacteria

Ans. (D) **(SSC (10+2), DEO 2012, SSC MTS 2011)**

Exp: Bacteria helps in decomposing biodegradable waste by converting them from complex to simpler substance. In this process useful gases are released. Eg. Methane.

40. During winter season dormancy period of animals is called–

(A) Aestivation (B) Hibernation
(C) Regeneration (D) Mutation

Ans. (B) **(SSC MTS 2011)**

Exp: Dormancy period of animals during winter season is called as Hibernation. In hibernation, animals get deactivate and conserve energy for unfavourable period. Eg- Polar bears.

41. Greater population can be supported on the Earth only if we eat more–

(A) Mutton (B) Eggs
(C) Plant Products (D) Beef

Ans. (C) **(SSC (10+2), DEO & LDC 2011)**

Exp: Greater population can be supported on the Earth only if we eat more plant Products. Plants are the primary organism in the food chain and forms the major biomass on the earth.

42. 'Stone cancer' occurs due to–

(A) Acid rain (B) Global warming
(C) Radioactivity (D) Bacterial action

Ans. (A) **(SSC (10+2), LDC 2011)**

Exp: 'Stone cancer' occurs due to Acid rain. It is a state when marble Buildings gets eroded and fainted due to acid rain Eg. Taj Mahal due to Acid rain of SO_2.

43. Which of the following is Biodegradable?

(A) Paper (B) DDT
(C) Aluminium (D) Plastic

Ans. (A) **(SSC (10+2), DEO & LDC 2011)**

Exp: Bio-degradables are the organic matter which converted into simple form by the action of microorganism. Eg; Plants and animal products, Paper, Leaves etc.

44. Cadmium pollution is associated with–

(A) Minamata Disease (B) Black Foot Disease
(C) Dyslexia (D) Itai-Itai

Ans. (D) **(SSC (10+2), DEO & LDC 2011)**

Exp: Cadmium pollution is associated with Itai-Itai disease. It spread by contamination of Soil and water with cadmium (Cd). Disease affects the Respiratory, excretory and skeletal system in Humans.

45. In a food chain, the solar energy utilised by plants is only–

(A) 10% (B) 1% (C) 0.1% (D) 0.01%

Ans. (B) **(SSC MTS 2011)**

Exp: In a Food chain only 1% of the solar energy is used by the plants. Plants are termed as autotrophs and are primary producers, 99% of the energy lost in the environment.

46. IUCN categorised major threatened species under–

(A) 7 classes (B) 5 classes

(C) 6 classes (D) 4 classes

Ans. (D) **(SSC MTS 2011)**

Exp: International Union for Conservation and Nature categorised major threatened species under 4 classes, critically endangered, vulnerable, endangered and lower risk species. IUCN Red list of threatened species was founded in 1964.

47. The optimum dissolved oxygen level (in mg/L) required for survival of aquatic organism is–

(A) 4-6 (B) 2-4 (C) 8-10 (D) 12-16

Ans. (A) **(SSC CGL 2011)**

Exp: The optimum dissolved oxygen level required for survival of aquatic organism is 4-6 mg/L. Dissolved oxygen is the amount of oxygen available in water, which is required by living organism for various metabolic processes.

48. Which of the following represents a food chain involving a producer, a vegetarian and a non-vegetarian?

(A) Grass—Insect—Elephant

(B) Plant-Rabbit-Tiger

(C) Fish—Insect—Whale

(D) Tiger-Rabbits-Owl

Ans. (B) **(SSC MTS 2011)**

Exp: Plant-Rabbit-Tiger,this food chain involves a producer (Plant), a vegetarian (Rabbit) and a non-vegetarian (Tiger). Food chain represents a unidirectional sequence where one organism is eaten by the other.

49. According to Darwin's theory of evolution, Long Necks in Giraffes–

(A) Arose because of constant attempt to reach leaves on tall trees, generation after generation

(B) Do not give them any special advantage and is just an accident

(C) Give them advantage in finding food, because of which those with long necks survive

(D) Is a result of the special weather prevalent in African Savannah.

Ans. (C) **(SSC CPO 2010)**

Exp: Darwin's theory of Natural selection states that "heritable traits of a population gives them survival benefits". Long necks in Giraffes gives them advantage in finding food from the tall trees.

50. Which of the following branches deals with the interactions of same species of living environment?

(A) Autecology (B) Synecology

(C) Ecology (D) Palaeontology

Ans. (C) **(SSC CPO 2010)**

Exp: Ecology is the branch of science which deals with the interactions between the organism and their environment. Ecology also shows the flow of energy within the atmosphere.

51. Which of the following snakes killed for its beautiful skin has been declared an endangered species?

(A) Python (B) King Cobra

(C) Russell's Viper (D) Krait

Ans. (C) **(SSC SAS 2010)**

Exp: Russell's viper has been declared as endangered species. Russell's viper is a species of venomous snake in the family viperidae of Phylum chordate. This snake is known for its beautiful, brown spotted skin.

52. The carbon dioxide content in the air that we exhale is about–

(A) 4% (B) 8% (C) 12% (D) 16%

Ans. (A) **(SSC CPO 2008)**

Exp: Exhaled air contains 4% Carbon dioxide, produced as a waste product of energy production, while the inhaled air contains 0.04% CO_2.

53. Dinosaurs were–

(A) Mammals that became extinct

(B) Large herbivorous creatures which gave rise to hippopotamus species

(C) Egg-laying mammals

(D) Reptiles that became extinct

Ans. (D) **(SSC CGL 2008)**

Exp: Dinosaurs were reptiles that became extinct, Dinosaurs lived between 230 and 65 million years ago in Mesozoic Era. Due to the unavailability of food according to their size the Dinosaurs extinct.

54. The study of extinct animals is called–

(A) Herpetology (B) Ornithology

(C) Geology (D) Palaeontology

Ans. (D) **(SSC CGL 2007)**

Exp: The study of extinct animals is called Palaeontology. These extinct animals becomes fossil after getting buried under the earth's surface. Palaeontology helps in identifying the age of fossils.

55. Which of the following organisms is most likely to produce Green House gases such as nitrous oxide and methane?

(A) Fungi (B) Earthworm

(C) Bacteria (D) Green plants

Ans. (C) **(SSC Tax Asst. 2007)**

Exp: Bacteria produces Green House gases such as nitrous oxide and methane during the anaerobic decomposition. Anaerobic decomposition is degradation of organic waste.

56. Chocolates can be bad for healths because of a high content of–

(A) Cobalt (B) Nickel
(C) Zinc (D) Lead

Ans. (D) **(SSC Matric Level 2006)**

Exp: Chocolates can be bad for healths because of high content of lead. Lead enters into the tissue and cause the lead poisoning.

57. Human kidney disorder is caused by the pollution of–

(A) Cadmium (B) Iron
(C) Cobalt (D) Carbon

Ans. (A) **(SSC CO 2006)**

Exp: Cadmium causes the Itai-Itai disease in humans. The disease offsets the respiratory, circulatory and excretory (kidney) system. Cadmium is released from general, shipyard and construction industries.

58. Which of the following is a biodegradable waste?

(A) Wool (B) Polythene bags
(C) Plastics (D) Nylon

Ans. (A) **(SSC Matric Level 2002)**

Exp: Biodegradable are the organic substances which can be broken down into simpler form by the microorganism. Eg. wool, papers, leaves etc.

59. Which one of the following is the most sensitive indicator of the health of a community?

(A) Birth rate (B) Infant mortality rate
(C) Death rate (D) Maternal mortality rate

Ans. (B) **(SSC Matric Level 2001)**

Exp: Infant mortality rate is the most sensitive indicator of the health for a Community. Infant mortality rate is the number of infant death per 1000 lives births.

60. The animal which has become extinct recently in India happens to be–

(A) Golden cat (B) Cheetah
(C) Wooly wolf (D) Rhinoceros

Ans. (B) **(SSC SO 2001)**

Exp: The Asiatic cheetah (Acrimonyx jubatus venatilus) has become extinct recently in India. Cheetah belongs to phylum vertebrate, class mammals.

61. Why does fish die in summer season as compare to winter season? It is because of–

(A) Shortage of food (B) Concentration of toxins
(C) Depletion of oxygen (D) Spread of diseases

Ans. (C) **(SSC Matric Level 2000)**

Exp: Due to the depletion of oxygen fish die in summer season as compare to winter. In summers water gets heated fast and the affinity of oxygen molecule in water decrease.

62. The pollen grains of flowers pollinated by insects are :

(A) Smooth and dry (B) Rough and sticky
(C) Rough and dry (D) Large and showy

Ans. (B) **(SSC CGL1999)**

Exp: Pollen grains of flowers pollinated by insects are rough and sticky. They are rough so they easily land on stigma and sticky so they easily attached to the fore and hind part of insects.

63. The Theory of Evolution' was put forward by

(A) Louis Pasteur (B) Aristotle
(C) Gregor Mendel (D) Charles Darwin

Ans. (D) **(SSC CPO SI 2003)**

Exp: Theory of evolution was put forward by Charles Darwin. Evolution is the process by which organism evolved themself with in a certain period. Darwin is known the father of evolution.

64. The tallest and thickest type of grass is

(A) Alfalfa (B) Fodder
(C) Bamboo (D) Lichens

Ans. (C) **(FC1 Assit. Grade-II 2012)**

Exp: Bamboo is the tallest and thickest type of grass. Bamboo can grow up to 1 meter (over 3 feet) in 24 hrs. Bamboo are the largest members of Family Poaceae.

65. An insect - catching plant is :

(A) Australian Acacia (B) Smilax
(C) Nepenthes (D) Nerium

Ans. (C) **(FC1 Assit. Grade-III 2012)**

Exp: Nepenthes is an insect-catching plant, Commonly called as insectivorus. so they extract the N_2 from the inset and use it.

66. The best method of disposal of garbage is

(A) Vermiculture (B) Incineration
(C) Land filling (D) Burning

Ans. (C) **(SSC Combined Matric Level 1999)**

Exp: Best Method of garbage disposal is land filling. Land filling is disposal of Solid and hazardous waste. It is also termed as a tip dump, rubbish dump or garbage dump.

67. The presence of air cavities is an adaptation of

(A) Desert plants (B) Trees
(C) Water plants (D) Mesophytes

Ans. (C) **(SSC Combined Matric Level 1999)**

Exp: Presence of are cavities is an adaptation of water plants or Hydrophytes. Air cavities are present between the mesodermal layers in leaves and Stems. Air Cavities provide the buoyancy to the freely floating plants.

68. Presticides are used to destroy

(A) Micro- organisms
(B) Poisonous substances in soil
(C) Poisonous plants (D) Insects

Ans. (D) **(SSC Combined Matric Level 1999)**

Exp: Pesticides are the chemical substances that are used to destroy insects. Most common pesticide Dichloro-Diphenyl trichloroethane (DDT) was discovered by Muller in 1939.

69. Identify the correct stateme-nt with respect to Biogas.

(A) Mixture of gases from volcanoes
(B) Gas produced from certain crude oil wells

(C) Gas produced by incomplete combustion of biomass

(D) Gas produced by fermen-tation of biomass

Ans. (D) **(SSC Combined Matric Level 2000)**

Exp: Biogas is produced by anaerobic fermentation method. Slurry made up of biodegradable material such as green waste, agricultural waste and cow dung is converted into methane and CO2 with the help of anaerobic bacteria.

70. Which of the following groups of organisms reproduce faster?

(A) Algae (B) Fungi

(C) Bacteria (D) Protozoa

Ans. (C) **(SSC Combined Matric Level 2000)**

Exp: Bacteria belongs to phylum Monera are the fastest - growing organisms on Earth. Bacteria divides by the means of Binary fission.

71. The largest flightless bird which can run at a great speed is

(A) Penguin (B) Kiwi

(C) Ostrich (D) Emu

Ans. (C) **(SSC Combined Matric Level 2001)**

Exp: Ostrich is the largest flightless bird which can run at a speed of 70 km/hr. Scientific name of ostrich is Struthio camelus

72. Blue green algae are included in the group

(A) Eubacteria (B) Cyanobacteria

(C) Protozoa (D) Fungi

Ans. (B) **(SSC Const. (GD) & Rilleman 1912)**

Exp: Blue green algae are included in the group cyanobacteria. Cyanobacteria belongs to kingdom Monera. Monera are prokaryotc and unicellular organisms.

73. 'Comose' seeds are seeds with

(A) Long hairs (B) Wings

(C) Bristles (D) Hooks

Ans. (A) **(SSC Const. (GD) & Rilleman 1912)**

Exp: 'Comose' seeds are seeds with long hairs. The word comose refers to tuft of hairs. Such seeds are present in Calotropis, Gossypium (cotton) etc. Presence of hairs help the seed in easy dispersal.

74. Plants which flower only once in their life time are known are

(A) Polycarpic (B) Monocarpic

(C) Monogamous (D) Monogeneric

Ans. (B) **(SSC (10+2) Level Data Entry & Operator & LDC 2012)**

Exp: Plants which flower only once in their life time are known as monocarpic. Plant live a number of years before it flowers and then die Eg. Bamboo

75. Absence of fish along a river indicates

(A) Zone of degradation

(B) Zone of active decomposition

(C) All zones of pollution

(D) Zone of recovery

Ans. (A) **(SSC (10+2) level Data Entry & Operator & LDC 2012)**

Exp: Zone of degradation indicates the absence of fish along a river. Zone of deterioration refers to the depletion of environment resources.

76. Nutrients are recycled in the atmosphere with the help of certain micro-organsims referred to as

(A) Producers (B) Consumers

(C) Decomposers (D) None of these

Ans. (C) **(SSC (10+2) level Data Entry & Operator & LDC 2012)**

Exp: Nutrients are recycled in the atmosphere with the help of certain micro - organisms referred to as decomposers. Decomposers decompose the organic material and convert them into gases and nutrients.

77. Which one of the following plant is used to treat blood pressure?

(A) Sarpagandha (B) Neem

(C) Babool (D) Tulsi

Ans. (A) **(SSC Graduate Level Tier-I 2012)**

Exp: Sarpagandha plant is used to treat blood pressure. It also cures Insomnia, Hysteria, Hypertension, plague and fever, The common name of Sarpagandha is Black snake root. Botanical name - Rauwolfia serpentine

78. Insectivorous plants grow in soil deficient in

(A) Calcium (B) Nitrogen

(C) Magnesium (D) Water

Ans. (B) **(SSC MTS 2013)**

Exp: Insectivorous plants grow in soil where nitrogen present in deficient condition. These plant trap the insects to extract the nitrogen. Eg. Nepenthes.

79. 'Green House effect' means

(A) Cultivation of crops it green house to conserve heat

(B) Trapping of solar energy due to carbon dixodie gases

(C) Trapping of solar energy by earth upper surfaces

(D) Increases of heat due to atomospheric pollution

Ans. (C) **(SSC MTS 2013)**

Exp: 'Green House effect' is the phenomena in which the solar energy is trapped by the Earth's Atmosphere.Carbon dioxide (CO_2) and Methane are known as Green House gases.

80. 'Kyoto Protocol' an agreement singed by various countries, is associated with

(A) Clean Environment and climate change

(B) Building common food stock to save human beings from any natural disaster

(C) International Trade

(D) Deep Sea oil and Mineral Expoloration

Ans.(A) **(SSC MTS 2013)**

Exp: Kyoto Protocol is associated with clean Environment and Climate change. Kyoto Protocol is an international treaty adopted on 11 Dec 1997 in Japan. Presently 192 Countries are the parts of Protocol.

81. The International year of Biodiversity was

(A) 1996 (B) 1999

(C) 2006 (D) 2010

Ans. (D) **(SSC MTS 2013)**

Exp: The international year of Biodiversity was 2010. Biodiversity is the variability among living organism in an area with a unique flora and fauna.

82. The Primary producer in an ecosystem are:

(A) Women (B) Men

(C) Plants (D) Bacteria

Ans. (C) **(SSC Graduate Level Tier-I 2013)**

Exp: Plants are the primary producer in an ecosystem. Plants trap the solar energy for photosynthesis and forms the glucose and release the energy and O2 in the environment.

83. The polluatns which move downward with percolating ground water are called

(A) Leachates (B) Pollutates

(C) Earthites (D) Percolates

Ans. (A) **(SSC Graduate Level Tier-I 2013)**

Exp: Leaching is the percolation of solute mixed with solvents through the layers of soil leachates are the pollutants which moves downwards with ground water.

84. The Particulate Matter (PM-10) exhaled from the polluted atmosphere is often filtered out during the process of

(A) Coughing (B) Sneezing

(C) A and B (D) Urination

Ans. (B) **(SSC Graduate Level Tier-I 2013)**

Exp: Particulate matters with diameter between 2.5 and 1.0 micrometers, enters the human body through thoracic and respiratory tract. These particulate matter are often filtered out during the process of sneezing.

85. Acceptable 'Noise Pollution level' in India range between

(A) 16 - 35 dec (B) 40 - 45 dec

(C) 70 - 100 dec (D) 10 - 15 dec

Ans. (B) **(SSC Graduate Level Tier-I 2013)**

Exp: Acceptable 'Noise pollution level' in India range between 40-45 dec. The noices pollution regulation and control rules, 2000 released by CPCB has decided limits for noise level.

86. Which of the following is an endemic species?

(A) Horn bill (B) Indian Rhino

(C) Pink head duck (D) Nicobar pigeon

Ans. (A) **(SSC Graduate Level Tier-I 2013)**

Exp: Hornbill is endemic species. Endemic species are those species which are confined only to a particular region or location and are not found anywhere else in the world.

87. Transboundary pollution (or) Acid rain is an casued by:

(A) Carbon monoxide (B) Carbon dioxde

(C) Hydrocarbon

(D) Nitrogen oxide and sulphur dioxide

Ans.(D) **(SSC Graduate Level Tier-I 2013)**

Exp: Transboundary pollution or Acid rain is caused by nitrogen oxide and sulphur dioxide. They all released by the industrial effluents which get react with water molecules in the atmosphere to produce acids.

88. Human conference-1972 was held at

(A) Stockholm (B) Paris

(C) Geneva (D) Australia

Ans. (A) **(SSC Graduate Level Tier-I 2013)**

Exp: UN conference on Human Environment-1972 was an International conference held on 5-16, June, 1972 in Stockholm.

89. Which of the following is an endangered species?

(A) Black buck (B) Blue sheep

(C) Gangetic dolphin (D) Mithun

Ans. (B) **(SSC Graduate Level Tier-I 2013)**

Exp: Blue sheep is an endangered species. Endangered species are those species which has been categorised to become extinct. List of endangered species is prepared by IUCN.

90. Which of the following three R's are regarded as environment friendly?

(A) Reduce, Rebuild, Restrict

(B) Random, Reduce, Recall

(C) Read, Register, Recall

(D) Reduce, Reuse, Recycle

Ans. (D) **(SSC (10+2) Level Data Entry Operator 2013)**

Exp: Three R's regarded as environment friendly are reduce, reuse and recycle. They help in saving energy and utilized a product to its fullest extent.

91. Plant genetic material in 'Gene-Bank' is preserved at - –196°C in liquid nitrogen as

(A) Seedling and meristerm

(B) Mature and meristem

(C) Pre-mature seed high moisture

(D) Ripe fruit

Ans. (B) **(SSC MTS 2014)**

Exp: Plant genetic material in 'Gene-Bank' is preserved at -196°C in liquid nitrogen as mature and meristem breserved here. This technique is named as cryopreservation.

92. Which one of the following terms describes not only the physical space occupied by an organsim, but also its functional role in the community of organsims?

(A) Eco-niche (B) Ecosystem

(C) Ecozone (D) Habitat

Ans. (B) **(SSC MTS 2014)**

Exp: Eco-system includes all the living organism (Biotic) their present in an area and there interaction with its abiotic or non-living organism. All the living organism of an area forms the community.

93. Major pesticidal properties are present in

(A) Jatropha (B) Castor

(C) Pongamia (D) Jamun

Ans. (A) **(SSC CGL Tier-I 2013)**

Exp: Both Jatropha and Pongamia has the pesticidal properties. Scientific name of Pongamia – Pongamia pivnata. It belongs to pea family Fabaceae.

94. Green Blocks are referred to

(A) Green cover (B) Green Ministry
(C) Bio-bricks (D) Pro-biotic curd

Ans. (C) **(SSC CGL Tier-I 2014)**

Exp: Green Blocks are referred to bio-bricks. Bio-Bricks are DNA sequences which conform to restriction-enzyme assembly standard. eg:- Promoters, coding sequences etc.

95. What is farming along with animal husbandary called?

(A) Mixed farming (B) Mixed agriculture
(C) Dairy farming (D) Truck farming

Ans. (A) **(SSC CGL Tier-I 2014)**

Exp: Farming along with animal husbandry is called mixed farming. It helps in maximising the advantage of light, moisture and soil nutrients. This increase the income through different sources.

96. Vermicomposting is done by

(A) Fungus (B) Bacteria
(C) Worms (D) Animals

Ans. (C) **(SSC CGL Tier-I 2014)**

Exp: Vermicomposting is the decomposition of organic waste such as vegetable and food, into the nutrient rich organic fertilizer. It is done by the help by worms.

97. Leaving agricultural land uncultivated for some years known as

(A) Intensive farming (B) Fallowing
(C) Shifting cultivation (D) Subsistence farming

Ans. (B) **(SSC CGL Tier-I 2014)**

Exp: Leaving agricultural land uncultivated for some years is known as fallowing. It helps in rejuvenation of normal nutrients in soil. Fallowing is also known as disambiguation.

98. What is 'Biodiversity'?

(A) Many types of flora & fauna in one forest
(B) Many types of flora and fauna in many forests
(C) Many population of one sepcies in one forest
(D) All the above are true

Ans. (A) **(SSC CGL Tier-I 2014)**

Exp: Biodiversity is the variety of living organism in an area and their interactions with their environment.

99. To conserve coral reefs, the Government of India declared one of the government as Marine Park:

(A) Gulf of Kutch (B) Lakshadweep Islands
(C) Gulf of Mannar (D) Andaman Islands

Ans. (A) **(SSC CGL Tier-I 2014)**

Exp: To conserve coral reefs, the government of India declared gulf of kutch as marine Park. Coral reefs are marine ecosystem made up of calcium carbonate released by corals.

100. Green manure is obtained from

(A) Domestic vegetable waste
(B) Oil seed husk cakes
(C) Fresh animal excreta
(D) Decomposing green legume plants

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Green manure is obtained from decomposing green legume plants. Green legume has the nodules which helps in fixation of nitrogen.

101. Cultivable land is defined as

(A) Land actually under crops
(B) Cultivable waste land + fallow land
(C) Old fallow lands + current fallow lands
(D) Total fallow lands + net sown area

Ans. (D) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Cultivable land is defined as total fallow lands and net sown area. Cultivate or arable land is the land capable of being ploughed and used to grow different crops.

102. Which of the following listed is not a feature of organic farming?

(A) The non-use of chemical fertilizers and pesticides
(B) Soil is nurtured for furter used by maintaning micro-or-ganisms
(C) Use of synthetic fertilizers
(D) Very less energy consumption

Ans. (C) **(SSC CHSL (10+2) DEO & LDC 2014)**

Exp: Organic farming is the method of cultivating land and raising crops by the use of organic wastes and other biological materials. Use of synthetic fertilizers is not a feature of organic farming.

103. The resources which are obtained from bio sphere and have life are:

(A) Potential resources (B) Biotic resoures
(C) Abiotic resources (D) Renewable resources

Ans. (B) **(SSC CAPF's SI, CSIF ASI & Delhi Police 2015)**

Exp: Biotic resources are the living renewable resources included plants and animals. These are obtained from biosphere and have life for Survival.

104. Which of the following fuels causes minimum environmental pollution?

(A) Kerosene (B) Diesel
(C) Coal (D) Hydrogen

Ans. (D) **(SSC CAPFs SI, CISF ASI & Delhi 2015)**

Exp: Hydrogen fuels causes minimum environmental pollution. Hydrogen is the cleanest fuel which after burning exhausted water vapours.

105. Hind limbs thumping on ground by a rabbit is a behaviour related to

(A) Courtship (B) Preparation for a duet
(C) Warming signal to members
(D) Surrender to a stronger oponent

Ans. (C) **(SSC CAPFs SI, CISF ASI & Delhi 2015)**

Exp: Thumping of hind limbs or aggressive stomping of back feet by rabbit is peculiar animal behaviour related to warming signal to members against any fear.

106. In the grass lands, trees do not replace the gasses as a part of an ecological succession because of

(A) Limited sun light and paucity of nutrients
(B) None of the options
(C) Insect and fungi
(D) Water limits and fire

Ans. (A) **(SSC CGL Tier- I 2015)**

Exp: Ecological succession is a sequential change in an ecosystem from a community to the other, within a particular time. In a grassland region there is not enough rainfall to support a forest moreover due to the high temperature there are chances of fire.

107. B-Diversity is also known as:

(A) Within habitat diversity
(B) Ecosystem diversity
(C) Global diversity
(D) Between habitat diversity

Ans. (B) **(SSC CGL Tier-I 2015)**

Exp: B-diversity is ecosystem diversity. It includes the variation in both terrestrial and aquatic ecosystem. Biodiversity represent 3 level i.e. genetic diversity, species diversity and ecosystem diversity.

108. Competition for food, light and space is most severe in:

(A) Distantly related species growing in different habitats
(B) Closely related species growing in the same area of niche
(C) Closely related species growing in different habitats
(D) Distantly related species growing in the same habitats

Ans. (B) **(SSC CGL Tier-I 2015)**

Exp: Competion for food, light and space is most severe in closely related species growing in the same area of niche, this is termed as intraspecific compitition

109. Rotation of crops is essential

(A) For increasing the quantity of minerals
(B) For decreasing the quantity of proteins
(C) For getting different kinds of crops
(D) For increasing fertility of the soil

Ans. (D) **(SSC CGL Tier-I 2015)**

Exp: Rotation of crops is essential for increasing fertility of the soil. This is necessary because different crops use different kinds of nutrient.

110. Additional excessive amount of heat to a lake is referred to as:

(A) Refrigeration effect
(B) Green House effect
(C) Thermal pollution
(D) Heat Bloom

Ans. (C) **(SSC CGL Tier-I 2015)**

Exp: Additional excessive amount of heat to a lake is referred as thermal pollution. Thermal power plants use the water as a coolant, then this heated water eject back into the water bodies, that effect the water system and their environment.

111. Point out the incorrect pair:

(A) Green Revolution - Agriculture Development
(B) White Revolution - Dairy Development
(C) Blue Revolution - Development of Fisheries
(D) Operation Flood - Irrigation Development

Ans. (D) **(SSC CGL Tier-I 2015)**

Exp: Operational flood is related with production of milk make which made India as supreme milk production Nation. Operational flood, launched in 1970 by National Dairy development Board (NDDB) Gujarat.

112. In B.C.G Vaccine the word 'C' stand for:

(A) Calmette
(B) Cough
(C) Chlorine
(D) Cadmium

Ans. (A) **(SSC Const. (GD) 2015)**

Exp: In B.C.G. vaccine the word 'C' stand for Calmette BCG vaccine is used against tuberculosis. Calmette and Guerin discovered the vaccine in 1908, BCG vaccine was first used medically in 1921.

113. Life originated by chemosynthesis was proved in the laboratory by:

(A) Sanger
(B) Pasteur
(C) Miller
(D) Aristotle

Ans. (C) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Miller and Urey originated the theory of origin of life, this theory was experimentally proved by Oparin & Haldane. The experiment showed how amino acids could be generated from organic molecule.

114. In India, Dugong (sea cow) is found in the bioreserve site of:

(A) Gulf of Mannar
(B) Nokrek
(C) Manas
(D) Sundarban

Ans. (A) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: In India, Dugong (Sea cow) is found in the biosphere site of gulf of mannar. Biosphere reserves are the sites of unique diversity of flora and fauna.

115. Natural system of classification was propsed by _____ botanists.

(A) Indian
(B) German
(C) Swedish
(D) British

Ans. (D) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Natural system of classification was proposed by British scientist George Bentham & Joseph Hooker. They classified plants on the basis of their reproductive organs and structural organs.

116. BOD stand for:

(A) Biological oxdiation demand
(B) Biological oxygen demand

(C) Biochemical oxygen demand
(D) Biotic oxidation demand

Ans. (C) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: BOD stands for Biochemical oxygen demand. BOD is the amount of oxygen required by anaerobic and aerobic bacteria to convert the organic substance in the water bodies.

117. What do you understand by the term "Dark Fermentation"?

(A) It is a method to dispose nuclear wastes
(B) It is a method to produce methane from organic wastes
(C) It is a method to reduce COD in the atmosphere
(D) It is a method to produce Hydrogen as a fuel from waste water

Ans. (D) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Dark fermentation – is the fermentation conversion of organic substrate to form hydrogen. In this process fermentative hydrolytic micro-organism hydrodyze complex organic polymers to monomers.

118. Blue Revolution is related to:

(A) Space research (B) Poultry
(C) Drinking water (D) Fisheries

Ans. (D) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Blue revolution is related to increase the productivity of aquaculture and fishes. It was started in 1970 during fifth five year plan.

119. The most suitable soil for the production of cotton is:

(A) Black soil (B) Alluvial soil
(C) Loamy soil (D) Well drained soil

Ans. (A) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Most suitable soil for the production of cotton is Black soil it is rich in Iron, Magnesium and Aluminium, but deficient in Nitrogen. It is found in Deccan areas of Maharashtra.

120. The five key indicators of global climate change of our planet are:

(A) Antartic Sea ice, Oxygen, Rainfall, Drought and Sea level
(B) Sea-level, Rising temperature, Rainfall, Nitrogen and Arctic Sea ice
(C) Arctic Sea ice, Carbon dioxide, Global Temperature, Sea level and Land ice.
(D) None of these

Ans. (C) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: The five key indicators of global climate change of our plant are - Arctic sea ice, Carbon dioxide, global temperature, sea level and Land ice. There are total 10 indicators of global climate change in the environment.

121. Maximum oxygen is available from:

(A) Deserts (B) Green forets
(C) Grass lands (D) Phytoplanktons

Ans. (D) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Maximum oxygen is available from phytoplanktons. Phytoplanktons are freely floating aquatic plants and forms almost half of photosynthetic activity of Earth and releases oxygen.

122. The basic unit of Bisoystematics is

(A) Phenotype (B) Ecotype
(C) Florotype (D) Genotype

Ans. (B) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Ecotype is the basic unit of biosystematics. Biosystematics is the study of the variation and evolution of a population of organism in relation to their taxonomic classification.

123. What is the famous 'Chipko' movement associated with?

(A) Saving the tigers (B) Saving the wetland
(C) None of these (D) Trees

Ans. (D) **(SSC CHSL (10+2) LDC, DEO & PA/SA 2015)**

Exp: Chipko movement is associated with trees. It was started in 1983 under the leadership of Sundar Lal Bahuguna to protect environmental degradation and deforestation in Uttarakhand.

124. The tree popularly known as 'Green Gold', but which is an ecological disaster, is

(A) Banyan (B) Peepal
(C) Eucalyptus (D) None of these

Ans. (C) **(SSC (10+2) Steno Grade 2016)**

Exp: Eucalyptus tree is popularly known as 'Green Gold' but it is an ecological disaster because Eucalyptus is water intensive and reduces water availability for other crops. Eucalyptus is toxic and restrict the germination of other species.

125. In water treatment plant, use of chloramines ensures _____.

(A) Taste and odour control
(B) Weed control in reservoirs
(C) Disinfection
(D) Removal of permanent hardness

Ans. (C) **(SSC CGL Tier-I 2016)**

Exp: In water treatment plant, use of chloramines ensures disinfection. Chloramines provides long-lasting protection against the disinfection as they do not break down quickly in water pipes.

126. Which one of the following is/are correct definition of Habitat?

(A) A complex of several types of communities
(B) Natural environment of a living organsim
(C) The place where one would go find the particular living organsim.
(D) Natural environment of a living organism and the place where one would go find the particular living organsim.

Ans. (D) **(SSC CGL Tier-I 2016)**

Exp: Habitat is a natural environment of a living organism and the place where one would go find the particular living organisms. Habitat includes both biotic and abiotic factors.

127. Which of the following range of Air Pollutant Index is considered as hazardous?

(A) 301-500 (B) 201-300
(C) 101-200 (D) 401-500

Ans. (A) **(SSC CPO SI, ASI 2016)**

Exp: Air polluting or Air quality Index (AQI) is an index for reporting daily air quality. The Index has the values from 0 to 500. The value 301-500 is considered as hazardous.

128. The most serious air pollutant causing health hazard is

(A) Sulphur dioxide (B) Carbon monoxide
(C) Ozone (D) Nitrogen oxide

Ans. (A) **(SSC CGL Tier-I 2016)**

Exp: Sulphur dioxide (SO_2) is the most serious air pollutant causing health hazard. Sulphur dioxide gas is released from the industries. SO_2 reacts with substances to form harmful compounds such as sulphuric & sulphurous acids.

129. Why is Carbon Monoxide a pollutant?

(A) Reacts with haemoglobin
(B) Makes nervous system inactive
(C) It reacts with Oxygen
(D) It inhibits glycolysis

Ans. (A) **(SSC CGL Tier-I 2016)**

Exp: Carbon monoxide is a pollutant and hazardous for human beings. Haemoglobin has more affinity towards carbon monoxide than oxygen. Which replaces the oxygen from the blood and tissues.

130. The second Green Revolution aims at increasing agricultral output to promote

(A) Availability of easy credit to big farmers
(B) Co-operative farming
(C) Inclusive growth
(D) Development of rural sector

Ans. (C) **(SSC CGL Tier-I 2016)**

Exp: Second Green Revolution aims at increasing agricultural output to promote inclusions growth. Second Green Revolution was under Eleventh five year plan. It aims to meet the problems of small and marginal farmers for providing income security.

131. Rio Summit is assocaited with

(A) Convention on Biological Diversity
(B) Green house gases
(C) Ozone depletion
(D) Wet lands

Ans.(A) **(SSC CGL Tier-I 2016)**

Exp: Rio summit is associated with convention on Biological Diversity, United Nation conference on Environment and Development (UNED) started this summit from 3 to 14 June 1992 which held in Rio de Janerio.

132. The waste management technique that involves the use of micro-organism to remove or neutralize pollutants from contaminated site is called

(A) Bio sensor (B) Bio magnification
(C) Bio remediation (D) Bio concentration

Ans. (C) **(SSC CGL Tier-I 2016)**

Exp: Bio-remediation is a waste management technique that involves the use of micro-organism to remove or neutralize pollutants from contaminated site.

133. The most productive ecosystem in the biosphere is

(A) Desert (B) Open Ocean
(C) Estuary (D) Tundra

Ans. (C) **(SSC CGL Tier-I 2016)**

Exp: Most productive ecosystem in the biosphere is estuary. Estuary is a transaction zone where a river meets the sea. Here the Saltwater mixes with freshwater and promotes the growth of grasses algae and aquatic animals.

134. One of the best solutions to get rid of non-biodegradable waste is

(A) Burning (B) Dumping
(C) Burying (D) Recycling

Ans. (D) **(SSC CGL Tier-I 2016)**

Exp: Recycling is one of the best solutions to get rid of non-biodegradable waste because Non-Biodegradable substances can not be degraded in environment by natural process.

135. Which of the following is the treatment of water pollution?

(A) Bag house filter (B) Window composting
(C) Venturi (D) Reverse Osmosis

Ans. (D) **(SSC CGL Tier-I 2016)**

Exp: Reverse Osmosis is the method of treatment of water pollution. Reverse osmosis works on the principal of semipermeable membrane in which dissolved inorganic solids are removed from water. It removes the contamination dissolved in water.

136. The first protocol to ban the emissions of choloroflurocarbons in the atmosphere was made in

(A) Montreal (B) Osaka
(C) Geneva (D) Florida

Ans. (A) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Chlorofluorocarbon is a halogenated gas that is used in refrigerator. CFC depute ozone in the upper atmosphere. Montreal Protocol bann the CFC because it is harmful for ozone depletion.

137. In a rainforest, the vegetation that grows under the shade of a canopy is known as

(A) Crown (B) Cancopy
(C) Understorey (D) Forest floor

Ans. (C) **(SSC CGL Tier-I (CBS) 2016)**

Exp: The vegetation that grows under the shade of a canopy is known as understorey. A layers of plants and bushes that grows under the canopy, they are also known as shadow plants.

138. Biofortification is a

(A) Method of breeding crops to increase their nutritional value
(B) Strategy to combat unwanted nutrients in plants
(C) Method of developing resistance to insect pests
(D) Method of plant breeding for disease resistance

Ans. (A) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Bio fortification is a process by which the nutritional quality of food crop improved through agronomic practices, conventional plants breeding or modern biotechnology which increases the nutritional value.

139. Which of the following green house gases has the greatest heat trapping ability?

(A) Chlorofluoro carbon (B) Methane
(C) Carbon dioxide (D) Nitrous oxide

Ans. (C) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Green house gases occur naturally in the atmosphere such as carbon-dioxide, while others are synthetic. Those that are man-made include the Chlorofluorocarbons (CFC's), Hydroflurocarbons (HFCs) as well as Sulphur Hexafluoride (SF_6).

140. Ozone protects biosphere from

(A) X-rays (B) Gamma rays
(C) UV rays (D) Infrared rays

Ans. (C) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Ozone layer present in upper atmosphere that protect the biosphere from UV rays. UV rays affect the skin and other cancerous disease.

141. Which of the following is least likely to be an effect of global warming?

(A) Increased frequency of hurricanes
(B) Loss of fertile delta region as for agriculture
(C) Decreased rate of photosynthesis in vegetation
(D) Shrinking of the polar ice regions

Ans. (C) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Global warming is the process in which temperature of the earth's surface (both Land and Ocean) as well as atmosphere. Gradual increasing the temperature is Earth's surfaces oceans that effect the photosynthetic activity in plants vegetation.

142. Growing agricultural crops between rows of planted trees is known as

(A) Social forestry (B) Jhum
(C) Taungya system (D) Agro forestry

Ans. (C) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Taungya system is a form of agroforestry, system in which short term crops are grown in between rows of planted trees. Taungya is a Burmese word that means cultivation in the hills.

143. Biodegradable wastes can usually be converted into useful substances with the help of:

(A) Bacteria
(B) Nuclear proteins
(C) Radioactive substances
(D) Viruses

Ans. (A) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Bio-degradable waste are those waste which are degraded by bacteria in biological nature. Bacteria convert organic substance in to gases and organic fertilizers.

144. The impact of Green Revolution was left most in the case of

(A) Wheat (B) Rice
(C) Pulses (D) Oil seed

Ans. (A) **(SSC CGL Tier-I (CBS) 2016)**

Exp: Green Revolution in India, was a period when the productivity of global agricultural increase drastically as result of new advance was a very important period in agriculture history.

145. The largest source of pollution in the world is

(A) Herbicides and insecticides
(B) Automobile exhausts
(C) Sewage and garbage
(D) Industrial effluents

Ans. (C) **(SSC CGL 2016)**

Exp: The presence of any substance that is harmful or poisonous to the environment called pollution. Sewage and garbage are largest source of pollution in the world. Sewage and garbage consist industrial waste and human waste or surface run off from rainwater.

146. Acid rain is caused due to pollution of atmosphere by-

(A) Oxides of nitrogen and sulphur
(B) Oxides of nitrogen and phosphorous
(C) Oxides of carbon and nitrogen
(D) Oxides of nitrogen and methane

Ans. (A)

Exp: Acid rain caused by the chemical reaction of nitrous oxide and sulphur dioxide in the atmosphere. Acid Rain usually has pH between 4.2 and 4.4.

147. Global warming is expected to result in-

(A) Increase in sea level
(B) Change in crop pattern
(C) Change in coastal line
(D) All of these

Ans. (D)

Exp: Global Warming is a climate change process which affect some natural phenomenon as change crop pattern, change in coastal line, increases red level due to rise the average temperature of Earth's climate.

148. Why Carbon Monoxide is a pollutant?

(A) Reacts with haemoglobin
(B) Makes nervous system inactive
(C) It reacts with Oxygen
(D) It inhibits glycolysis

Ans. (A)

Exp: Carbon Monoxide is a gas which enter in to blood stream and react with haemoglobin on the binding site of CO_2. CO released from automobiles and industry. CO bind to haemoglobin and from stable compound carboxyl hemoglobin (HbCO).

149. Which one of the following weeds is effective in controlling water pollution caused by industrial effluents?

(A) Parthenium (B) Elephant grass
(C) Water hyacinth (D) Mogar grass

Ans. (C)

Exp: Water hyacinth is a floating aquatic plant which is used in wastewater treatment as an adsorbent for textile effluent treatment.

150. Sullage water is _____

(A) Waste water released from kitchen
(B) Waste water released from toilets
(C) Waste water released from factories
(D) waste water released from hospitals

Ans. (A)

Exp: Sullage water is a waste water released from households or office buildings from streams without fecal contamination. It is also called as Grey water.

151. Chernobyl disaster is the result of pollution by_____.

(A) Oil spill (B) Acid rain
(C) Carbon dioxide (D) Radioactive waste

Ans. (D)

Exp: Chernobyl Nuclear Power plant near Pripyat in Ukraine (USSR). Chernobyl disaster was a catastrophic nuclear accident. It occurred on 26 April 1986. So it cause the Ratioactive waste pollution.

152. The most productive ecosystem in the biosphere is

(A) Desert (B) Open Ocean
(C) Estuary (D) Tundra

Ans. (C)

Exp: Estuary is a enclosed body of water where river water and ocean water meet or mixed. So Estuary ecosystem is very productive ecosystem.

153. The tree species most commonly used in social forestry is

(A) Peepal (B) Gulmohar
(C) Eucalyptus (D) Mango

Ans. (C)

Exp: Social forestry means management and protection of forest for the purpose of helping environmental, social and rural development. First used in 1971 by National commission on Agriculture Govt. of India. Eucalyptus commonly used in social forestry in India.

154. One of the best solutions to get rid of non biodegradable waste is

(A) Burning (B) Dumping
(C) Burying (D) Recycling

Ans. (D)

Exp: Non-biodegradable wastes are not decomposed by biological agents. So they are used as recycling process.

155. In bio fortification technique plant breeders use breeding to overcome

(A) Loss due to insect pests
(B) Decrease in food production
(C) Deficiencies of micro nutrients and vitamins
(D) Loss due to plant diseases

Ans. (C)

Exp: Bio-fortification is a technique by which the nutritional quality of food crops is improved through agronomic prefaces by plant breeding or modern biotechnology. To overcome the deficiencies of micro-nutrients and vitamins.

156. Nitrification is the biological process of converting

(A) N_2 into nitrate (B) N into nitrite
(C) Ammonia into nitrite (D) Ammonia into N_2

Ans. (C)

Exp: Nitrification is a biological process of converting to ammonia or ammonium (NH_3) to nitrite (NO_3). It is a oxidation process. Nitrification is an important process in Nitrogen cycle.

157. Which of the following produces the most solid waste?

(A) Agriculture waste (B) Power Plants
(C) Manufacturing (D) Packaging Industry

Ans. (C)

Exp: In the manufacturing process most solid wasted are generated.

158. Spraying of DDT on crops causes pollution of _____.

(A) Air & Soil (B) Crops & Air
(C) Soil & Water (D) Air & Water

Ans. (C)

Exp: DDT (Dichloro-Diphenyl Trichloro ethane) is an insecticidal used on crops. It was also used during the WW II to control civilians and troops. Muller a chemist discovered it and got Nobel Prize. DDT get dissolve in soil & water and cause pollution.

159. Which of the following region in India is now regarded as an "Ecological Hot Spot"?

(A) Western Himalayas (B) Eastern Himalayas
(C) Western Ghats (D) Eastern Ghats

Ans. (C)

Exp: Ecological Hotspot is a natural environment with high biodiversity that contain a large number of endangered species. Western Ghat in India is a region as Hot spot.

160. The waste management technique that involves the use of micro-organisms to remove or neutralize pollutants from contaminated site is called

(A) Bio sensor (B) Bio magnification
(C) Bio remediation (D) Bio concentration

Ans. (C)

Exp: Bio-remediation is a biological process in which we use micro organism to remove or neutralize pollutants from contaminated site.

161. Who is known as the Father of Green Revolution' in India?

(A) G. Paul (B) Norman Borlaug
(C) Van Neil (D) Dr. Mithchell

Ans. (B)

Exp: Green Revolution - revolution means drastically change in system, during the green revolution high-yielding varieties (HYVs) of cereals especially dwarf wheat and rice variety were introduced. Norman Borlaug is known as the father of Green Revolution and received the Nobel Peace in 1970.

162. Which of the following is the world's top environmental conservation award?

(A) Golden Bear Award (B) Golden Panda Award
(C) Golden Globe Award (D) Golden Palms Award

Ans. (B)

Exp: World's Top environmental conservation award is Golden Panda Award created by World Wide Fund for Nature.

163. Which of the following is least likely to be an effect of global warming?

(A) Increased frequency of hurricanes
(B) Loss of fertile delta region as for agriculture
(C) Decreased rate of photosynthesis in vegetation
(D) Shrinking of the polar ice regions

Ans. (C)

Exp: Due to the Global Warming the temperature of the atmosphere increases that effect on climate, precipitation level rising, melting the glaciers or shrinking of the polar ice regions.

164. Algal bloom results from

(A) Global warming (B) Salination
(C) Eutrophication (D) Biomagnification

Ans. (C)

Exp: Algal bloom or uncontrolled growth of algae in either freshwater or marine environments is the resultant fo enrichment of nutrients in the habitat. This causes abundnt growth of phytoplanktons . The process is also known as eutrophication.

165. Lichen is an association between which of the two?

(A) Algae and fungus (B) Algae and tree
(C) Fungus and tree (D) Bacteria and legume plant

Ans. (A)

Exp: Lichen is a composite organism that arises from symbiosis of algae and fungi. Lichen may have tiny, leafless branched, flacks that lie on the surface like plants. They produce their own food by photosynthesis.

166. _____ is the number of individuals of the same species that have come into the habitat from elsewhere during the time period under consideration.

(A) Natality (B) Mortality
(C) Immigration (D) Emigration

Ans. (C) **(SSC CGL 2017)**

Exp: Immigration

167. Which among the following is the major cause of acid rain?

(A)Carbon dioxide (B)Carbon monoxide
(C)Nitrogen dioxide (D)Oxygen

Ans. (C) **(SSC CGL 2017)**

Exp: Major cause of acid rain are sulphur dioxide and nitrogen dioxide released from the industries. These acids reacts with water molecule to produce acid .

168. Which of the following is an artificial ecosystem?

(A) Aquarium (B) Zoo
(C) Sanctuary (D) National Park

Ans. (A) **(SSC CPO 2017)**

Exp: Artificial ecosystem is made and controlled by humans. It mimic a natural ecosystem but less complex. Aquarium is an example of artificial ecosystem.

169. Identify correct type of food chain:

Dead animal → Maggots → Frog → Snake
(A) Decomposer food chain
(B) Detritus food chain
(C) Grazing food chain (D) Parasitic food chain

Ans. (B) **(SSC CPO 2017)**

Exp: There are two types of food chain available environment: Grazing food chain and Detritus food chain. Detritus food chain has the decomposer or dead animal at the primary or first trophic level.

170. In which of the following ecosystem pyramid of biomass is upright?

(A) Pond ecosystem (B) Grassland ecosystem
(C) Fresh water ecosystem (D) Forest ecosystem

Ans. (B) **(SSC CPO 2017)**

Exp: Pyramid of biomass represent the mass of living material in each organism available at a trophic level. Pyramid of Biomass is always upright.

171. Which of the following is non-biodegradable?

I. Glass II. Cotton
III. Paper
(A) Only I (B) I and III
(C) II and III (D) I, II and III

Ans. (A) **(SSC CPO 2017)**

Exp: Non-biodegradable are those substances which cannot be decompose by bacteria and are not converted into environment naturally. Glass, leather, polythenes are non-biodegradable substances.

172. In which of the following ecosystem, benthic zone is found?

(A) Fresh water ecosystem
(B) Salt water ecosystem
(C) Tundra Ecosystem (D) Forest Ecosystem

Ans. (B) **(SSC CPO 2017)**

Exp: Benthic zone is the ecological regions of a water body. Organisms living in this zone are called as benthos. Benthic zone are found in salt water ecosystem.

173. What was the main aim of Basel Convention?
(A) Protection of Ozone layer
(B) Bio-diversity Conservation
(C) Global Warming (D) Climate Change
Ans. (B) **(SSC CPO 2017)**
Exp: Basel convention aims at the Bio diversity conservation and the control of transboundary movements of hazardous waste and their disposal. It was signed by 184 countries and European union on 22 March 1989.

174. What was the main aim of Kyoto Protocol?
(A) Conservation of wetlands
(B) Bio-diversity Conservation
(C) Global Warming (D) Climate Change
Ans. (C) **(SSC CPO 2017)**
Exp: Kyoto protocol is an international agreement under UNFCCC. It was signed on 11 Dec. 1997 in Kyoto, Japan. It aims to observe the CO_2 emissions from different country which leads to global warming. Global warming is the heating of earth's atemosphere.

175. If in any water Body, there is high BOD value then it is generally _____.
(A) Very clean (B) Very polluted
(C) Highly productive (D) Highly unproductive
Ans. (B) **(SSC CPO 2017)**
Exp: BOD is Biochemical Oxygen Demand. It is the amount of oxygen required by aerobic bacteria to convert the inorganic substances in aquatic system. For any water body high BOD value shows the very polluted water body.

176. Which of the following ecosystem has highest bio-mass?
(A) Desert Ecosystem
(B) Fresh water Ecosystem
(C) Tundra Ecosystem (D) Forest Ecosystem
Ans. (D) **(SSC CPO 2017)**
Exp: Biomass is the total mass of living material present in trophic level. Forest ecosystem with vast flora and fauna has highest bio-mass.

177. Which among the following is not a Biotic component of environment?
(A) Parasites (B) Decomposers
(C) Non-Green plants (D) Soil
Ans. (D) **(SSC CPO 2017)**
Exp: Biotic components are the living organisms of the environment. Decomposers are present in soil which helps in decmposing organic material. Eg. of decomposers are bacteria, fungus or invertebrate Soil is an abiotic factor.

178. Which of the following is an abiotic component of environment?
(A) Green plants (B) Non-green plants
(C) Decomposers (D) Gravity
Ans. (D) **(SSC CPO 2017)**
Exp: Abiotic are the non-living component of environment. Gravity is an abiotic component.

179. Which among the following is an Abiotic component of environment?
(A) Green plants (B) Non-Green plants
(C) Water (D) Parasites
Ans. (C) **(SSC CPO 2017)**
Exp: Water, air, sunlight, gravity, temperature are the abiotic component of environment. Abiotic are non-living component of environment.

180. Which of the following is a biotic component of environment?
(A) Energy (B) Radiation
(C) Water (D) Green plant
Ans. (D) **(SSC CPO 2017)**
Exp: Green plants and animals are the biotic or living component of environment.

181. Which of the following represents the most complex trophic level?
(A) Community (B) Population
(C) Ecosystem (D) Species
Ans. (C) **(SSC CGL 2017)**
Exp: Ecosystem is the assemblage of living (biotic) component and non-living (abiotic) component of an environment. Ecosystem represents the interspecific and intraspecific relationship of species with other species and with their environment.

182. Red data book contains data of which of the following?
(A) All plant species (B) All animal species
(C) All endangered species (D) All extinct species
Ans. (C) **(SSC CGL 2017)**
Exp: All endangered species belong to red data book. It is a kind of recording book of rare and endangered plants, animals and fungi. it helps us to provide complete information for research, studies and also for monitoring of species.

183. Which of the following three R's are regarded as environment friendly?
(A) Reduce - Reuse - Recycle
(B) Reduce - Reuse - Reutilize
(C) Recollect - Reuse - Reutilize
(D)Reduce - Renew - Reutilize
Ans. (A) **(SSC CGL 2017)**
Exp: Reduce-Reuse - Recycle are three R's regarded as environment friendly.

184. Who was the pioneer of Chipko movement of 1973?
(A) Sambaji (B) Baba Amte
(C) Sunderlal Bahuguna (D) Medha Patkar
Ans. (C) **(SSC CGL 2017)**
Exp: Chipko movement was started by Sunderlal Bahuguna in 1973 in the Garhwal district of Uttarakhand. The movement was started againt deforestation.

185. What is full form of BOD?
(A) Biological Oxygen Deficit
(B) Biological Oxygen Difference
(C)Biological Oxygen Demand
(D) Biological Oxygen Distribution
Ans. (C) **(SSC CGL 2017)**
Exp: BOD stands for Biological oxygen Demand. It is the amount of oxygen dissolved in water required by aerobic bacterias to break down the organic material present in water body.

186. Any undesirable change in physical, chemical or biological characteristics of air, land, water or soil is called?

(A) Greenhouse effect (B) Solid wastes
(C) Pollution (D) Deforestation

Ans. (A) (SSC CGL 2017)

Exp: Ecosystem is a biological community of interacting organisms and their physical environment. Ecosystem include all the living organism with their non living environment.

187. Presence of large amounts of nutrients in waters also causes excessive growth of _____ algae.
(A) Biomag nification (B) Algal bloom
(C) Planktonic (D) Eutro phication

Ans. (D) (SSC CGL 2017)

Exp: Planktonic are the freely floating aquatic organism. The excessive growth of these planktonic algae is the result of nutrients in water. The excessive amount of these nutrient results in the eutrophication of water bodies.

188. Which one of the following is not a Major Abiotic Factors?
(A) Temperature (B) Water
(C) Light (D) Air

Ans. (D) (SSC CGL 2017)

Exp: Abiotic factors are non-living component of the environment. Temperature, light and water are abiotic factor, but their amount in environment is major factor which helps in germination of seed. Air is not a major abiotic factor.

189. According to Central Pollution Control Board (CPCB), particulate size _____ micrometers or less in diameter are responsible for causing the greatest harm to human health.
(A) 0.5 (B) 2.5 (C) 5 (D) 10

Ans. (B) (SSC CGL 2017)

Exp:Central pollution control board (CPCB) is an organistion under the ministry of Environment, Forest and climate change. Particulate size 2.5 micrometers or less are harmful to human health, as they easily enters through nasal and earl passage.

190. _____ is the number of deaths in the population during a given period.
(A) Natality (B) Mortality
(C) Immigration (D) Emigration

Ans. (B) (SSC CGL 2017)

Exp: Mortality is the number of deaths in population in a particular period of time

191. _____ is the most ecologically relevant environmental factor.
(A) Water (B) Temperature
(C) Light (D) Soil

Ans. (B) (SSC CGL 2017)

Exp: Temperature is one of the abiotic factor or non-living component of the environment. Ecologically temperatrue is the most relevant environmental factor.

192. A few organisms can tolerate and thrive in a wide range of temperatures. Such organisms are called _____.
(A) Osmotic (B) Eurythermal
(C) Stenothermal (D) Hydrothermal

Ans. (B) (SSC CGL 2017)

Exp: Eurythermals are those organisms who can tolerate a wide range of temperature. Stenothermals are the organisms who have a narrow range of temperature adaptibility.

193. A few organisms can tolerate and thrive in a narrow range of temperatures. Such organisms are called _____.
(A)Osmotic (B)Eurythermal
(C)Stenothermal (D)Hydrothermal

Ans. (C) (SSC CGL 2017)

Exp: A few organisms only capable of living or surviving within a narrow temperature range stentotherm is a Greek word:- "stenos-narrow' and 'therme-heat'. These animals are called stenothermal animal.

194. _____ refers to the number of births during a given period in the population that are added to the initial density.
(A) Natality (B) Mortality
(C) Immigration (D) Emigration

Ans. (A) (SSC CGL 2017)

Exp: Natality is the number of birth per 1000 persons in a particular period of time.

195. Through photosynthesis at least a half of the total carbon dioxide fixation on earth is carried out by?
(A) Pteridophytes (B) Bryophytes
(C) Algae (D) Gymnosperms

Ans. (C) (SSC CGL 2017)

Exp: Photosynthesis is the process by which plants use the energy from sunlight to produce sugar. Algae are vital to the global cycle of nutrients such as carbon and oxygen. They remove carbon dioxide from the atmosphere and generate over half of the global oxygen supply.

196. _____ is the interaction in which one species benefits and the other is neither harmed nor benefited.
(A) Predation (B) Commensalism
(C) Competition (D) Parasitism

Ans. (B) (SSC CGL 2017)

Exp: Commensalism is a type of inter specific positive relationship in which one species is benefited and the other is neither harmed nor benefited.

197. _____ is any attribute of the organism (morphological, physiological, behavioural) that enables the organism to survive and reproduce in its habitat.
(A)Adaptation (B)Migration
(C)Conformation (D)Regulation

Ans. (A) (SSC CGL 2017)

Exp: Adaptation is an attribute of the organism that enables them to survive and reproduce in its habitat.

198. Many freshwater animals cannot live for long in sea water and vice versa because of the _____ problems, they would face.
(A) Osmotic (B) Eurythermal
(C) Stenothermal (D) Hydrothermal

Ans. (A) (SSC CGL 2017)

Exp: Marine freshwater animals (fishes) cannot live for long in sea water, because of osmostic problems. The body of fishes contains a relatively lower concentration of salt than ocean water. Osmosis causes the fish to constantly lose water in order to equalize salt concentration inside and outside the fish.

Chapter-01

Classification of Animal Kindgom

1. A contemporary of Charles Darwin who came to the same conclusion in the matter of organic evolution was–

(A) Jean Baptist Lamarck
(B) Thomas Huxley
(C) Alfred Russel Wallace
(D) Franklin Benjamin

Ans. (C) **(SSC CGL 2014)**

Exp: Alfred Russell Wallace was a British naturalist and was a contemporary of Charles Darwin, Both came to the same conclusion on the matter of organic evolution. This was announced by Linnaean society, on July 1, 1958. Organic evolution is defined as the change in organism with respect to their environment.

2. Panda belongs to the same family as that of–

(A) Whale (B) Bear
(C) Kangaroo (D) Porcupine

Ans. (B) **(SSC CISF.ASI 2013)**

Exp: Panda and Bear belongs to the family – Ursidae. Scientific name of Panda is – Ailuropoda melanoleuca Panda is a native to south central china. Panda survive on the diet of Bamboo. Both Bear and Panda are listed in the IUCN'S endangered list.

3. The largest invertebrate is a/an–

(A) Sponge (B) Mollusca
(C) Arthropoda (D) Echinodermata

Ans. (B) **(SSC CGL, 2012)**

Exp: The largest invertebrate belongs to the phylum mollusca. Giant squid (Architeuthis dux) can grow up to the length of 59^{ft} belongs to phylum mollusa. In terms of number of organism mollusca is the second largest phylum after Arthropoda.

4. What is a sponge?

(A) A fossil (B) A plant
(C) An animal (D) A fungus

Ans. (C) **(SSC (10+2) 2012)**

Exp: Sponge is an aquatic animal, belong to phylum-poriferea. Organism bear pores called as ostia and osculum in neck region of these organism. They have a canal system as they need continuous current of water flowing through their bodies for respiration, excretion, nutrition and reproduction.

5. Normally, animals can change the place, but which one of the following animals cannot change the place?

(A) Starfish (B) Sponge
(C) Hydra (D) Leech

Ans. (C) **(SSC (10+2) 2012)**

Exp: Animals which cannot change their place are termed as sessile or sedentary. Hydra belongs to phylum Cnideria and class Hydrazoa. It is a immobile aquatic organism resides on a substratum.

6. Which of the following is a true fish?

(A) Silverfish (B) Starfish
(C) Dogfish (D) Shellfish

Ans. (C) **(SSC CGL, 2012)**

Exp: Dog fish is a true fish. It belongs to the family of sharks and phylum Chordata. Common name of dog fish is Scoliodon and scientific name is Squalus acanthias Dogfish is in the list of IUCN as an vulnerable organism.

7. Which of the following Amphibian lacks tongue?

(A) Sphenodon (B) Salamander
(C) Ichthyophis (D) Necturus

Ans. (C) **(SSC (10+2) Exam, 2012)**

Exp: Ichthyophis belongs to class Amphibia of phylum Chordata. These are limbless and tongue less organism, lives in moist soil and lead a burrowing life. It is an elongated organism and can measure up to 30 cm in length.

8. The commonest mammal is–

(A) Elephant (B) Lion
(C) Man (Homosapiens) (D) Panther

Ans. (C) **(SSC FCI 2012)**

Exp: The commonest mammal on earth is man. Scientific name of man is Homo sapiens. Man belongs to the class mammal of phylum vertebrate.

9. Which is the only mammal that can fly?

(A) Whale (B) Bat
(C) Hen (D) Lizard

Ans. (B) **(SSC FCI Exam, 2012)**

Exp: Despite being a mammal bat can fly. Wings of bats are the modification of tetrapod forelimbs, Bats belong to the order- Chiroptera, this is the second largest order of mammals.

10. Which of the following is a monogenetic parasite?

(A) Hydra (B) Fasciola
(C) Ascaris (D) Earthworm

Ans. (C) **(SSC FCI Exam, 2012)**

Exp: Monogenetic parasites are those organisms who complete thier life cycle in single host. Ascaris lumbricoides belongs to phylum Nematoda completes its life cycle in the small intestine of human beings.

11. Columba Livia is the scientific name of–

(A) Pigeon (B) Snake
(C) Rabbit (D) Shark

Ans. (A) **(SSC FCI 2012)**

Exp: Pigeon is a member of class-Aves in phylum-Chordata. It is an intelligent bird with unique feature of making crop, i.e., secretion from the lining of the crop of parents birds that is regurgitated to young birds (milk).

12. The process of preventing the birds from flying is called–

(A) Brailing (B) Debeaking
(C) Dubbing (D) Pecking

Ans. (A) **(SSC FCI Exam, 2012)**

Exp: Brailing is the process of preventing the birds from flying. This is a temporary method in which the wings are tied with leather or plastic strip.

13. Which of the following is an egg laying mammal?

(A) Bat (B) Leafy ant-eater
(C) Whale (D) Spiny ant-eater

Ans. (D) **(SSC (10+2) 2011)**

Exp: Spiny ant eater (Echnida) and Platypus are mammals, they lay eggs. They belongs to the order Monotremata. Mammals give birth to the young ones.

14. 'Cod' is a variety of–

(A) Goat (B) Fish
(C) Crop (D) Coral

Ans. (B) **(SSC CPO Exam 2011)**

Exp: 'Cod' is a variety of fish. It belongs to the genus Gaudus of family Gadidae. Three species Atlantic, Pacific and Greenland are called as cod. Cod is popular as a food and is an important source of vit A, D and E

15. Birds which swim in water have–

(A) Webbed Feet (B) Broad Wings
(C) Long Beaks (D) Toes with Claws

Ans. (A) **(SSC CGL Exam, 2011)**

Exp: Birds with the webbed feet can swim in water. Webbed feet increases the surface area and also helps to apply more force against the surrounding water Eg. Duck, geese and swans.

16. The animal which can tolerate more summer heat is–

(A) Buffalo (B) Cow
(C) Goat (D) Donkey

Ans. (C) **(SSC CPO Exam, 2010)**

Exp: Goat can tolerate more summer heat. They have thin loose skin and floppy ears, goat & sheep both belongs to family bovidae.

17. Which one of the following pairs belongs to Cartilaginous Fish?

(A) Shark and Tuna (B) Shark and Ray
(C) Skates and Hilsa (D) Ray and Eel

Ans. (B) **(SSC CGL Exam, 2007)**

Exp: Shark and Ray are the examples of cartililagenous fish. These fishes belongs to class chondrichthyes. The skeleton is made up of cartiliage and no bones are present. The fishes have jaw, paired fins scales and the 2 chambered heart.

18. Which one of the following is not a true fish?

(A) Silver Fish (B) Saw Fish
(C) Hammer Fish (D) Sucker Fish

Ans. (A) **(SSC CGL Exam, 2007)**

Exp: Silver fish is not a true fish. Silver fish is an example of phylum Arthropoda. It is a wingless insect with long antennae. Scientific name of silver fish is Lepisma saccharina

19. Which of the following is a fish?

(A) Silverfish (B) Starfish
(C) Dogfish (D) Cuttlefish

Ans. (C) **(SSC CPO Exam 2007)**

Exp: The spiny dog fish is a small shark that is deep grey in colour with some white spots. On average, it reaches 3-4 feet length. They can live upto 25-100 years.

20. Which one of the following is not a true snake?

(A) Glass snake (B) Sea snake
(C) Tree snake (D) Blind snake

Ans. (A) **(SSC CGL Exam, 2007)**

Exp: Glass snakes are the lizards belongs to phylum Reptiles. Apparently these lizards resembles as snakes because of their size. They can grow up to 4ft. These lizards are also known as jointed snakes.

21. Which one of the following set belongs to the Class-Mammalia?

(A) Lion, Hippopotamus, Penguin, Bat
(B) Lion, Bat, Whale, Ostrich
(C) Hippopotamus, Penguin, Whale, Kangaroo
(D) Whale, Bat, Kangaroo, Hippopotamus

Ans. (D) **(SSC CGL Exam, 2007)**

Exp: Mammals are the class of phylum chordata. They are the most advanced organism in the whole animal kingdom. Main characeteristic feature of mammal is to posses the mammary gland which helps them to nourish their young ones.

22. Which one of the following is the tallest bird?

(A) Peacock (B) Penguin
(C) Ostrich (D) Emu

Ans. (C) **(SSC Tax Asst. 2007)**

Exp: Ostrich is the only, living tallest bird of genus Struthio. It is a native of Africa. This bird can grow upto the 9 feet and can run at the speed of 70 km/hr.

23. Which one of the following is not a true fish?

(A) Shark (B) Starfish
(C) Eel (D) Sea-horse

Ans. (B) **(SSC Matric Level 2006)**

Exp: Starfish is not true fish. Starfish is an example of phylum Echinodermata. These are spiny skinned aquatic organisms. They have a peculiar water driven mechanism in their tube feets. These tube feets also helps them in locomotion.

24. The Scientific study of birds is known as–

(A) Limnology (B) Herpetology
(C) Malacology (D) Ornithology

Ans. (D) **(SSC Tax Asst. 2006)**

Exp: The scientific study of birds is known as ornithology. The father of ornithology in India is Dr. Salim Ali.

25. Which of the following animal has a clitellum?

(A) Millipede (B) Centipede
(C) Earthworm (D) Ringworm

Ans. (C) **(SSC Mat.Level 2006)**

Exp: Earthworm has a clitellum. Earthworm belongs to phylum Annelida. Clitellum is a part of reproductive system, which function to store the eggs of worms.

26. The language used in writing the scientific name of animal is–

(A) French (B) Latin
(C) German (D) Dutch

Ans. (B) **(SSC SO Exam 2006)**

Exp: Language used in writing the scientific name of animal is Latin. This is the language which can be understood in the whole world. This system of naming the organism is known as Binomial nomenclature, and theory was given by Carolus linnaeus.

27. Which one of the following is a non-poisonous snake?

(A) Cobra (B) Dryophis
(C) Elapes (D) Python

Ans. (D) **(SSC Tax Asst. 2006)**

Exp: Python is a non-poisonous or non-venomous snake. Python is example of family-phythonidae and phylum-chordata. Python kill its prey by asphyxiation i.e. choking the breath and swallowing prey completely.

28. Most fish do not swim in water because of the presence of–

(A) Air sinuses
(B) Buoyant scales on the body
(C) Swim Bladder (D) Swimmerets

Ans. (C) **(SSC Metric Level 2006)**

Exp: Swim bladder or air bladder are present in fishes which helps them not to swim in water & stay at one place. Air bladder helps to expel the extra water. This is an important features of osteichthyes fishes.

29. The Literal meaning of the term 'Homo Sapiens' is–

(A) Man — The Wise
(B) Man — The Supreme
(C) Man — The Omnivore
(D) Man — The Fool

Ans. (A) **(SSC Metric Level 2006)**

Exp: Homo sapiens sapiens is the scientific name of man which literally mean 'man-the wise'. Man is the most advanced animal on the earth belongs to the phylum Mammalia.

30. Which animal produces the biggest baby?

(A) Camel (B) Lion
(C) Elephant (D) Blue whale

Ans. (D) **(SSC SI 2005)**

Exp: Blue whale is the largest & heaviest aquatic mammal present on the earth. It can weigh 190 tons. Being the largest animal they give birth to biggest baby. Scientific name of whale- Balaenoptera musculus. Blue whale is in the endangered list of IUCN.

31. The animal which uses sounds as its 'Eyes' is–

(A) Dog (B) Cat
(C) Snake (D) Bat

Ans. (D) **(SSC SO 2005)**

Exp: Bat uses sounds as its 'Eyes'. Bats has echolocation system by which they compare the outgoing pulse with the returning echoes and make the image of surrounding in the darkness.

32. Which of the following is the largest living bird?

(A) Peacock (B) Ostrich
(C) Dodo (D) Turkey

Ans. (B) **(SSC SO 2005, SSC CGL 1999)**

Exp: Ostrich is the largest and tallest living bird of genus Struthio. Common ostrich was originally described by Carolus Linnaeus in his book 'systema naturae'. Ostrich is the largest flightless bird which can run at a speed of 70-80 km/hr.

33. In male sharks, claspers are found attached to–

(A) Anal fin (B) Pectoral fin
(C) Pelvic fin (D) Ventral fin

Ans. (C) **(SSC SO 2003)**

Exp: In male sharks, claspers are found attached to pelvic fin. Claspers are the external appendages which helps in ejection of sperms during internal fertilization.

34. Odontology is the branch of science which deals with the study of–

(A) Teeth (B) Ontogent
(C) Bone (D) Ageing

Ans. (A) **(SSC (10+2) 2012)**

Exp: Odontology is the branch of science which deals with the study of teeth. It also helps in diagnosis, prevention and treatment of disease.

35. Archaeopteryx had the following reptilian characters–

(A) Teeth on jaw, tail beak
(B) Clawed wings, teeth on jaw, tail
(C) Clawed wings, scales, feathers
(D) Teeth on jaw, feathers, tail

Ans. (B) **(SSC (10+2) DEO & LDC 2010)**

Exp: Archaeopteryx is the largest and oldest known fossil of the bird. Archaeopteryx lived in Jurrasic Period. i.e. 150 m years ago. This is the reason that this bird is regarded as a connecting link between feathered dinosaurs and birds. Although some of the characters common to reptiles are clawed wings, teeth on jaw and tail.

36. 'Darwin finches' refers to a group of–

(A) Fishes (B) Lizards
(C) Birds (D) Amphibians

Ans. (C) **(SSC CGL 2011, 2004)**

Exp: 'Darwin finches' refers to a group of birds Darwin studied the finches of 14 birds on the Galapagos island to show that how the organisms evolved themselves towards their environment.

37. The 'Theory of Evolution' was put forward by–

(A) Louis Pasteur (B) Aristotle
(C) Gregor Mendel (D) Charles Darwin

Ans. (D) **(SSC CPO 2003)**

Exp: Theory of evolution was put forwarded by Charles Darwin in 1859. Darwin is known as the "Father of Evolution".

38. The concept of 'survival of the fittest' was first advocated by

(A) Oparin (B) Darwin
(C) Spencer (D) Haeckel

Ans. (C) **(SSC CPO SI 2006)**

Exp: 'Survival of the fittest' concept was first advocated by a British philosopher Herbert Spencer in his book 'Principle of Biology' (1864).

39. The study of extinct animals is called

(A) Herpetology (B) Ornithology
(C) Geology (D) Palaeontology

Ans. (D) **(SSC CGL 2007)**

Exp: Palaeontology is the scientific study of extinct animals. These are the fossils of dead animals and plants burried under the earth's surface million years ago. It helps in the study of evolution and their relation with other organisms and environment.

40. Dinosaures were

(A) Mammals that became extinct
(B) Large herbivorous creatures which gave rise to hippopotamus species
(C) Egg-laying mammals
(D) Reptiles that became extinct

Ans. (D) **(SSC CGL 2008)**

Exp: Dinosaur were huge bodied reptiles that became extinct. They lived between 230 and 65 mn years ago in Jurrasic period of mesozoic. There are many theories regarding the extinction of Dinosaurs, i.e, ice age, huge body size, unavailability of food.

41. In which vertebrate oxygenated and deoxygenated blood gets mixed?

(A) Fish (B) Amphibian
(C) Bird (D) Mamal

Ans. (B) **(SSC CPO SI 2008)**

Exp: In Ambhibians the deoxygenated and oxygenated blood get mixed. Amphibians and lung fishes have 3-chambered heart i.e, 2 Auricles and a ventricle, right atrium receives the deoxygenated blood and left atrium receives oxygenated blood. But both oxygenated and deoxygenated blood get mixed in single ventricle.

42. Animals living in the three trunks are known as

(A) Arboreal (B) Volant
(C) Amphibious (D) Aquaticx

Ans. (A) **(SSC CGL 2010)**

Exp: Animals living in the tree trunks are known as arboreal. Arboreal animals display a wide variety of characteristic features including the flexible body, Clawed feet with huge claws and the tail which helps them to hang.

43. Which phenomenon do bats or dolphins use to find prey, predators or obstacles?

(A) Refraction of sound (B) Formation of beats
(C) Scattering of sound (D) Echo location

Ans. (D) **(SSC CGL 2011)**

Exp: Bats or Dolphin used to find prey, predators or obstacles by the phenomenon of Echolocation. These are the sound produce by bat & Dolphin. The waves bounce off by object return to the animal as echos. This phenomena is also called as Sonar.

44. Number of Eyes in an Earthworm is —

(A) One (B) Two
(C) Many (D) No eyes

Ans. (D) **(SSC Combined Matric Level 1999)**

Exp: Eyes are absent in Earthworm. Earthworms are the segmented worms belongs to phylum Annelids. They are hermaphrodite i.e., carries both male and female sex organs in single organism.

45. Which of the following is not a part of the Darwin's theory of evolution?

(A) Natural selection (B) Struggle for existence
(C) Survival of the fittest
(D) Inheritance of acquired characters

Ans. (D) **(SSC Combined Martic Level 1999)**

Exp: Inheritance of Acquired characters is not the part of Darwin's theory of evolution. This theory was given by J.B. Lamarck. It is also known as 'Use and disuse' of organs theory.

46. Which one of the following is not true fish?

(A) Shark (B) Starfish
(C) Eel (D) Sea-horse

Ans. (B) **(SSC Combined Matric Level 2006)**

Exp: Star fish is not the true fish. Starfish is an example of phylum- Echindermata i.e., spiny skinned animals. They have water-driven tube system which is used for locomotion, capture and transport of food.

47. What is a sponge?

(A) A fossil (B) A plant
(C) An animal (D) A fungus

Ans. (C) **(SSC CHSL 2012)**

Exp: Sponge is an animal. Sponge is a common name of the phylum Porifera. Body has the minute pores called ostia through which water enters into a central cavity, spongocoel. These organism are non-motile and attached to substratum.

48. Which of the following amphibians lacks tongue?

(A) Sphenodon (B) Salamander
(C) Ichthyophis (D) Necturus

Ans. (C) **(SSC CHSL 2012)**

Exp: Ichthyophis is a tongue less, limbless amphibians. It is a native of southeast Asia and Philippines. They are also called as Asian Caecilians.

49. An insect is an orgainism having

(A) 3 paris of legs (B) 4 pairs of legs
(C) Head, thorax and abdomen
(D) Pair of wings and antenna

Ans. (A) **(SSC MTS 2013)**

Exp: Insecta or Arthropoda is the largest phylum of animal kingdom. Important characteristics include the 3 pairs of legs, a pair of wing and a pair of antenna. The body is segmented into three parts i.e. Head, thorax and abdomen. Insecta, crustaceans and arachnids are members of phylum Arthropoda.

50. Entomolgy is the study of

(A) Birds (B) Insects
(C) Fossils (D) Fungi

Ans. (B) **(SSC CGL 2013)**

Exp: The scientific study of Insects is called as entomology. Insecta is a category belongs to phylum Arthropoda. It has the largest number of species.

51. Which of the following is a tapeworm?

(A) Fasciola (B) Schistosoma
(C) Taenia (D) Enterobius

Ans. (C) **(SSC MTS 2014)**

Exp: Taenia solium is a tapeworm belong to Phylum Platyhelminthes. The common name of Taenia is flatworm or ribbon worm or tapeworm. It is hermaphrodite and complete their life cycle in human as primary host and secondary host is pig.

52. Clitellum is found in-

(A) Leech (B) Snail
(C) Nereis (D) Earthworm

Ans. (D) **(SSC MTS (Non.Tech) 2014)**

Exp: Clitellum is found in Earthworm. Clitellum is a part of reproductive structure, it helps in storage of eggs. It is present in anterior part of the body & covers the segment 14,15 and 16.

53. Pinna (external ear) is present in-

(A) Amphibian (B) Fish
(C) Mammal (D) Reptile

Ans. (C) **(SSC CAPFs SI, CISF ASI & Delhi 2014)**

Exp: External ear or pinna is the characteristic feature of mammals. It helps to gather the sound.

54. Which one of the following is an egg-laying mamal

(A) Sloth (B) Duck-Billed platypus
(C) Kangaroo (D) Bandicoot

Ans. (B) **(SSC CGL 2014)**

Exp: Duck-Billed platypus and Echnida are the organisms belongs to phylum mammals. Despite being mammals these two organism lay eggs. They are also termed as monotremes.

55. Who proposed Five Kingdom Classification?

(A) R.H. Whittaker (B) John Ray
(C) Carolus Linnaeus (D) H.F. Copeland

Ans. (A) **(SSC CHSL 2014)**

Exp: Five Kingdom classification was proposed by R.H. Whittaker. Whittaker classified the organism on the basis of their cell structure, mode of nutrition and division of labour, Organisms were divided into Monera, Protista, Fungi, Plantae & Animalia.

56. The International Commisson on Zoological Nomenclature was established in-

(A) 1898 (B) 1988
(C) 2001 (D) 1664

Ans. (*) **(SSC CHSL 2014)**

Exp: International Commission on Zoological Nomenclature (ICZN) was established in 18 September 1895. ICZN publish the zoological or scientific name of the animals.

57. Carolus Linnaeus system of classification is-

(A) Natural (B) Artificial
(C) Binomial (D) Phylogenetic

Ans. (C) **(SSC CHSL 2014)**

Exp: Carolus Linnaeus system of classification known as Binomial nomenclature. In binomial system organism is named by the genus and species. He published the book 'Systema Naturae' for the classification of organism, Carolus Linnaeus is known as the 'Father of Taxonomy'.

58. Myrmecology is study of-

(A) Insects (B) Ants
(C) Crustaceans (D) Arthropods

Ans. (B) **(SSC CGL 2014)**

Exp: Myrmecology is the branch of entomology that deals with the ants. Ants belongs to the family Formicidae, order Hymenoptera.

59. What does the word 'amphibian means'?

(A) Three lives (B) Four lives
(C) Two lives (D) One lives

Ans. (C) **(SSC CAPFs SI, CISF ASI & Delhi Police SI 2015)**

Exp: The word amphibian refers to double life or life in water and land both. At the larval state the organism start their life cycle in water and in adult age spend the life on land. Eg. Frog, Toads, Salamander.

60. Wings of birds and insects are

(A) Xenologous (B) Homologous
(C) Paralogous (D) Analogous

Ans. (D) **(SSC CAPFs SI, CISF ASI & Delhi Police SI 2015)**

Exp: Wings of birds and insects are analogous organs. Analogous organs are those who have the different structural and embryological origin but perform the same function.

61. Which one of the following animals belongs to mollusca?

(A) Haliotis (B) Hare
(C) Hydra (D) Hyla

Ans. (B) **(SSC CGL 2015)**

Exp: Sea hare belongs to phylum Mollusca. They are soft bodied organisms covered with a protein shell. Scientific name of hare is Aplysia californica.

62. Which one of these animals is jawless:

(A) Sphyrna (B) Trygon
(C) Myxine (D) Shark

Ans. (C) **(SSC CGL 2015)**

Exp: Myxine, a hagfish is a jawless animal. Hagfish belongs to class- cyclostoma of phylum chordata. Hagfish are slime secreting marine fishes. Slime helps in easy movement from water to land.

63. Which of the following organism possesses characteristics of a plant and an animal?

(A) Euglena (B) Mycoplasma
(C) Paramecium (D) Chlorella

Ans. (A) **(SSC CGL 2015)**

Exp: Euglena is an unicellular, aquatic organism possesses characteristics of both plants and animal. Euglena has the chloroplast in its body which is a plant character and the movement of Euglena with the help of flagella is an animal character.

64. Which of the following insect has its scientific name as Blattaria?

(A) Beetle (B) Cockroach
(C) Mosquito (D) Butterfly

Ans. (B) **(SSC CPO SI 2016)**

Exp: The scientific name of German cockroach is Blattela germanica. The term Blattaria origins from the latin word 'blatta' which means Cockroach. Cockroaches are generally insects of the darkness. They are negatively phototactic.

65. Locomotory organ of a starfish is

(A) Tube feet (B) Paddle
(C) Muscular foot (D) Flipper

Ans. (A) **(SSC MTS 2017)**

Exp: Locomotory organs of starfish are tube feet. These tube also works as a water driven mechanism and helps in respiration & Excretion.

66. Which of the following is a fish?

(A) Jelly fish (B) Lobster
(C) Salmon (D) Whale

Ans. (C)

Exp: Fish is an aquatic animal belongs to chordate phylum. Study of fish is called pisciculture or fish foaming. Salmon is a typical fish which lay egg outside the sea.

67. Which of the following mammals lay eggs?

(A) Bat (B) Whale
(C) Weasel (D) Platypus

Ans. (D)

Exp:Mammals are those animals which have mammary gland and are viviparous but Platypus lay eggs and is found in Australia.

68. Charles Darwin, the famous evolutionist, proposed his theory in which one of his books?

(A) The families of flowering plant
(B) The origin of species
(C) The life on earth
(D) The story of the living world

Ans. (B)

Exp: Charles Darwin was a geologist, naturalist who proposed the theory in his book the 'origin of species'.

69. Which among the following has the maximum life span-

(A) Eagle (B) Tortoise
(C) Tiger (D) Elephant

Ans. (B)

Exp: Tortoise has maximum life span. Tortoise can live upto 250 years.

70. Red Data Book provides an account of-

(A) Extinct animals only
(B) Endangered plants & animals
(C) Endangered plants only
(D) Fossil plants

Ans. (B)

Exp:Red data book is a type of public document which is created for the recordings of rare and endangered species include animal, plant and fungi as well as local subspecies. It is published by IUCN (Internation Union for conservation of Nature).

71. Which of the following is Study of fossils ?

(A) Ethology (B) Etiology
(C) Anthropology (D) Palaeontology

Ans. (D)

Exp: Paleontology origin from Greek word paleon mean old, ancient, logy study. Paleontology is the study of fossils.

72. Sea-Anemones belongs to the phylum

(A) Arthropoda (B) Cnidaria
(C) Porifera (D) Mollusca

Ans. (B)

Exp: Sea- anemone belongs to the phylum cnidaria. The word Cnidaria is derived from cnidoblasts present of tentacles.

73. Amoeba belongs to the phylum

(A) Protozoa (B) Annelida
(C) Porifera (D) Platyhelminthes

Ans. (A)

Exp: Amoeba belongs to phylum Protozoa. Amoeba is a single-called organism which can alter its shape during the movement with the help of pseudopodia.

74. Sponges belongs to the phylum

(A) Protozoa (B) Annelida
(C) Porifera (D) Cnidaria

Ans. (C)

Exp: Sponges belongs to phylum porifera. Porifera includes organisms with the minute holes present on whole body. Organisms are marine and asymmetrical animals, Porifera are hermaphrodite i.e. eggs and sperms are produced by the same individual.

75. Spiders belong to the phylum

(A) Mollusca (B) Annelida
(C) Cnidaria (D) Arthropoda

Ans. (D)

Exp: Spiders belongs to the phylum Arthropoda. Arthropoda means organism with the jointed legs. Arthropoda is divided into 3 categories Insects, arachnids and crustaceans. Spiders, Mites, ticks belongs to the Arachnids.

76. Octopus belongs to the phylum

(A) Mollusca (B) Cnidaria
(C) Echinodermata (D)Chordata

Ans. (A)

Exp: Octopus belongs to the phylum mollusca. Mollusca are the soft-bodied animals and some are covered with the shells for protection. Octopus shows the highest regeneration power.

77. Prawn belongs to the phylum

(A) Arthropoda (B)Cnidaria
(C) Echinodermata (D) Chordata

Ans. (A)

Exp: Prawn belongs to the category Crustaceans of phylum Arthropoda. This organism breathe through gills and they have 2 pairs of antennae.

78. Crabs belongs to the phylum

(A) Mollusca (B) Cnidaria
(C) Platyhelminthes (D) Arthropoda

Ans. (D)

Exp: Crabs belongs to the category crustaceans of phylum Arthropoda. The body of Arthropoda is covered with chitinuous and is segmented into three parts Head, Thorax and Abdomen.

79. When a Cuttlefish is described as a Molluscs, it is at which level of classification?

(A) Class (B) Order
(C) Family (D) Phylum

Ans. (D)

Exp: Cuttle fish is described as phylum-Mollusca. In the hierarchy of classification organisms are classified in the sequence of – Kingdom, phylum, class, order, family, genus, species. This is also termed as taxonomic rank.

80. Vertebrates belongs to the phylum

(A) Arthropoda (B) Annelida
(C) Cnidaria (D) Chordata

Ans. (D)

Exp: Vertebrates belongs to phylum Chordata. The word vertebrates means the organisms with the vertebral column. Chordata are the organisms which have the notochord at the adult stage.

81. _____is caused by parasites of the Plasmodium genus.

(A) Dysentery (B) Malaria
(C) Chickenpox (D) Herpes

Ans. (B)

Exp: Malaria is caused by the parasites of plasmodium genus. Malaria is a disease transmitted by an infected female Anopheles mosquito. The infected stage of malaria is sporozoite.

82. Oysters belongs to the phylum_____.

(A) Arthropada (B) Annelida
(C) Platyhelminthes (D) Mollusca

Ans. (D)

Exp: Oysters belongs to the phylum Mollusca. These organism are bilaterally symmetrical, triploblostic, coelomate animals with a little segmentation. Body is covered with calcareous shell.

83. Human Beings belong to which category of the ecosystem?

(A) Omnivores (B) Carnivores
(C) Herbivores (D) Zooplankton

Ans. (A)

Exp: Human beings belongs to omnivores category of the ecosystem. Omnivores are those organisms who consume both green plant and flesh for their food.

84. Who of the following is known as 'Father of Zoology'?

(A) Darwin (B) Aristotle
(C) Heckle (D) Edward Jenner

Ans. (B) **(SSC CPO 2017)**

Exp: Aristotle separated the biology branch from natural sceience and is called as father of biology. Aristotle explained 500 animal species in his book 'Historia Animalium'.

85. Which of the following is not an example of an amphibian?

(A) Frog (B) Sea horse
(C) Alligator (D) Toad

Ans. (B) **(SSC CPO 2017)**

Exp: Class amphibia belongs to the phylum vertebrata. Amphibian are those organism who complete their life on both land and water. Sea horse is aquatic animal belong to class pisces.

86. Which among the following is the habitat of 'Dog fish'?

(A) River (B) Sea (C) Lake (D) Marsh

Ans. (B) **(SSC CPO 2017)**

Exp: Spiny dogfish is an aquatic animals belongs to family of sharks.

87. Which of the following pair is INCORRECT?

I. Crocodile - Reptile
II. Frog - Amphibian
III. Tiger - Reptile

(A) I and II (B) I and III
(C) Only III (D) Only II

Ans. (C) **(SSC CPO 2017)**

Exp: Tiger (Panthera tigris) is an organism belongs to class mammalia and phylum chordata.

88. Snakes, turtle, lizards and crocodiles falls under which category of animals?

(A) Pisces (B) Amphibian
(C) Reptilian (D) Aves

Ans. (C) **(SSC CGL 2017)**

Exp: Snakes, turtle , lizards and crocodiles belongs to the class- reptilia and phylum chordata. Reptiles are tetrapod animal three chambered heart.

89. The scientific name of human being is?

(A) Homo Nigrum (B) Melongena Sapiens
(C) Homo Sapiens (D) Tigris Solanum

Ans. (C) **(SSC CGL 2017)**

Exp: The scientific name of human being is Homo Sapiens. Under the binomial nomenclature the organisms are named by their genus and species to which they belong.

90. Which among the following has segmented body?

(A) Phylum Mollusca (B) Phylum Arthopoda
(C) Phylum Annelida (D) Phylum Coelenterata

Ans. (C) **(SSC CGL 2017)**

Exp: The annelids also known as the ringed worms or segmented worms. Phylum annelids have 17,000 species including ringworms, earthworms and leeches.

91. Which of the following is the largest mammal?

(A) Whale (B) Rhinoceros
(C) Elephant (D) Human

Ans. (A) **(SSC CGL 2017)**

Exp: Blue sulphur whale is the largest and heaviest mammal present on earth. Whale range in size from 8.5 to 98 ft and 190 metric tons weight.

92. Nereis, Pheretima (Earthworm) and Hirudinaria (blood sucking leech) are examples of which Phylum?

(A) Coelenterata (B) Aschelminthes
(C) Annelida (D) Arthropoda

Ans. (C) **(SSC CGL 2017)**

Exp: Annelida are ringed worms or segmented worm. The phylum includes the earthworm (Pheretima) Nereis and Hirudinaria (leech) these are ectoparasitic organism and some of them are hermaphrodite.

93. Animals like annelids and arthropods etc where the body can be divided into identical left and right halves in only one plane, exhibit _____ symmetry.

(A) Coelenterata (B) Radial
(C) Ctenophora (D) Bilateral

Ans. (D) **(SSC CGL 2017)**

Exp: Bilaterally symmetrical organism get divide into two equal right and left halves, when cut from centre. Annelids and arthropoda are bilaterally symmetrical organism.

94. Which of the following does not hold true for Animal belonging to Phylum Chordate?

(A) Notochord present
(B) Pharynx perforated by gill slits.
(C) Heart is dorsal (if present)
(D) A post-anal part (tail) is present

Ans. (C) **(SSC CGL 2017)**

Exp: Phylum chordate have important characteristic features as-

- Notochord present at the early stage
- Pharyngeal gill slits
- A post anal pail

95. _____ is the second largest animal phylum.

(A) Mollusca (B) Chordata
(C) Coelomates (D) Anneldia

Ans. (A) **(SSC CGL 2017)**

Exp: Mollusca or soft bodied animals are the second largest phylum of animal kingdom. Mollusca have approximately 90,000 species. Mollusca is largest marine phylum.

96. What type of a body plan does coelenterates, ctenophores and echinoderms have?

(A) Annelida (B) Radial
(C) Bilateral (D) Platyhelminthes

Ans. (B) **(SSC CGL 2017)**

Exp: Symmetry of an organism in animal kingdom is of two types; Radial and Bilaterally symmetrical. In radial symmetry the organism is divided into two equal halves when it is cut from any plane . Coelenterates, ctenophoras and Echinodermata have radial symmetry.

97. Taenia (Tapeworm), Fasciola (Liver fluke) are examples of which Phylum?

(A) Coelenterata (B) Platyhelminthes
(C) Annelida (D) Arthropoda

Ans. (B) **(SSC CGL 2017)**

Exp: Taenia (Tapeworm) , Fasciola(Liver fluker) are examples of platyhelminthes. Platyhelminthes are flat worm unsegmented, soft bodied invertebrates. These organisms are hermaphrodite and some of the species are endoparasite and some are ectoparasite.

98. Which of the following Phylum are also called flatworms?

(A) Mollusca (B) Chordata
(C) Ctenophora (D) Platyhelminthes

Ans. (D) **(SSC CGL 2017)**

Exp: Platyhelminthes are also called as flatworms. Platyhelminthes may be free-living or parasitic. Hooks and suckers are present in the parasitic form. Platyhelminthes have flame cells which helps in osmoregulation and excretion.

99. Order Primata comprising monkey, gorilla and gibbon is placed in class Mammalia along with order Carnivora that includes?

(A) Giraffe , Camels and Elephants
(B) Crocodile, Lizard and Snake
(C) Lion, Leopard and Tiger
(D) Tiger, Cats and Dogs

Ans. (D) **(SSC CGL 2017)**

Exp: Mammals are the class of vartebrata having vertebral coloumn and mammary gland as their characteristic features. Mammals are classified into three different categories; Primates (apes and monkeys), cetartiodactyla (whales) and carnivore (cats, dogs, seals).