Sharath Gore

NEET mock test 1 (biology) 2022-23

Time : 90 Min	Bio : Full Portion Paper	Marks : 400

Hints and Solutions

01) Ans: **B)** Both the statement 1 and the statement 2 are true and the statement 2 is a correct explanation of the statement 1
Sol: Bryophytes are a group of non-vascular land plants. The sex organs in the bryophytes are multicellular and jacketed. The jacket of sterile cells around the sperms and eggs is an adaptation to a life on land. It protects the sex cells against the drying effects of air.

02) Ans: **D)** a = Reverse transcroption b = Replication, c = Transcription, d = Translation
Sol: $RNA \xrightarrow{\text{Reverse transcription}} DNA \xrightarrow{\text{Replication}}$
$DNA \xrightarrow{\text{Transcription}} mRNA \xrightarrow{\text{Translation}} Polypeptide$

03) Ans: **A)** Goitre
Sol: Simple goitre is caused by lower intake of iodine through diet, goitre is the swelling of neck because of enlargement of thyroid.

04) Ans: **D)** lactate fermentation
Sol: Two types of anaerobic respiration or fermentation are lactate fermentation and ethanol fermentation. Lactate fermentation produces lactic acid only as pyruvic acid produced in glycolysis is directly reduced by NADH to form lactic acid and no CO_2 is produced. Alcoholic (ethanol) fermentation involves conversion of pyruvate to acetaldehyde, so, CO_2 is released.

05) Ans: **A)** First child will survive
Sol: Rh^- woman married with Rh^+ man, become sensitized simply by carrying a Rh^+ child within her body. Some of the cells from the embryo may mix into her own blood stream in development. The first child of the parents with this genetic back ground is nearly always normal.

06) Ans: **A)** lead
Sol: Key is a taxonomical aid used for identification of plants and animals based on the similarities and dissimilarities. The key are based on contrasting characters generally in a pair termed as couplet. It represents the choice made between two opposite options, which results in acceptance of only one and rejection of the other. Each statement in the key is known as a lead.

07) Ans: **A)** Pinus
Sol: Because pollen tube is present and dispersal of pollen grains by wind. So male gametes are not ciliate.

08) Ans: **A)** Erythrocytic cycle

09) Ans: **D)** I^BI^O
Sol: The genotype of the child would be I^OI^O (recessive). Hence, the genotype of the father can only be I^BI^0

10) Ans: **B)** Heterospory

11) Ans: **C)** Biosphere reserves
Sol: Biosphere reserves are multipurpose protected area that are meant for preserving genetic diversity in representative ecosystems of various natural biomes and unique biological communities.

12) Ans: **A)** Micro-organisms
Sol: As in the presence of oxygen micro-organisms (Bacteria) oxidise the complex organic components to inorganic forms.

13) Ans: **A)** Sphagnum

14) Ans: **A)** 4, 2, 5, 3, 1

15) Ans: **A)** For maintaining the scrotal temperature lower than the internal body temperature
Sol: The purpose is for maintaining the scrotal temperature lower than the internal body temperature. The testes are situated outside the abdominal cavity within a pouch called scrotum. The scrotum helps in maintaining the low temperature of the testes ($2-2.5°C$ lower than the normal internal body temperature) necessary for spermatogenesis.

16) Ans: **D)** cells of trophoblast, in contact with inner cell mass of blastocyst
Sol: The blastomeres in the blastocyst are arranged into an outer layer called trophoblast and an inner group of cells attached to trophoblast known as the inner cell mass. The trophoblast does not take part in the formation of the embryo proper and it remains external to the embryo and gives rise to the extraembryonic membranes, namely, chorion and amnion, for the protection and nourishment of the embryo. The trophoblast cells in contact with the embryonal knob are known as cells of the Rauber.

17) Ans: **B)** plasmodium falciparum

18) Ans: **B)** Acromegaly
Sol: Hypersecretion of growth hormone or somatotrophic hormone (STH) is responsible for acromegaly disease. It is an adulthood malformation due to abnormal growth in jaws, limbs, etc. Overgrowth of soft tissues and bones characteristically results in large spade like hands and feet prominent brow ridges, broadening of bridge of nose, etc.

19) Ans: **C)** The statement 1 is true but the statement 2 is false
Sol: Balanoglossus belong to class enteropneusta. In certain cases, the proboscis pore does not communicate with the proboscis coelom, but terminate blindly, and may send off a narrow tubular diverticulum which opens into the neurocoel. The proboscis sits in the collar somewhat like an acorn in its cup, a character which has given the name"acorn worm" to the group.

20) Ans: **D)** Transpiration

21) Ans: **B)** Both the statement 1 and the statement 2 are true but the statement 2 is not a correct explanation of the statement 1

22) Ans: **C)** Bartholin's gland
Sol: Bartholin's gland is not an accessory glands in male reproductive system. The greater vestibular glands/ Bartholin's gland are present one on each side of vaginal orifice in females. These glands are homologous to bulbourethral glands of male.

23) Ans: **C)** Fibula and phalanges

24) Ans: **D)**
Species-Genus-Family-Order-Class-Phylum-Kingdom
Sol: Hierarchy of categories is the classification of organisms in a definite sequence of categories (taxonomic categories) in a descending order starting from Kingdom and reaching upto Species and vice versa. The number of similar characters of categories decreases from lowest rank (Species) to highest rank (Kingdom). The taxonomic hierarchy includes seven obligate categories-Kingdom, Division or Phylum, Class, Order, Family, Genus and Species.

25) Ans: **C)** Aquatic insects
Sol: Aquatic insects are not ureotelic but ammonotelic in nature. Ammonia is excreted by aquatic animals through diffusion across body surface or through gill surfaces (fish) as ammonium ions. Mammals and terrestrial amphibians mainly excrete urea and are ureotelic. Whereas birds excrete nitrogenous waste as uric acid in the form of pellet or paste with minimum loss of water and are uricotelic.

26) Ans: **D)** taxonomic keys
Sol: Taxonomic keys used for identification of plants and animals based on the similarities and dissimilarities. The key are based on contrasting characters generally in a pair callled couplet. It represents the choice made between two opposite options, which results in acceptance of only one and rejection of the other. Each statement in the key is known as a lead.

27) Ans: **C)** blood group O
Sol: The blood group of donor was O. The person with O blood group is universal donor. It lacks both antibodies 'a' and 'b' therefore do not cause agglutination or clumping of blood cells when transfused into person with any of the four blood groups.

28) Ans: **B)** (a)-(i), (b)-(iii), (c)-(ii), (d)-(v), (e)-(iv)

29) Ans: **D)** All of these
Sol: All given are an important muscle proteins that help in movement. Actin is a contractile protein found in muscle tissue, in which it occurs in the form of filaments known as thin filaments. Each filaments consists of two chains of globular actin molecules, around which is twisted a strand of tropomyosin and interspersed troponin. Units of muscle fibre consists of actin myosin filaments, which interact to bring about muscle contraction.

30) Ans: **B)** Duck-billed platypus is connecting link between mammals and reptiles
Sol: Duck bill platypus is a connecting link between mammals and reptiles because it possesses a mixture of characters of both mammals and reptiles.

31) Ans: **C)** Oxidation and reduction

32) Ans: **B)** vascular cambium
Sol: A narrow layer of thin-walled cells found between phloem/bark and wood of dicot is vascular cambium. Vascular cambium present inside a vascular bundle is called as interfascicular cambium and vascular cambium. The vascular cambium is a meristematic tissue.

33) Ans: **A)** periodic abstinence
Sol: A contraceptive method in that the couples avoid or abstain from coitus from day 10 to 17 of the menstrual cycle when ovulation could be expected, is known as periodic abstinence/rhythm method.

34) Ans: **B)** Ozone in upper part of atmosphere is harmful to animals
Sol: Ozone layer is present in stratosphere. It act as a shield against strong UV rays coming from sun. UV radiations are very harmful and may cause mutations in living organisms. Thinning of ozone layer increases the amount of UV radiations reaching the earth and it would increase occurrence of cataract, skin cancers, dimming of eye sight, photoburning, deficient functioning of immune system, etc.

35) Ans: **A)** Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1
Sol: Speciation is the process of species formation from previously existing species. A single species may give rise to new species (i.e. Intraspecific speciation) or two different species may give rise to a new species (i.e. Interspecific hybridization). If intraspecific speciation occurs in geographically separated population, it is termed as allopatric speciation. If intraspecific speciation occurs in the population occupying the same geographical area, it is called sympatric speciation. There are several factors involved in intraspecific speciation, but in all cases gene flow within populations must be interrupted.

36) Ans: **C)** To diversity in germplasm will effect the crop breeding
Sol: Habitats of a large variety of organisms would be destroyed as well the food chains would be disturbed leading to population and ecological imbalance.

37) Ans: **D)** All of these

38) Ans: **A)** Endarch
Sol: In specific conditions, the differentiation of initial xylem begins near the periphery of stele and proceeds towards the center.
Therefore, the protoxylem occurs towards the center of the axis and metaxylem, towards the periphery of the axis. This type of xylem is called endarch or centrifugal. This condition is seen in angiospermic stem.

39) Ans: **B)** I_2, C_1, P_2, M_3
Sol: Dental formula of human is
$\frac{2,1,2,3}{2,1,2,3} = \frac{8}{8} x2 = 32$ which shows the number of incisor 2, canine 1, premolar 2 molar 3 in each half upper and half lower jaw with 32 teeth in buccal cavity.

40) Ans: **B)** Bryphyllum and Kalanchoe
Sol: Bryophyllum propagates vegatatively by adventitious leafbuds. Leaves of Bryophyllum carry on photosynthesis, their usual function, but they also have the capacity to produce one or more plants from the notches in their margins. It is also found in kalanchoe.

41) Ans: **A)** During inspiration, the intrapulmonary pressure is less than the atmospheric pressure.
Sol: During inspiration, the intrapulmonary pressure is less than the atmospheric pressure is the most appropriate in normal circumstances. The movement of air into and out of the lungs is guarded by creating a pressure gradient between the lungs and the atmosphere. Inspiration can occur if the pressure within the lungs (intrapulmonary pressure) is less than the atmospheric pressure, i.e., there is a negative pressure in the lungs with respect to atmospheric pressure. The diaphragm and a specialized set of muscles-external and internal intercostal between the ribs, help in generation of such gradients.

42) Ans: **D)** S. rimosus
Sol:

1	Streptomycin	Streptomyces griseus
2	Tetracycline (Aureomycin)	Streptomyces aureofaciens
3	Neomycin	Streptomyces fradiae
4	Terramycin (Oxytetracycline)	Streptomyces ramosus
5	Chloramphenicol (Chloromycetin)	Streptomyces venezualae
6	Erythromycin	Streptomyces erythrenus

43) Ans: **B)** 1 is correct, 2 and 3 are false

44) Ans: **C)** In both males and females
Sol: Colour blindness is X linked recessive disease, influencing man in heterozygous condition whereas woman in homozygous condition.

45) Ans: **C)** Blood circulation

46) Ans: **A)**

a	b	c
3	1	2

47) Ans: **C)** Genetically different
Sol: During meiosis, daughter cells has the half number of chromosomes with respect to parent cells. Hence, daughter cell will be genetically different.

48) Ans: **D)** all of the above
Sol: Microbes are present everywhere in soil, water, air, inside our bodies and that of other plants and animals. They are present even at sites where no other life form could possibly exist, like deep inside the geysers (thermal vents) where the temperature may be high as 100^0C, deep in the soil, and under the layers of snow several meters thick and in highly acidic environment

49) Ans: **B)** 140 mL
Sol: The amount of CSF in the cranial cavity is 140 mL and the cerebrospinal fluid (CSF) is secreted by anterior choroid plexus and posterior choroid plexus and is found inside the ventricles of the brain, the central canal of the spinal cord and in the subarachnoid space around the brain and spinal cord.

50) Ans: **A)** Peroxisomes

51) Ans: **D)** Regulation of body temperature
Sol: Hypothalamus present at the base of the thalamus. It provides anatomical connection between the nervous and endocrine systems by its relationship to the pituitary gland. Hypothalamus is thermoregulatory centre. So, it is called "thermostat" of the body. It keeps body temperature at roughly 37^0C by means of a complex thermostat system. Any localised injury to hypothalamus will, so, disrupt regulation of body temperature.

52) Ans: **B)** (i) and (ii)
Sol: Flowers in pea have diadelphous stamens. The floral formula for Solanaceae is

$\oplus \female K_5 \overset{\frown}{C}_{(5)} A_5 \underline{G}_{(2)}$

53) Ans: **B)** Fungi

54) Ans: **C)** ABA
Sol: Abscisic acid (ABA) is a stress hormone as the production of hormone is stimulated by drought, water logging and other adverse environmental conditions. In desiccation ABA is rapidly synthesized. The inhibitor causes closure of stomata and hence prevents transpiration.

55) Ans: **D)** Zoological parks
Sol: Endangered or threatened animals are

protected from extinction by ex-situ conservation in zoological parks. The regular zoo movement in India, began in the year 1855 when the first zoo was set up in Chennai. In the zoological parks animals enjoy protection. They have now become repositories of threatened wildlife and a store house of the knowledge on animal behaviour, their breeding habits, etc. Zoological park is the place where they are assured of food, medical care and treatment and where they also feel safe from their natural enemies.

56) Ans: **D)** Albumin
Sol: As we know, albumin is globular protein.

57) Ans: **B)** Proteins → proteoses and peptones → peptides → amino acids

58) Ans: **B)** gene transfer process
Sol: In gene transfer process biolistic technique is used.
The payload is an elemental particle of a heavy metal such as gold or tungsten coated with plasmid DNA. The device is used to transform almost any type of cell including plants, and is not limited to genetic material of the nucleus : it can also transform organelles, including plastids.

59) Ans: **A)** b, d and e
Sol: The correct statements are as follows:
The number of ovules in an ovary may be many (papaya, watermelon and orchinds) to one (wheat, paddy and mango).
Enclosed within the integuments is a mass of cells called the nucellus.
Each ovule has one or two protective envelopes called integuments. Integuments encircle the ovule except at the tip where a small opening called the micropyle is organised. Opposite the micropylar end, is the chalaza representing the basal part of the ovule.

60) Ans: **C)** Both Statement 1 and Statement 2 are false
Sol: The genetic material in all bacteria is DNA. The genetic material is not organized into a nucleus. DNA is naked i.e., it is not associated with histone proteins. DNA lies coiled inside the cytoplasm. The coiled mass is known as nucleoid. It is equivalent to a single chromosome. RNA is found as genetic material only in some viruses.

61) Ans: **A)** Cistron

62) Ans: **A)** Bacteriophage

63) Ans: **A)** A = q, B = r, C = s, D = p

64) Ans: **C)** Runner
Sol: Runners is the subaerial stem modification with long internode. They have long and thin internodes and branches creep over the surface of soil. There branches develop adventitious roots at nodes on lower side. Scaly leaves are present on nodes, from the axil of which arise aerial branches. When long branches break up by any method they form new plants. In this way large number of new plants are formed. Some examples are Doob grass, Oxalis, Hydrocotyle.

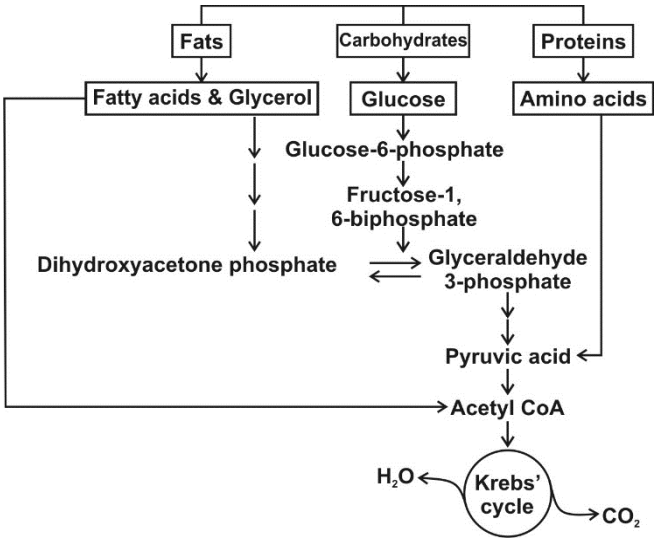
65) Ans: **A)** Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1
Sol: Carolus Linnaeus (1707-1778) was a Swedish naturalist. He is considered as "Father of Taxonomy". 'Systema Naturae' (1758) and 'Species Plantarum' (1753) are famous publications of Linnaeus. He described about 4000 species of plants according to his system of classification based on sexual characters.

66) Ans: **D)** Partial closure of stomata

67) Ans: **D)** Diagrammatic notation of floral characters
Sol: Floral formula is a symbiotic and numerical way to provide information about number, position, cohesion and adhesion of floral parts, symmetry of the flower as well as sexuality of the flower.

68) Ans: **A)** Consumers
Sol: The rate of resynthesis of organic matter by the consumers is called as secondary productivity. It depends upon the loss while transferring energy containing organic matter from the previous trophic level and the consumption due to respiration and predation. Therefore, net productivity decreases with each trophic level.

69) Ans: **D)** Acetyl CoA
Sol: Carbohydrates are generally first converted into glucose before they are used for respiration. Fats are broken down into glycerol and fatty acids first. If fatty acids were to be respired they would first be degraded to acetyl CoA and enter the pathway. Glycerol would enter the pathway after being converted to 3-phosphoglyceraldehyde (PGAL). The proteins are degraded proteases to individual amino acids (after deamination) and depending on their structure enter the pathway within the Krebs' cycle or as pyruvate or acetyl CoA. So, acetyl CoA is the common metabolite of all the three (carbohydrates, proteins and fats).
the given flow chart shows these interrelationships:



70) Ans: **D)** GIP
Sol: Gastric inhibitory peptide (GIP) contains 43

amino acids and is produced by duodenal mucosa. The release of GIP is triggered by the presence of glucose in the gut and the most important function of GIP is to stimulate the release of insulin from pancreas. This is evident from the fact that the plasma insulin level is elevated much before the increase in blood glucose and It also inhibits gastric HCl secretion, gastric motility and its emptying.

71) Ans: **B)**

X-axis	Y-axis
Temperature	Enzyme activity

Sol: Enzymes generally function in a narrow range of temperature and pH. Each enzyme shows its highest activity at a particular temperature and pH called the optimum temperature and optimum pH. Activity declines both below and above the optimum values. X-axis always represents temperature or pH and Y axis represents enzyme activity.

72) Ans: **B)** Cercospora
Sol: Tikka disease of groundnut is a world- wide disease caused by a pathogenic fungus, Cercospora personata (Deuteromycetes). The disease occurs on all above ground plant parts, more severely on the leaves. Circular, necrotic, dark brown or blankish leaf spots develop on the plant parts. The lesions coalesce is infection develops and severely spotted leaves shed prematurely.

73) Ans: **C)** The ecosystem
Sol: A keystone species has disproportionately large effect on its environment relative to its abundance. They play a critical role in maintaining the structure of an ecological community, affecting many other organisms in an ecosystem and helping to determine the types and number of various other species in the community.

74) Ans: **B)** 27.5%
Sol: Given, A + T =45%
As per Chargaff's rule,
A + T + C + G = 100%

$$\Rightarrow 45 + G + G = 100$$
$$\Rightarrow 2G = 100 - 45 = 55$$
$$\therefore G = \frac{55}{2} = 27.5\%$$

75) Ans: **C)** Temperature areas
Sol: Vernalisation is a process of the promotion of flowering by exposure to a period of low temperature. Many temperature plants have vernalisation requirement and must experience a period of low temperature in winter to initiate or accelerate flowering process, or in many fruit trees species, to induce dormancy and then break dormancy prior to flowering.

76) Ans: **A)** Oxaloacetic acid to citric acid
Sol: Citric acid cycle or tricarboxylic acid (TCA) cycle is also called as Krebs' cycle (name given on person who discovered it). Krebs' cycle is stepwise oxidative and cyclic degradation of acetyl CoA derived from pyruvate. Dehydrogenase enzyme mediate the conversion of citric acid to α -ketoglutaric acid, succinic acid to Fumaric acid and malic acid to oxaloacetic acid. Oxaloactetate converts into citrate in presence of citrate synthase.

77) Ans: **B)** Anchorage of plant to soil
Sol: They are thin thread - like adventitious roots that often develop in groups. Fibrous roots provide better and firm anchorage to the plant e.g. Grass.

78) Ans: **A)** Cu, Mn, Fe
Sol: Cu - Copper takes part in electron transport as plastocyanin (between PS II and PSI) and cytochrome to oxygen.
Mg - Manganese is activator of a number of enzymes such as reductases, oxidases, etc. taking part in respiration and photosynthesis.
Fe - Iron is component of e^- transferring bio-molecules as cytochromes and ferredoxin. They are essential components of photosynthesis.

79) Ans: **A)** nucellus or integuments
Sol: Normal type of sexual reproduction having two regular features, i.e., meiosis and fertilisation, is called amphimixis. But in some plants, this normal sexual reproduction (amphimixis) is replaced by some abnormal type of sexual reproduction called apomixis. Apomixis may be defined as, 'abnormal kind of sexual reproduction in which egg or other cells associated with egg (synergids, antipodals. etc.) develop into embryo without fertilisation and with or without meiosis'. Adventive embryony is a type of apomixis in which development of embryos directly takes place from sporophytic tissues like nucellus and integuments, e.g., Citrus, mango, etc.

80) Ans: **C)** O_3 and PAN
Sol: In the presence of sunlight the hydrocarbons and oxides of N_2 react to yield O_3 and PAN (Peroxy acetyl nitrate) and aldehyde and other organic substance.

81) Ans: **B)** Phosphorus and sulphur
Sol: Biogeochemical cycle are of two types: gaseous and sedimentary. In gaseous nutrients cycles, the material involved in circulation between biotic and abiotic components of biosphere are gases or vapours and the reservoir pool is atmosphere or hydrosphere, e.g., carbon, hydrogen, oxygen, nitrogen, water. In sedimentary nutrient cycle, material involved in circulation between biotic and abiotic components of biosphere are non-gaseous and the reservoir pool is lithosphere, e.g., phosphorus, calcium, magnesium. Sulphur has both sedimentary and gaseous nutrient cycles.

82) Ans: **D)** All of these
Sol: AIDS is a viral disease caused by HIV (Human Immunodeficiency Virus). Such common means are:
i) Infected blood transfusion
ii) Sexual intercourse with an infected partner without a condom

iii) From infected mother to child through placenta
iv) Use of contaminated needles, razors and syringes
v) Artificial insemination
vi) Organ transplantation

83) Ans: **A)** Phototropism
Sol: In photo tropism according to Cholondy Went theory, unilateral light produces more auxin and thus more growth on the shaded side resulting in bending.

84) Ans: **D)** Vasopressin
Sol: Vasopressin increases water re-absorption by renal tubule.

85) Ans: **A)** a, c and d
Sol: The correct statements are as follows:
Though the genotypic ratios can be calculated using mathematical probability, by simply looking at the phenotype of dominant trait, it is not possible to know the genotypic composition.
Based on his observation on monohybrid crosses Mendel proposed two rules that are called Principles or laws of Inheritance: the First Law or Law of Dominance and the Second Law or Law of Segregation.
If in test cross, all the progenies shows dominant trait then the unknown parent is homozygous dominant.

86) Ans: **B)** Stem apex

87) Ans: **D)** none of these
Sol: Starch sheath is also known as endodermis, a single layer of compactly arranged cells which are generally Parenchymatous, but have distinct wall characteristics clearly seen in roots. In some stems it is identifiable by innermost layer of cortex.
Caspary (1865-66) intrduced a band of the wall material in the radial and transverse walls of endodermis. This particular wall material is chemically different from the rest of the wall. It is known as casparian strip or starch sheath and it is believed to be made of suberin and found in roots.

88) Ans: **B)** Stomach
Sol: The main nutritional substance of gram is protein and it starts from stomach.

89) Ans: **A)** Blackman
Sol: Blackman propounded the law of limiting factors and also proposed the occurrence of a dark phase in photosynthesis.

90) Ans: **A)** 1 and 4 alone are correct
Sol: The correct statements are as follows:
Repressor protein associates from operator region and prevents RNA polymerase from transcribing the operon.
In the presence of lactose, the repressor is inactivated by interaction with lactose.

91) Ans: **D)** 51%
Sol: Vulnerable species refer to those species whose present population is sufficient but is under-going depletion because of some factor, or factors so that, it is facing risk of extinction in medium term future. Out of the total threatened species, 34-51% are vulnerable (34% mammals, 36% birds, 43% reptiles, 48% amphibians and 51% angiosperms).

92) Ans: **B)** Number of processes arising from the cell body
Sol: Neurons are classified on the basis of number and nature of their processes. The four types of neurons are (i) nonpolar or unpolar (ii) Unipolar (iii) Bipolar and (iv) Multipolar neurons.

93) Ans: **A)** Flame cell-Flatworm

94) Ans: **A)** Plastid
Sol: Plastids are present in plant cells whereas absent in most of the animal cells.

95) Ans: **A)** They are used up in reactions
Sol: Enzymes work as inorganic catalyst and are not used up in biochemical reactions.

96) Ans: **C)** Tension due to transpiration
Sol: Rate of absorption of water is almost directly proportional to the rate of transpiration.

97) Ans: **B)** Philippines

98) Ans: **B)** Oxytocin
Sol: Adrenaline and noradrenaline collectively known as catecholamines are two hormones secreted from adrenal medulla in response to stress and emergency. They directly and positively affect the SA node to increase rate of heart beat and strength of heart contraction. Hypersecretion of thyroxine (secreted from thyroid gland), potentiates the action of catecholamines leading to increased rate of heart beat.
Oxytocin (a hormone secreted from posterior lobe of pituitary gland) causes contraction of smooth muscles of uterus during parturition and expulsion of milk from mammary glands suckling and it has no effect on heart beat.

99) Ans: **B)** Give them support and prevent their collapse

100) Ans: **C)** areolar tissue
Sol: Areolar tissue is the most widely distributed connective tissue in the animal body and it is named so as it takes the form of fine threads crossing each other in every direction leaving small spaces known as areolae. The areolar tissue consists of ground substance, the matrix, white, yellow and reticular fibres and cell like fibroblasts, mast cells, macrophages, lymphocytes, plasma cells, mesenchyme cells, chromatophores.