BIOLOGY I - SECTION A

1 If one wants to recover many copies of the target DNA, it should be cloned in a vector:
1. that is a single-stranded DNA molecule
2. whose origin [ori] supports a high copy number
3. that carries two selectable markers
4. whose cloning sites are all clustered at one place

2 The flower cannot be divided into two similar halves by any vertical plane passing through the centre in:
1. Canna
2. Pea
3. Mustard
4. Datura

3 If a cell had 2N chromosomes and 2C DNA content in G1 phase, what would be the corresponding values at the end of the S phase?
1. 2N, 2C
2. 4N, 2C
3. 2N, 4C
4. 4N, 4C

4 Which step in the decomposition of detritus is carried out by bacteria and fungi?
1. fragmentation
2. leaching
3. catabolism
4. mineralisation

5 The interaction where one species is benefitted and the other is neither benefitted nor harmed is called:
1. mutualism
2. commensalism
3. competition
4. amensalism

6 Which of the following polysaccharides does not have glucose as its constituent unit?
1. Inulin
2. Starch
3. Cellulose
4. Glycogen

7 Cells of which of the following wall layer of microsporangium possess dense cytoplasm and generally have more than one nucleus?
1. epidermis
2. endothecium
3. middle layers
4. tapetum

8 During the formation of the embryo sac in angiosperms, cell walls are laid:
1. from the first nuclear division
2. between the 2-nucleate and 4-nucleate stage
3. before the 8-nucleate stage
4. after the 8-nucleate stage

9 Match each item in COLUMN I with one in Column II and select the correct match from the codes given:

	Column I [Element]		Column II [Role in plants]
A	Magnesium	P	Synthesis of auxin
B	Manganese	Q	Ribosome structure
C	Boron	R	Pollen germination
D	Zinc	S	Splitting of water

Codes:

	A	B	C	D
1.	Q	R	P	S
2.	S	R	Q	P
3.	Q	S	R	P
4.	R	S	P	Q

10 The numbers of ATP and NADPH molecules required to make one molecule of glucose through the Calvin pathway, respectively, are:
1. 9 and 6
2. 18 and 12
3. 6 and 9
4. 12 and 18

11 Consider the two statements:
Assertion: In a plant cell, the concentration of a number of ions is significantly higher in the vacuole than in the cytoplasm.
Reason: The tonoplast facilitates the transport of a number of ions and other materials against concentration gradients into the vacuole.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

12 The most important cause driving animals and plants to extinction in contemporary times is:
1. Habitat loss and fragmentation
2. Over-exploitation
3. Alien species invasion
4. Co-extinction

13 Spraying sugarcane crops with which of the following plant growth regulators increases the stem's length, thus increasing the yield by as much as 20 tonnes per acre?
1. Auxins
2. Gibberellins
3. Cytokinins
4. ABA

14 A ‘protonema’ stage in the life cycle of a moss is the:
1. first stage in gametophyte generation
2. second stage in gametophyte generation
3. first stage in sporophyte generation
4. second stage in sporophyte generation

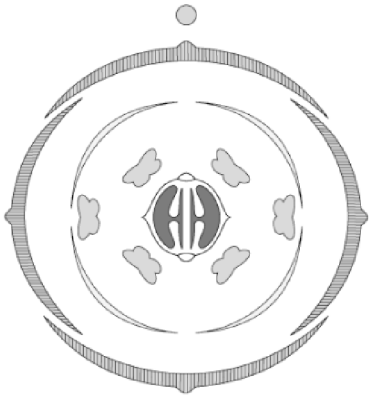
15 Besides starch, pyrenoids in many members of Chlorphyceae, contain:
1. Double-stranded DNA
2. A low molecular weight RNA
3. Protein
4. Lipids

16 Sex determination is based on the number of sets of chromosomes an individual receives in:
1. Honeybees
2. Grasshoppers
3. Fruit fly
4. Birds

17 In mung bean, mutations were used to induce resistance to:
I: yellow mosaic virus
II: powdery mildew
1. Only I
2. Only II
3. Both I and II
4. Neither I nor II

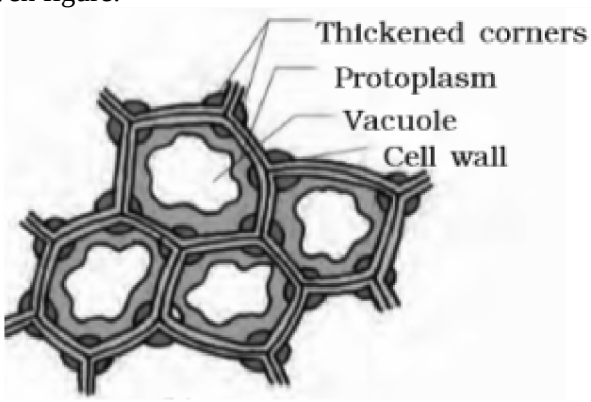
18 Which means of transport is very important to plants since it is the only means for gaseous movement within the plant body?
1. Diffusion
2. Facilitated diffusion
3. Active transport
4. Secondary active co-transport

19 The floral diagram describes the members of angiosperms belonging to the family:



1. Brassicaceae
2. Fabaceae
3. Liliaceae
4. Solanaceae

20 Identify the simple tissue of plants shown in the given figure:



1. Parenchyma
2. Collenchyma
3. Sclereids
4. Sclerenchyma fibres

21 Bacteria are grouped under four categories based on their shape. identify the incorrect match:

1.	Coccus	Spherical
2.	Bacillus	Rod-shaped
3.	Vibrium	Icosahedron
4.	Spirillum	Spiral

22 Earth has amazing bio-diversity. The number of species on Earth that are known and described ranges between:
1. 0.8 - 1.0 million
2. 1.7 - 1.8 million
3. 7 – 8 million
4. 20 – 50 million

23 Identify the correct statement regarding Euglenoids:
1. Majority of them are marine water organisms found in running water.
2. The cell wall has stiff cellulose plates on the outer surface.
3. They have only one flagellum.
4. Though they are photosynthetic in the presence of sunlight, when deprived of sunlight they behave like heterotrophs.

24 'Toddy', a traditional drink of some parts of southern India is made by fermenting sap from:
1. palms
2. soybean
3. bamboo shoots
4. barley

25 The consumers that feed on herbivores are correctly described as:
1. Primary producers
2. Primary consumers
3. Secondary carnivores
4. Secondary consumers

26 Which of the following gases is responsible for the least contribution to total global warming?
1. Carbon dioxide
2. Methane
3. CFCs
4. N_2O

27 The salient features of the Double-helix structure of DNA include all the following except:
1. It is made of two polynucleotide chains, where the backbone is constituted by sugar-phosphate, and the bases project inside.
2. The two chains have anti-parallel polarity.
3. The bases in two strands are paired through hydrogen bonds (H-bonds) forming base pairs (bp).
4. The two chains are coiled in a left-handed fashion.

28 All the following are purposes served by transpiration in plants except:
1. It creates transpiration pull for absorption and transport in plants.
2. It supplies water for photosynthesis.
3. It warms leaf surfaces to activate enzymes for carbon fixation.
4. It maintains the shape and structure of the plants by keeping cells turgid.

29 The vegetative propagule in the angiosperm Agave is known as:
1. Bulbil
2. Runner
3. Rhizome
4. Bulb

30 In dicot roots, initiation of lateral roots takes place in the cells of:
1. Endodermis
2. Pericycle
3. Epiblema
4. Hypodermis

31 Nitrifying bacteria are:
1. chemoautotrophs
2. photoautotrophs
3. chemoheterotrophs
4. methanogens

32 The water-splitting complex in green plants is associated with:
1. PS I, which itself is physically located on the inner side of the membrane of the thylakoid.
2. PS I, which itself is physically located on the outer side of the membrane of the thylakoid.
3. PS II, which itself is physically located on the inner side of the membrane of the thylakoid.
4. PS II, which itself is physically located on the outer side of the membrane of the thylakoid.

33 For the formation of interfascicular cambium and cork cambium the parenchyma cells first undergo:
1. Differentiation
2. Dedifferentiation
3. Redifferentiation
4. Reverse differentiation

34 During glycolysis, an ATP molecule is synthesised during the conversion of:
I: BPGA to 3-phosphoglyceric acid (PGA)
II: PEP to pyruvic acid
1. Only I
2. Only II
3. Both I and II
4. Neither I nor II

35 Consider the two statements:
Statement I: The proteins encoded by the genes cryIAc and cryIIAb control the corn borer.
Statement II: The proteins encoded by the gene cryIAb control the cotton bollworms.
1. Statement I is correct; Statement II is correct
2. Statement I is incorrect; Statement II is correct
3. Statement I is correct; Statement II is incorrect
4. Statement I is incorrect; Statement II is incorrect

BIOLOGY I - SECTION B

36 All the following biomolecules can be called both polymers and macromolecules except:
1. Lipids
2. Proteins
3. Carbohydrates
4. Nucleic acids

37 Consider the two statements:
Assertion: The evolutions of the flower and its pollinator species are tightly linked with one another.
Reason: Plants need the help of animals for pollinating their flowers and dispersing their seeds.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

38 Identify the incorrect statement:
1. Gross primary productivity of an ecosystem is the rate of production of organic matter during photosynthesis.
2. Gross primary productivity minus respiration losses (R), is the net primary productivity (NPP).
3. Gross primary productivity is the available biomass for the consumption of heterotrophs (herbivores and decomposers).
4. Secondary productivity is defined as the rate of formation of new organic matter by consumers.

39 Consider the given two statements:
Statement I: All prokaryotes have a cell wall surrounding the cell membrane except in mycoplasma.
Statement II: No organelles, like the ones in eukaryotes, are found in prokaryotic cells except for ribosomes.
1. Statement I is correct; Statement II is correct
2. Statement I is incorrect; Statement II is correct
3. Statement I is correct; Statement II is incorrect
4. Statement I is incorrect; Statement II is incorrect

40 Transfer of pollen grains from the anther to the stigma of another flower of the same plant is known as:
1. Autogamy
2. Geitonogamy
3. Cleistogamy
4. Xenogamy

41 Which of the following will not be true for gymnosperms?
1. Gymnosperms lack vessels in their xylem.
2. Gymnosperms have albuminous cells and sieve cells.
3. Gymnosperms lack sieve tubes and companion cells.
4. Gymnosperms lack secondary growth.

42 Identify the incorrect statement:
1. Cytosine is common for both DNA and RNA.
2. Uracil is present in RNA at the place of Thymine.
3. A nitrogenous base is linked to the OH of 1'C pentose sugar through a N-glycosidic linkage to form a nucleoside.
4. When a phosphate group is linked to OH of 2'C of a nucleoside through phosphoester linkage, a corresponding nucleotide is formed.

43 Consider the two statements:
Assertion: A high dose of UV-B causes inflammation of cornea, called snow-blindness.
Reason: UV radiation of wavelengths shorter than UV-B are almost completely absorbed by Earth's atmosphere, given that the ozone layer is intact.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

44 In Cycas:
I: coralloid roots are associated with N2-fixing cyanobacteria
II: the stems are unbranched
III: the pinnate leaves persist for a few years
1. Only I and II are correct
2. Only I and III are correct
3. Only II and III are correct
4. I, II and III are correct

45 Consider the two statements:
Assertion: It is necessary to define the boundaries that would demarcate the region and the strand of DNA that would be transcribed.
Reason: In transcription, only a segment of DNA and only one of the strands is copied into RNA.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

46 Which histone is not a part of the octamer that forms the core of histone molecules in a nucleosome?
1. H1
2. H2A
3. H2B
3. H3

47 Consider the two statements:
Assertion: It is better to consider the respiratory pathway as an amphibolic pathway rather than as a catabolic one.
Reason: The respiratory pathway is involved in both anabolism and catabolism.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

48 What would be true for Alternaria but not for Puccinia?
1. Heterotrophic mode of nutrition
2. Sexual stage is unknown
3. Lack of vegetative reproduction
4. Called as bracket fungi

49 Biodiversity hotspots are not characterised by:
1. Having a large number of species
2. Abundance of endemic species
3. Being mostly located in the tropics
4. Being mostly located in the polar regions

50 Consider the given two statements:
Statement I: Stem tendrils which develop from axillary buds are slender and spirally coiled and help plants to climb such as in Citrus and Bougainvillea.
Statement II: Axillary buds of stems may get modified into woody, straight and pointed thorns found in many plants such as gourds and grapevines.
1. Statement I is correct; Statement II is correct
2. Statement I is incorrect; Statement II is correct
3. Statement I is correct; Statement II is incorrect
4. Statement I is incorrect; Statement II is incorrect

BIOLOGY II - SECTION A

51 Each ejaculatory duct is formed by the union of:

1. the vas deferens with the duct of the bulbourethral gland
2. the vas deferens with the duct of the seminal vesicle
3. the epididymis and the vas deferens
4. the duct of bulbourethral gland and the urethra

52 Match each item in COLUMN I with one in Column II and select the correct match from the codes given:

	Column I [Phylum]		Column II [Characteristic]
A	Porifera	P	Water vascular system
B	Aschelminthes	Q	Canal system
C	Echinodermata	R	Pseudocoelom
D	Hemichordata	S	Stomochord

Codes:

	A	B	C	D
1.	Q	R	P	S
2.	S	R	Q	P
3.	Q	S	R	P
4.	R	S	P	Q

53 PCT and DCT of a nephron are respectively lined with:

1. Columnar brush-bordered epithelium and Simple cuboidal epithelium
2. Cuboidal brush-bordered epithelium and Simple cuboidal epithelium
3. Cuboidal brush-bordered epithelium and Simple columnar epithelium
4. Columnar brush-bordered epithelium and Simple columnar epithelium

54 Techniques to alter the chemistry of genetic material (DNA and RNA), to introduce these into host organisms and thus change the phenotype of the host organism comes under:

1. Bioprocess engineering
2. Genetic engineering
3. Bioinformatics
4. Biomedical technology

55 Consider the given two statements:

Statement I: Protonephridia or flame cells are the excretory structures in Aschelminthes.
Statement II: Reptiles, birds, land snails, and insects are uricotelic animals.

1. Statement I is correct; Statement II is correct
2. Statement I is incorrect; Statement II is correct
3. Statement I is correct; Statement II is incorrect
4. Statement I is incorrect; Statement II is incorrect

56 The somatic neural system relays impulses from:

1. the CNS to skeletal muscles
2. the CNS to the involuntary organs and smooth muscles of the body
3. the skeletal muscles of the CNS
4. the involuntary organs and smooth muscles of the body to the CNS

57 A man has type AB blood and he marries a woman with type O blood. Two children are born to the couple and they also adopted one child. If Child 1 has type A blood, Child 2 has type B blood, and Child 3 has type O blood, which child was adopted?

1. Child 1
2. Child 2
3. Child 3
4. Cannot be commented

58 Atrial systole increases the flow of blood into the ventricles by about:

1. 30 %
2. 50 %
3. 70 %
4. 90 %

59 Consider the given two statements:

Statement I: Periplaneta americana is dioecious.
Statement II: The development of Periplaneta americana is holometabolous.

1. Statement I is correct; Statement II is correct
2. Statement I is incorrect; Statement II is correct
3. Statement I is correct; Statement II is incorrect
4. Statement I is incorrect; Statement II is incorrect

60 Symptoms like constipation, abdominal pain and cramps, stools with excess mucous and blood clots are commonly seen in:

1. Amoebic dysentery
2. Ascariasis
3. Typhoid
4. Cholera

61 The son of a woman who carries the gene for colour blindness [but herself is not affected]:
1. can never be colour blind
2. has a 25 per cent chance of being colour blind
3. has a 50 per cent chance of being colour blind
4. has a 100 per cent chance of being colour blind

62 The membranes of which of the following cell organelle are not included in the endomembrane system of a eukaryotic cell?
1. Vacuole
2. Lysosome
3. Plastid
4. Endoplasmic reticulum

63 Identify the incorrectly matched pair:

1.	Myasthenia gravis	An auto-immune disorder affecting neuromuscular junction leading to fatigue, weakening and paralysis of skeletal muscle.
2.	Muscular dystrophy	Progressive degeneration of skeletal muscle mostly due to a genetic disorder.
3.	Tetany	Rapid spasms (wild contractions) in muscle due to high Ca++ in body fluid.
4.	Gout	Inflammation of joints due to accumulation of uric acid crystals.

64 Match the stage of Prophase I given in Column I with the corresponding event in Column II and select the correct match from the codes given:

	Column I		Column II
A	Zygotene	P	Terminalisation of chiasmata
B	Pachytene	Q	Appearance of chiasmata
C	Diplotene	R	Crossing over
D	Diakinesis	S	Pairing of homologues

Codes:

	A	B	C	D
1.	Q	R	P	S
2.	S	R	Q	P
3.	Q	S	R	P
4.	R	S	P	Q

65 The sobriquet "Lungs of the planet Earth" is used for:
1. Western Ghats in India
2. Alpine tundra
3. Amazon rainforest
4. Khasi and Jaintia Hills

66 An impairment affecting synthesis or release of ADH results in:
1. a diminished ability of the kidney to conserve water
2. enhanced re-absorption of water by the collecting duct of the nephron
3. glycosuria and ketonuria
4. a generalised vasoconstriction in the body leading to uncontrolled hypertension

67 The first clinical gene therapy was given in 1990 to a 4-year-old girl with:
1. adenosine deaminase (ADA) deficiency
2. alpha-1-antitrypsin deficiency
3. phenylalanine hydroxylase deficiency
4. homogentisic acid oxidase deficiency

68 The frequencies of dominant and recessive alleles of a gene in a population are 0.7 and 0.3 respectively. The expected frequency for heterozygotes in the population is likely to be:
1. 42%
2. 49%
3. 21%
4. 9%

69 What is the maximum number of oxygen molecules that a molecule of haemoglobin can carry?
1. 2
2. 4
3. 6
4. 8

70 Which of the following secondary metabolites is a carbohydrate-binding protein [Lectin]?
1. Abrin
2. Vinblastin
3. Curcumin
4. Concanavalin A

71 Identify the incorrect statement regarding the layers in the wall of alimentary canal:
1. Serosa is the outermost layer and is made up of a thin mesothelium with some connective tissues.
2. Muscularis is formed by skeletal muscles usually arranged into an outer circular and an inner longitudinal layer.
3. The sub-mucosal layer is formed of loose connective tissues containing nerves, blood and lymph vessels.
4. The innermost layer lining the lumen of the alimentary canal is the mucosa.

72 Match the pulmonary volume/capacity given in Column I with the corresponding description in Column II and select the correct match from the codes given:

	Column I		Column II
A	Expiratory reserve volume	P	Additional volume of air, a person can inspire by a forcible inspiration.
B	Inspiratory reserve volume	Q	Additional volume of air, a person can expire by a forcible expiration.
C	Residual volume	R	Volume of air that will remain in the lungs after a normal expiration.
D	Functional residual capacity	S	Volume of air remaining in the lungs even after a forcible expiration.

Codes:

	A	B	C	D
1.	P	Q	R	S
2.	P	Q	S	R
3.	Q	P	R	S
4.	Q	P	S	R

73 Which of the following conditions is not a case of aneuploidy?
1. Down's syndrome
2. Turner's syndrome
3. Thalassemia
4. Klinefleter's syndrome

74 A motor neuron along with the muscle fibres connected to it constitutes a:
1. Neuro-muscular junction
2. Motor end plate
3. Sarcomere
4. Motor unit

75 Identify a vertebrate chordate amongst the following:
1. Ascidia
2. Doliolum
3. Brancnhiostoma
4. Petromyzon

76 Compressed natural gas (CNG) is a fuel gas mainly composed of:
1. Hydrogen
2. Methane
3. Ammonia
4. Sulphur dioxide

77 Study the given two statements:
Statement I: The eye of the octopus and the eye of mammals are homologous.
Statement II: Sweet potato and potato are an example of homology.
1. Statement I is incorrect; Statement II is correct
2. Statement I is correct; Statement II is correct
3. Statement I is correct; Statement II is incorrect
4. Statement I is incorrect; Statement II is incorrect

78 Which of the following sexually transmitted infections is caused by a bacterium?
1. Trypanosomiasis
2. Syphilis
3. Genital warts
4. Trichomoniasis

79 The functions of hormones of Fight or Flight do not include:
1. pupillary dilation
2. piloerection
3. increase in the strength of heart contraction
4. storage of glucose into glycogen resulting in a decreased concentration of glucose in the blood

80 Intrinsic factor, a factor essential for the absorption of vitamin B12, is secreted by:
1. Parietal cells of gastric mucosa
2. Goblet cells
3. Paneth cells in the small intestine
4. Brunner's gland in the duodenum

81 Erythroblastosis foetalis can be avoided by administering anti-Rh antibodies to the:
1. mother between 20 weeks and 24 weeks of pregnancy
2. mother early in pregnancy
3. mother immediately after the delivery of the child
4. newborn immediately after the delivery

82 If the population pyramid of an associated population has an extremely broad base, it is:
1. a rapidly expanding population
2. a stable population
3. a population where there were more old individuals than young individuals
4. a population with more males than females

83 Inbreeding is important in animal husbandry because it:
1. increases vigour
2. improves the breed
3. increases heterozygosity
4. increases homozygosity

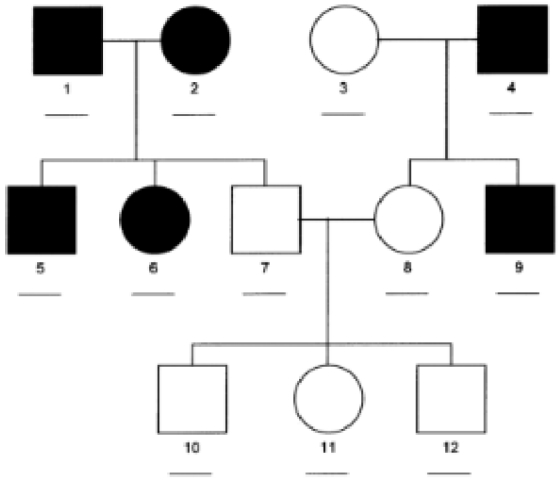
84 If a plasmid is to be used as a cloning vector, the most important feature which must be present in it is:
1. Origin of replication (Ori)
2. Presence of a selectable marker
3. Presence of sites for restriction endonuclease
4. Being linear rather than circular

85 Essential for the maintenance of the endometrium, what hormone is secreted in large amounts by the corpus luteum in a non-pregnant female?
1. hCG
2. Progesterone
3. Estrogen
4. LH

BIOLOGY II - SECTION B

86 Consider the two statements:
Assertion: Removal of a keystone species from a community affects community structure significantly.
Reason: Keystone species are always the apex predators in an ecosystem.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

87 The mode of inheritance of the trait [shown by solid symbols] in the given pedigree is most likely:



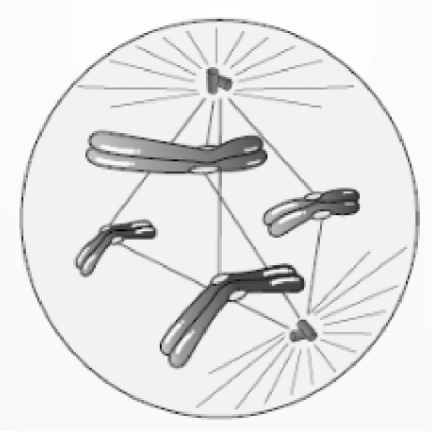
1. Autosomal recessive
2. Autosomal dominant
3. Sex linked recessive
4. Sex linked dominant

88 Identify the correct statement:
1. Evolution by natural selection works best on a population having no variation.
2. Mutation is a relatively unimportant source of variation and is not the foundation for evolution.
3. The effects of genetic drift are most apparent in small populations.
4. Inbreeding increases the proportion of heterozygous individuals in a population.

89 Consider the two statements:
Statement I: Irrigation without proper drainage of water leads to water-logging in the soil.
Statement II: Besides affecting the crops, water-logging draws salt to the surface of the soil.
1. Statement I is incorrect; Statement II is correct
2. Statement I is correct; Statement II is correct
3. Statement I is correct; Statement II is incorrect
4. Statement I is incorrect; Statement II is incorrect

90 ELISA stands for:
1. Easily Located Immuno Specific Antigen
2. Early Live Inactive Surface Antigen
3. Energy Loaded Intermediate Site on Apoenzyme
4. Enzyme-Linked Immuno Sorbent Assay

91 The cell shown in the given figure is at:



1. Early Prophase
2. Transition to Metaphase
3. Anaphase
4. Telophase

92 The T-cells:

I: themselves do not secrete antibodies
II: help B cells to produce antibodies
1. Only I is correct
2. Only II is correct
3. Both I and II are correct
4. Both I and II are incorrect

93 Consider the two statements:

Assertion: When Griffith injected a mixture of heat-killed S and live R bacteria, the mice died.
Reason: Mice infected with the S strain (virulent) die from pneumonia infection but mice infected with the R strain do not develop pneumonia.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

94 Consider the two statements:

Assertion: A continuous culturing method produces a larger biomass leading to higher yields of the desired protein.
Reason: In a continuous culture system the used medium is drained out from one side while the fresh medium is added from the other to maintain the cells in their physiologically most active log/exponential phase.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

95 Consider the two statements:

Assertion: As the filtrate passes upward in the ascending limb of the Loop of Henle, it gets diluted.
Reason: The ascending limb is impermeable to water but allows the transport of electrolytes actively or passively.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

96 Consider the two statements regarding the human internal ear:

Statement I: The malleus is attached to the tympanic membrane and the stapes is attached to the oval window of the cochlea.
Statement II: At the base of the cochlea, the scala vestibuli ends at the round window, while the scala tympani terminates at the oval window which opens to the middle ear.
1. Statement I is incorrect; Statement II is correct
2. Statement I is correct; Statement II is correct
3. Statement I is correct; Statement II is incorrect
4. Statement I is incorrect; Statement II is incorrect

97 The number of chromosomes in the male and female is/are not equal in:

I: Humans
II: Honeybees
III: Grasshoppers
IV: Drosophila
1. Only II
2. Only I and IV
3. Only II and III
4. I, II, III and IV

98 For a female becoming haemophilic:
I: mother of such a female has to be at least a carrier.
II: father of such a female has to be at least a carrier.

1. Only I is correct
2. Only II is correct
3. Both I and II are correct
4. Both I and II are incorrect

99 Consider the two statements:
Assertion: The Golgi apparatus, also known as the Golgi body, is like a post office.
Reason: The Golgi apparatus is an important site for the formation of glycoproteins and glycolipids.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

100 Consider the two statements:
Assertion: As long as the mother breast-feeds the child fully, chances of conception are almost nil upto six months following parturition.
Reason: Although ovulation occurs, the endometrium does not undergo any change during the period of intense lactation following parturition.
1. Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
2. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
3. Assertion is true but Reason is false.
4. Both Assertion and Reason are false.

Fill OMR Sheet*

*If above link doesn't work, please go to test link from where you got the pdf and fill OMR from there. After filling the OMR, you would get answers and explanations for the questions in the test.