

# Sharath Gore

## Biology mock test 8 2022-23

Time : 45 Min

Bio : Full Portion Paper

Marks : 400

**101)** Choose the correct option: *Bacillus thuringiensis* is used as

- A) weedicide
- B) fungicide
- C) biopesticide
- D) insecticide

**102)** In gymnosperms pollination is exclusively by

- A) Insects
- B) Water
- C) Wind
- D) Animals

**103)** Find a, v and c correctly.

To study pollen germination, some pollen from flowers such as pea, chickpea, *Crotalaria*, balsam and *Vinca* are collected and dusted on a glass slide containing a drop of ...a... solution about ....b... per cent. After about ....c... minutes, pollen tubes coming out of the pollen grains.

- A) a-Sugar, b-5, c-10 to 20
- B) a-Saline, b-5, c-5 to 10
- C) a-Saline, b-10, c-15 to 30
- D) a-Sugar, b-10, c-15 to 30

**104)** Number of ecological hot spots in the world is

- A) 25
- B) 20
- C) 16
- D) 14

**105)** Choose the correct combination

- A) Aves and Chordata.....Classes
- B) Mollusca and Hydrozoa.....Classes
- C) Oligochaeta and Arthropoda.....Phyla
- D) Annelida and Porifera ..... Phyla

**106)** A person likes to have more green vegetables. Which of the following vitamins will be excreted in faeces?

- A) Vitamin B
- B) Vitamin C
- C) Vitamin H
- D) Vitamin K

**107)** The abundance of a species population, within its habitat, is called (1995)

- A) relative density
- B) regional density
- C) absolute density
- D) niche density

**108)** Nucleotides are building blocks of nucleic acids. Each nucleotide is a composite molecule formed by

- A) Base-sugar-phosphate
- B) (Base-sugar-phosphate)<sub>n</sub>

C) Base-sugar-OH

D) Sugar-phosphate

**109)** One way of detecting sex linked inheritance is

- A) Son resembles father and daughter resembles mother
- B) Son resembles mother and daughter resembles father
- C) Both son and daughter resemble father
- D) Both son and daughter resemble mother

**110)**  $C_4$  pathway is advantageous over  $C_3$  pathway in plants because it

- A) occurs in relatively low  $CO_2$  concentration
- B) occurs in relatively low  $O_2$  concentration
- C) uses more amount of water
- D) is less efficient in energy utilization.

**111)** Oxygen evolution is connected with which of the following part?

- A) Photosystem II
- B) Photosystem I
- C) RUBP enzyme
- D) Cyclic photophosphorylation

**112)** Which type of division occurs during formation of megaspore?

- A) Meiosis
- B) Mitosis
- C) Mitosis followed by meiosis
- D) Meiosis followed by mitosis

**113)** Find the correct representation of the normal adult human dental formula.

- A)  $\frac{3}{3}, \frac{1}{1}, \frac{3}{3}, \frac{3}{3}$
- B)  $\frac{2}{2}, \frac{1}{1}, \frac{3}{2}, \frac{3}{3}$
- C)  $\frac{2}{2}, \frac{1}{1}, \frac{2}{2}, \frac{3}{3}$
- D)  $\frac{3}{3}, \frac{1}{1}, \frac{3}{2}, \frac{1}{1}$

**114)** At which stage of HIV infection does one usually show symptoms of AIDS? (2014)

- A) Within 15 days of sexual contact with an infected person
- B) When the infected retro virus enters host cells
- C) When HIV damages large number of helper T-lymphocytes
- D) When the viral DNA is produced by reverse transcriptase

**115)** Which is the phenomenon that operates in

the formation of root or shoot in a callus culture?

- A) Differentiation
- B) Re-differentiation
- C) Re-juvenation
- D) De-differentiation

**116)** Where the principal nitrogenous excretory compound in humans is synthesised?

- A) In liver and also eliminated by the same through bile
- B) In kidneys but eliminated mostly through liver
- C) In kidneys as well as eliminated by kidneys
- D) In the liver, but eliminated mostly through kidneys

**117)** In purple and green bacteria, oxygen is not evolved during photosynthesis because \_\_\_\_\_ is hydrogen donor.

- A)  $H_2O$
- B)  $H_2S$
- C)  $NH_3$
- D)  $CH_4$

**118)** Secondary growth is absent in

- A) Gymnosperms
- B) Dicot stem
- C) Monocot stem
- D) Dicot root

**119)** Hydroponics are

- A) Growing of floating aquatic plants
- B) Growing of aquatic plants
- C) Growing of plants in sand
- D) Growing of plants aqueous balanced nutrient

**120)** Isobilateral leaf is found in

- A) Xerophytes
- B) Monocots
- C) Hydrophytes
- D) Dicots

**121)** The best stage to count the number of chromosomes during mitosis is

- A) Metaphase
- B) Prophase
- C) Anaphase
- D) Telophase

**122)** Vitreous humor is

- A) Mucoid connective tissue
- B) Watery fluid
- C) Solid crystalline
- D) All of these

**123)** Write the name of pulmonary disease in which alveolar surface area involved in gas exchange is drastically reduced due to damage in the alveolar walls.

- A) Asthama
- B) Pneumonia
- C) Pleurisy
- D) Emphysema

**124)** The pineapple which under natural condition is difficult to blossom has been made to produce fruits throughout the year, is possible by applying \_\_\_\_\_.

- A) NAA, 2, 4-D
- B) Cytokinin
- C) IAA, IBA
- D) Phenyl acetic acid

**125)** Endoplasmic reticulum is more developed in

- A) Young cells
- B) Green cells
- C) Mature cells
- D) Bacteriophage

**126)** Articulation of the atlas with the axis is an example of

- A) Ball and socket joint
- B) Hinge joint
- C) Gliding joint
- D) Pivot joint

**127)** What are ovarioles?

- A) Structural units of ovaries of female cockroach
- B) Equivalent to uterus in function
- C) The ligaments that connect ovaries to the abdominal walls
- D) Structural units of gonads of male cockroach

**128)** Pneumatophores are useful in

- A) Respiration
- B) Transpiration
- C) Protein synthesis
- D) Guttation

**129)** Choose the correct option: Fight -or - flight reactions cause activation of

- A) the kidney, leading to suppression of renin-angiotensin-aldosterone pathway
- B) the parathyroid glands, leading to increased metabolic rate
- C) the adrenal medulla, leading to increased secretion of epinephrine and norepinephrine
- D) the pancreas leading to a reduction in the blood sugar levels.

**130)** The Greek word for ecology is

- A) Hecicology
- B) Oekologie
- C) Synecology
- D) Ethology

**131)** Statement 1 : Liverworts fail to spread to a new locality through fragmentation.

Statement 2 : Gemmae are helpful in propagating liverworts in different locality.

- A) Both the statement 1 and statement 2 are true but the statement 2 is not a correct explanation of the statement 1
- B) Both the statement 1 and the statement 2 are true and the statement 2 is a correct explanation of the statement 1
- C) The statement 1 is true but the statement 2 is false

D) Both the statement 1 and statement 2 are false

**132)** Which portion of an eukaryotic gene is transcribed but not translated?

- A) Codon
- B) Intron
- C) Cistron
- D) Exon

**133)** Cytokinin is added to the medium to enhance

- A) Rooting and shooting
- B) Quick differentiation
- C) Cell division in callus
- D) All of these

**134)** Statement 1 : A cell membrane shows fluid behaviour.

Statement 2 : A membrane is a mosaic or composite of diverse lipids and proteins.

- A) Both the statement 1 and statement 2 are true but the statement 2 is not a correct explanation of the statement 1
- B) Both the statement 1 and the statement 2 are true and the statement 2 is a correct explanation of the statement 1
- C) The statement 1 is true but the statement 2 is false
- D) Both the statement 1 and statement 2 are false

**135)** A compound having very important role in prebiotic evolution was

- A)  $\text{CH}_4$
- B) NO
- C)  $\text{SO}_2$
- D)  $\text{SO}_3$

**136)** In almost all Indian metropolitan cities like Delhi, the major atmospheric pollutant(s) is/ are

- A) Oxides of nitrogen
- B) Oxides of sulphur
- C) Suspended particulate matter (SPM)
- D) Carbon dioxide and carbon monoxide

**137)** \_\_\_\_\_ is not a synovial joint.

- A) Hinge joint
- B) Pivot joint
- C) Sutures forming the cranium
- D) Ball and socket joint

**138)** In biological terminology, a group of similar organisms which are capable of interbreeding and producing fertile offsprings is known as

- A) species
- B) family
- C) tribe
- D) genus

**139)** Genes for colour blindness/sex linked traits are located on which chromosomes?

- A) y-chromosome
- B) x-chromosome
- C) x or y-chromosomes
- D) both X and Y-chromosomes

**140)** The valve present between right auricle and right ventricle is

- A) tricuspid valve
- B) bicuspid valve
- C) eustachian valve
- D) semilunar valve

**141)** Mark the false statement for hydrophytes.

- A) Vessels are usually absent
- B) Tracheids are absent
- C) Air chamber are well developed
- D) Cuticle is poorly developed

**142) Statement 1:** Silica is deposited in the cell wall of diatoms.

**Statement 2:** Big heaps of siliceous frustules of diatoms is called diatomite or diatomaceous earth.

- A) Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1
- B) Both Statement 1 and Statement 2 are true and the Statement 2 is correct explanation of the Statement 1
- C) The Statement 1 is true, but the Statement 2 is false
- D) The Statement 1 is false but the Statement 2 is true

**143)** Injury to adrenal cortex is not likely to affect the secretion of which one of the following? (2010)

- A) Aldosterone
- B) Both androstenedione and dehydroepiandrosterone
- C) Adrenaline
- D) Cortisol

**144) Statement 1:** Ribosomes came to our knowledge after the discovery of electron microscope.

**Statement 2:** Electron microscope has lowest magnification and resolving power.

- A) Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1
- B) Both Statement 1 and Statement 2 are true and the Statement 2 is correct explanation of the Statement 1
- C) The Statement 1 is true but the Statement 2 is false
- D) The Statement 1 is false but the Statement 2 is true

**145)** In human females, meiosis-II is not completed until (2015)

- A) uterine implantation
- B) birth
- C) puberty
- D) fertilisation

**146) Statement 1:** Each cell can be seen with unaided eye.

**Statement 2:** Human eye can see objects smaller than  $100\text{ }\mu\text{m}$ .

- A) Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1  
 B) Both Statement 1 and Statement 2 are true and the Statement 2 is correct explanation of the Statement 1  
 C) The Statement 1 is true but the Statement 2 is false  
 D) The Statement 1 is false but the Statement 2 is true

**147)** Nitrogen fixation by Rhizobium in root nodules requires presence of red pigment called

- A) Rhizoglobin  
 B) Legobin  
 C) Myoglobin  
 D) Leghaemoglobin

**148)** Schwann cells and Node of Ranvier are found in

- A) Nervous tissue  
 B) Osteoblast  
 C) Gland cells  
 D) Chondrioblast

**149)** Which is the national aquatic animal of India? (NEET-I 2016)

- A) Blue whale  
 B) Sea-horse  
 C) Gangetic shark  
 D) River dolphin

**150)** A yellow substance oozing out from wound has

- A) Lymph + RBC + dead bacteria  
 B) Lymph + RBC + WBC  
 C) Lymph + WBC + dead bacteria  
 D) Lymph + dead leucocytes

**151)** Pulses are obtained from (1993)

- A) Fabaceae  
 B) Asteraceae  
 C) Poaceae  
 D) Solanaceae

**152)** A pigment concerned with both floral induction and seed germination is

- A) Chlorophyll  
 B) Florigen  
 C) Plastocyanin  
 D) Phytochrome

**153) Statement 1:** Opium and Heroin are opiate narcotic.

**Statement 2:** Opiate narcotic depress brain activity and produce feeling of calmness.

- A) Both Statement 1 and Statement 2 are true but Statement 2 is not the correct explanation of Statement 1  
 B) Both Statement 1 and Statement 2 are true and the Statement 2 is correct explanation of the Statement 1  
 C) This Statement 1 is true, but the Statement 2 is false

D) Both Statement 1 and Statement 2 are false

**154)** Statement 1 : Hemichordata was previously considered as the class of phylum chordata.  
 Statement 2 : Hemichordates is supposed to have some affinities with chordata. .

- A) Both the statement 1 and the statement 2 are true and the statement 2 is a correct explanation of the statement 1  
 B) Both the statement 1 and statement 2 are true but the statement 2 is not a correct explanation of the statement 1  
 C) The statement 1 is true but the statement 2 is false  
 D) Both the statement 1 and statement 2 are false

**155)** Which of the following point is concerned in the Montreal Protocol (1987)?

- A) Global warming and climatic changes  
 B) Persistent organic pollutants  
 C) Biosafety of genetically modified organisms  
 D) Controlling the emission of ozone depleting substances

**156)** Which one of the following statement is true about an organism and its classification?

- A) Sea lily is a kind of echinoderm  
 B) Maiden hair tree is a kind of angiosperm  
 C) Sea horse is closely related to dolphin  
 D) Blue green alga is kind of fungus

**157)** Which of the following elements has its end walls perforated?

- A) Tracheid  
 B) Vessel  
 C) Scleried  
 D) Fiber

**158)** Bryophytes are dependent on water, because (1998)

- A) water is essential for their vegetative propagation  
 B) the sperms can easily reach upto egg in the archegonium  
 C) archegonium has to remain filled with water for fertilization  
 D) water is essential for fertilization for their homosporous nature.

**159)** If for some reason, the vasa efferentia in the human reproductive system get blocked, the gametes will not be transported from which organ?

- A) Testes to epididymis  
 B) Ovary to uterus  
 C) Epididymis to vas deferens  
 D) Vagina to uterus

**160)** In \_\_\_\_\_ cycles,  $O_2$  is directly used.

- A) Oxidative decarboxylation  
 B) Fermentation  
 C) Electron transport chain  
 D) Glycolysis

**161)** Protein of capsomeres is made up of

- A) Carbohydrates
- B) Amino acids
- C) Fats
- D) Nucleic acids

**162)** What shall be the sequence of events during wilting of a plant?

- A) Endosmosis, plasmolysis, wilting
- B) Exosmosis, deplasmolysis, wilting
- C) Exosmosis, plasmolysis, wilting
- D) Endosmosis, deplasmolysis, wilting

**163)** Due to low atmospheric pressure, the rate of transpiration will

- A) Decrease rapidly
- B) Decrease slowly
- C) Increase
- D) Remain unaffected

**164)** In a food chain herbivores are

- A) Decomposers
- B) Primary producers
- C) Primary consumers
- D) Secondary consumers

**165)** Typhlops is (1988)

- A) sea snake
- B) glass snake
- C) blind snake
- D) grass snake

**166)** The testes of a great majority of mammals are typically enclosed in an extra abdominal sac, the scrotum. The temperature inside the scrotum is lower than that in the abdomen. What will happen if the temperature of the scrotum is artificially maintained to the level of abdominal temperature

- A) The germinal epithelium of the testes will divide faster, thus producing more sperms
- B) The germinal epithelium will produce a large quantity of androgen secretion
- C) The germinal epithelium of the testes will degenerate, resulting in sterility
- D) The germinal epithelium will carry out normal spermatogenesis

**167)** Toxic agents present in food which interfere with thyroxine synthesis is responsible for the development of

- A) cretinism
- B) toxic goitre
- C) simple goitre
- D) thyrotoxicosis

**168)** During seed germination its stored food is mobilised by which of the following plant hormone?

- A) ABA
- B) Gibberellin
- C) Cytokinin
- D) Ethylene

**169)** Point out the wrongly matched pair.

- A) Hotspots - Western Ghats
- B) Endemism - Species confined to a region and

not found anywhere else

- C) Sacred groves - Jaintia hills of Rajasthan
- D) Ex situ conservation - Zoological parks

**170)** To record \_\_\_\_\_ sphygmomanometer instrument is used.

- A) systolic pressure
- B) diastolic pressure
- C) both systolic and diastolic pressure
- D) none of the above

**171)** Gastrulation is the process which involves the differentiation of the following layers in a vertebrate embryo.

- A) Ectoderm and endoderm
- B) Ectoderm and mesoderm
- C) Endoderm and mesoderm
- D) Ectoderm, endoderm and mesoderm

**172)** Find the true according to Charagaff's rule.

- A)  $A = C$
- B)  $A + C = T + C$
- C)  $G/T = 1$
- D)  $G = T$

**173)** The 3rd, 6th and 11th cranial nerves are

- A) Optic, facial, spinal
- B) Oculomotor, trigeminal, spinal
- C) Oculomotor, abducens, spinal
- D) Trichlear, abducens, vagus

**174)** \_\_\_\_\_ carbohydrates is considered non-reducing in acidic medium.

- A) Fructose
- B) Sucrose
- C) Lactose
- D) Maltose

**175)** In which of the following point the multilocular adipose tissue differs from unilocular adipose tissue?

- A) It undergoes lipolysis under influences of epinephrine
- B) It has greater number of mitochondria
- C) It has cells that are not electrically coupled
- D) It has fewer blood vessels

**176)** Regions of root from base to root tip are

- A) Cell division zone - Elongation zone - Maturation zone
- B) Maturation zone - Elongation zone - Cell division zone
- C) Maturation zone - Cell division zone - Elongation zone
- D) Elongation zone - Cell division zone - Maturation zone

**177)** Chemically DNA differs from RNA in having

- A) Single strand
- B) Thymine in place of uracil
- C) Ribose sugar instead of deoxyribose sugar
- D) All of the above

**178)** After double fertilisation, \_\_\_\_\_ present in a

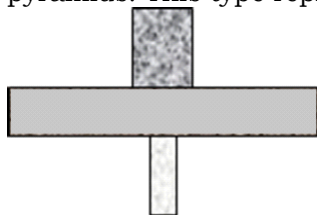
mature ovule.

- A) 1 diploid and 1 haploid cell
- B) 1 diploid and 1 triploid cell
- C) 1 haploid and 1 triploid cell
- D) 2 haploid and 1 triploid cell

**179)** Implants under the skin and injections are also used as contraceptive device. These devices contain

- A) progestin-estrogen combination
- B) estrogen alone
- C) progestogens alone
- D) either A or C

**180)** Given below is one of the types of ecological pyramids. This type represents



- A) Pyramid of numbers in a grassland
- B) Energy pyramid in a spring
- C) Pyramid of biomass in a lake
- D) Pyramid of biomass in a fallow land

**181)** In single Krebs' cycle, decarboxylation takes place at how many steps?

- A) Four
- B) Five
- C) Three
- D) Two

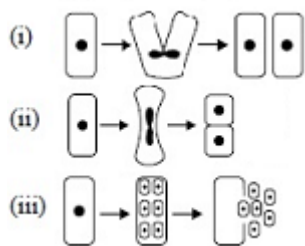
**182)** A single strand of nucleic acid tagged with a radioactive molecule is known as

- A) selectable marker
- B) vector
- C) plasmid
- D) probe

**183)** \_\_\_\_\_ antibodies are produced in response to hypersensitive reactions.

- A) IgG
- B) IgE
- C) IgA
- D) IgM

**184)** In the given figures, there are 3 different types of fission. Find the option that correctly matches them with organism.



- |    | (i)        | (ii)       | (iii)   |
|----|------------|------------|---------|
| A) | Euglena    | Plasmodium | Amoeba  |
| B) | Plasmodium | Paramecium | Euglena |

	(i)	(ii)	(iii)
C)	Euglena	Paramecium	Escherichia
	(i)	(ii)	(iii)
D)	Euglena	Paramecium	Amoeba

**185)** 'Roquefort cheese' is ripened by using which microbes?

- A) type of yeast
- B) bacterium
- C) cyanobacteria
- D) fungus

**186)** Who coined the word species?

- A) Linnaeus
- B) Aristotle
- C) John Ray
- D) Engler

**187)** A patient of diabetes mellitus excretes glucose in urine even when he is kept in a carbohydrate free diet. It is because

- A) Fats are catabolised to form glucose
- B) Amino acids are catabolised in liver
- C) Glycogen from muscles is released in blood stream.
- D) Amino acids are discharged in blood stream from liver

**188)** \_\_\_\_\_ is added to the blood during haemodialysis to prevent blood clotting.

- A) Thrombin
- B) Haemocyanin
- C) Heparin
- D) Haemoglobin

**189)** On which membrane receptor sites for neurotransmitters are present?

- A) Tips of axons
- B) Pre-synaptic membrane
- C) Post-synaptic membrane
- D) Membranes of synaptic vesicles

**190)** Which term is refer to the cellular transport method that involves use of transmembrane proteins without energy expenditure?

- A) Diffusion
- B) Facilitated diffusion
- C) Exocytosis
- D) Active transport

**191)** The parietal cells secrete which one of the following substance?

- A) Mucus
- B) Pepsinogen
- C) Lysozyme
- D) Intrinsic factor

**192)** What is the alternate name for the yellow spot in retina?

- A) Corpus lutea
- B) Canalis centralis
- C) Fovea centralis
- D) Macula lutea

**193)** Genetic material in TMV is

- A) RNA
- B) DNA
- C) Capsid
- D) Both (1) and (2)

**194)** The ozone of atmosphere in which the ozone layer is present is known as

- A) troposphere
- B) mesosphere
- C) stratosphere
- D) ionosphere

**195)** Which of the following is not a cell organelle?

- A) Microsome
- B) Golgi complex
- C) Ribosome
- D) Mitochondria

**196)** "Both the characters in a monohybrid cross are recovered as such in the  $F_2$  generation though one of these is not seen at the  $F_1$  stage". What is the base of this interpretation?

- A) Second law of Mendel
- B) First law of Mendel
- C) Incomplete dominance
- D) Second set of generalisations

**197)** Distinct alternation of generation is found in

- A) Pteris (Fern)
- B) Viruses
- C) Bacteria
- D) Rhizopus

**198)** What is the function of companion cells?

- A) Providing water to phloem
- B) Providing energy to sieve elements for active transport
- C) Loading of sucrose into sieve elements by passive transport
- D) Loading of sucrose into sieve elements.

**199)** Breathing differs from respiration by

- A) Breathing refers to respiration in human beings whereas respiration occurs in rest of the animals and plants
- B) Both are same and there is no difference
- C) Breathing refers to chest movements due to inhalation of  $O_2$  and exhalation of carbon dioxide whereas respiration refers to gaseous exchange
- D) None of these

**200)** Mark the correct statement.

- A) Oxygen is vital in respiration for removal of hydrogen.
- B) Pyruvate is formed in the mitochondrial matrix.
- C) During the conversion of Succinyl CoA to succinate a molecule of ATP is synthesised.
- D) There is complete breakdown of glucose in fermentation.