

## Objective

If you prepare these MCQs then Insha Allah Confirm your 17/17 marks.

اگر آپ یہ معروضی تیار کرتے ہیں تو انشاء اللہ آپ کے 17/17 نمبر پکے ہیں۔



- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct.
- A plant is adapted to remove the flooding of its cells in fresh water:  
(A) Mesophyte (B) Cactus (C) Hydrophyte ✓ (D) Xerophyte
  - They have adaptations for reduced rate of transpiration:  
(A) Hydrophytes (B) Xerophytes ✓ (C) Mesophytes (D) Bryophytes
  - The category of plants that has adaptation of small and thick leaves to limit water loss is called:  
(A) Hydrophytes (B) Xerophytes ✓ (C) Mesophytes (D) Aygrophytes
  - The more concentrated external environment is termed as:  
(A) Hypertonic ✓ (B) Hypotonic (C) Isotonic (D) Paratonic
  - A diluted solution compared to the cell concentration is termed as:  
(A) Hypertonic (B) Hypotonic ✓ (C) Isotonic (D) Paratonic
  - Among the vertebrates, hag fishes are isotonic with the surrounding:  
(A) Fresh water (B) Sea water ✓ (C) Pond water (D) River water
  - Hag fishes are:  
(A) Osmoregulators (B) Isotonic ✓ (C) Hypertonic (D) Hypotonic
  - Which part of the plant body serves excretophores?  
(A) Stem (B) Leaves ✓ (C) Roots (D) Bark
  - 1 g of ammonia nitrogen requires how much water for excretion:  
(A) 50 ml (B) 100 ml (C) 250 ml (D) 500 ml ✓
  - Animals excreting urea are called:  
(A) Ammonotelic (B) Aminotelic (C) Ureotelic ✓ (D) Uricotelic
  - The excretory product that requires maximum water for its removal is:  
(A) Ammonia ✓ (B) Creatinine (C) Urea (D) Uric Acid
  - Nitrogenous waste is very toxic and dissolves quickly in body fluid is:  
(A) CO<sub>2</sub> (B) Urea (C) Ammonia ✓ (D) Uric
  - The excretory product which requires minimum water for its removal:  
(A) Urea (B) Uric acid ✓ (C) Creatinine (D) Ammonia
  - Flame cells are part of excretory system of:  
(A) Hydra (B) Cockroach (C) Planaria ✓ (D) Earthworm
  - Animals of the group of flatworms have simple tubular excretory system called as:  
(A) Kidney (B) Nephron (C) Nephridia (D) Protonephridium ✓
  - The planaria flatworm have simple tubular excretory system known as:  
(A) Protonephridium ✓ (B) Metanephridium (C) Mesonephridium (D) Prenephridium
  - Cockroach excrete nitrogenous wastes in the form of:

- (A) Ammonia (B) Urea (C) Uric acid ✓ (D) Allantoin
18. Excretory structure present in cockroach is:  
(A) Contractile vacuole (B) Malpighian tubules ✓ (C) Nephridia (D) Flame cells
19. Nephridia are the excretory structures present in:  
(A) Hydra (B) Planaria (C) Cockroach (D) Earthworm ✓
20. The Removal of Sebum on the Skin is for:  
(A) Nutrition (B) Excretion (C) Protection ✓ (D) Thermoregulation
21. Number of Ammonia molecules required to produce one molecule of urea is:  
(A) 01 (B) 02 ✓ (C) 03 (D) 04
22. The chief nitrogenous waste in birds and reptiles is:  
(A) NH<sub>3</sub> (B) Urea (C) Uric Acid ✓ (D) Creatirine
23. Liver acts as a store house of:  
(A) Bile ✓ (B) Albumin (C) R.B.Cs (D) Iron
24. Liver also has numerous crucial functions of:  
(A) Osmoregulation (B) Homeostasis ✓ (C) Excretion (D) Themoregulation
25. Among vertebrates' uric acid is the chief nitrogenous waste in birds and:  
(A) Fishes (B) Amphibians (C) Reptiles ✓ (D) Mammals
26. The compound which takes part in urea cycle is:  
(A) Adenine (B) Guanine (C) Citrulline ✓ (D) Thymine
27. Which organ is the central station of metabolism:  
(A) Kidney ✓ (B) Liver (C) Pancreas (D) Stomach
28. Urine leaves the kidney through adduct called:  
(A) Urethra (B) Pelvis (C) Ureter ✓ (D) Nephron
29. The active uptake of sodium ions in the loop of Henle is provided by the action of hormone:  
(A) Insulin (B) Aldosterone ✓ (C) Oxytocin (D) Adrenaline
30. Non-surgical removal of kidney stone is called:  
(A) Dialysis (B) Lithotripsy ✓ (C) Uremia (D) Kidney transplant
31. High degree of renal failure is also called as:  
(A) Uremia ✓ (B) Leukemia (C) Anemia (D) Lithotripsy
32. The incidence of calcium oxalate types stones of Kidney is:  
(A) 40 % (B) 50% (C) 60% (D) 70% ✓
33. Abdomen has a peritoneal cavity, lined by a thin epithelium called:  
(A) Ectoderm (B) Endoderm (C) Peritoneum ✓ (D) Epidermis
34. The incidence of uric acid kidney stones is:  
(A) 10% ✓ (B) 15% (C) 20% (D) 70%
35. Most land mammals respond to cold by raising their:  
(A) Skin (B) Furs ✓ (C) Bristies (D) Spines
36. Which one of the following is an Endotherm:  
(A) Birds ✓ (B) Bat (C) Humming Bird (D) Reptiles
37. Which one of the following is an ectothen:  
(A) Brid (B) Huming bird (C) Amphibain ✓ (D) Bat

38. Chemical that causes fever and are produced from blood cells are:  
(A) Bilirubin (B) Interferons (C) Pyrogens ✓ (D) Anti bodies
39. Human body temperature is controlled by:  
(A) Hypothalamus ✓ (B) Pons (C) Medulla (D) Cerebellum 
40. The nature of shivering thermogenesis adaptation is:  
(A) structural (B) physiological ✓ (C) psychological (D) behavioural
41. Bundle caps in sunflower stem, are formed by:  
(A) Sclerenchyma ✓ (B) Parenchyma (C) Mesenchyma (D) Collenchyma
42. Turgor pressure is generated by high osmotic pressure in plants cell:  
(A) Cytoplasm (B) Vacuole ✓ (C) Mitochondria (D) Chloroplast
43. The collenchymas cells have protoplast and usually lack.  
(A) Primary wall (B) Secondary wall ✓ (C) Middle Lemella (D) Vacuole
44. The membrane that bounds vacuole is called:  
(A) Tonoplast ✓ (B) Leucoplast (C) Chromoplast (D) Chloroplast
45. Angular thickenings in their primary walls are present in:  
(A) Parenchyma (B) Collenchyma ✓ (C) Sclerenchyma (D) Tracheids
46. An increase in plant girth due to activity of vascular cambium is called:  
(A) Primary growth (B) Secondary growth ✓ (C) Sap wood (D) Heart wood
47. The Sclerenchyma cells found in seed coats and nut shells are the:  
(A) Fibres (B) Vessels (C) Tracheids ✓ (D) Scleriedes
48. This type of wood is most resistant to decay and insect attack.  
(A) Heart wood ✓ (B) Sapwood (C) Cork (D) Bark
49. The sclerenchyma has thick secondary walls usually impregnated with:  
(A) Chitin (B) Pectin (C) Silica (D) Lignin ✓
50. The movement in response to stimulus of touch i.e. Climbing vines is called:  
(A) Hydrotropism (B) Thigmotropism ✓ (C) Phototropism (D) Geotropism
51. Haptonastic movements occur in response to:  
(A) Contact ✓ (B) Chemical (C) Temperature (D) Water
52. Action of the Venus fly trap is:  
(A) Nyctinasty (B) Photonasty (C) Haptonasty ✓ (D) Thermonasty
53. Movement shown by sperms of liver worts, mosses and ferns towards archegonia is a:  
(A) Chemotactic movement ✓ (B) Photoactic movement  
(C) Chemotropic movement (D) Phototropic movement
54. Which bone provide attachment site for muscle:  
(A) Compact bone ✓ (B) Spongy bone (C) Soft bone (D) Cartilage
55. The process of moulting is controlled by the nervous system and a hormone called:"  
(A) Aldosteron (B) Androgen (C) Ecdysone ✓ (D) Oxytocin
56. Mature bone cells are called as:  
(A) Osteocytes ✓ (B) Osteoblasts (C) Chondrocytes (D) Blastocytes
57. Define Cartilage. What are two types of cartilage?  
(A) Humerus (B) Femus (C) Tibia (D) Rib ✓
58. The number of cervical vertebrae is:  
(A) 07 ✓ (B) 12 (C) 33 (D) 22
59. The fusion of four posterior vertebrae presents in the pelvic region form:

- (A) Sacrum (B) Lumbar (C) Coccyx ✓ (D) Chest cage
60. All of the following bones are associated with coxal bones, except:  
(A) Ilium (B) Ischium (C) Pubis (D) Clavicle ✓
61. The joints that allow movement in several directions is called:  
(A) Fibrous Joint (B) Synovial Joint (C) Hinge Joint (D) Ball and Socket Joint ✓
62. Sciatica is characterized by stabbing pain radiating over the course of:  
(A) Sciatic artery (B) Sciatic nerve ✓ (C) Sciatic vein (D) Sciatic capillary
63. Which one of the following is not a joint disease:  
(A) Arthritis (B) Sciatica ✓ (C) Disc Slip (D) Spondylosis
64. A disease which causes immobility and fusion of vertebral joint is called:  
(A) Disc Slip (B) Sciatica (C) Arthritis (D) Spondylosis ✓
65. The inflammatory degenerative disease of joint is:  
(A) Arthritis ✓ (B) Sciatica (C) Herniation (D) Spondylosis
66. The beginning of bone formation, starts after injury:  
(A) 3-4 months ✓ (B) 2-3 months (C) 8 weeks (D) 8-12 weeks
67. Trpomyosin is a complex of how many polypeptide chains?  
(A) Single (B) Double ✓ (C) Triple (D) None
68. The disease caused by low calcium in blood is called:  
(A) Tetanus (B) Cramp (C) Sciatica (D) Tetany ✓
69. Which is the end of muscle which remains fixed when the muscle contracts?  
(A) Insertion (B) Origin ✓ (C) Tendon (D) Belly
70. There are \_\_\_\_\_ muscles in the human body most of which occur in pairs:  
(A) 650 ✓ (B) 630 (C) 660 (D) 645
71. What is mortality rate in developing countries due to Tetanus?  
(A) 35% (B) 40% ✓ (C) 45% (D) 50%
72. Which animal shows digitigrade mode of locomotion?  
(A) Bear (B) Dear (C) Rabbit ✓ (D) Horse
73. A respiratory protein found in all aerobic species is:  
(A) Cytochrome 'a' (B) Cytochrome 'b' (C) Cytochrome 'c' ✓ (D) Cytochrome 'd'
74. Which animal moves by jet-propulsion:  
(A) Earth worm (B) Star Fish (C) Snail (D) Jelly Fish ✓
75. Euglena moves with the help of:  
(A) Cilium (B) Pseudopodium (C) Myonemes (D) Flagellum ✓
76. The diameter of cilia ranges from:  
(A) 0.1 to 0.5  $\mu\text{m}$  ✓ (B) 0.1 to 0.5 mm (C) 0.36 to 0.8  $\mu\text{m}$  (D) 0.3 to 0.8 mm
77. The mammals who walk on tips of the toes, modified into hooves are termed as:  
(A) Plantigrades (B) Unguligrades (C) Digitigrades ✓ (D) Brachigrades
78. The supracoracoid muscles provide power for the:  
(A) Upward Stroke ✓ (B) Downward Stroke (C) Recovery Stroke (D) Neutral Stroke
79. Digitigrade mammals tend to walk on their:  
(A) Jelly fish (B) Silver fish (C) Cuttle fish (D) Star fish ✓
80. The plant hormone that inhibits the growth of lateral shoots:  
(A) Auxins ✓ (B) Gibberellins (C) Cytokinins (D) Ethene
81. Promotes closing of Stomata under conditions of water stress:  
(A) Auxins (B) Gibberellins (C) Cytokinins (D) Abscisic acid ✓
82. Ethene induce flowering in:  
(A) Banana (B) Rose (C) Pine-apple ✓ (D) Orange
83. Nissl's granules are group of:  
(A) Mesosomes (B) Lysosomes (C) Ribosomes ✓ (D) Chromosomes
84. The processes conducting impulses away from the cell body are called:  
(A) Dendrites (B) Dendron (C) Nissl's granulis (D) Axon ✓

85. The sensation of pain is produced by:  
 (A) Chemoreceptors (B) Photoreceptors (C) Nociceptors ✓ (D) Mechanoreceptors
86. Nociceptors produce sensation of:  
 (A) Touch (B) Pain ✓ (C) Warmth (D) Pressure
87. Resting membrane potential of a neuron is:  
 (A) 50 mv (B) -60 mv (C) -70 mv ✓ (D) -80 mv
88. In neurons the message is transmitted across synapse in the form of chemical messenger called:  
 (A) Neurotransmitters ✓ (B) Communication (C) Nerve Impulse (D) Synaptic Vesicle
89. The number of spinal nerves in man is:  
 (A) 24 (B) 62 ✓ (C) 12 (D) 31
90. Diffused nervous system is found in:  
 (A) Poriferans (B) Platyhelminthes (C) Cnidarians ✓ (D) Annelids
91. The largest part of brain is:  
 (A) Hypothalamus (B) Cerebellum (C) Cerebrum ✓ (D) Pons
92. In human mid brain is:  
 (A) Reduced ✓ (B) Enlarged (C) Swollen (D) Broken
93. The structure in human brain which control hunger is:  
 (A) Amygdala (B) Hippocampus (C) Thalamus (D) Hypothalamus ✓
94. Alzheimer's disease is:  
 (A) Physical illness (B) Mental illness ✓ (C) Renal illness (D) Pulmonary illness
95. Alzheimer's disease is characterized by the decline in the function of:  
 (A) Brain ✓ (B) Liver (C) Kidney (D) Stomach
96. Effective drug available for Parkinson's disease is:  
 (A) Nicotine (B) GDNF (C) AZT (D) L-dopa ✓
97. Endocrine glands secrete:  
 (A) Hormones ✓ (B) Salts (C) Enzymes (D) Mucous
98. Which hormone is chemically steroid?  
 (A) ADH (B) Corticosterone ✓ (C) Thyroxine (D) Insulin
99. The corpus luteum secretes a hormone called:  
 (A) Oxytocin (B) Progesterone ✓ (C) Oestrogen (D) Testosterone
100. Insulin and glucagon hormones are in nature:  
 (A) Carbohydrates (B) Proteins ✓ (C) Steroids (D) Polypeptides
101. Ovulation is induced by:  
 (A) FSH (B) LH ✓ (C) Estrogen (D) Progesterone
102. Excess thyroxine produces a condition called:  
 (A) Cretinism (B) Dwarfism (C) Grave's disease ✓ (D) Cushing's disease
103. Kohler used chimpanzee to prove:  
 (A) Habituation (B) Imprinting (C) Latent Learning (D) Insight learning ✓
104. The form of learning which involve a diminish of response to repeated stimuli.  
 (A) Imprinting (B) Habituation ✓ (C) Conditioning (D) Latent learning
105. Higher form of learning is the:  
 (A) Conditioned reflex type-I (B) Imprinting (C) Insight learning ✓ (D) Latent learning
106. Fruit development without fertilization is\_\_\_\_\_  
 (A) Dormancy (B) Climacteric (C) Parthenocarpy ✓ (D) Parthenogenesis
107. Parthenocarpy is sometimes artificially induced in tomato, peppers etc, by adding:  
 (A) Auxins ✓ (B) Cytokinins (C) Abscisic Acid (D) Ethene
108. Vehicle for transport of male gamete in land plants is:  
 (A) Water (B) Pollen tube ✓ (C) Pollen grain (D) Wind
109. Developing seeds are a rich source of:  
 (A) Auxin (B) Gibberellins (C) Cytokinins (D) All of these ✓

110. Reproduction is very important to the survival of:  
 (A) Species ✓ (B) Individual (C) Population (D) Community
111. Fruit ripening is often accompanied by burst of respiratory activity called:  
 (A) Apomixes (B) Climacteric ✓ (C) Photoperiodism (D) Endosperm
112. Evolution of pollen tube is parallel to the evolution of:  
 (A) Stem (B) Leaves (C) Flower (D) Seed ✓
113. P660 is quiescent form, is converted to active p730 by the absorption of:  
 (A) Blue light (B) Red light ✓ (C) Yellow light (D) Far red light
114. The light which promotes germination of fern spores:  
 (A) Green (B) White (C) Blue (D) Red ✓
115. Which is a long day plant?  
 (A) Soyabean (B) Henbane ✓ (C) Tomato (D) Cucumber
116. Photoperiod affects flowering meristems start producing:  
 (A) Floral buds ✓ (B) Leaves (C) Lateral buds (D) Branches
117. Cucumber, tomato, garden pea, maize, cotton are example of:  
 (A) Short day plant (B) long day plant (C) Day-neutral plant ✓ (D) Night-neutral plant
118. Example of Day Neutral plant is:  
 (A) Tomato ✓ (B) Soyabean (C) Xanthium (D) Chrysanthium
119. In nature to P730 to P660 Conversion occurs in:  
 (A) Dark ✓ (B) Light (C) Morning (D) Evening
120. Type of asexual reproduction:  
 (A) Fertilization (B) Vernalization (C) Apomixes ✓ (D) Photoperiodism
121. The animals that lay shelled eggs to protect the developing embryo are called:  
 (A) Oviparous ✓ (B) Viviparous (C) Ovoviviparous (D) Egg laying mammals
122. Fertilization is the process which leads to the union of:  
 (A) Individuals (B) Gametes ✓ (C) Sperms (D) Eggs
123. In honey bee, males are haploid and produce sperms by:  
 (A) Mitosis ✓ (B) Meiosis (C) Apomixis (D) Parthenogenesis
124. Haploid males produce sperms by mitosis:  
 (A) Honey bee ✓ (B) Earth worm (C) Hydra (D) Man
125. The hormone responsible for production of sperm cells and male secondary sexual characteristics during puberty is:  
 (A) Progesterone (B) Testosterone ✓ (C) Thyroxin (D) Estrogen
126. Discharge of egg from the Ovary is called:  
 (A) Oogenesis (B) Ovulation ✓ (C) Gametogenesis (D) Spermatogenesis
127. The first convoluted part of vas deferens is called:  
 (A) Epididymis ✓ (B) Penis (C) Scrotum (D) Sperm
128. The release of ovum from the ovary is called  
 (A) Ovulation ✓ (B) Menstruation (C) Follicle atresia (D) Menace
129. Decrease of FSH and increase of estrogen causes the pituitary gland to secrete:  
 (A) LH ✓ (B) LTH (C) TSH (D) ACTH
130. Oestrus cycle, a reproductive cycle is found in all females except:  
 (A) Cat (B) Cow (C) Human being ✓ (D) Lion
131. The yellowish glandular structure corpus luteum, starts secreting a hormone:  
 (A) LH (B) FSH (C) Oestrogen (D) Progesterone ✓
132. Towards the end of pregnancy, the reduction in progesterone level, stimulates pituitary gland to produce:  
 (A) Oxytocin ✓ (B) Oestrogen (C) Androgen (D) Pro lactin
133. Average loss of blood during birth in human female is about:  
 (A) 350 cm<sup>3</sup> (B) 350 cm<sup>2</sup> (C) 350 cm ✓ (D) 350 ml
134. In human female the total gestation period is female is usually about

- (A) 280 days ✓ (B) 280 weeks (C) 28 months (D) 360days
135. The hormones that induce Labour pain:  
(A) Lactogen (B) Oxytocin ✓ (C) LH (D) LTH
136. The human embryo is referred to as the fetus, from beginning of:  
(A) 3<sup>rd</sup> Month ✓ (B) 3<sup>rd</sup> Week (C) 6<sup>th</sup> Month (D) 6<sup>th</sup> Week
137. Lutenizing hormone in human female induces:  
(A) Menstruation (B) Menopause (C) Oogenesis (D) Ovulation ✓
138. Primary growth in plants is caused by:  
(A) Apical meristem ✓ (B) Lateral meristem  
(C) Intercalary meristem (D) Rib meristem
139. Intercalary meristems are situated at:  
(A) Root Apex ✓ (B) Shoot Apex (C) Base of Internode (D) Top of Internode
140. Secondary growth leads to an increase in the diameter if the:  
(A) Stem (B) Root (C) Leaf (D) Stem and Root ✓
141. The meristems that are found at the tips of roots and shoots are called:  
(A) Lateral meristems (B) Intercalary meristems  
(C) Secondary meristems (D) Apical meristems ✓
142. The removal of apex releases those Lateral buds from the apical dominance. It is called:  
(A) Inhibitory effect (B) Compensatory ✓ (C) Apical dominance (D) Reproduction
143. The mesodermal cells do not invaginate but migrate medially and caudally from both and create a midline thickening called:  
(A) Hensen's Node (B) Primitive streak ✓ (C) Epiblast (D) Hypoblast
144. Immediately after fertilization, the egg under goes a series of mitotic divisions called:  
(A) Morulla (B) Gastrulaion (C) Cleavage ✓ (D) Blastula
145. The Shell, over chick egg is secreted as it passes through:  
(A) Ovary (B) Oviduct (C) Uterus ✓ (D) Cloaca
146. The cavity formed between somatic and splanchnic mesoderm is:  
(A) Archenteron (B) Hensen's node (C) Coelom ✓ (D) Neurocoel
147. Hatching period of chick is:  
(A) 15 days (B) 18 days (C) 21 days ✓ (D) 28 days
148. Somites are formed and organized by:  
(A) Ectoderm (B) Mesoderm ✓ (C) Endoderm (D) Blastoderm
149. The discoidal cap of cells above the blastocoele is called:  
(A) Ectoderm (B) Mesoderm (C) Endoderm (D) Blastoderm ✓
150. The pigment free area that appears at the time of fertilization is called:  
(A) Embryo (B) Yolk (C) Gray crescent ✓ (D) White cytoplasm
151. The grey equatorial cytoplasm in fertilized egg of ascidian produces:  
(A) Gut (B) Muscle Cells (C) Larval epidermis (D) Notochord tube ✓
152. The negative physiological changes in our body are said to be:  
(A) Maturation (B) Childhood (C) Aging ✓ (D) Death
153. Unspecialized cells, neoblast are always present in body of:  
(A) Salamander (B) Planaria ✓ (C) Newt (D) Lizard
154. The unspecialized cells present in flatworms and planaria are:  
(A) Neoblast ✓ (B) Osteoblast (C) Osteoclast (D) Chondrocyte
155. Chromosomes appear inside the nucleus at the time of:  
(A) Cell Division ✓ (B) Cell Elongation (C) Cell maturation (D) Cell differentiation
156. The base pairs in human genome are:  
(A) Two billion (B) Three billion ✓ (C) Four billion (D) Five billion
157. Highly condensed portions of the chromatin are called:  
(A) Homochromatin (B) Euchromatin (C) Heterochromatin ✓ (D) Achromatin
158. The particular array of chromosomes that an individual possess is called its:

- (A) Genotype (B) Phenotype (C) Karyotype ✓ (D) Epistasis
159. In 1882, chromosomes were first observed by:  
(A) John Brown (B) T.H. Morgan (C) Walter Fleming ✓ (D) Walther Sutton
160. Walther Fleming first discovered chromosomes in the dividing cells of:  
(A) Frog Larvae (B) Sea Urchin Larvae (C) Insect Larvae (D) Salamander Larvae ✓
161. Transfer of genetic material from one cell to other that can alter the genetic make-up of recipient cell is called:  
(A) Transformation ✓ (B) Translation (C) Transcription (D) Replication
162. X-Ray diffraction analysis of DNA was performed by:  
(A) Erwin Chargaff (B) Watson & Crick (C) Rosalind Franklin ✓ (D) Charles Darwin
163. Pentose sugar in the molecule of DNA is:  
(A) Ribose (B) Deoxyribose ✓ (C) Lactose (D) Sucrose
164. The strand which replication towards the replication fork is:  
(A) Leading ✓ (B) Lagging (C) Okazaki (D) Primer
165. In 1953, F.Sanger described the sequence of Amino Acids of:  
(A) Myoglobin (B) Keratin (C) Insulin ✓ (D) Globulin
166. In sickle cell anemia code for glutamic acid is replaced by:  
(A) Leucine ✓ (B) Histidine (C) Valine (D) Proline
167. OR Which strand of DNA is transcribed?  
(A) Coding strand (B) Sense strand (C) Antisense strand ✓ (D) Conservative strand
168. One of the givens does not code for any amino acid:  
(A) AUG (B) ACU (C) GAU (D) UAA ✓
169. In bacteria, human and all living organism, AGA specifies:  
(A) Phenylalanine (B) Leucine (C) Methionine (D) Arginine ✓
170. Nerve cells and eye lens cells remain in \_\_\_\_\_ stage for life time:  
(A) G<sub>1</sub> (B) G<sub>2</sub> (C) G<sub>0</sub> ✓ (D) S
171. The period of life cycle of cell between two consecutive divisions is termed as:  
(A) Resting phase (B) Inter phase ✓ (C) G<sub>1</sub> phase (D) G<sub>2</sub> Phase
172. In the case of human cell, average cell cycle is about:  
(A) 24 hours ✓ (B) 26 hours (C) 28 hours (D) 30 hours
173. Full cell cycle in yeast cells has length of:  
(A) 30 minutes (B) 60 minutes (C) 90 minutes (D) 120 minutes ✓
174. Post mitotic cells can exist the cell cycle during:  
(A) G<sub>0</sub> -phase (B) G<sub>1</sub> - phase ✓ (C) S-phase (D) G<sub>2</sub>-phase
175. Chromosomal Doubling Occurs in:  
(A) G<sub>1</sub> phase (B) S phase ✓ (C) G<sub>2</sub> phase (D) G<sub>0</sub>-phase
176. RNA and protein called:  
(A) Insulin (B) Tubulin ✓ (C) Actin (D) Myosin
177. The microtubule is composed of traces of RNA and protein called:  
(A) Myosin (B) Troponin (C) Actin (D) Tubulin ✓
178. The microtubules are composed of a protein tubulin and traces of:  
(A) DNA (B) RNA ✓ (C) Lipids (D) Terpenoids
179. During cell division, the nuclear division is called:  
(A) Cytokinesis (B) Karyokinesis ✓ (C) Karyotype (D) Plasmolysis
180. Contractile ring in cytokinesis is formed by:  
(A) Tubulin (B) Actin & Myosin ✓ (C) Keratin (D) Cyclin
181. Each bivalent consists of four:  
(A) Chromosomes (B) Chromatids ✓ (C) Chiasmata (D) Spores
182. The chromatin material gets condensed by folding and chromosomes appear as thin thread in mitosis at the beginning of:  
(A) Interphase (B) Prophase ✓ (C) Metaphase (D) Anaphase

183. The tumor which is localized and not transferred to other body parts:  
 (A) Malignant (B) Benign ✓ (C) Apoptosis (D) Necrosis
184. Which one sub-stage of prophase-I of Meiosis-I lasts for days, week or even years?  
 (A) Zygotene (B) Leptotene (C) Pachytene ✓ (D) Diplotene
185. In which stage of Meiosis, crossing over occur:  
 (A) Leptotene (B) Pachytene ✓ (C) Zygotene (D) Anaphase
186. The stage of prophase that last for days, week or even year is:  
 (A) Leptotene (B) Zygotene (C) Pachytene ✓ (D) Diplotene
187. The prophase stage in which the chromosomes become visible, shorten and thick:  
 (A) Leptotene ✓ (B) Zygotene (C) Pachytene (D) Diplotene
188. In which stage of Meiosis, the paired chromosomes repel each other and begin to separate:  
 (A) Leptotene (B) Zygotene (C) Diplotene ✓ (D) Pachytene
189. The condensation of chromosomes reaches to its maximum during  
 (A) Pachytene (B) Zygotene (C) Diakinesis (D) Leptotene ✓
190. Synapsis occurs during:  
 (A) Pachytene (B) Leptotene (C) Zygotene ✓ (D) Diplotene
191. Unequal separation of chromosomes is called:  
 (A) Disjunction (B) Separation (C) Non-disjunction ✓ (D) Metastasis
192. Plasmids were discovered while studying the sex life of:  
 (A) E.Coli ✓ (B) Hyphomicrobium (C) Vibriofi (D) Mycobacterium
193. Cell death due to tissue damage is called:  
 (A) Apoptosis (B) Metastasis (C) Necrosis ✓ (D) Suicide
194. Apoptosis is:  
 (A) Division of cells (B) Death of Cells by tissue damage  
 (C) Suicide of cells ✓ (D) Weakness of cells
195. Programmed and organized process of cell death is also called as:  
 (A) Apoptosis ✓ (B) Necrosis (C) Cyclosis (D) Chlorosis
196. The position of gene on chromosome is called its:  
 (A) Allele (B) Phenotype (C) Locus ✓ (D) Genotype
197. The genes found in a breeding population constitute:  
 (A) Genotype (B) Genome (C) Gene frequency (D) Gene Pool ✓
198. Expression of a trait is termed as:  
 (A) Genotype (B) Phenotype ✓ (C) Wild type (D) Dominance
199. Mendelian factors were renamed as "genes" by:  
 (A) Mendel (B) Correns ✓ (C) Johannsen (D) Morgan
200. The cross which is used to find out the homozygous or heterozygous nature of the genotype is called:  
 (A) Test cross ✓ (B) Reciprocal cross (C) Monohybrid cross (D) Dihybridcross
201. Different alleles of a gene that are both expressed in a heterozygous condition are called:  
 (A) Codominant ✓ (B) Over dominant  
 (C) Complete dominant (D) Incomplete dominant
202. MN Blood group is example of:  
 (A) Complete dominance (B) Co dominance ✓  
 (C) Incomplete dominance (D) Over dominance
203. RH Blood group system is named after:  
 (A) Discoverer (B) Rhesus monkey ✓ (C) A Patient (D) Rhinoceros
204. The individuals called universal recipients have \_\_\_\_\_.  
 (A) A blood group (B) B blood group (C) O blood group (D) AB blood group ✓
205. In 1901, ABO group system was discovered by:  
 (A) Punnet (B) Karl Landsteiner ✓ (C) Bern Stein (D) Wiener
206. A person having neither antigen A nor B would have blood group:

- (A) 0 ✓ (B) A (C) B (D) AB 
207. Human skin colour is controlled by gene pairs:  
 (A) Two to Four (B) Three to Six ✓ (C) Four to Six (D) Six to Ten
208. A gamete without any sex chromosome is called:  
 (A) Homogamete (B) Heterogamete (C) Isogamete (D) Nullogamete ✓
209. The sex chromosomes were discovered by:  
 (A) Sutton (B) Morgan ✓ (C) Jordan (D) Correns
210. The true colour blindness is:  
 (A) Monochromacy ✓ (B) Dichromacy (C) Tetrachromacy (D) Trichromacy
211. Green colour blindness is called:  
 (A) Deuteranopia ✓ (B) Protanopia (C) Tritanopia (D) Colour blind
212. The gene that triggers towards maleness is:  
 (A) TFM (B) SRY ✓ (C) MODY (D) BOB
213. Hypophosphatemic rickets in an \_\_\_\_ trait:  
 (A) X - Linked ✓ (B) Y - Linked (C) X and Y liked (D) An Autosomal
214. The maturity on set diabetes of the young is:  
 (A) An autosomal recessive trait (B) An autosomal dominant trait ✓  
 (C) A sex-linked trait (D) A sex influenced trait
215. The enzymes which are used to cut out the gene of interest are known as:  
 (A) DNA ligase (B) DNA polymerase (C) RNA polymerase (D) Restriction Endonuclease ✓
216. Eco R1 is a commonly used:  
 (A) Gene (B) Restriction Enzyme ✓ (C) Bacteriophage (D) Bacteria.
217. PSC 101 has antibiotic resistance gene for:  
 (A) Tetracycline ✓ (B) Ampicillin (C) Neomycin (D) Ergotine
218. Recombinant DNA is introduced into the host cell  
 (A) phage (B) vector ✓ (C) bacterium (D) fungus
219. Taq polymerase enzyme present in:  
 (A) Fungi (B) Bacteria ✓ (C) Alga (D) Bacterium
220. Organisms that have had a foreign gene inserted into them are called:  
 (A) Transgenic Organism ✓ (B) Hermaphrodites  
 (C) Polygenesis (D) Transmuted organisms
221. Anti -Thrombin III is a biotechnological product produced by:  
 (A) Sheep (B) Goat ✓ (C) Mice (D) Cow
222. Urine is preferable vehicle for a biotechnology product than:  
 (A) Milk ✓ (B) Blood (C) Plasma (D) Tissue Fluid
223. Transgenic bacteria are produced in large vats called:  
 (A) transducer (B) bioreactor ✓ (C) biomultiplier (D) Culter media
224. Cystic fibrosis lacks a gene that codes for trans-membrane carrier of:  
 (A) Chloride ion ✓ (B) Sodium ion (C) Calcium ion (D) Magnesium ion
225. Patients of cystic fibrosis numerous infections of:  
 (A) Digestive tract (B) Excretory tract (C) Respiratory tract ✓ (D) Reproductive tract
226. An antibody made by soya beans can be used as treatment for:  
 (A) AIDS (B) Herpes simple (C) Genital Herpes ✓ (D) Hepatitis C
227. The enzyme luciferase is produced commonly known as the:  
 (A) House fly (B) Butterfly (C) Caddis fly (D) Fire fly ✓
228. The ultimate source of changes is:  
 (A) Evolution (B) Mutation ✓ (C) Genetic drift (D) Migration
229. Among the scientists who believed in divine creation was:  
 (A) Lamark (B) Darwin (C) Carolus Linnaeus ✓ (D) Hyell
230. Lyell published the principle of \_\_\_\_:  
 (A) Population (B) Community (C) Biome (D) Geology ✓

231. An essay on the principle of population was published by:  
(A) Darwin (B) Wallace (C) Linnaeus (D) Malthus ✓
232. The idea of endosymbiont was proposed by:  
(A) Cuvier (B) Lyell (C) Malthus (D) Margulis ✓
233. According to endosymbiont hypothesis, the aerobic bacteria developed into:  
(A) Ribosome (B) Lysosome (C) Mitochondria ✓ (D) Plastids
234. Alfred Wallace developed a theory of natural selection essentially:  
(A) Linnaeus's (B) Darwin's ✓ (C) Lamarck's (D) Mendel's
235. Book "The Origin of Species" was written by:  
(A) Linnaeus (B) Darwin ✓ (C) Lamarck (D) Wallace
236. Acquired characteristics of an individual cannot be:  
(A) Inherited ✓ (B) Flourished (C) Lost (D) Migrated
237. Biogeography is the geographical distribution of:  
(A) Phylum (B) Species ✓ (C) Classes (D) Genera
238. Which of the following is vestigial organ of whale:  
(A) Pelvis (B) Leg bones (C) Lungs (D) Pelvis and leg bones ✓
239. The armored mammal that lives only in America:  
(A) Armadillos ✓ (B) Penguin (C) Echidna (D) Porcupine
240. Armadillos, the armored mammals live only in \_\_\_\_\_:  
(A) Africa (B) America ✓ (C) Europe (D) Asia
241. Tubes that connect the middle ear with the throat in humans are called:  
(A) Eustachian tube ✓ (B) Neural tube (C) Fallopian tube (D) Nephridial tube
242. Which one is not a vestigial organ of human being?  
(A) appendix (B) Coccyx (C) nictitating membrane (D) eye lid ✓
243. In fish, the gill pouches develop into:  
(A) Gills ✓ (B) Pharynx (C) Eustachian tube (D) Fins
244. A group of individuals belong to a particular species and sharing a common geographic area is called:  
(A) Family (B) Population ✓ (C) Species (D) Community
245. Some individuals leave behind more progeny than others and the rate at which they do so is affected by their inherited characteristics. This is called:  
(A) Non random mating (B) Selection ✓ (C) Migration (D) Mutation
246. The change in frequency of alleles at locus that occur by chance is called:  
(A) Mutation (B) Migration (C) Genetic Drift ✓ (D) Selection
247. In 1917, term Niche was first proposed by American Ornithologist named:  
(A) Charles Elton (B) Joseph Grinnell ✓ (C) Ernst Haeckel (D) Lamarck
248. The actual location of place, where an organism lives is called its:  
(A) Niche (B) Environment (C) Habitat ✓ (D) Ecosystem
249. Any group of inter breeding organisms of the same species that exist together in both time and space is called:  
(A) Community (B) Population ✓ (C) Ecosystem (D) Biosphere
250. The whole of the world land is called:  
(A) Lithosphere ✓ (B) Ecosphere (C) Hydrosphere (D) Biosphere
251. All the food chains begin with:  
(A) Producers ✓ (B) Primary Consumers  
(C) Secondary consumers (D) Decomposers
252. Lithosphere includes:  
(A) Earth Soil ✓ (B) Air (C) Water (D) Gases
253. The abiotic component of an ecosystem is:  
(A) Temperature ✓ (B) Producer (C) Consumer (D) Decomposer
254. In each case succession is initiated by a few hardy invaders called:

- (A) Starters (B) Pioneers ✓ (C) Climax Community (D) Decomposers
255. The leaves with very small surface area, are found in:  
(A) Hydrophytes (B) Mesophytes (C) Xerophytes ✓ (D) Sciophytes
256. Lichens are example of:  
(A) Parasitism (B) Predation (C) Mutualism ✓ (D) Commensalism
257. The animal that is caught and eaten is called:  
(A) Predator (B) Prey ✓ (C) Host (D) Parasite
258. Moderate grazing is very helpful to maintain ecosystem:  
(A) Tundra (B) Grass Land ✓ (C) Pond (D) Desert
259. The bacteria in the root nodules fix nitrogen and convert it into:  
(A) Nitrate (B) Nitrite (C) Amino Acid ✓ (D) Ammonia
260. Lichen is a symbiotic association between a fungus and:  
(A) Gymnosperm (B) Angiosperm (C) An alga ✓ (D) Pterrdophyta
261. In root nodules, the organisms present are:  
(A) Bacteria ✓ (B) Cyanobacteria (C) Algae (D) Fungi
262. In aquatic ecosystem, near shore zone is called:  
(A) Littoral zone ✓ (B) Limnetic zone (C) Profundal zone (D) Benthic zone
263. Fresh water ecosystem covers less than:  
(A) 7% (B) 5% (C) 3% (D) 1% ✓
264. Here, light is insufficient to support photosynthesis:  
(A) Littoral Zone (B) Limnetic Zone (C) Profundal Zone ✓ (D) Photoplankton Zone
265. Limnetic phytoplankton include the:  
(A) Bacteria (B) Cyanobacteria ✓ (C) Fishes (D) Mosses
266. In spermatophytes, important adaptation is the evolution:  
(A) Seed coat ✓ (B) Pollen tube (C) Fruit (D) Flower
267. Coniferous forests located at high latitude are called:  
(A) Alpine (B) Boreal ✓ (C) Taiga (D) Prairies
268. Temperate deciduous forests are located in Pakistan at:  
(A) Shogran ✓ (B) Chilas (C) Mionwali (D) Sind
269. Perhaps the most fragile of all the because of its short growing season is:  
(A) Tundra ✓ (B) Desert (C) Grass land (D) Temperate Deciduous Forest
270. Northern coniferous forest is called:  
(A) Savanna (B) Prairies (C) Taiga ✓ (D) Tundra
271. Coniferous forest located at high attitude are called:  
(A) Deciduous forest (B) Alpine forest ✓ (C) Tundra (D) Grass land
272. Layering is the characteristic of:  
(A) Tundra (B) Desert (C) Taiga (D) Grassland ✓
273. Grassland ecosystem in Pakistan is found in:  
(A) Chilas (B) Chitral ✓ (C) Dir (D) Swat
274. In Sindh, the desert ecosystem is called:  
(A) Thar ✓ (B) Thal (C) Sahara (D) Gobi
275. Desert ecosystem of Bhakkar and Mianwali is called:  
(A) Thar (B) Thal ✓ (C) Sahara (D) Rohi
276. The biomes which has been increased in area by human activities:  
(A) Grassland (B) Tundra (C) Desert ✓ (D) Coniferous forests
277. A succulent plant has water stored in tissue:  
(A) Cacti ✓ (B) Moss (C) Yarrow (D) Spruce
278. Cactus is found in the ecosystem:  
(A) Forest (B) Desert ✓ (C) Grass land (D) Tundra
279. Mountain of Karakoram is located in major terrestrial ecosystem in Pakistan:  
(A) Grassland (B) Coniferous alpine forest

- (C) Temperate deciduous forest (D) Tundra ✓
280. The arctic tundra stretches across Northern North America, Northern Europe and:  
(A) Cyprus (B) Siberia ✓ (C) Morocco (D) Nepal
281. The Nuclear power station can last only for about:  
(A) 10 years (B) 20 years (C) 30 years ✓ (D) 40 years
282. In ocean of tropical regions, the temperature of surface water is about:  
(A) 5°C (B) 10°C (C) -5°C (D) 25°C ✓
283. The most widely used source of energy on earth is:  
(A) Wind (B) Sun ✓ (C) Water (D) Geothermal
284. The upper weathered layer of earth crust is:  
(A) Rock (B) Soil ✓ (C) Sandy (D) Rhizome
285. It is not fossilized fuel:  
(A) Lignite (B) Peat ✓ (C) Natural gas (D) Oil
286. It is a fossilized fuel:  
(A) Water (B) Oil ✓ (C) Wind (D) Oil
287. Which of the following is a renewable resource?  
(A) oil and air (B) water and oil (C) oil and gas (D) air and water ✓
288. The world population is expected to be nearly doubled by:  
(A) 2020 (B) 2030 (C) 2040 ✓ (D) 2050
289. The decline in thickness of ozone layer is caused by increasing level of:  
(A) Chlorofluorocarbon (CFCs) ✓ (B) Nitrogen (C) Chlorine (D) Carbon Dioxide
290. Ozone in the upper layer of atmosphere that filters:  
(A) IR radiation (B) UV radiation ✓ (C)  $\beta$  radiation (D)  $\alpha$  radiation
291. Some detergents contain a lot of:  
(A) Sulphur (B) Carbon (C) Phosphate ✓ (D) Carbonates
292. A single chlorine atom can react with ultraviolet rays and destroy as many as ozone molecule:  
(A) One million ✓ (B) Two million (C) One billion (D) Two billion
293. Water present in water and ice cap is:  
(A) 01% (B) 02% ✓ (C) 03% (D) 04%
294. In pure form, Ozone is:  
(A) Greenish (B) Reddish (C) Yellowish (D) Bluish ✓
295. Which of the following act as environmental buffers  
(A) Deserts (B) Forests ✓ (C) Industry (D) Fossil fuels
296. Oxides of Nitrogen cause:  
(A) Lung Cancer (B) Cough ✓ (C) Brain damage (D) Cholera
297. The atmosphere gas behaves like glass sheet of green house is:  
(A) Oxygen (B) Hydrogen (C) Carbon dioxide ✓ (D) Nitrogen

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### ★ Subjective Part ★

If you prepare these Short and long Questions then Insha Allah Confirm your A+ marks

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#### Section-I

#### Question No. 2

1. What is lithotripsy?
2. What are pyrogens?
3. Differentiate between hypotonic and hypertonic environment.
4. What are osmoconformers and osmoregulators?