

Question Booklet Series: A

Question Booklet Serial No.: 410977

CET (UG) – 2024

Important: Please consult your Admit Card/Roll No. slip before filling your Roll Number on the Test Booklet and Answer Sheet.

Roll No.

(In Figure)

(In Words)

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O.M.R. Answer Sheet Serial No.

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Signature of Candidate: _____

Signature of Invigilator: _____

SUBJECT: BIOLOGY

Time: 70 Minutes

Number of Questions: 60

Total Marks: 120

DO NOT OPEN THE SEAL ON THE BOOKLET UNTIL ASKED TO DO SO.

INSTRUCTIONS:

1. Write your Roll No. on the Questions Booklet and also on the OMR Answer Sheet in the space provided and nowhere else.
2. Enter the Question Booklet Serial No. on the OMR Answer Sheet. Darken the corresponding bubbles with **Black Ball / Gel Pen only**.
3. Do not make any identification mark on the Answer Sheet or Question Booklet.
4. The medium of examination shall be **English** only.
5. Please check that this Question Booklet contains **60** Questions. In case of any discrepancy, inform the Assistant Superintendent within 10 minutes of the start of Test.
6. Each question has four alternative answer (A,B,C,D) of which only one is correct. For each question, darken only one bubble (A or B or C or D), whichever you think is the correct answer, on the Answer Sheet with **Black Ball / Gel Pen only**.
7. If you do not want to answer a question, leave all the bubbles corresponding to that question blank in the Answer Booklet. No marks will be deducted in such cases.
8. Darken the bubbles in the OMR Answer Sheet according to the Serial No. of the question given in the Question Booklet.
9. **Negative marking will be adopted for evaluation i.e. 25% of the marks of the question will be deducted for each wrong answer. A wrong answer means incorrect answer or wrong filling of bubble.**
10. The University will provide logarithmic table. Borrowing of log tables and any other material is not allowed.
11. For rough work only the blank sheet at the end of the Question Booklet be used.
12. The Answer Sheet is designed for computer evaluation. Therefore, if you do not follow the instructions given on the Answer Sheet, it may make evaluation by the computer difficult. **Any resultant loss to the candidate on the above account, i.e. not following the instructions completely, shall be of candidate only.**
13. After the test, hand over the Question Booklet and the Answer Sheet to the Assistant Superintendent on duty.
14. In no case the Answer Sheet, the Question Booklet, or its part or any material copied/noted from this Booklet is to be taken out of the examination hall. Any candidate found doing so would be expelled from the examination.
15. **20 minutes** extra will be given to the visually handicapped/Person with Disability (PwD) for each paper.
16. A candidate who creates disturbance of any kind or changes his/her seat or is found in possession of any paper possibly of any assistance or found giving or receiving assistance or found using any other unfair means during the examination will be expelled from the examination by the Centre Superintendent/Observer whose decision shall be final.
17. Tele-communication equipment such as Cellular/cordless phones, pager, wireless, scanner, camera or any electronic/digital gadget etc., is not permitted inside the examination hall. **Use of calculator is not allowed.**
18. The candidates will not be allowed to leave the Examination Hall/Room before the expiry of the allotted time.

1. Which of the following taxonomic category is represented by *Solanum* in the scientific name *Solanum tuberosum*?
 (A) Family (B) Genus (C) Order (D) Division
2. Litmus paper is obtained from-
 (A) Algae (B) Fungi (C) Lichen (D) Bryophytes
3. Prions differ from viroids as the former has/is
 (A) DNA as genetic material (B) Low molecular weight RNA
 (C) Proteinaceous in nature (D) Obligate parasite
4. Pollination by snail is commonly known as-
 (A) Anemophily (B) Ornithology (C) Malacophily (D) Chereptrophily
5. World environment day is celebrated on-
 (A) 5 May (B) 12 June (C) 12 July (D) 5 June
6. Nitrogen from soil is obtained by plants in form of-
 (A) Nitrogen gas (B) Ammonia
 (C) Ammonium sulphate (D) Nitrates
7. Taq polymerase is obtained from-
 (A) *Thermus aquaticus* (B) *Serratia marcescens*
 (C) *Klebsiella pneumonia* (D) *Haemophilus aegypticusc*
8. Hypogynous flowers are seen in-
 (A) Plum (B) Mustard (C) Pea (D) Peach
9. Ground tissue of leaf is called
 (A) Pith (B) Medulla (C) Mesophyll (D) Endodermis
10. The primary CO₂ acceptor in C₄ plants in mesophyll cells are
 (A) PEP (B) RUBP (C) RuBisCO (D) OAA
11. Only enzyme not proteinaceous in nature-
 (A) RNAses (B) Zymogens (C) Ribozymes (D) Taq polymerase
12. The innermost layer of anther wall which surrounds the sporogenous tissue and nourishes the developing pollen grains is
 (A) Epidermis (B) Endothecium (C) Tapetum (D) Middle layer
13. Enzyme involved in conversion of RNA to DNA
 (A) Reverse transcriptase (B) Taq polymerase
 (C) RNA polymerase (D) DNA polymerase
14. The common layer present between the adjoining cells is known as
 (A) Plasma membrane (B) Plasmodesmata
 (C) Secondary cell wall (D) Middle lamella

15. The term protoplasm was proposed by
 (A) Purkinje (B) A.V. Leeuwenhoek
 (C) Schleiden and Schwann (D) Strasburger
16. Both prokaryotic and eukaryotic cells contain?
 (A) Nucleus (B) Endoplasmic reticulum
 (C) DNA (D) Mitochondria
17. The start codon is
 (A) UAA (B) AUG (C) UAG (D) UUU
18. Which are the most primitive algae?
 (A) Red algae (B) Blue-green algae (C) Green algae (D) Brown algae
19. Cell wall of fungi are made up of
 (A) Cellulose (B) Lipids (C) Proteins (D) Chitin
20. Sunken stomata are present in
 (A) Epiphytes (B) Hydrophytes (C) Mesophytes (D) Xerophytes
21. Bacteria used for gene transfer and genetic engineering in plants-
 (A) *Agrobacterium tumefaciens* (B) *Bacillus subtilis*
 (C) *Escherichia coli* (D) *Bacillus thuringiensis*
22. Starch containing plastid is called
 (A) Amyloplast (B) Chloroplast (C) Leucoplast (D) Chromoplast
23. Emasculation is:
 (A) Pollination between flowers of different plants
 (B) Pollination between flowers of same plant
 (C) Removal of the anthers from the flower
 (D) Artificial pollination
24. The edible portion in coconut is
 (A) Endosperm (B) Pericarp (C) Mesocarp (D) Leaves
25. During rains, leather becomes green due to growth of
 (A) Bacteria (B) Fungi (C) Flowering plants (D) Mosses
26. Early blight of potato is caused by
 (A) *Phytophthora infestans* (B) *Alternaria solani*
 (C) *Colletotrichum falcatum* (D) *Ustilago tritici*
27. Coconut water contains
 (A) ABA (B) Auxin (C) Cytokinin (D) Gibberellin
28. Tallest tree among gymnosperm is
 (A) Eucalyptus (B) Pinus (C) Cycas (D) Sequoia

29. Xylem is involved in
 (A) Water conduction (B) Food conduction
 (C) Photosynthesis (D) None of these
30. RNAi refers to –
 (A) A new type of RNA (B) RNA interference
 (C) RNA inhibition (D) RNA initiation
31. The largest chamber of ruminant stomach is
 (A) Rumen (B) Reticulum (C) Omasum (D) Abomasum
32. The large, spherical and least existed papillae found near the sulcus terminalis are known as
 (A) Filiform papillae (B) Fungiform papillae
 (C) Circumvallate papillae (D) Foliate papillae
33. Sponges shows which type of body plan?
 (A) Cell-aggregate type (B) Blind sac type
 (C) Tube-within-tube type (D) None of these
34. Which of the following is correctly matched?
 (A) *Leishmania*: Elephantiasis (B) *Plasmodium*: Kala azar
 (C) *Giardia*: Chagas disease (D) *Dracunculus*: Guinea worm disease
35. Which of the following are wingless insects?
 (A) *Lepisma*, *Cimex* (B) *Pediculus*, *Laccifer*
 (C) *Xenopsylla*, *Cryptotermes* (D) *Astacus*, *Cyclops*
36. Osphradium is a sensory organ found in
 (A) King crab (B) *Pila* (C) *Palaemon* (D) *Periplaneta*
37. Carapace and Plastron are the characteristic feature of which animal
 (A) *Sphenodon* (B) *Heloderma* (C) *Gavialis* (D) *Testudo*
38. Largest serpentarium of India is
 (A) Katraj Snake Park, Pune (B) Bannerghatta Snake Park, Bengaluru
 (C) Chennai Snake Park, Chennai (D) Parassinikkadavu Snake Park, Kerala
39. Baleen plate is found in
 (A) Blue whale (B) *Zalopus* (C) Dolphin (D) *Pteropus*
40. Dicondylic skull is found in
 (A) Aves and reptiles (B) Reptiles and mammals
 (C) Aves and amphibians (D) Amphibians and mammals
41. In females the leucorrhoea disease is caused by
 (A) *Trypanosoma* (B) *Monocystis* (C) *Trichomonas* (D) *Entamoeba*
42. Amino acids tryptophan and methionine are coded by
 (A) CGA and AGC (B) UCU and UUG (C) AUG and AGC (D) UGG and AUG

43. The number of base pairs per turn in Z-DNA are
 (A) 12 pairs (B) 11 pairs (C) 10 pairs (D) 9 pairs
44. The cry-du-chat syndrome is an example of
 (A) Terminal deletion of chromosome 5p
 (B) Reciprocal translocation between chromosome 9 and 22
 (C) Frameshift mutation
 (D) Duplication
45. Two peaks are formed in which type of natural selection?
 (A) Directional selection (B) Stabilizing selection
 (C) Disruptive selection (D) Positive selection
46. In which type of rocks fossils are generally found
 (A) Metamorphic rocks (B) Igneous rocks
 (C) Sedimentary rocks (D) Volcanic rocks
47. Choose the incorrect one
 (A) Breed of pig: Ghungroo (B) Breed of sheep: Patanwadi
 (C) Breed of goat: Jamunapari (D) Draught breed cattle: Nali
48. Which of the following species of honey bees is largest in size, highly aggressive, migratory and yields highest amount of honey?
 (A) *Apis indica* (B) *Apis florea* (C) *Apis dorsata* (D) *Apis mellifera*
49. Choose true statement about *Homo habilis*.
- | | Cranial capacity | Fossils discovered in |
|-----|-------------------------|------------------------------|
| (A) | 1650-1800 cc | Somalia |
| (B) | 900-1000 cc | Java |
| (C) | 650-800 cc | Tanzania |
| (D) | 400-500 cc | Ethiopia |
50. Heroin is a white, odourless, bitter crystalline compound, extracted from poppy plant. Chemically it is known as
 (A) Amphetamine (B) Diacetylmorphine
 (C) Dicyclomine hydrochloride (D) Tetrahydrocannabinol
51. Cyclosporine A, an immunosuppressant used in organ-transplantation is produced by
 (A) Fungus: *Trichoderma polysporum* (B) Yeast: *Monascus purpureus*
 (C) Bacteria: *Lactobacillus bulgaris* (D) Bacteria: *Acetobacter aceti*
52. The nucleosomes coil to form a solenoid, its diameter is
 (A) 300 nm (B) 110 nm (C) 75 nm (D) 30nm
53. Which of the following is a restriction enzyme that produces blunt end of a DNA
 (A) Sma I (B) Hind III (C) EcoRI (D) Bam I

54. Which of the following is incorrect?
 (A) Succession on sand=Psammosere (B) Succession on rocks=Lithosere
 (C) Succession in salty water=Oxalosere (D) Succession in water= Hydrosere
55. The world wetland day is observed on
 (A) 2nd February (B) 22nd March (C) 8th June (D) 16th September
56. A severely emaciated child below one year of age having dry and wrinkled skin is affected by which Protein Energy malnutrition?
 (A) Kwashiorkor (B) Marasmus (C) Anemia (D) Gaucher disease
57. The adult human skeleton is having 206 bones, out of which how many bones form axial and appendicular skeleton?
 (A) Axial: 180; Appendicular: 26 (B) Axial: 80; Appendicular: 126
 (C) Axial: 120; Appendicular: 86 (D) Axial: 90; Appendicular: 116
58. The Family Planning Programme was initiated by Government of India in which year?
 (A) 1952 (B) 1943 (C) 1955 (D) 1959
59. Which of the following cranial nerves are mixed nerves?
 (A) Glossopharyngeal, Auditory (B) Abducens, Hypoglossal
 (C) Vagus, Olfactory (D) Trigeminal, Facial
60. Black Necked Crane is a State bird of which state or UT?
 (A) Ladakh (B) Assam (C) Lakshadweep (D) Sikkim

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ROUGH WORK