

**COMMON P.G. ENTRANCE TEST-2022 (CPET-2022)**

Subject Code : **54**

Test Booklet No.:

Entrance Subject : **Marine Science-Marine Biology**

Hall Ticket No.:

**TEST BOOKLET**

Time Allowed : **90 Minutes**

Full Marks : **70**

**INSTRUCTIONS TO CANDIDATES**

1. **Please do not open this Question Booklet until asked to do so.**
2. Check the completeness of the Question Booklet immediately after opening.
3. Enter your **Hall Ticket No.** on the Test Booklet in the box provided alongside. **Do not** write anything else on the Test Booklet.
4. Fill up & darken Hall Ticket No. & Test Booklet No. in the OMR Answer Sheet as well as fill up Test Booklet Serial No. & OMR Answer Sheet Serial No. in the Attendance Sheet carefully. Wrongly filled up OMR Answer Sheets are liable for rejection.
5. Each question has four answer options marked (A), (B), (C) & (D).
6. Answers are to be marked on the Answer Sheet, which is provided separately.
7. Choose the most appropriate answer option and darken the oval completely, corresponding to (A), (B), (C) or (D) against the relevant question number.
8. Use only **Blue/Black Ball Point Pen** to darken the oval for answering.
9. Please do not darken more than one oval against any question, as scanner will read such markings as wrong answer.
10. **Each question carries equal marks. There will be no negative marking for wrong answer.**
11. **Electronic items such as calculator, mobile, etc., are not permitted inside the examination hall.**
12. Don't leave the examination hall until the test is over and permitted by the invigilator.
13. **The candidate is required to handover the original OMR sheet to the invigilator and take the question booklet along with the candidate's copy of OMR sheet after completion of the test.**
14. Sheet for rough work is appended in the Test Booklet at the end.

1. Cartilaginous fishes are?
  - (A) Osteichthyes
  - (B) Chondrichthyes
  - (C) Placoderms
  - (D) Acanthodians
  
2. If more than single species of fish is cultures at a time in a same pond, such type of culture is called as?
  - (A) Monoculture
  - (B) Aquaculture
  - (C) Mariculture
  - (D) Polyculture
  
3. The first human hormone product by recombinant DNA technology is
  - (A) Insulin
  - (B) Thyroxin
  - (C) Estrogen
  - (D) Progesterone
  
4. The main reason for blueness of the sky is –
  - (A) Due to presence of water vapors
  - (B) Due to absorption of blue light by air
  - (C) Due to scattering of sunlight by the air molecules
  - (D) None of the above
  
5. Which of the following is the reason for soil pollution?
  - (A) Ozone depletion
  - (B) Aerosol
  - (C) Acid rain
  - (D) All the above

6. Pisciculture is rearing and production of?
- (A) Fishes
  - (B) Birds
  - (C) Reptiles
  - (D) Crustaceans
7. Restriction enzymes were discovered by
- (A) Smith and Nathans
  - (B) Berg
  - (C) Alexander Fleming
  - (D) None
8. Which part of the plant evaporates water?
- (A) Fruit
  - (B) Stomata
  - (C) Root
  - (D) All the above
9. Some elasmobranchs have modified pelvic fin for copulation called as?
- (A) Cloaca
  - (B) Clasper
  - (C) Penis
  - (D) None
10. What is hibernation?
- (A) Summer sleep
  - (B) Winter sleep
  - (C) Hiding of animals from predators
  - (D) None of the above

11. Which of the following is not a plant division?
- (A) Bryophyta
  - (B) Pteridophyta
  - (C) Thallophyta
  - (D) Hulkaphyta
12. BSI in India stands for
- (A) Botanical Survey of India
  - (B) Botanical System Information
  - (C) Biological Source of Information
  - (D) Biodiversity School of India
13. Which of the following is not a key character of gymnosperm?
- (A) No flower
  - (B) Havehaploid tissues
  - (C) Seeds are enclosed inside an ovary
  - (D) No fruit
14. IUCN is abbreviated for
- (A) International United Consortium of Nature
  - (B) International University of Conservation of Nature
  - (C) International Union for Conservation of Nature
  - (D) International Universal Centre for Nature
15. Krebs' cycle is also known as
- (A) Photosystem II
  - (B) Tricarboxylic acid cycle
  - (C) Ferredoxin pathway
  - (D) Light reaction cycle

16. Photosynthesis takes place in
- (A) Plasmoplast
  - (B) Chloroplast
  - (C) Germplasm
  - (D) Xylem
17. Which of the following is not a nitrogen-fixing bacteria?
- (A) Anabaena
  - (B) Nostoc
  - (C) Coliform
  - (D) Rhizobium
18. Xylem carries water and minerals from
- (A) From root to flower
  - (B) From leaves to chlorophyll
  - (C) From roots to leaves
  - (D) From leaves to roots
19. Pollination is an important process of
- (A) Plant transpiration
  - (B) Bacteria production
  - (C) Plant reproduction
  - (D) Germplasmtransfusion
20. Bryophytes are attached to the substratum by
- (A) Phloem
  - (B) Thallium
  - (C) Isomer
  - (D) Rhizoids

21. Which of the following flowers throughout its life?
- (A) Apple
  - (B) Grape
  - (C) Orange
  - (D) Bamboo
22. Which of the following has proven to be beneficial in the preservation of pollen as fossils?
- (A) Sporopollenin
  - (B) Sporoplasm
  - (C) Pollen Germplasm
  - (D) None of the above
23. Eukaryotes differ from prokaryotes by
- (A) having a membrane-bound nucleus
  - (B) exhibiting Golgi complex
  - (C) having a nutrient chamber
  - (D) possessing a immature nucleic acid
24. Monocotyledon plants have
- (A) tissue root system
  - (B) tap root system
  - (C) fibrous root system
  - (D) None of the above
25. The final step in the process of fusing two haploid eukaryotic cells together is
- (A) Bryogamy
  - (B) Karyogamy
  - (C) Spermatogamy
  - (D) Biogenesis

26. Which gas is released as an outcome of plant photosynthesis process?
- (A) Carbon dioxide
  - (B) Oxygen
  - (C) Nitrogen
  - (D) Helium
27. Salt loving plants are known as
- (A) Halophytes
  - (B) Maxophytes
  - (C) Saltophytes
  - (D) Seaphytes
28. The process of water exudation via hydathodes is known as
- (A) Water Respiration
  - (B) Guttation
  - (C) Hydrolysis
  - (D) None of the above
29. Which of the following is not a plant hormone?
- (A) Gibberellins
  - (B) Auxins
  - (C) Somatostatin
  - (D) Absciscic acid
30. Mycology deals with studying
- (A) Pathogenic bacteria
  - (B) Dengue virus
  - (C) Malaria parasites
  - (D) Fungi

31. Pisciculture is the commercial breeding of
- (A) Mushroom
  - (B) Duck
  - (C) Fish
  - (D) Edible fungi
32. Cold-blooded animals are also known as
- (A) Chloroform
  - (B) Poikilotherm
  - (C) Thermoform
  - (D) Isotherm
33. Which one of the following is a mammal?
- (A) Octopus
  - (B) Shark
  - (C) Dolphin
  - (D) Catfish
34. Which of the following independently developed the theory of evolution by natural selection
- (A) Gregor Mendel and Charles Darwin
  - (B) Charles Darwin and Alfred Wallace
  - (C) Robert Brown and Theophrastus
  - (D) None of the above
35. Which of the following vessel Charles Darwin made his sea voyage?
- (A) Atlantic Neptune
  - (B) Beagle
  - (C) Royal Caribbean
  - (D) None of the above



36. When an amoeba is submerged in salt water, the contractile vacuole
- (A) Disappears
  - (B) Stretches
  - (C) Elongates
  - (D) Replicates
37. Which of the following helps in blood circulation?
- (A) Phagocyte
  - (B) Lymphocyte
  - (C) Monocyte
  - (D) Parasite
38. In which of the following, the third supralabial is the biggest, touching the eye?
- (A) *Penaeus monodon*
  - (B) *Naja naja*
  - (C) *Labeo rohita*
  - (D) *Panthera tigris*
39. As per IUCN, what does it mean to be a critically endangered species?
- (A) Fully extinct
  - (B) High risk of extinction in the captivity
  - (C) Extremely high risk of extinction in the wild
  - (D) None of the above
40. Which of the following animal is a major tourist attraction of Chilika lagoon?
- (A) Shark
  - (B) Dolphin
  - (C) Stingray
  - (D) Dugong

41. The lowest category in taxonomic hierarchy is
- (A) Class
  - (B) Kingdom
  - (C) Species
  - (D) Phylum
42. Which one of the following is not a crustacean?
- (A) Shrimp
  - (B) Barnacle
  - (C) Crab
  - (D) Frog
43. The organelles known as suicide bags of the cell are
- (A) Mitochondria
  - (B) Lysosomes
  - (C) Golgi apparatus
  - (D) None of the above
44. The organisms able to maintain body temperature independent of the environment are
- (A) Thermoforms
  - (B) Mesoforms
  - (C) Homeotherms
  - (D) Isotherms
45. Which of the following is not warm-blooded?
- (A) Dog
  - (B) Lion
  - (C) Vulture
  - (D) Lizard

46. Which tissue acts as first line of protection for body from any external damage?
- (A) Connective tissue
  - (B) Blood tissue
  - (C) Epithelial Tissue
  - (D) Nervous tissue
47. The animals of which phylum have jointed legs?
- (A) Ctenophora
  - (B) Arthropoda
  - (C) Nemertea
  - (D) Bryozoa
48. Ichthyology is the study of
- (A) Parasite
  - (B) Reptile
  - (C) Earthworm
  - (D) Fish
49. The study of organism's interaction with their environment is
- (A) Ecology
  - (B) Economics
  - (C) Envirolology
  - (D) Zoology
50. The transmission of traits from parents to their offspring is
- (A) Histopathogenesis
  - (B) Biogenesis
  - (C) Genetics
  - (D) None of the above

51. Oxygen and hemoglobin bind in a reversible manner to form
- (A) Carboxyhemoglobin
  - (B) Oxyhemoglobin
  - (C) Methoglobin
  - (D) BPG
52. Which of the following is NOT a plasma protein?
- (A) Albumin
  - (B) Globulin
  - (C) Fibrinogen
  - (D) Fibronectin
53. Abnormally low levels of white blood cells is called as?
- (A) Leukocytosis
  - (B) Leucopenia
  - (C) Lymphocyte
  - (D) Thrombopoietin
54. Which of the following hormone plays a major role in water reabsorption?
- (A) Somatostatin
  - (B) Relaxasin
  - (C) Oxytocin
  - (D) Vasopressin
55. Name the basic structural and functional unit of the nervous system.
- (A) Neuroglia
  - (B) Glial cells
  - (C) Neurons
  - (D) Perikaryon

56. Which of the following feature is the same in cilia and flagella?
- (A) Help in locomotion
  - (B) Wave-like motion
  - (C) Occurring all over the surface of the cell
  - (D) Very small in size
57. Genes of sex linked characters are located on the?
- (A) Chromosome 18
  - (B) Chromosome 13
  - (C) Chromosome 14
  - (D) Sex chromosome
58. What is pedigree analysis?
- (A) Record of inheritance pattern
  - (B) Linkage map
  - (C) Quantitative genetic
  - (D) Polygene analysis
59. What is the effect on biodiversity when we move from pole to equator?
- (A) High
  - (B) Increases
  - (C) Decreases
  - (D) Remains same
60. Which of the following term defines the ability of the individual in the population to produce new individuals?
- (A) Dispersion
  - (B) Mortality
  - (C) Natality
  - (D) Population dispersal

61. Name the term which defines the ability of community return to its original state after being displaced?
- (A) Dispersed
  - (B) Clumped
  - (C) Resistance
  - (D) Resilience
62. Which of the following climatic zone lies around 40° - 60° latitude?
- (A) Tropical
  - (B) Subtropical
  - (C) Arctic
  - (D) Temperate
63. Which of the following parameter of light is NOT required by plants to grow?
- (A) Wavelength of light
  - (B) Intensity of light
  - (C) Duration of light
  - (D) Color of light
64. Frustule is the name of cell wall present in\_\_\_\_\_
- (A) Slime molds
  - (B) Cyanobacteria
  - (C) Dinoflagellates
  - (D) Diatoms
65. Which of the following is the largest single membrane-bound intracellular compartment?
- (A) Ribosome
  - (B) Nucleus
  - (C) Endoplasmic reticulum
  - (D) Golgi apparatus

66. Which of the following is the site of aerobic respiration in eukaryotic cells?
- (A) Peroxisome
  - (B) Mitochondria
  - (C) Plastid
  - (D) Cilia
67. Which of the following is not a component of the nucleus?
- (A) Chromosome
  - (B) Nucleolus
  - (C) Cytoplasm
  - (D) Nuclear envelope
68. Name the structure which is used to transfer macromolecules between the cytoplasm and nucleus?
- (A) Microtubules
  - (B) Nuclear pores
  - (C) Cilia
  - (D) Centrioles
69. Name the RNA which is used to carry genetic information copied from DNA?
- (A) tRNA
  - (B) mRNA
  - (C) rRNA
  - (D) snRNA
70. Class of carbohydrate which cannot be hydrolyzed further, is known as?
- (A) Disaccharides
  - (B) Polysaccharides
  - (C) Proteoglycan
  - (D) Monosaccharide

\*\*\*\*\*

# ROUGH WORK