



Combined Class Test (CCT) - 05

OCTOBER 26, 2017

Test Code : 05

Time allowed : 45 minutes.

Maximum marks : 180.

Instructions

- There will be negative marking.
- For each correct answer 4 marks will be given.
- For each wrong answer 1 mark shall be deducted.
- Name, Batch and NTB I.D. must be written in the answer sheet.

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- Study of four statements (a-d) given below and select the two correct ones out of them
 - In majority of higher plants and animals, growth and reproduction are mutually exclusive events
 - Photoperiod affects reproduction in seasonal breeders, both plants and animals
 - Systema Naturae was written by Aristotle
 - Systematics does not take into account evolutionary relationships between organisms

(A) a and b (B) b and c
(C) c and d (D) a and d.

- Identify the phylum 'a'

Animalia → Organ system grade → Bilateral → Coelomate → 'a'.

(A) Platyhelminthes (B) Aschelminthes
(C) Coelentrata (D) Annelida.

- Identify the correct pair of combination

- Selaginella* - Homosporous - Lycopsidea
- Ectocarpus* - Filamentous form - Cholorophyll a and c
- Laminaria* - Biflagellate gametes - Haplo - diplontic life cycle
- Polytrichum* - Multiflagellate gametes - Moss

(A) a and b (B) b and c
(C) c and d (D) b and d.

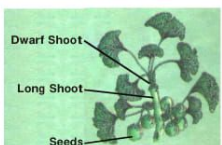
- Mycorrhizal association is found in



(A)



(B)



(C)

(D) All of the above.

- Choose the correct statements with reference to sponges with reference to sponges

- They are exclusively marine forms
- Skeleton consists of spicules or spongin fibres
- They are hermaphrodite in nature
- Fertilisation is external

(A) b and d (B) b and c
(C) a and c (D) a and b.

- Read the assertion and reason carefully to mark the correct option in question.

- If both assertion and reason are true and the reason is the correct explanation of the assertion
- If both assertion and reason are true but reason is not the correct explanation of the assertion
- If assertion is true but reason is false.
- If both assertion and reason are false.

Assertion : Urochordate's tadpole larva is more chordate - like than the adult.

Reason : Tadpole changes into an adult by retrogressive metamorphosis.

- Fungus which is used extensively in biochemical and genetic work belongs to the class

- Phycomycetes (B) Ascomycetes
(C) Basidiomycetes (D) Deuteromycetes.

- Match the columns and choose the right option

Column I

Column II

- | | |
|----------------------|---------------------|
| a. Truffles | i. Phycomycetes |
| b. Puffballs | ii. Ascomycetes |
| c. <i>Alternaria</i> | iii. Deuteromycetes |
| d. Bread mould | iv. Basidiomycetes |

(A) i-b, ii-c, iii-d, iv-a (B) i-d, ii-a, iii-b, iv-c
(C) i-d, ii-a, iii-c, iv-b (D) i-d, ii-b, iii-c, iv-a.

- Which of the following is a characterstic feature of gymnosperms

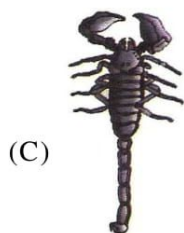
- (A) The development of pollen grains take place within the microsporangia
- (B) Some gymnosperms are homosporous
- (C) The ovules are borne on megasporophylls which may be clustered to form the male cones
- (D) All of the above.

10. Consider the following statements with respect to angiosperms

- a. They provide food, fodder, fuel and medicines to humans
- b. They are divided into two classes
- c. Each embryo sac has a seven-celled egg apparatus
- d. The female sex organ in a flower is called stamen. Of the above statements which are correct

- (A) a and c
- (B) b and d
- (C) a and b
- (D) b and c.

11. Which is a gregarious pest



12. Read the assertion and reason carefully to mark the correct option in question.

- (A) If both assertion and reason are true and the reason is the correct explanation of the assertion
- (B) If both assertion and reason are true but reason is not the correct explanation of the assertion
- (C) If assertion is true but reason is false.

(D) If both assertion and reason are false.

Assertion : Blood does not clot while leech is sucking it.

Reason : An anticoagulant hirudin from the salivary glands checks blood clotting.

13. Nephridia of earthworm help in

- (a) Digestion
- (b) Excretion
- (c) Osmoregulation
- (d) Reproduction.

- (A) a and are correct
- (B) b and c are correct
- (C) c and d are correct
- (D) b and d are correct.

14. Read the statements regarding molluscs and choose the correct option.

- a. They are both marine and fresh water animals
- b. Body is covered by calcareous shell
- c. Body is segmented with a distinct head, muscular foot and visceral hump
- d. They are usually monoecious and oviparous with indirect development

- (A) a and b
- (B) b and c
- (C) c and d
- (D) b and d.

15. Select the wrong statement

- (A) Influenza and herpes in human beings is caused by viruses
- (B) Potato spindle tuber disease is caused by viroids
- (C) White spots seen on mustard leaves are due to sac fungi
- (D) Wheat rust is caused by fungus *Puccinia*.

16. Which of the following is a partially heterotrophic plant

- (A) *Equisetum*
- (B) Venus fly trap
- (C) *Ginkgo*
- (D) *Polysiphonia*.

17. Presence of pyrenoid is characteristic feature of

- (A) *Chara* (B) *Laminaria*
(C) *Gracilaria* (D) Kelp.

18. Match the columns and find the correct option

Column I

Column II

- | | |
|---------------------------|-------------------------|
| (a) Radula | 1. <i>Ophiura</i> |
| (b) Parapodia | 2. <i>Pleurobrachia</i> |
| (c) Proboscis gland | 3. <i>Loligo</i> |
| (d) Water vascular system | 4. <i>Nereis</i> |
| (e) Bioluminescence | 5. <i>Saccoglossus</i> |

- (A) a-2, b-3, c-5, d-1, e-4
(B) a-5, b-2, c-1, d-4, e-3
(C) a-3, b-4, c-5, d-1, e-2
(D) a-3, b-4, c-5, d-2, e-1.

19. Read the assertion and reason carefully to mark the correct option in question.

- (A) If both assertion and reason are true and the reason is the correct explanation of the assertion
(B) If both assertion and reason are true but reason is not the correct explanation of the assertion
(C) If assertion is true but reason is false.
(D) If both assertion and reason are false.

Assertion : The protozoans are believed to be primitive relatives of fungi.

Reason : Protozoans are heterotrophs and live as predators or saprophytes.

20. As per Whittaker's classification, an organism possessing eukaryotic cell structure, multicellular organisation without a cell wall and nuclear membrane showing heterotrophic nutrition can be placed under the kingdom

- (A) Protista (B) Fungi
(C) Plantae (D) Animalia.

21. Which one is an example of living fossil

- (A) King cobra (B) King crab
(C) Queen bee (D) Locust.

22. Select the incorrect option about the given figure



- (A) Triploblastic nature
(B) Respiration by gills
(C) Closed type circulatory system
(D) Fertilisation is external.

23. What is common in *Polytrichum*, *Psilotum* and *Pinus*

- (A) Independent sporophyte
(B) Independent gametophyte
(C) Antheridia
(D) Archegonia.

24. Find out the incorrect match

- (A) Lateral appendages in aquatic annelids - Parapodia
(B) Free floating form of cnidaria - Medusa
(C) Stinging organ of sea fan - Radula
(D) Blood filled cavity in arthropods - Haemocoel.

25. *Homo sapiens* belongs to sub-phylum

- (A) Mammalia (B) Vertebrata
(C) Chordata (D) Tetrapoda.

26. Orange rot is due to

- (A) Bacteria (B) Fungi
(C) Virus (D) Viroid.

27. In which of the following organisms, the adult shows radial symmetry while the larva has bilateral symmetry

- (A) *Aplysia*
- (B) *Echinus*
- (C) *Salpa*
- (D) *Physalia*.

28. Incomplete digestive system is found in

- (A) Liver fluke
- (B) Hookworm
- (C) Blood sucking leech
- (D) King crab.

29. Read the assertion and reason carefully to mark the correct option in question.

- (A) If both assertion and reason are true and the reason is the correct explanation of the assertion
- (B) If both assertion and reason are true but reason is not the correct explanation of the assertion
- (C) If assertion is true but reason is false.
- (D) If both assertion and reason are false.

Assertion : *Branchiostoma* and *Balanoglossus* are bilaterally symmetrical and triploblastic animals.

Reason : They are exclusively marine and possess notochord.

30. Given figure belongs to phylum



- (A) Vertebrata
- (B) Urochordata
- (C) Chordata
- (D) Cephalochordata.

31. Cellular level of body organisation is found in

- (A) Monera
- (B) Protista
- (C) Porifera
- (D) All of the above.

32. Find out the odd one

- (A) *Bombyx*
- (B) *Laccifer*
- (C) *Limulus*
- (D) *Apis*.

33. Find the wrongly matched pair

- (A) Radula - Feeding
- (B) Cnidoblast - Anchorage
- (C) Air bladder - Defense
- (D) Flame cells - Excretion.

34. Which suffix is used in the name of animal family

- (A) -aceae
- (B) -oidae
- (C) -idae
- (D) -inae.

35. The members of which of the following sub-phylum are exclusively marine

- (A) Ctenophora
- (B) Echinodermata
- (C) Urochordata
- (D) All of the above.

36. Non-chordates differ from chordates in having

- (A) Notochord
- (B) Pharyngeal gill slits
- (C) Dorsal hollow nerve cord
- (D) None of the above.

37. *Trichoderma* is an example of which of the following kingdom

- (A) Ascomycetes
- (B) Basidiomycetes
- (C) Deuteromycetes
- (D) Fungi.

38. Match the columns and find the correct combination

Column I

Column II

- | | |
|------------------------|-------------------------|
| a. Organ system level | 1. <i>Spongilla</i> |
| b. Cellular level | 2. <i>Teania</i> |
| c. Tissue level | 3. <i>Ancylostoma</i> |
| d. Organ level | 4. <i>Dentalium</i> |
| (A) a-2, b-1, c-4, d-3 | (B) a-3, b-4, c-1, d-2 |
| (C) a-4, b-1, c-2, d-3 | (D) a-4, b-1, c-3, d-2. |

39. The leaves of fern plants are called

- (A) Microphylls (B) Macrophylls
(C) Sporophylls (D) Cataphylls.

40. The tallest tree species of gymnosperm is

- (A) *Wolfia* (B) *Cedrus*
(C) *Sequoia* (D) *Eucalyptus*.

41. Read the assertion and reason carefully to mark the correct option in question

- (A) If both assertion and reason are true and the reason is the correct explanation of the assertion
(B) If both assertion and reason are true but reason is not the correct explanation of the assertion
(C) If assertion is true but reason is false.
(D) If both assertion and reason are false.

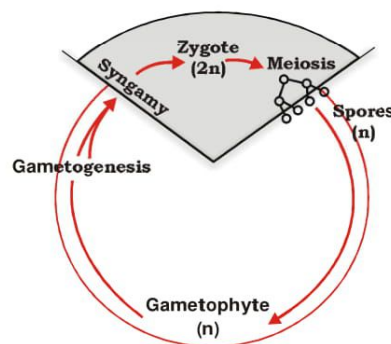
Assertion : In *Pleurobrachia*, eight comb like ciliary plates called comb plates are present on the body that help in locomotion.

Reason : *Pleurobrachia* reproduces sexually and its life cycle includes cydippid larva.

42. Notochord is present only in larval tail in

- (A) Urochordata
(B) Cephalochordata
(C) Protochordata
(D) Vertebrata.

43. This type of life cycle is found in



- (A) *Fucus* (B) *Polysiphonia*
(C) *Volvox* (D) *Gymnosperm*.

44. Which is not a character of chordates

- (A) Dorsal notochord
(B) Dorsal central nervous system
(C) Dorsal heart
(D) Post-anal tail.

45. One of the representative of subphylum cephalochordata

- (A) *Lancelet*
(B) *Branchiostomata*
(C) *Doliolum*
(D) Both A and B.

Your Next CCT held on
November 09, 2017

:: Topic ::
Chapter-1 to Chapter-5