BIOLOGY

CB04

SYLLABUS : Animal Kingdom

Max. Marks : 180 **Marking Scheme :** + 4 for correct & (–1) for incorrect **Time : 60 min.**

INSTRUCTIONS : This Daily Practice Problem Sheet contains 45 MCQs. For each question only one option is correct. Darken the correct circle/ bubble in the Response Grid provided on each page.

1. Classification of Porifera is based on
(a) branching (b) spicules
(c) reproduction (d) symmetry

2. A chordate character is
(a) gills (b) spiracles
(c) postanal tail (d) chitinous exoskeleton

3. Which one of the following pairs of animals comprises 'jawless fishes'?
(a) Mackerals and Rohu (b) Lampreys and hag fishes
(c) Guppies and hag fishes (d) Lampreys and eels

4. Leech is
(a) carnivorous (b) sanguivorous
(c) ectoparasite (d) Both (b) and (c)

5. Which one of the following groups of animals is bilaterally symmetrical and triploblastic?
(a) Aschelminthes (round worms)
(b) Ctenophores
(c) Sponges
(d) Coelenterates (Cnidarians)

6. Which of the following animal is cold blooded and has 4 - chambered heart?
(a) Salamander (b) *Ornithorhynchus*
(c) Crocodile (d) *Calotes*

7. Which one of the following is NOT a characteristic of phylum Annelida?
(a) Closed circulatory system
(b) Segmentation
(c) Pseudocoelom
(d) Ventral nerve cord

RESPONSE GRID					
1. ⓐⓑⓒⓓ	**2.** ⓐⓑⓒⓓ	**3.** ⓐⓑⓒⓓ	**4.** ⓐⓑⓒⓓ	**5.** ⓐⓑⓒⓓ
6. ⓐⓑⓒⓓ	**7.** ⓐⓑⓒⓓ			

Space for Rough Work

8. Which one of the following characters is not typical of the class mammalia?
(a) Thecodont dentition
(b) Alveolar lungs
(c) Ten pairs of cranial nerves
(d) Seven cervical vertebrae

9. Which one of following feature is possessed by Crustaceans and not by insects?
(a) Paired limbs
(b) Two pairs of antenna
(c) Chitinous exoskeleton
(d) Bilateral symmetry

10. Poison glands of snake are modified
(a) Linguals (b) Sublinguals
(c) Maxillaries (d) Parotids

11. The adults are radially symmetrical but larvae exhibit bilateral symmetry in
(a) Mollusca (b) Hemichordata
(c) Echinodermata (d) Cephalochordata

12. Which one of the following categories of animals, is correctly described with no single exception in it?
(a) All sponges are marine and have collared cells.
(b) All mammals are viviparous and possess diaphragm for breathing.
(c) All bony fishes have four pairs of gills and an operculum on each side.
(d) All reptiles possess scales, have a three chambered heart and are cold blooded (poikilothermal).

13. Solenocytes and metanephridia are excretory organs of
(a) Annelida and Arthropoda
(b) Platyhelminthes and Annelida
(c) Coelenterata and Mollusca
(d) Aschelminthes and Annelida

14. Radial symmetry occurs in
(a) Porifera and Coelenterata
(b) Coelenterata and Echinodermata
(c) Coelenterata and Platyhelminthes
(d) Arthropoda and Mollusca

15. Which of the following statements is/are not true?
(i) In Urochordata, notochord is present in larval tail.
(ii) In Cephalochordata, notochord extends from head to tail region.
(iii) *Branchiostoma* belongs to hemichordata.
(iv) Only one class of living members, class Cyclostomata represents the super class agnatha
(a) (ii) and (iv) (b) (i), (iii) and (iv)
(c) (iii) only (d) (i) and (iv)

16. In *Amoeba* and *Paramecium* osmoregulation occurs through
(a) pseudopodia (b) nucleus
(c) contractile vacuole (d) general surface

17. Animals with metameric segmentation, bilateral symmetry and closed circulatory system belong to phylum
(a) Annelida (b) Echinodermata
(c) Arthropoda (d) Mollusca

18. Which one of the following characters is **not** typical of the class Mammalia?
(a) Thecodont dentition
(b) Alveolar lungs
(c) Ten pairs of cranial nerves
(d) Seven cervical vertebrae

19. The segments of earthworms are
(a) Apparent in the embryo but not in the adult
(b) Specialised for different functions and are present in endoderm only
(c) Present in mesoderm but not in the ectoderm
(d) Repetitive, with serial repetition of at least some organs

20. The evolution of an internal body cavity/coelom offered an advantage in animal body design in all areas, except
(a) Evolution of effecient organ systems
(b) Provides space within which the gonads can expand and large number of gametes stored
(c) Circulation
(d) Greater freedom of movement

RESPONSE GRID					
	8. (a)(b)(c)(d)	**9.** (a)(b)(c)(d)	**10.** (a)(b)(c)(d)	**11.** (a)(b)(c)(d)	**12.** (a)(b)(c)(d)
	13. (a)(b)(c)(d)	**14.** (a)(b)(c)(d)	**15.** (a)(b)(c)(d)	**16.** (a)(b)(c)(d)	**17.** (a)(b)(c)(d)
	18. (a)(b)(c)(d)	**19.** (a)(b)(c)(d)	**20.** (a)(b)(c)(d)		

Space for Rough Work

21. Animals like bats have/are
(a) Hollow skeleton
(b) Feathers which are modified reptilian scales
(c) Endothermic
(d) Efficient respiration. Non-vascular air sacs are connected to lungs to supplement respiration

22. Which of the following is incorrect match of animal group/life style/structure/function?

	Animal	Lifestyle	Structure/functions group
(a)	Sponges	Sessile filter feeders	Amoebocytes/carry food and wastes Spicules/support and protection spongin / support
(b)	Cnidarians	Free floating or attached	Gastrovascular cavity/digestion Cnidocytes/ protection and food getting
(c)	Flatworms	Free living or parasite	Flame cells/ excretion Tegument/ protection
(d)	Molluscs	Terrestrial, marine, fresh water inhabitants	Radula/feeding mantle/motility

23. Complete the following analogy : Pigeon's milk : Crop :: Song :
(a) Syrinx (b) Trachea
(c) Proventriculus (d) Anterior air sacs

24. Which of the following is not correct matching of phylum and its three examples?
(a) Annelida : *Aphrodite, Chaetopterus, Bonnelia*
(b) Mollusca : *Teredo, Aplysia, Chaetopleura*
(c) Aschelminthes : *Ancylostoma, Enterobius, Tubifex*
(d) Arthropoda : *Buthus, Lepisma, Leptocorisa*

25. Hemichordates differ from chordates, in that hemichordates
(a) Are gill breathers
(b) Fertilisation is external and development is indirect
(c) Do not possess notochord
(d) Are bilaterally symmetrical, triploblastic and coelomate animals

26. All birds have
(a) Oil gland at the base of tail
(b) Feather on their body and can fly
(c) Nests to care their babies
(d) Internal fertilization, are oviparous and eggs are covered with calcareous shell

27. Which one of the following is a coelenterate?
(a) Sea mouse (b) Sea anemone
(c) Sea urchin (d) Sea cucumber

28. Presence of external ear pinna, body hairs, four chambered heart are the characters of
(a) *Macropus* (b) *Balaenoptera*
(c) *Psittacula* (d) *Aptenodytes*

29. Which one of the following statements about certain given animals is correct?
(a) Round worms are pseudo-coelomates
(b) Molluscs are acoelomates
(c) Insects are pseudo-coelomates
(d) Flatworms are coelomates

30. Which one of the following phyla is correctly matched with its two general characteristics?
(a) Echinodermata – pentamerous radial symmetry and mostly internal fertilization
(b) Mollusca – normally oviparous and development through a trochophore or veliger larva
(c) Arthropoda – body divided into head, thorax and abdomen and respiration by mouth
(d) Chordata – notochord persists throughout and separate anal and urinary openings to the outside

31. Amphibians share with reptiles all of the following characters expect
(a) ventral heart
(b) external fertilization and indirect development
(c) dioecious, oviparous
(d) cold blooded or poikilotherms.

RESPONSE GRID

21. ⓐⓑⓒⓓ	**22.** ⓐⓑⓒⓓ	**23.** ⓐⓑⓒⓓ	**24.** ⓐⓑⓒⓓ	**25.** ⓐⓑⓒⓓ
26. ⓐⓑⓒⓓ	**27.** ⓐⓑⓒⓓ	**28.** ⓐⓑⓒⓓ	**29.** ⓐⓑⓒⓓ	**30.** ⓐⓑⓒⓓ
31. ⓐⓑⓒⓓ				

Space for Rough Work

32. Which of the following statements about the body cavity of animals is true ?
(a) The body cavity of coelomates develops from the embryonic ectoderm.
(b) The acoelomates' body cavity is filled with liquid.
(c) The pseudocoel of the pseudocoelomates have a peritoneum.
(d) The acoelomates do not have an enclosed body cavity.

33. Sponges have a very simple body plan. Which of the following statements about sponge structure or function is false ?
(a) Choanocytes are flagellated cells that play a role in feeding.
(b) Large species are found in areas of heavy wave action, where food is most abundant.
(c) Individual sponges are both male and female.
(d) Water enters a sponge through pores and exits via one or more oscula.

34. Which of the following traits is not shared by the Ctenophora and the Cnidaria ?
(a) Both are diploblastic
(b) Both have radial symmetry
(c) Both have complete guts.
(d) Both have feeding tentacles.

35. Earthworm has
(a) Two eyes (b) Many eyes
(c) No eyes (d) One eye.

36. Which of the following statements is not true of the Rotifera ?
(a) They have a complete gut with an anterior mouth and posterior anus.
(b) They are coelomates
(c) The corona is a ciliated organ used in acquiring food.
(d) They use a hydrostatic skeleton.

37. The combination of a true coelom and repeating body segmentation allows the annelids (unlike the anatomically "simpler" worms) to do which of the following ?
(a) Attain complex body shapes and thus locomote more precisely
(b) Move through loose marine sediments
(c) Be hermaphroditic
(d) Inject paralytic poisons into their prey

38. An animal is divided along its main body axis to produce similar halves. Which of the following types of symmetry could apply ?
(a) Spherical (b) Radial
(c) Radial or biradial (d) Bilateral

39. Cephalization is a characteristic mainly associated with which of the following types of body symmetry in animals ?
(a) Asymmetric (b) Radial
(c) Biradial (d) Bilateral

40. Amphids present on ventrolateral lips of *Ascaris* are
(a) Chemoreceptors (b) Olfactoreceptors
(c) Tactoreceptors (d) Gustatoreceptors

41. Corals are common representatives of the cnidarian class_____ .
(a) Scyphozoa (b) Anthozoa
(c) Porifera (d) Placozoa

42. Which of the following characteristics is unique to the phylum Cnidaria ?
(a) Sexual reproduction
(b) Symbiotic associations with other organisms
(c) Sedentary body forms
(d) Nematocysts

43. Which of the following statements is true of all flatworms ?
(a) Flatworms are biradially symmetric
(b) Flatworms have a complete digestive system
(c) Flatworms tend to have large, thickened bodies
(d) Flatworms are triploblastic

44. Which of the following structures is absent from a typical gastropod mollusk (e.g., a garden snail) ?
(a) Protective shell (b) Head
(c) Radula (d) None of these

45. Which two of the following are found in the mesophyl or protein matrix and serve as structural support for a sponge ?
(a) spicule, spongin (b) osculum, spicule
(c) medusa, polyp (d) polyp, osculum

RESPONSE GRID					
	32. (a)(b)(c)(d)	**33.** (a)(b)(c)(d)	**34.** (a)(b)(c)(d)	**35.** (a)(b)(c)(d)	**36.** (a)(b)(c)(d)
	37. (a)(b)(c)(d)	**38.** (a)(b)(c)(d)	**39.** (a)(b)(c)(d)	**40.** (a)(b)(c)(d)	**41.** (a)(b)(c)(d)
	42. (a)(b)(c)(d)	**43.** (a)(b)(c)(d)	**44.** (a)(b)(c)(d)	**45.** (a)(b)(c)(d)	

Space for Rough Work

DAILY PRACTICE PROBLEM DPP CHAPTERWISE 4 - BIOLOGY			
Total Questions	45	Total Marks	180
Attempted		Correct	
Incorrect		Net Score	
Cut-off Score	40	Qualifying Score	65
Success Gap = Net Score – Qualifying Score			
Net Score = (Correct × 4) – (Incorrect × 1)			