

Chapter 7

ANSWERS

Multiple Choice Questions

- | | | | |
|---------|---------|---------|---------|
| 1. (d) | 2. (c) | 3. (d) | 4. (c) |
| 5. (b) | 6. (a) | 7. (a) | 8. (a) |
| 9. (a) | 10. (c) | 11. (d) | 12. (c) |
| 13. (a) | 14. (d) | 15. (c) | 16. (b) |
| 17. (d) | 18. (c) | 19. (a) | 20. (d) |
| 21. (b) | 22. (b) | 23. (a) | 24. (d) |
| 25. (a) | 26. (b) | 27. (b) | 28. (a) |
| 29. (a) | 30. (b) | 31. (b) | 32. (a) |
| 33. (b) | 34. (b) | | |

Short Answer Questions

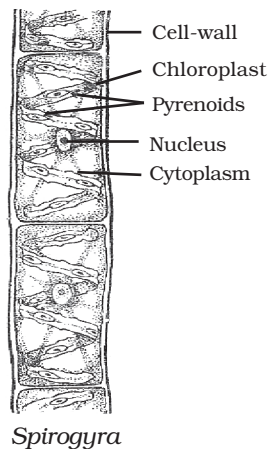
35. (a) T (b) T (c) F (d) T (e) F (f) T
36. (a) saprophytic (b) chitin (c) lichens (d) carbohydrate
(e) species (f) thallophyta (g) bryophytes
37. Gram—dicot Wheat—monocot Rice—monocot,
Pumpkin—dicot Maize—monocot Pea—dicot
38. (a)—B; (b)—A; (c)—D; (d)—C; (e)—F; (f)—E, (g)—G.
39. (a)—C; (b)—B; (c)—F; (d)—A; (e)—E; (f)—D
40. *Spongilla* —Acoelomate
Sea anemone—Acoelomate
Planaria—Acoelomate
Liver fluke—Acoelomate
Wuchereria—Pseudocoelomate
Ascaris—Pseudocoelomate
Nereis—Coelomate
Scorpion—Coelomate
Earthworm—Coelomate
Birds, Fishes and Horse—Coelomate

41. Torpedo—Cartilagenous, Sting ray—Cartilagenous, Dog fish—Cartilagenous, Rohu—Bony, Angler fish—Cartilagenous Exocoetus—bony.
42. Rohu, *Scoliodon*—2 chambered. Frog, Salamander, Flying lizard, King Cobra—3 chambered. Crocodile, Ostrich, Pigeon, Bat, Whale—4 chambered.
43. Cold blooded—Rohu, *Scoliodon*, Frog, Salamander, Flying Lizard, King Cobra, Crocodile, Warm blooded—Ostrich, Pigeon, Bat, Whale.
44. (i) *Platypus* (ii) *Echidna*
45. (a) Robert Whittaker
(b) Species
(c) Monera
(d) Eukaryotic unicellular organisms
(e) Chlorophyll
(f) Mushroom
(g) Yeast
(h) Lichens
46. (a) F (b) T (c) F (d) T (e) T (f) T
47. (a) Liver fluke
(b) Filarial worm
(c) Arthropods
(d) Nematodes
48. (a) Dorsal fin
(b) Caudal fin
(c) Pelvic fin
(d) Pectoral fin
Function of Caudal fin—Caudal fin helps in streamlined movement in water.

Long Answer Questions

49. (a) Thallophyta
(b) Without specialized vascular tissue
(c) Pteridophyta
(d) Phanerogams
(e) Bear naked seeds
(f) Angiosperms
(g) Have seeds with two cotyledons
(h) Monocots

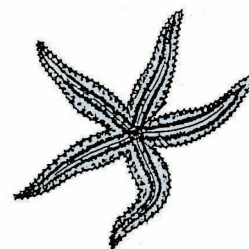
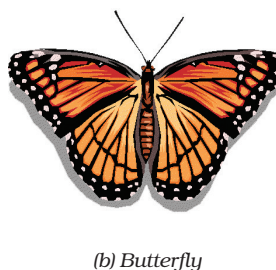
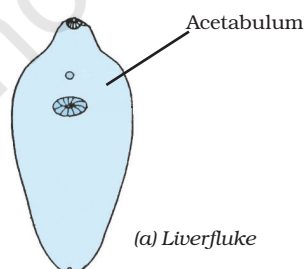
50. *Ulothrix, Spirogyra, Cladophara, Ulva and Chara,*



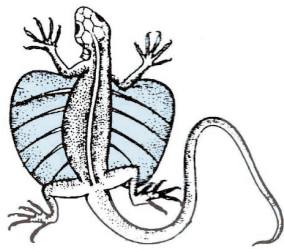
- 51.** The Thallophyta, bryophyta and pteridophyta are called as 'Cryptogams' because the reproductive organs of these groups are inconspicuous or hidden. Seeds are absent. On the other hand 'Phanerogams' include gymnosperms and angiosperms which have well differentiated reproductive tissue and the embryo with stored food. Embryo develops into seed.



- 52.** (a) The left and right halves of the body have the same design, eg, liver fluke
(b) Coelom is the internal body cavity between visceral organs and body wall in which well developed organs can be accommodated, eg. butterfly
(c) Animals having three layers of cells from which differentiated tissue can be made are called triploblastic, eg. star fish



53. All organisms given in the question do not belong to same group. Leech and *Nereis* belong to phylum annelida because they have metamerically segmented body i.e., body is divided into many segments internally by septa. Body segments are lined up one after the other from head to tail. But *Scolopendra*, prawn and scorpion belong to phylum arthropoda as these have jointed legs and open circulating system.
54. **Hint—** Mango tree is more complex and evolved because, it is eukaryotic, autotrophic, terrestrial sporophyte with covered seed. The bacteria is unicellular prokaryote and fungi are the heterotrophic, simple thallophyte with no tissue systems.
55. *Flying lizard* belongs to group reptiles and characterised as cold blooded, body covered with scales and having three chambered heart, while *birds* belong to group aves and have characteristics of being warm blooded, having feather covered body, forelimbs modified as wings and having four chambered heart.



Flying lizard (*Draco*)



Pigeon

56. Bat, rat and cat belong to class mammalia and have following common features
- (a) All have notochord at some stage of life cycle.
 - (b) All are warm blooded.
 - (c) All have four chambered heart.
 - (d) All have skin covered with hair and with sweat and oil glands.
57. **Hint—** Because both are (1) cold blooded (2) have scales (3) breathe through lungs (4) have three chambered heart, and (5) they lay eggs with tough covering.