1 ANIMAL KINGDOM

Basis of classification

1. Which of the following is a basic feature of all the organisms of Animalia? **[Pg-46,E]**
   A) Multicellular structure
   B) Sensory and neuromotor system
   C) Terrestrial habitat
   D) Locomotion

2. Which of the following lack tissue grade organization? **[Pg-46,E]**
   A) Metazoans
   B) Eumetazoans
   C) Parazoans
   D) None of these

3. Match the columns. **[Pg-46,47,M]**

	Column-I		**Column-II**
(A)	Organ level	(1)	Pheretima
(B)	Cellular aggregate level	(2)	Fasciola
(C)	Tissue level	(3)	Spongilla
(D)	Organ system level	(4)	Obelia

Codes-

	(A)	**(B)**	**(C)**	**(D)**
A)	2	4	3	1
B)	2	3	4	1
C)	4	1	2	3

D) If both assertion and reason are false.

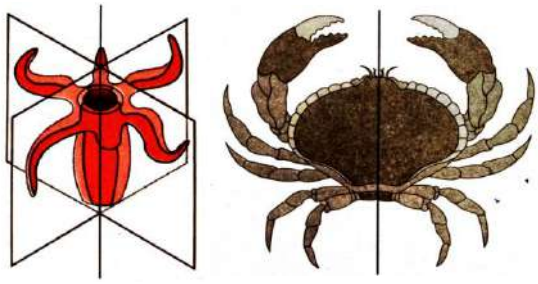
4. Choose the correct option **[Pg-47,H]**
   A) Ctenophores and platyhelminthes possess complete digestive system.
   B) Aschelminthes to chordates, all possess organ system level of organization along with complete digestive system.
   C) Coelenterates and aschelminthes possess organ system level of organization along with complete digestive system.
   D) Poriferans may possess complete digestive system.

5. The entry of food and exit of waste takes place from separate openings in **[Pg-47,M]**
   A) organisms having incomplete digestive system
   B) coelenterates, ctenophores and Platyhelminthes
   C) organisms having complete digestive system
   D) organisms having cellular level of organization

6. Which of the following is incorrect? **[Pg-47,M]**
   A) Some division of labour (activities) occur among the cells in the members of phylum porifera.
   B) Division of labour (activities) is completely absent among the cells in poriferans.
   C) Open circulatory system is found in Tunicates, hemichordates, and non-cephalopod molluscs.
   D) All of these

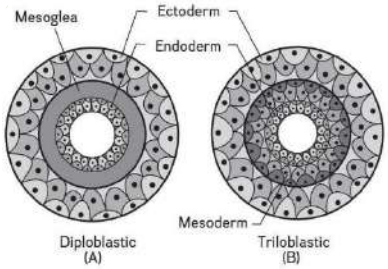
7. Choose the incorrect option. **[Pg-47,M]**
   A) Complete digestive system - Two openings, mouth and anus
   B) Incomplete digestive system - Single opening system
   C) Open circulatory system - Blood is circulated through tubes
   D) Closed circulatory system - Arteries veins and capillaries present

8. Choose the correct body symmetry shown in the diagram. [Pg-47,E]



   A) A – Radial, B – Bilateral
   B) A – Bilateral, B – Pentamerous
   C) A – Radial, B – Pentamerous
   D) A – Bilateral, B – Radial

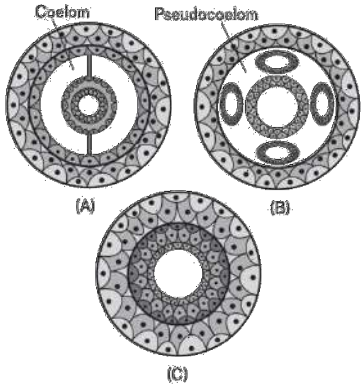
9. The diagram below shows the diploblastic and triploblastic germ layers in the animals. Identify the correct option in which they are found. **[Pg-47,E]**



A) A – Radial, B – Bilateral
B) A – Bilateral, B – Pentamerous
C) A – Radial, B – Pentamerous
D) A – Bilateral, B – Radial

10. Choose the true statement: **[Pg-47,M]**
A) Animals like annelids, arthropods, aschelminthes, molluscs, hemichordates and chordates possess bilateral symmetry.
B) Most of the animals possess bilateral symmetry.
C) Platyhelminthes was the first phylum during evolution to exhibit bilateral symmetry.
D) All of these

11. Study the types of animals with respect to the presence or absence of body cavities: **[Pg-48,E]**



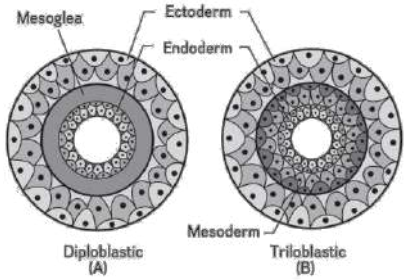
A) A – Molluscs, B – Chordates
B) A – Annelida, B – Porifera
C) A – Coelenterates, B – Platyhelminthes
D) A – Molluscs, B – Porifera

12. Which of the following option is wrong? **[Pg-47,M]**
A) Coelenterates and ctenophores are diploblastic.
B) Animals from platyhelminthes to chordates are triploblastic.
C) Radially symmetric animals remain attached to a surface by their aboral surface.
D) Mesoglea is an undifferentiated layer which do not form any tissue or organ.

13. Choose the incorrect match **[Pg-47,M]**
A) Tube-within-tube body plan: Nemathelminthes, Annelida, Arthropoda, Mollusca, Echinodermata, Chordata
B) Cell-aggregate type body plan: Coelenterates
C) Blind-sac type body plan: Platyhelminthes and coelenterates
D) None of these

14. Which of the following is/are the function of coelom? **[Pg-48,H]**
A) Absorb shock or provide hydrostatic skeleton
B) Support shock or provide hydrostatic skeleton
C) Allow muscles to grow independently of the body wall
D) All of these

15. The diagram below shows the diploblastic and triploblastic germ layers in the animals. Identify the correct option in which they are found. **[Pg-47,E]**



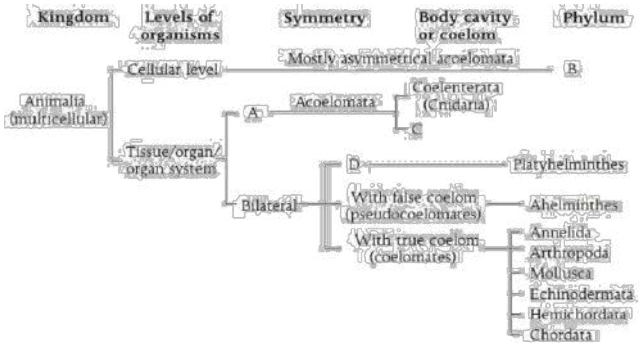
A) A – Molluscs, B – Chordates
B) A – Annelida, B – Porifera
C) A – Coelenterates, B – Platyhelminthes
D) Molluscs, B – Porifera

16. Choose the incorrect option **[Pg-48,H]**
A) True coelom is a body cavity which arises as a cavity in the embryonic mesoderm.
B) Digestive cavity is found in acoelomates, pseudocoelomates as well as coelomates.
C) The body cavity of arthropods and non- cephalopod molluscs is called haemocoel.
D) There is no cavity between the body wall and gut wall in echinoderms.

17. Metamerism is present in **[Pg-48,E]**
A) annelids
B) arthropods
C) chordates
D) all of these

18. Choose the incorrect match: **[Pg-47,E]**
A) Coelenterates – Radial symmetry
B) Molluscs – Radial symmetry in adults
C) Platyhelminthes – Triploblastic
D) Ctenophores – Triploblastic

19. Choose the correct label for A, B, C and D in the broad Classification of Kingdom Animalia based on common fundamental features as given below. **[Pg-47,E]**



	A	B	C	D
A)	Bilateral	Porifera	Ctenophora	Coelomate
B)	Radial	Porifera	Ctenophora	Acoelomate
C)	Bilateral	Porifera	Ctenophora	Coelomate
D)	Radial	Ctenophora	Porifera	Acoelomate

20. Choose the incorrect statement.
(I) Notochord is ectodermally derived rod-like structure.
(II) Notochord is formed on the dorsal side during embryonic development.
(III) The animals from porifera to Echinoderms are without notochord.
(IV) In some chordates, notochord is replaced by the vertebral column and these chordates are called vertebrates.
[Pg-48,M]
A) I and II
B) I, II, and III
C) II, III and IV
D) I only

21. Identify the correct labels A and B. **[Pg-48,E]**

Notochord	Nerve Cord
A	Part of nervous system
Found in chordates only	Found in chordates as well as non-chordates
Dorsal side in chordates	B

A) A = Exoskeleton, B = Dorsal in chordates as well as in non-chordates
B) A = Endoskeleton; B = Ventral in chordates as well as in non-chordates
C) A = Exoskeleton; B = Ventral in chordates and dorsal in non-chordates
D) A = Endoskeleton; B = Dorsal in chordates and ventral in non-chordates

22. True coelom appear in which of the following during evolution? **[Pg-48,E]**
A) Echinodermata
B) Annelida
C) Platyhelminthes
D) Aschelminthes

23. The layer absent in the embryos of diploblastic animals is **[Pg-47,E]**
A) ectoderm B) endoderm
C) mesoderm D) mesoglea

24. Nerve cells and tissue level of organization first appeared in **[Pg-46,E]**
A) coelenterates B) ctenophora
C) chordate D) porifera

25. In some animal groups, the body is found divided into compartments with at least some organs. This characteristic feature is called **[Pg-48,E]**
A) segmentation
B) metamerism
C) metagenesis
D) metamorphosis

26. Body cavity is the cavity present between body wall and gut wall. In some animals the body cavity is not lined by mesoderm. Such animals are called **[Pg-48,E]**
A) acoelomate
B) pseudocoelomate

C) coelomate
D) haemocoelomate

27. Match the following Columns **[Pg-47,M]**

	Column-I (Phylum)		**Column-II (Characteristic Features)**
(A)	Porifera	(1)	Canal system
(B)	Aschelminthes	(2)	Water vascular system
(C)	Annelida	(3)	Muscular pharynx
(D)	Arthropoda	(4)	Joined appendages
(E)	Echinodermata	(5)	Metameres

Select the correct option

	(A)	**(B)**	**(C)**	**(D)**	**(E)**
A)	1	3	5	4	2
B)	1	2	3	4	5
C)	5	4	3	2	1
D)	4	3	1	2	5

28. Which of the following animals are true coelomates with bilateral symmetry? **[Pg-47,E]**
A) Adult echinoderms
B) Aschelminthes
C) Platyhelminthes
D) Annelids

29. Assertion: The primary character of chordates is the presence of dorsal hollow nerve cord. **[Pg-48,H]**
Reason: Vertebral column is derived from the notochord.
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

30. Assertion: Animals with radial symmetry has more advantage in detecting food and danger.
Reason: It allows animal to be able to respond to stimulus from any direction. **[Pg-47,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

31. Assertion: Aschelminthes represent pseudocoelomates.
Reason: In aschelminthes, mesoderm is present as scattered pouches in between ectoderm and endoderm. **[Pg-48,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

PORIFERA

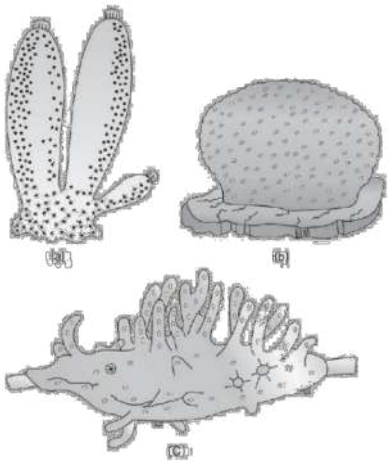
32. Sponges are **[Pg-49,E]**
A) with water canal system
B) sexually reproducing by formation of gametes
C) both (a) and (b)
D) sessile or free-swimming

33. In case of poriferans, the spongocoel is lined with flagellated cells called **[Pg-49,E]**
A) ostia B) oscula
C) choanocytes
D) mesenchymal cells

34. Body having meshwork of cells, internal cavities lined with food filtering flagellated cells and indirect development are the characteristics of phylum **[Pg-49,E]**
A) coelenterate B) porifera
C) Mollusca D) protozoa

35. In most simple type of canal system of porifera, water flows through which one of the following ways? **[Pg-49,M]**
A) Ostia → Spongocoel → Osculum → Exterior
B) Spongocoel → Ostia → Osculum → Exterior
C) Osculum → Spongocoel → Ostia → Exterior
D) Osculum → Ostia → Spongocoel → Exterior

36. Examine the figures A, B, and C. **[Pg-49,E]**



In which one of the four options all the animals (Poriferans) are correct?

A) A - Sycon, B - Euspongia, C - Spongilla
B) A - Euspongia, B - Spongilla, C - Sycon
C) A - Spongilla, B - Sycon, C - Euspongia
D) A - Euspongia, B - Sycon, C – Spongilla

37. Which of the following is a freshwater sponge? **[Pg-50,E]**

A) Euspongia
B) Euplectella
C) Spongilla
D) Sycon

38. In poriferans, the rudimentary division of labour is found between the **[Pg-49,E]**

A) tissue B) cells
C) organs D) organ-system

39. Which of the following is not a characteristic of class Porifera? **[Pg-49,M]**

(I) Development is indirect (larval stage is present).
(II) Mostly asymmetrical and usually marine
(III) Primitive multicellular animals with cellular level of organization.
(IV) Choanocytes line the spongocoel and the canals.
(V) Sexes are separate

A) I and IV B) II only
C) V only D) III and IV

40. Choose the correct characteristic for sponges. **[Pg-49,M]**

A) They are highly regenerative
B) They are universally radially symmetrical
C) The contain clarions spicules but lack the siliceous one
D) They are found only in fresh water

COELENTERATA

41. Cnidocytes are **[Pg-50,H]**

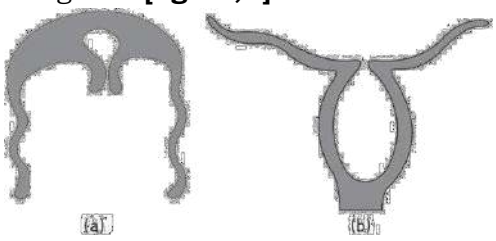
A) also called cnidoblast or nematocyte
B) explosive cells each of which contain giant secretory organelle called nematocyst
C) stinging cells
D) with all the above features

42. Consider the following statements about cnidarians: **[Pg-50,H]**

(I) They have tissue level of organization and triploblastic.
(II) Digestion is extracellular and intracellular.
(III) Corals secrete calcium bicarbonate form a skeleton.
(IV) Corals may harbour some photosynthetic dinoflagellates for taking nutrition.
(V) They possess a central gastro-vascular cavity with a single opening mouth in hypostome.

A) Statements I and III are correct
B) Statements II, IV and V are correct
C) Statements I, II and III are correct
D) Statements III and IV are incorrect

43. Here two basic body forms of cnidarians are given. **[Pg-50,E]**



A) A and B are false swimming forms
B) A and B are sessile form
C) A produce B asexually and B form the 'A' sexually
D) B produce A sexually and A form the 'B' sexually

44. Match the columns. **[Pg-50,M]**

	Column-I		Column-II
(A)	Gorgonia	(1)	Sea fan

(B)	Adamsia	(2)	Sea pen
(C)	Physalia	(3)	Portuguese man of war
(D)	Pennatula	(4)	Sea anemone

Select the correct option

	(A)	(B)	(C)	(D)
A)	1	3	4	2
B)	1	2	3	4
C)	4	3	2	1
D)	3	4	1	2

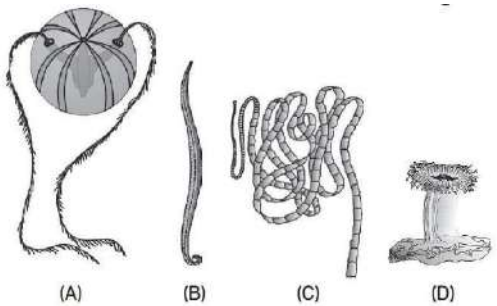
45. 'Stinging capsules' or nematocytes are found in **[Pg-50,E]**
A) sea anemone B) sea pen
C) sea fan D) all of these

46. Assertion: Choanocytes or collar cells line the spongocoel and the canals in poriferans.
Reason: Poriferans possess spicules or spongin fibers. **[Pg-49,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

CTENOPHORA

47. Ctenophores **[Pg-51,E]**
A) perform external fertilization
B) have indirect development
C) both (A) and (B)
D) have separate sexes

48. Identify the correct option specifying the names of the animals A, B, C and D. **[Pg-50,51,52,H]**



	(A)	(B)	(C)	(D)
A)	Pleurobranchia	Tapeworm	Taenia	Aurelia
B)	Fasciola	Tapeworm	Liverfluke	Aurelia
C)	Pleurobranchia	Roundworm	Taenia	Adamsia
D)	Fasciola	Roundworm	Liverfluke	Adamsia

PLATYHELMINTHES

49. In tapeworms **[Pg-51,M]**
A) flame cells are absent
B) both exoskeleton and endoskeleton present
C) hooks and suckers present
D) body is radially symmetrical

50. Which of the following is not a Platyhelminthes **[Pg-51,E]**
A) Wuchereria B) Taenia
C) Faxiola D) Planaria

51. Ascaris is characterized by **[Pg-52,M]**
A) the absence of true coelom but presence of metamerism
B) the presence of neither true coelom nor metamerism
C) the presence of true coelom but the absence of metamerism
D) the presence of true coelom and metamerism

52. Which of the option is correct for the statements given below. **[Pg-51,E]**
(I) Commonly called sea walnuts or comb jellies.
(II) Bioluminescence is well marked.
(III) Body bear eight external rows of ciliated comb plates.
(IV) They have flame cells for osmoregulation and excretion.
(V) Alimentary canal is complete with a well-developed muscular pharynx.

	Ctenophores	Platyhelminthes	Aschelminthes
A)	I, II, III	IV	V
B)	IV	I, II	III, V
C)	I, II	III, IV	V
D)	IV, V	II, III	I

53. Phylum Platyhelminthes members are **[Pg-51,M]**

A) dorsoventrally flattened, thus called flatworms
B) bilaterally symmetrical, triploblastic and acoelomates
C) with organ system level of organization
D) with all the above features

54. Assertion: Taenia Solium and Dugesia belong to Platyhelminthes. **[Pg-51,H]**
Reason: Platyhelminthes are coelomates.
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

55. Assertion: The organisms of Platyhelminthes are usually hermaphrodite. Reason: These organisms possess internal as well as external fertilization. **[Pg-51,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

ASCHELMINTHES

56. Consider the following statements about aschelminthes: **[Pg-52,E]**
(I) Their body is circular in cross-section, so are called round worms.
(II) Alimentary canal is incomplete
(III) Muscular pharynx is present
(IV) They are hermaphrodites Which of the following is correct?
A) I and III B) II and IV
C) I, II and IV D) IV only

57. Choose the incorrect option. **[Pg-50,51,52,M]**
A) Mesoglea is present in between ectoderm and endoderm in Obelia.
B) Asterias exhibits radial symmetry.
C) Fasciola is pseudocoelomate animal.
D) Taenia is a triploblastic animal

58. Out of the given cells, which of them can differentiate and perform different functions? **[Pg-52,M]**
A) Choanocytes B) Interstitial cells
C) Gastrodermal cells
D) Nematocysts

59. Blood sucking leech is **[Pg-52,E]**
A) Nereis B) Hirudinaria
C) Pheretima D) All of these

60. Which one of the following endoparasites of humans does show viviparity? **[Pg-52,E]**
A) Ancylostoma duodenale
B) Enterobius spiralis
C) Trichinella spiralis
D) Ascaris lumbricoides

61. Assertion: Aschelminthes and Annelids possess bilateral symmetry. **[Pg-52,M]**
Reason: Both Aschelminthes and Annelids are coelomates.
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

ANNELIDA

62. Which of the following animals are true coelomates with bilateral symmetry? **[Pg-52,E]**
A) Adult echinoderms
B) Aschelminthes
C) Platyhelminthes
D) Annelids

63. The name 'Annelida' is given to animal phylum having **[Pg-52,E]**
A) parapodia
B) metameric segments
C) nephridia
D) all of these

64. In Annelids **[Pg-52,M]**
A) neural system consists of paired ganglia connected by lateral nerves to a double ventral nerve cord
B) reproduction occur both asexually and sexually

C) like Nereis, Pheretima and Hirudinaria have monoecious condition
D) Aquatic forms are completely absent.

65. Match the columns **[Pg-53,M]**

	Column-I		Column-II
(A)	Gills	(1)	King crab
(B)	Tracheal system	(2)	Crab, prawn
(C)	Book gills	(3)	Butterfly, cockroach
(D)	Book lungs	(4)	Scorpion, spider

	(A)	(B)	(C)	(D)
A)	1	2	3	4
B)	2	3	1	4
C)	4	3	2	1
D)	3	1	4	2

66. Choose the incorrect statement.
A) In cockroaches and prawns, excretion of waste material occurs through malphigian tubules. **[Pg-55,M]**
B) In ctenophores, locomotion is mediated by comb plates. **[Pg-51]**
C) In fasciola, flame cells take part in excretion. **[Pg-51]**
D) Earthworms are hermaphrodites and yet cross fertilization takes place among them. **[Pg-52]**

67. Consider the following statements: **[Pg-52,M]**
(I) Triploblastic, bilateral symmetry
(II) Metamerically segmental and coelomate animals
(III) Dioecious
(IV) Closed circulatory system
(V) Lateral appendages
(VI) Annelida

Which of the following information's belongs to the given animal.
A) I, II, IV, VI B) I, III, IV, V
C) II, III, IV, V D) III, IV, V, VI

ARTHROPODA

68. Choose the incorrect set with respect to arthropods. **[Pg-53,M]**
A) Limulus, locusta, culex
B) Bombyx, Apis, lacifer
C) Pinctada, Aplysia, Dentalium
D) Aedes, Anopheles, Apis

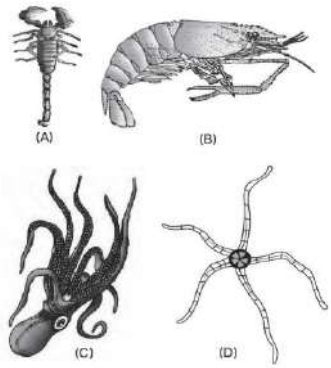
69. Balancing organ of aquatic arthropods is **[Pg-53,E]**
A) Cnidoblasts B) choanocytes
C) scleroblasts D) statocysts

70. Which one of the following features is not present in the phylum-Arthropods? **[Pg-53,E]**
A) Metameric segmentation
B) Parapodia
C) Jointed appendages
D) Chitinous exoskeleton

71. Which one of the following characteristics is mainly responsible for diversification of insects on land? **[Pg-53,E]**
A) Segmentation
B) Bilateral symmetry
C) Exoskeleton
D) Eyes

72. Which of the following statement is correct?
A) Insect hemolymph has no role in oxygen transport in most cases.
B) Insects hemolymph is mostly colourless.
C) Both (A) and (B)
D) None of these **[Pg-53,E]**

73. Consider the following statements about



Arthropods. **[Pg-53,M]**
(I) Open circulatory system is found in most arthropods.

(II) Arthropods contain Haemolymph which directly bathes in internal tissues and organs.

A) I is true but II is false
B) I is false but II is true
C) Both I and II are true
D) Both I and II are false

74. Moulting **[Pg-53,E]**
A) is also called ecdysis
B) occurs to shed chitin at regular intervals by many arthropods
C) is the shedding of cuticle in many invertebrates
D) all of these

75. Maggot is the larva of **[Pg-53,E]**
A) housefly B) crab
C) moth D) butterfly

MOLLUSCA

76. Choose the incorrect statement for phylum Mollusca**. [Pg-53,H]**
A) Body is covered by a calcareous shell and unsegmented.
B) Feather like gills present for excretion and respiration.
C) The anterior head region has sensory tentacles.
D) Mostly terrestrial, triploblastic and acoelomates.

77. Choose the correct names for the following. **[Pg-53,E]**

	A	B	C	D
(a)	Scorpion	Prawn	Loligo	Asterias
(b)	Scorpion	Prawn	Octopus	Ophiura
(c)	Locust	Butterfly	Loligo	Asterias
(d)	Locust	Prawn	Squid	Ophiura

78. Assertion: In many gastropods, the arms and the mental cavity are placed anteriorly above the head.
Reason: During embryonic development in many gastropods, one side of the visceral mass grows faster than the other side. This uneven growth rotates the visceral organs up to 180° in many gastropods. **[Pg-53,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

79. Assertion: In molluscs, feathers like gills are present in the mantle cavity.
Reason: These gills have respiration and excretory function. **[Pg-53,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

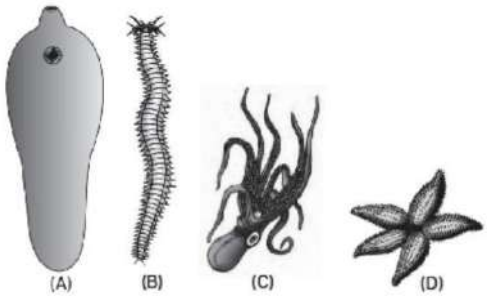
80. Which of the following statements represents the incorrect feature of Echinodermata? **[Pg-54,M]**
A) They are triploblastic and coelomate animals.
B) All are marine with cellular level of organization.
C) Endoskeleton of calcareous ossicle.
D) None of these

81. Which of the following is the feature of water vascular system in Echinoderms? **[Pg-54,E]**
A) Locomotion
B) Respiration
C) Capture and transport of food
D) All of these

82. Choose the correct statement for star fish. **[Pg-54,M]**
(I) Sexes are separate and reproduction is sexual
(II) Development is indirect with free-swimming larva
(III) Mouth is present on the upper (dorsal) side and anus on the lower (ventral) side.
(IV) Their body bear jaw-like structure which is called oral arms.
A) I and III B) I, II and IV
C) I, II and III D) III and IV

83. Which one for the following animals does not undergo metamorphosis? **[Pg-54,E]**
A) Moth B) Tunicate
C) Earthworm D) Starfish

84. Choose the correct statement for the following animals. **[Pg-54,H]**



A) All the animals are aquatic, free living
B) All are true coelomates
C) 'A' has radial symmetry but remaining have bilateral symmetry
D) 'A' is monoecious but remaining are dioecious

85. Which of the following is incorrect statement for Hemichordata? **[Pg-54,M]**
A) They are bilaterally symmetrical, triploblastic and coelomate.
B) Circulation is of open type.
C) Sexes are separate, fertilization is external and development is indirect.
D) None of these

86. Select the feature which is/are not present in Hemichordates. **[Pg-54,E]**
A) Stomochord
B) Worm-like body
C) Gills
D) All of these

87. The correct classification of given animal is **[Pg-54,E]**
A) Chordata – Vertebrata – Craniata
B) Chordata – Craniata
C) Chordata – Acraniata
D) Non- chordata – Hemichordata

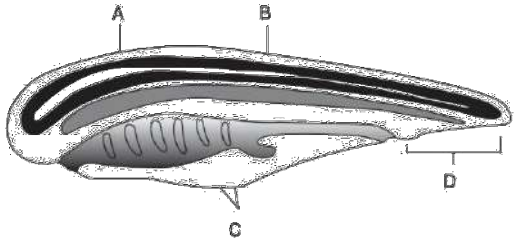
88. The body of Balanoglossus is divisible into **[Pg-54,E]**
A) proboscis, tunic and trunk
B) collar, trunk and tunic
C) proboscis, collar and trunk
D) proboscis, stomochord and trunk

89. An important characteristics that hemichordates share with chordates is**[Pg-54,E]**
A) absence of notochord
B) ventral tubular nerve cord
C) pharynx with gill slits
D) pharynx without gill slits

CHORDATA

90. Which of the following is not found in the phylum chordate **[Pg-55,M]**
A) A dorsal hollow nerve chord
B) Lateral paired gill slits during development
C) A notochord at some stage of development
D) An external skeleton

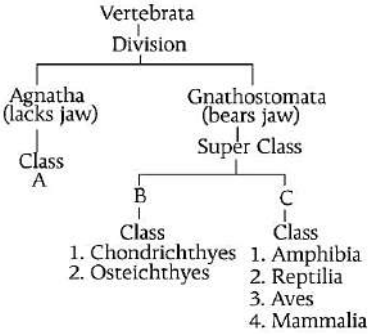
91. Animals belonging to phylum-chordata are fundamentally characterized by the presence of structure noted as A, B, C and D. Identify A, B, C and D.



A) A - Notochord, B - Nerve cord, C - Gill slits, D - post anal part
B) A - Nerve cord, B - Notochord, C - Gill slits, D - Post anal part
C) A - Nerve cord, B - Notochord, C - Post anal part, D - Gill Slits
D) A - nerve cord, B - Gill slits, C - Notochord, D - post anal part

92. Choose the incorrect vertebrate character. **[Pg-55,E]**
A) Ventral muscular heart
B) Kidneys for excretion and osmoregulation
C) Paired appendages which may be fins or limbs
D) None of these

93. The following flow chart for division of sub phylum vertebrata fill in the parts A, B, C and D and choose the correct option. **[Pg-56,E]**



	A	B	C
A)	Ostracodermi	Pisces	Tetrapoda
B)	Cyclostomata	Pisces	Tetrapoda
C)	Ostracodermi	Cyclostomata	Pisces
D)	Pisces	Tetrapoda	Cyclostomata

94. Select the correct difference between the notochord in the following: **[Pg-56,57,M]**

	Urochordata	**Cephalochordata**
A)	Present only in larval tail	Extend from head to tail throughout life
B)	present only in adult	Present only in larval tail
C)	Persistent throughout their life	Present only in adult
D)	Extend from head to tail throughout life	Present only in larval tail

95. Consider the following statements. **[Pg-56,M]**
(I) Lancelets are jawless, primitive fish-like vertebrates.
(II) In lancelets notochord, tubular nerve cord and pharyngeal gills slits are present throughout their life.
A) I is true, but II is false
B) I is false, but II is true
C) Both I and II are true
D) Both I and II are false

96. Which of the following represents the correct combination without any exception? **[Pg-56,H]**

	Characteristic	Class
A)	Mammary gland; hair on body; pinnae; two pairs of limbs	Mammalia
B)	Mouth ventral; gills without operculum skin with placoid scales; persistent notochord	Chondrichthyes
C)	Sucking and circular mouth, jaws absent integument without scales; paired appendages	Cyclostomata
D)	Body covered with feathers; skin moist and glandular; lungs with air sacs forelimbs from wings	Aves

97. Among the following edible fishes, which one is a marine fish having rich source of omega-3 fatty acids**? [Pg-57,E]**
A) Mystus B) Mangur
C) Mrigala D) Mackerel

98. Which one is not cartilaginous fish? **[Pg-57,E]**
A) Carcharoden (great white shark), Trygon (sting ray)
B) Exocoetus (flying fish), catla (katla), clarias (Mangur)
C) Scolidon (dog fish)
D) Pristis (saw fish)

99. Following are few examples of bony fishes. Choose the odd one out as marine bony fish. **[Pg-57,E]**
A) Flying fish
B) Hippocampus (sea horse)
C) Both (A) and (B)
D) Labeo (rohu), catla, clarias

100. Which of the following is not a characteristic of class chondrichthyes? **[Pg-56,M]**
A) Gill slits are separated and without operculum.
B) Predaceons with powerful jaws.
C) Notochord is persistent throughout life.
D) Airbladder present.

101. Which of the following characteristic features always holds true for the corresponding group of animals? **[Pg-56-59,H]**
A) Viviparous Mammalia
B) Possess a mouth with an upper and a lower jaw Chordata
C) Three-chambered heart with one incompletely divided ventricle Reptilia
D) Cartilaginous endoskeleton Chondrichthyes

102. Bony fishes are **[Pg-57,E]**
A) having external fertilization
B) mostly oviparous
C) with direct development
D) all of these

103. Bony fishes stay at any particular depth in water without spending energy due to **[Pg-57,E]**
A) Operculum B) Neuromuscles

C) Pneumatic bones
D) Swim bladder

104. Choose the incorrect statement? **[Pg-56,M]**
A) Both cartilaginous and bony fishes are dioecious
B) Cartilaginous fishes show sexual dimorphism
C) Male cartilaginous fish have claspers
D) Female cartilaginous fish have claspers

105. Choose the correct option for the given figures. **[Pg-57,58,H]**

A) Animal A is salamandra and B is chameleon.
B) Both A and B belongs to class Reptilia.
C) Fertilization is external in both.
D) Animal A has 2-chambered heart and B has 3-chambered heart.

106. Choose the incorrect option for the following animal. **[Pg-57,M]**

A) Cloaca present
B) Dioecious, external fertilization, oviparous, indirect development
C) Body divisible into head and trunk
D) Eyes are without eyelids.

107. Which one of these animals is not a homeotherm? **[Pg-57,58,E]**
A) Camelus B) Chelone
C) Macropus D) Psittacula

108. Identify the vertebrate group of animals characterized by crop and gizzard in its digestive system**. [Pg-58,E]**
A) Aves B) Reptilia
C) Amphibia D) Osteichthyes

109. Which among these is the correct combination of aquatic mammals? **[Pg-56,57,M]**
A) Seals, dolphin, sharks
B) Dolphins, seals, trygon
C) Whales, dolphins, seals
D) Trygon, whales, seals

110. Which one of the following characteristic is not shared by birds and mammals**? [Pg-58,59,E]**
A) Breathing using lungs
B) Viviparity
C) Warm-blooded nature
D) Ossified endoskeleton

111. Which of the following animals is not viviparous? **[Pg-59,E]**
A) Flying fox (bat) B) Elephant
C) Platypus D) Whale

112. Choose the correct option having animals with four chambered heart? **[Pg-58,59,E]**
A) Amphibian, reptiles, birds
B) Crocodiles, birds, mammals
C) Lizards, crocodiles, turtles
D) Lizards, mammals, birds

113. The animal pair with non-glandular skin are **[Pg-58,E]**
A) snake and frog
B) crocodile and tiger
C) frog and pigeon
D) chameleon and turtle

114. Which of the following characteristic is shared by both birds and mammals?
A) Pigmented skin
B) Pneumatic bones
C) Viviparity
D) Warm-blooded body **[Pg-58,59,M]**

115. Which of the following sets of animals belongs to a single Taxonomic group? **[Pg-59,E]**
A) Man, monkey, chimpanzee
B) Cuttlefish, jellyfish, silver fish, dog fish, starfish
C) Bat, pigeon, butterfly
D) Silkworm, tapeworm, earthworm

116. Match the following columns.

	Column-I		**Column-II**
(A)	Cyclostomes	(1)	Hemichordata
(B)	Aves	(2)	Urochoradata
(C)	Tunicates	(3)	Agnatha
(D)	Balanoglossus	(4)	Pisces
(E)	Osteichthyes	(5)	Tetrapod

Codes **[Pg-55-58,M]**

	A	**B**	**C**	**D**	**E**
A)	1	2	3	4	5

B) 2 3 4 1 5
C) 3 5 2 1 4
D) 3 1 5 2 4

117. Which of the following is incorrect for Petromyzon? **[Pg-56,M]**
A) Cranium and vertebral column are cartilaginous
B) They are freshwater organisms but migrate for spawning to sea water
C) After spawning within few days, they die
D) Their larvae, after metamorphosis, return to ocean

118. Match the name of the animal in Column I with one characteristic in Column II and the phylum/class in column III to which it belongs**. [Pg-56,M]**

	Column-I	**Column-II**	**Column-III**
(a)	Petromyzon	Ectoparasite	Cyclostomata
(b)	Ichthyophis	Terrestrial	Reptilia
(c)	Limulus	Body covered by chitinous exoskeleton	Pisces
(d)	Adamsia	Radially symmetrical	Porifera

119. Choose the incorrect subphylum of PhylumChordata **[Pg-55,E]**
A) Hemichordata B) Vertebrata
C) Cephalochordata
D) Urochordata

120. Protochordates **[Pg-55,E]**
A) include Urochordata and cephalochordata
B) are exclusively marine
C) have notochord throughout life
D) All of these

121. Choose the incorrect option for chordates**. [Pg-54,E]**
A) Paired pharyngeal gill slits
B) Coelomate diploblastic
C) Post anal tail
D) Closed circulatory system

122. Choose the correct option for the animals shown below**. [Pg-55,E]**

A) The organism belongs to cephalochordate and genus Ascidia.
B) Circulatory system is open type.
C) Development is always direct.
D) Fresh water dwelling.

123. The skin of amphibians**[Pg-57,E]**
A) can be smooth or rough
B) are usually with Scales
C) possess eutaneous glands
D) both (A) and (B)

124. In amphibians **[Pg-57,E]**
A) mole copulatory organs are absent
B) metamorphosis is usually absent
C) tadpole stage is universally present
D) cranial nerves are absent

125. Read the following statements. **[Pg-57,58,H]**
(I) Retention of larval trait is called neoteny.
(II) The largest amphibian is Cryptobrances.
(III) Seymousia is a connecting link between amphibian and reptiles.
(IV) Larva of Ambystoma is called axolotl.
(V) Axolotls are amphibians formed without undergoing metamorphosis.
Choose the correct statement
A) I and IV
B) II and III
C) I, II and III
D) I, II, III and IV

126. Match the columns. **[Pg-58,M]**

	Column-I		**Column-II**
(A)	Chameleon	(1)	Tortoise
(B)	Testudo	(2)	Tree lizard
(C)	Calotes	(3)	Garden lizard
(D)	Chelone	(4)	Turtle

	A	**B**	**C**	**D**
A)	1	2	3	4
B)	4	3	2	1
C)	2	1	3	4
D)	3	1	4	2

127. Choose the incorrect statement for class Reptilia. **[Pg-58,M]**
A) Sexes are separate.
B) Kidneys are metanephric.
C) Limbs are always present and are two pairs.

D) Possess creeping or crawling mode of locomotion.

128. Birds **[Pg-58,E]**
A) are poikilotherms
B) have respiration performed only by the air sacs
C) are bipeds
D) endoskeleton is ossified partially

129. Find the incorrect match **[Pg-58,59,M]**
A) Crow – Corvus
B) Pigeon – Columba
C) Parrot – Psittacula
D) Penguin – Pavo

130. Which of the following is incorrect? **[Pg-58,M]**
A) Aves possess poor olfactory system.
B) Aves are partially homeotherms.
C) Aves bones are hollow with air cavities.
D) Aves have sexes separate, fertilization is internal, oviparous with direct development.

131. Syrinx present in birds **[Pg-58,E]**
A) helps in producing sound
B) lie near the junction of trachea and bronchi
C) both (A) and (B)
D) helps in excretion of urea

132. The most unique mammalia character is **[Pg-58,E]**
A) the presence of two pairs of limbs
B) reproducing young ones
C) the presence of mammary glands
D) the presence of skin

133. The skin of the mammals is unique in possessing **[Pg-59,E]**
A) glands
B) epidermal layer
C) hair
D) both (A) and (C)

134. Heart is always four chambered in**[Pg-59,E]**
A) mammals B) aves
C) reptiles D) both (A) and (B)

135. Choose the correct statements from the following: **[Pg-59,M]**
A) Mammals, birds, reptiles and amphibians possess 12 pairs of cranial nerves.
B) In aquatic mammalian males, testes lie outside the body cavity in scrotal sacs
C) The neck of mammals generally possess 5 cervical vertebrae
D) Archeopteryx is a fossil animal.

136. Choose the odd one out. **[Pg-60,M]**
A) Prototheria – Ornithorlynchus
B) Marsupilia – Macropus
C) Metatheria – Maceaea
D) Eutheria – Homo

137. Choose the correct option for A, B, C and D. **[Pg-59,60,M]**

Prototherians	**Metatherians**	**Eutherians**
A	Viviparous	Viviparous
Nipples absent on mammary glands	B	Nipples present
C	Vagina and uterus present	Vagina and uterus present
Ear is devoid of pinna	Pinna is present	D
Scrotum absent	Scrotum present	Scrotum present

A) A = Oviparous
B = Nipples present
C = Vagina and uterus absent
D = Pinna is absent in aquatic forms
B) A = Oviparous
B = Nipples present
C = Vagina and uterus absent D = Pinna is universally forms
C) A = Viviparous
B = Nipples present
C = Vagina and uterus absent
D = Pinna is absent in aquatic forms
D) A = Oviparous
B = Nipples absent
C = Vagina and uterus absent
D = Pinna is present only in aquatic forms.

138. Tetrapods **[Pg-57-60]**
A) lack paired appendages and pentadactyl limbs
B) universally possess gills
C) possess sense organ functional in air
D) dwell only in terrestrial zones

139. Identify A, B, C and D in the table given below. **[Pg-57-60,M]**

Amphibins	Reptiles	Birds	Mammals
Scales usually absent	A	Present on hind limbs	Absent
Cloaca present	Cloaca present	Cloaca absent	B
Erthrocytes oval, biconvex and nucleated	RBC oval, biconvex and nucleate d	Erythro cytes oval, biconvex x and nucleated	RBC circular biconcave and non-nucleated
Three chambere d heart	Three chamber ed heart	C	Four chambere d heart with left systemic arch
External ear absent	External ear may be present	D	External ear with pinna present

A) A = Scales absent
B = Cloaca mainly present
C = Four chambered heart with left systemic arch
D = External ear absent

B) A = Scales present
B = Cloaca mainly absent C = Three chambered heart D = External ear absent

C) A = Scales absent
B = Cloaca mainly present
C = Three chambered heart with right systemic arch
D = External ear present

D) A = Scales present
B = Cloaca mainly absent
C = Four chambered heart with right systemic arch
D = External ear present

140. Assertion: All vertebrates are chordates.
Reason: Vertebrates possess notochord during embryonic period. **[Pg-57,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

141. Assertion: All metatherians are placental mammals. Reason: All placental mammals have menstrual cycle. **[Pg-59,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

142. Assertion: Duck bill platypus is not a true mammal.
Reason: True mammals are all viviparous while platypus are egg laying. **[Pg-59,60,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

143. Assertion: Bats and whales are classified as mammals.
Reason: Bats and whales have four chambered heart. [Pg-59,60,H]
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

144. Assertion: Mammalian teeth are heterodont.
Reason: Mammals possess more than a single tooth **[Pg-59,H]**
A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

145. Assertion: Reptiles are referred to as poikilotherms.
Reason: Reptiles possess eggs with shells which help them to adapt in land environment. **[Pg-58,H]**

A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true.

146. Assertion: Birds possess moist skin. Reason: Birds possess oil glands throughout their body. **[Pg-58,H]**

A) Both Assertion and Reason are true and Reason is correct explanation of Assertion.
B) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
C) Assertion is true, but Reason is false.
D) Assertion is false, but Reason is true

Answer Key
ANIMAL KINGDOM

Q.	1	2	3	4	5	6	7	8	9	10
Ans.	**A**	**C**	**D**	**B**	**C**	**B**	**C**	**A**	**C**	**D**
Q.	11	12	13	14	15	16	17	18	19	20
Ans.	**A**	**C**	**B**	**D**	**A**	**D**	**A**	**D**	**B**	**D**
Q.	21	22	23	24	25	26	27	28	29	30
Ans.	**D**	**B**	**C**	**A**	**B**	**B**	**A**	**D**	**B**	**A**
Q.	31	32	33	34	35	36	37	38	39	40
Ans.	**A**	**C**	**C**	**B**	**A**	**A**	**C**	**B**	**C**	**A**
Q.	41	42	43	44	45	46	47	48	49	50
Ans.	**D**	**B**	**C**	**A**	**D**	**B**	**C**	**C**	**C**	**A**
Q.	51	52	53	54	55	56	57	58	59	60
Ans.	**B**	**A**	**A**	**C**	**C**	**A**	**C**	**A**	**B**	**D**
Q.	61	62	63	64	65	66	67	68	69	70
Ans.	**C**	**A**	**D**	**A**	**B**	**D**	**A**	**A**	**D**	**B**
Q.	71	72	73	74	75	76	77	78	79	80
Ans.	**C**	**B**	**C**	**D**	**A**	**A**	**B**	**A**	**B**	**A**
Q.	81	82	83	84	85	86	87	88	89	90
Ans.	**D**	**B**	**A**	**A**	**D**	**A**	**D**	**C**	**C**	**D**
Q.	91	92	93	94	95	96	97	98	99	100
Ans.	**D**	**D**	**D**	**A**	**B**	**C**	**D**	**B**	**C**	**B**
Q.	101	102	103	104	105	106	107	108	109	110
Ans.	**D**	**B**	**A**	**D**	**A**	**B**	**C**	**A**	**C**	**A**
Q.	111	112	113	114	115	116	117	118	119	120
Ans.	**C**	**B**	**D**	**D**	**A**	**C**	**B**	**A**	**A**	**C**
Q.	121	122	123	124	125	126	127	128	129	130
Ans.	**B**	**A**	**A**	**A**	**D**	**C**	**B**	**D**	**D**	**B**
Q.	131	132	133	134	135	136	137	138	139	140
Ans.	**A**	**C**	**D**	**D**	**C**	**A**	**D**	**D**	**D**	**D**
Q.	141	142	143	144	145	146				
Ans.	**D**	**D**	**B**	**A**	**C**	**D**				