

ANIMAL PHYLA

NON- CHORDATE ANIMAL PHYLA

1. **Which of the following is not a correct statement w.r.t sponges?**
 - a) In sponges, cells are arranged as loose cell aggregates
 - b) They exhibit cellular level of organization
 - c) All are sessile
 - d) They are exclusively found in marine water
2. **Sponges have a water transport or canal system. This pathway of water transport is helpful in all, except**
 - a) In food gathering
 - b) Respiratory exchange
 - c) Removal of waste
 - d) Locomotion
3. **Most sponges exhibit:**
 - a) Radial symmetry
 - b) bilateral symmetry
 - c) spherical symmetry
 - d) asymmetry
4. **The type of digestion seen in sponges is.**
 - a) Intercellular
 - b) Extracellular
 - c) intracellular
 - d) Non-cellular
5. **Which one of the following is a fresh water sponge?**
 - a) Sypha
 - b) Euplectella
 - c) Euspongia
 - d) Spongilla
6. **Sexually sponges are**
 - a) Unisexual
 - b) hermaphrodites
 - c) dioecious
 - d) Non-sexual
7. **Totipotent cells in sponges are:**
 - a) choanocytes
 - b) trophocytes
 - c) porocytes
 - d) Archaeocytes
8. **Which of the following is commonly known as brain coral?**
 - a) Heliopora
 - b) Meandrina
 - c) Hippospongia
 - d) Adamsia
9. **Which of the following is not a characteristic feature of phylum Ctenophora?**
 - a) They are exclusively marine, radially symmetrical animals
 - b) They move by cilia, which join together to form eight meridian comb plates
 - c) When the tentacles are present they are two in number and contain cnidoblasts
 - d) Reproduction takes place only by sexual means
10. **In which of the following animal, alimentary canal is complete with a well-developed muscular pharynx?**
 - a) Ascaris
 - b) Taenia
 - c) Planaria
 - d) Fasciola

11. Which of the following worm is found in the caecum, colon or vermiform appendix of human being and is more common in children?
a) Wuchereria b) Ancylostoma c) Enterobius d) Trichinella
12. Water vascular system is a distinctive feature of phylum Echinodermata, this system helps in
a) Locomotion b) Capture and transport of food
c) Respiration d) All of these
13. Chemical nature of pearl is
a) CaCO_3 b) CaSO_4 c) Chitin d) Silica
14. Infection of hook worm occurs through
a) Measled pork b) Contaminated food/drink
c) Bare foot, while walking on soil d) Bite of mosquito
15. Tube feet/podia of the echinoderm is related to
a) Locomotion b) Respiration c) Excretion d) All of these
16. The invertebrate group having Enterocoel and Deuterostomia condition is
a) Arthropoda b) Echinodermata c) Mollusca d) Annelida
17. Mark the correct match
a) Brittle star – Auricularia b) Feather star – Ophiopluteus
c) Sea star – Doliolaria d) Sea urchin – Echinopluteus
18. Which of the following is incorrectly matched?
a) Sponging type - House fly
b) Chewing and lapping type - Honey bees
c) Siphoning type - Butterflies and moths
d) Piercing and sucking - Grasshoppers
19. In which class of phylum Echinodermata anus is absent, mouth and madreporite are present on oral surface?
a) Asteroidea b) Ophiuroidea c) Holothuroidea d) Crinoidea
20. Eutely is related with
a) Taenia solium b) Ascaris c) Sabella d) Fasciola
21. Which of the following is given a status of a phylum under non-Chordata by recent taxonomists?
a) Urochordata b) Cephalochordata c) Hemichordata d) Tunicata

22. **Assertion (A): Echinoderms have water vascular system which is of enterocoelic origin**
Reason (R): During metamorphosis, a bilaterally symmetrical larva transforms into a radially symmetrical adult.
- a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false d) If, both A and R are false statements
23. **Find out the mismatched pair**
- a) Limulus – Connecting link between annelids and arthropods
b) Locusta – Gregarious pest
c) Julus – Worm like with 2 pair of legs on each abdominal segment
d) Scolopendra – Each body segment with 1 pair of legs and first pair of legs are modified into poison claws
24. **Which one of the following acts as a chemoreceptor organ for testing the chemical nature and pH of water in molluscs like Pila**
- a) Statocyst b) Radula c) Osphradium d) Ctenidium
25. **Which of the following is not a matching set of class and its three examples?**
- a) Crustacea – Palaeomon, Cancer, Astacus
b) Arachnida – Aranae, Sarcoptes, plaemneus
c) Insecta – Glow worm, ship worm, blind worm
d) Diplopoda - Julus, Spirobolus & Spirostreptus
26. **Which of the following is a common characteristic of earthworm, prawn and cockroach?**
- a) Cutaneous respiration b) Metameric segmentation
c) Chitinous exoskeleton d) Open circulatory system
27. **Which one is mismatched?**
- a) Apis - Honey bee b) Tachardia - Lac insect
c) Locusta - Gregarious pest d) Limulus - Fossil arthropod

28. Match the generic name listed under column-I with the common name given under column-II. Choose the answer which gives the correct combination of the alphabets of the two columns:

Column- I (Genus)	Column- II (Common name)
A. Millepora	p. sea wasp
B. Pennatula	q. Blue coral
C.Heliopora	r. Sea pen
D. Chiropsalmus	s. Stinging coral

- a) A = s, B = q, C = r, D = p b) A = q, B = r, C = s, D = p
 c) A = s, B = r, C = q, D = p d) A = r, B = q, C = s, D = p
29. Which of the following possesses a hard exoskeleton formed by calcium carbonate?
 a) Aurelia b) Physalia c) Corallium d) Halistemma
30. Assertion (A): Metagenesis is exhibited by hydra and Aurelia
 Reason (R): Metagenesis in Hydra and Aurelia is like that of alternation of generation in plants
 a) If both A & R are true and the reason is the correct explanation of the A
 b) If both A & R are true, but the reason is not the correct explanation of the A
 c) If A is true statement, Reason is false d) If both A and R are false statements
31. In the ommatidium of cockroach the primary pigmented cells are formed by
 a. semper cells b.retinular cells c,rhabdomeres d.lenticular cells.
32. Solenocytes are associated with:
 a) Nutrition b) excretion c) respiration d) reproduction
33. Parasitic animals have well-developed:
 a) Respiratory system b) digestive system c) reproductive system d) excretory system
34. What is common amongst tapeworm, liver fluke and planarian?
 a) They are all segmented b) They all have a coelom
 c) They are all found in gut d) They all have flattered body
35. Alimentary canal is absent in:
 a) Cestoda b) Nematoda c) Gastropoda d) Pelecypoda
36. Anus is absent in:
 a) Unio & Fasciola b) Fasciola & Ophiothrix
 c) Phetetima & Gorgonocephalus d) Periplanata & Phetetima

37. In the life – history of liver fluke one comes across the following stages:

1. Cercaria 2. Metacercaria
3. Miracidium 4. Radia 5.Sporocyst

Which of the following is the proper sequence in its life- history?

- a) 3-5-4-2-1 b) 3-5-1-2-4 c) 3-5-4-1-2 d) 3 – 5- 4 -2-1

38. In which of the animals female lives in male?

- a) Bonellia b) Schistosoma c) Both (a) & (b) d) none of these

39. Eggs of cockroach are fertilized in:

- a) Cocoon b) ootheca c) Fallopian tube d) genital pouch of female

40. Embryonated egg of Ascaris is:

- a) An egg with gastrula b) an egg with ovum
c) An egg with blastula d) an egg with juvenile

41. The route through which the developmental stages of Ascaris serially pass in man includes

- a) Outside → intestine → liver → heart → lung → intestine → out side
b) Outside → trachea → lung → heart → liver → intestine → outside
c) Outside → oesophagus → stomach → heart → lung → heart → trachea → outside
d) Outside → stomach → oesophagus→ heart → lung → trachea → outside

42. Study the following with reference to body wall in cockroach.

1. Exocuticle 2.layer of polyphenols 3.lipoprotein layer 4.wax layer.

Arrange the above layers from the innermost to the outermost layers

- A.3-2-1-4. b.1-2-3-4 c. 1-2-4-3 d.3-4-2-1

43. Parapodia are found in:

- a) Hirudinea b) Polychaeta c) Oligochaeta d) Arthropoda

44. Titillator in cockroach is borne by:

- a) Ovipositor b) left Phallomeres c) ventral Phallomeres d) right phallomere

45. In Pheretima, the cells that are analogous to hepatic cells of vertebrates are:

- a) Amoeboid cells b) circular cells c) mucous cells d) chloragogen cells

Mock test Question paper in Non Chordate Animal Phyla KEY

1) d	2) d	3) d	4) c	5) c	6) b	7) d	8) b	9) c	10) a
11) c	12) d	13) a	14) c	15) d	16) b	17) d	18) d	19) b	20) b
21) c	22) b	23) a	24) c	25) c	26) b	27) d	28) c	29) c	30) d
31) b	32) b	33) c	34) d	35) a	36) b	37) c	38) b	39) d	40) a
41) a	42) b	43) b	44) b	45) d					

QUESTION BANK EXERCISE -3

01. Which of the following is not a match between the protozoan and its locomotor organelles?

Protozoans	Locomotory organs
a) Trypanosoma	- Flagellum
b) Paramecium	- Cilia
c) Giardia	- Flagella
d) Monocystis	- Pseudopodia

02. Organism that does not belong to class mastigophora is

- a) Trypanosoma b) Trichomonas
c) Leishmania d) Balantidium

03. Which of the following type of cell of poriferans provide food to the developing cells and are called nurse cells?

- a) Scleroblasts b) Myocytes c) Gland cells d) Trophocytes

04. Which of the following statement is an incorrect w.r.t sponge?

- a) All sponges are aquatic b) They are primitive multicellular
c) Digestion is extracellular d) Paragastric cavity is present

05. Cliona is the boring sponge which can penetrate the rocks and break them into pieces. It belongs to

- a) Calcarea b) Hexactinellida c) Calcispongiae d) Demospongiae

06. Siliceous spicules which are triaxon with six rays are present in

- a) Calcarea b) Hexactinellida c) Demospongiae d) Euspongia

07. Assertion (A): Paramecium is a surface feeder

Reason (R): Nutrition is holozoic in Paramecium

- a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false

d) If both A and R are false statements

08. Assertion (A): Sponges reproduce asexually by fragmentation and sexually by the formation of gametes

Reason (R): In sponges fertilization is internal and development is indirect having a larval stage which is morphologically distinct from adult

- a) If both A & R are true and the reason is the correct explanation of the A
- b) If both A & R are true, but the reason is not the correct explanation of the A
- c) If A is true statement, Reason is false
- d) If both A and R are false statements

09. Which of the following is commonly known as brain coral?

- a) Heliopora b) Meandrina c) Hippospongia d) Fungia

10. Which of the following cells are present in the endoderm of Hydra, but not in epidermis?

- a) Cnidoblasts and interstitial cells
- b) Glandular cells and endothelio-muscular nutritive cells
- c) Cnidoblasts and germ cells
- d) Interstitial cells and sensory cells

11. Choose the correct match

- a) Adamisa – Blue coral b) Pennatula – Sea pen
- c) Gorgonia – Organ pipe coral d) Beroe – Venus girdle

12. Which of the following is/are exclusively marine, radially symmetrical and diploblastic?

- a) Pleurobranchia b) Hydra c) Ctenoplana d) Both 1 & 3

13. Which of the following stages in the life cycle of Fasciola hepatica infects the primary and secondary hosts respectively?

- a) Miracidium, redia b) Metacercaria, miracidium
- c) Miracidium, cercaria d) Cercaria, metacercaria

14. Among the following organisms, which one possesses high regeneration power?

- a) Taenia b) Schistosoma c) Planaria d) Fasciola

15. Which of the following organism is not free living?

- a) Rhabditis b) Planaria c) Ancylostoma d) Pheretima

16. Assertion (A): In flatworms, flame cells are meant for excretion and osmoregulation

Reason (R): In flatworms, ammonia is the chief excretory waste product

- a) If both A & R are true and the reason is the correct explanation of the A
- b) If both A & R are true, but the reason is not the correct explanation of the A
- c) If A is true statement, Reason is false
- d) If both A and R are false statements

17. Assertion (A): In annelids, neural system consists of paired ganglia connected by lateral nerves to a double ventral nerve cord.

Reason (R): Nereis possesses lateral appendages, parapodia which help in swimming

- a) If both A & R are true and the reason is the correct explanation of the A
- b) If both A & R are true, but the reason is not the correct explanation of the A
- c) If A is true statement, Reason is false
- d) If both A and R are false statements

18. Assertion (A): Hirudinaria is blood sucking leech

Reason (R): It exhibits bilateral symmetry and enterocoelom

- a) If both A & R are true and the reason is the correct explanation of the A
- b) If both A & R are true, but the reason is not the correct explanation of the A
- c) If A is true statement, Reason is false
- d) If both A and R are false statements

19. Chloragogen cells in earthworm help in

- a) Cutaneous respiration
- b) Formation of blood cells
- c) Excretion
- d) Helps in digestion like liver

20. Find the odd one w.r.t ctenophore

- a) Polyp phase is absent in life cycle
- b) Biradially symmetrical without cnidoblasts
- c) Tentacles when present contain colloblasts
- d) Asexual reproduction

21. Which of the following has nerve cells but no brain?

- a) Hydra
- b) Sponge
- c) Cockroach
- d) Mosquito

22. Digestion in sponges is/occurs

- a) Extra-cellular
- b) intra-cellular
- c) Both extra-cellular and intra-cellular
- d) in Paragastric cavity

23. Open type circulation is found in

- a) Earthworm and Leech
- b) Earthworm and Pila
- c) Pila and Leech
- d) Earthworm and Octopus

24. Which of the following is not the correct match regarding the animal and its larva?

- a) Pila – Veliger larva
- b) Neopilina – Trochophore
- c) Obelia – Planula
- d) Fasciola – Cysticercus larva

25. Tube feet/podia of the echinoderm is related to

- a) Locomotion
- b) Respiration
- c) Excretion
- d) All of these

26. Halteres in mosquitoes and housefly are associated with

- a) Prothorax
- b) Mesothorax
- c) Metathorax
- d) Head

27. **Starfish belongs to asteroidean class. Mark correct characters related to starfish from those given below**
- a) Respiration by dermal branchae and tube feet b) Shows autonomy of arms
c) Bipinnaria larva d) Presence of pedicellariae
a) Only c b) c & d c) a, c & d d) a, b, c & d
28. **The invertebrate group having enterocoel and deuterostomic condition is**
- a) Arthropoda b) Echinodermata c) Mollusca d) Annelida
29. **Mark the correct match**
- a) Cydippid – Jelly fish b) Trochophore – Acorn worm
c) Glochidium – Fresh water mussel d) Brachiolaria – Brittle star
30. **The cephalothorax bears simple eyes and six pairs of appendages and antenna are absent in the class**
- a) Arachnida b) Insecta c) Crustacea d) Annelida
31. **Match the following**
- | | |
|-----------------|------------------------|
| Column-1 | Column-2 |
| a) Schistosoma | i) Protrusible pharynx |
| b) Fasciola | ii) polyembryony |
| c) Dugesia | iii) Dog tapeworm |
| d) Echinococcus | iv) Dioecious |
- a) a(i), b(ii), c(iii), d(iv) b) a(iv), b(ii), c(i), d(iii)
c) a(iv), b(iii), c(ii), d(i) d) a(iii), b(iv), c(i), d(ii)
32. **In which class of phylum echinodermata anus is absent, mouth and madreporite present on oral surface?**
- a) Asteroidea b) Ophiuroidea c) Holothuroidea d) Crinoidea
33. **Chemically pearls contain calcium carbonate and are secreted by mantle of Pinctada when**
- a) Attacked by enemies
b) Stimulated by some silica or other particles or parasites
c) Starvation occurs for a long period
d) More food is available
34. **Which of the following is not a characteristic feature of annelids?**
- a) The body is covered by definite cuticle secreted from the ectoderm
b) The body wall of annelids has both longitudinal and circular muscles
c) In soft bodied earthworms, with a segmented body, there is a separate coelom in each segment. Here it acts as a hydraulic skeleton

- d) Polychaetes are monocious. Larva is typical trochophore
35. **Assertion (A): In sponges Archaeocytes are totipotent in nature**
Reason (R): Archaeocytes are undifferentiated cells which are able to develop into all type of cells
- a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
36. **Which of the following has proboscis supported by a buccal diverticulum?**
- a) asidian b) lancelet c) acorn worm d) Salpa
37. **Which of the following are the common characters of all arthropods?**
- a) Head, thorax and abdomen b) Chitinous, exoskeleton and jointed appendages
c) Malpighian tubules and jointed appendages d) Tracheal system and green glands
38. **Torsion is a characteristic of**
- a) Gastropods only b) Cephalopods only
c) Gastropods and cephalopods d) All molluscs
39. **Find out the incorrect statement w.r.t. Arthropods**
- a) Adult culex and Anopheles can be distinguished with the help of sitting posture
b) Halteres are second pair of reduced wings of housefly and mosquito which help in balancing
c) Spider spins the web by means of a secretion of abdominal glands
d) Blood helps in transportation of O₂ and CO₂ within the body in insects
40. **Which of the following is a common characteristic of earthworm, prawn and cockroach?**
- a) Cutaneous respiration b) Metameric segmentation
c) Chitinous exoskeleton d) Open circulatory system
41. **Which of the following character is evolved for the first time in phylum annelida?**
- a) Organ-system level of body organization b) Bilateral symmetry
c) Triploblastic d) Metameric segmentation
42. **Neural system in annelid consists of paired ganglia connected by lateral nerves to nerve cord. The nerve cord is/are**
- a) Double, ventral and solid b) Double, dorsal and hollow
c) Single, ventral and hollow d) Single, ventral and solid
43. **Which one is mismatched?**
- a) Nereis - Chloragogen cells b) Earthworm - Citellum
c) Leech - Botryoidal tissue d) Nereis - Trochophore larva
44. **In Mollusca the space between the hump and the mantle is called ____**
- a) Pleral cavity containing lungs b) Pericardial cavity containing heart
c) Haemocoel containing blood d) Mantle cavity containing gills
45. **Assertion (A): Nereis shows indirect development**
Reason (R): Life cycle includes trochophore larva

- a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
- 46. Which of the following insect is not beneficial to man?**
a) Locusta b) Apis c) Bombyx d) Laccifer
- 47. Some characters with reference to arthropods are given below, mark wrong one**
a) Circulatory system is of open type
b) Mostly dioecious
c) Mostly oviparous with external fertilization
d) Development may be direct or indirect
- 48. Which of the following match is incorrect?**
a) Peripatus – Nephridia b) Limulus – Book gills
c) Scorpion – Book lungs d) Crab – Malpighian tubules
- 49. Which of the following match is incorrect w.r.t animal and their larval form?**
a) Silk worm – Catepillar b) Beetle – Grub
c) Housefly – Maggot d) Anopheles – Mysis
- 50. Mark the odd one**
a) Bombyx b) Musca c) Tereudo d) Periplaneta
- 51. Which of the following organism is viviparous?**
a) Cockroach b) Scorpion c) Prawn d) Leptocoris
- 52. Select the incorrect statement regarding arthropods**
a) In land arthropods, fertilization is internal
b) In all arthropods the body is divided into head, thorax and abdomen
c) The heart is dorsal and the circulatory system is open
d) These are triploblastic and schizocoelomate organisms
- 53. In which of the following polyp stage is absent in their life cycle. They are radially symmetrical devoid of cnidoblasts but contain colloblasts, and exhibit bioluminescence**
a) Aurelia and Vellala b) Physalia and Homiphora
c) Meandrina and Madrepora d) Ctenoplana and Cestrum
- 54. Metagenesis is usually distinct in the following cnidarian animals, except**
a) Obelia b) Hydra c) Physalia d) Aurelia
- 55. Which of the following cells are not present in the gastrodermal layer of Hydra?**

- a) Nerve cell b) Interstitial cell c) Gland cell d) Cnidoblast cell
56. **'Lasso' present in the nematoblasts of Hydra is meant for**
a) Ejection of the thread tube b) Uncoiling of thread tube
c) Preventing detachment of nematocyst from nematoblast
d) Opening of operculum
57. **A unicellular green alga Zoochlorellae makes symbiotic association with Chlorohydra viridissima. This alga is present**
a) In the gastrovascular cavity
b) With mesenteries separating the gastrovascular cavity
c) In interstitial space
d) in gastrodermal cells
58. **Which of the following ctenophore is commonly known as the Venus girdle?**
a) Homiphora b) Pleurobrachia c) Ctenoplana d) Cestum
59. **Type of symmetry present in the larval forms of echinoderms is**
a) Radial b) Biradial c) Bilateral d) Asymmetrical
60. **Which of the following are pincer like structures and keep the body surface clear of debris and minute organisms?**
a) Papulare b) Dermal branchiae c) Pedicellariae d) Madreporite
61. **Aristotle's lantern is a masticatory apparatus and is present in**
a) Crinoidea b) Echinus c) Ophiothrix d) Antedon
62. **Which of the following are members of the same class?**
a) Asterias, Clypeaster, Pentaceros b) Echinus, Ophiura, Echinarachinus
c) Asterias, Pentaceros, Astropecten d) Holothuria, Antedon, Cucumaria
63. **Which of the following animals have gills for respiration, proboscis gland for excretion and external fertilization?**
a) Echinus b) Cucumaria c) Balanoglossus d) Pentaceros
64. **Molluscs typically employ a feeding organ called radula which is armed with rows of chitinous teeth but radula is absent in which of the following mollusc?**
a) Pila b) Unio c) Doris d) Limax
65. **Which of the following phylum is second largest?**
a) Arthropoda b) Mollusca c) Annelida d) Echinodermata
66. **Which of the following statement is/are correct w.r.t molluscs?**
a) Body is generally covered with calcareous shell

- b) Body is generally unsegmented with distinct head, muscular foot and visceral hump
c) Molluscs generally have rasping organ for feeding called radula
d) All of these
- 67. Which of the following is not a characteristic of phylum Annelida?**
1) Metamerically segmented body 2) Coelomate condition
3) Only longitudinal muscles for locomotion 4) Double ventral nerve cord
a) 1 only b) 3 only c) 2 & 3 only d) 3 & 4 only
- 68. Which of the following cannot be considered as advancement of annelids over nematodes?**
a) Metameric segmentation b) Longitudinal and circular muscles for locomotion
c) Tube within tube body plan d) Closed circulatory system
- 69. Which of the following nematode is monogenetic and is found in small intestine?**
a) Ascaris lumbricoides b) Ancylostoma duodenate
c) Enterobius d) Both 1 & 2
- 70. Animals having soft, unsegmented body with a distinct head, muscular foot and visceral hump belong to phylum**
a) Annelida b) Arthropoda c) Mollusca d) Echinodermata
- 71. Which of the following animals is not dioecious?**
a) Ascaris b) Wuchereria c) Nereis d) Earthworm
- 72. Assertion (A): Pearls are made up of calcium carbonate**
Reason (R): They are secreted by shell
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false d) If both A and R are false statements
- 73. Assertion (A): Hirudinaria is sanguivorous and its saliva contains anticoagulant, hirudin**
Reason (R): Hirudin prevents clotting of blood during blood meal in Hirudinaria
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
- 74. Assertion (A): Gastropods body is asymmetrical due to torsion**
Reason (R): In gastropods body is asymmetrical but during development the body twists by 360° so that the body becomes asymmetrical
a) If both A & R are true and the reason is the correct explanation of the A

- b) If both A & R are true, but the reason is not the correct explanation of the A
- c) If A is true statement, Reason is false
- d) If both A and R are false statements

75. Which of the following acts as a distinguishing character between *Periplanata* and *Blatta*?

- a) Anal style
- b) Anal cerci
- c) Reduced wings in *Blatta* while developed in *Periplanata*
- d) reverse of above

76. If corpora allata are removed from 1st instar of a nymph, then:

- a) Duration of stadia increases
- b) It will remain nymph forever
- c) It will become adult immediately
- d) It will enter into secondary stage of juvenile

77. Study the following

- | | |
|----------------|--------------------|
| A. spider | 1. uric acid |
| B. prawn | 2. NH ₃ |
| C. Earth worm | 3. guanine. |
| D. silver fish | 4. urea. |

Choose the correct set of matching

- | | A | B | C | D | | A | B | C | D |
|----|---|---|---|---|----|---|---|---|---|
| a) | 3 | 4 | 1 | 2 | b) | 4 | 3 | 2 | 1 |
| c) | 2 | 1 | 3 | 4 | d) | 3 | 2 | 4 | 1 |

78. Cellulase is secreted by the microbes living in

- a. crop
- b. Gizzard
- c. mesenteron
- d. proctodaeum.

79. The number of alary muscles and the number of chamber present in the heart of cockroach are respectively:

- a. 12 & 13
- b. 12 pairs & 13
- c. 10 & 12
- d. 12 & 13 pairs.

80. The muscles that help in the breathing movements in cockroach are

- a. adductor and alary muscles
- b. dorsoventral & longitudinal muscles
- c. tergosternal & alary muscles
- d. longitudinal & abductor muscles.

UNIT-III:: INVERTEBRATE PHYLA Question Bank key

1) d	2) d	3) d	4) c	5) d	6) b	7) b	8) b	9) b	10) b
11) b	12) d	13) b	14) c	15) c	16) b	17) b	18) c	19) c	20) d
21) a	22) b	23) c	24) d	25) d	26) c	27) d	28) b	29) c	30) a
31) b	32) b	33) b	34) d	35) a	36) c	37) b	38) a	39) d	40) b
41) d	42) a	43) a	44) d	45) a	46) a	47) c	48) d	49) d	50) c
51) b	52) b	53) d	54) b	55) d	56) c	57) d	58) d	59) c	60) c
61) b	62) c	63) c	64) b	65) b	66) d	67) b	68) c	69) d	70) c
71) d	72) c	73) a	74) c	75) c	76) b	77) d	78) d	79) b	80) b

ANIMAL PHYLA

MOCK NEET PAPER IN NON- CHORDATE ANIMAL PHYLA

**Answer all 45 Questions each correct response fetches 4 marks;
total: 180 marks, time: 45 minutes each wrong answer reduces '1' mark from total score.**

- Which of the following is not a correct statement w.r.t sponges?**
 - In sponges, cells are arranged as loose cell aggregates
 - They exhibit cellular level of organization
 - All are sessile
 - They are exclusively found in marine water
- Sponges have a water transport or canal system. This pathway of water transport is helpful in all, except**
 - In food gathering
 - Respiratory exchange
 - Removal of waste
 - Locomotion
- Most sponges exhibit:**
 - Radial symmetry
 - bilateral symmetry
 - spherical symmetry
 - asymmetry
- The type of digestion seen in sponges is.**
 - Intercellular
 - Extracellular
 - intracellular
 - Non-cellular
- Which one of the following is a fresh water sponge?**

- a) Sypha b) Euplectella c) Euspongia d) Spongilla
6. **Sexually sponges are**
a) Unisexual b) hermaphrodites c) dioecious d) Non-sexual
7. **Totipotent cells in sponges are:**
a) choanocytes b) trophocytes c) porocytes d) Archaeocysts
8. **Which of the following is commonly known as brain coral?**
a) Heliopora b) Meandrina c) Hippospongia d) Adamsia
9. **Which of the following is not a characteristic feature of phylum Ctenophora?**
a) They are exclusively marine, radially symmetrical animals
b) They move by cilia, which join together to form eight meridian comb plates
c) When the tentacles are present they are two in number and contain cnidoblasts
d) Reproduction takes place only by sexual means
10. **In which of the following animal, alimentary canal is complete with a well-developed muscular pharynx?**
a) Ascaris b) Taenia c) Planaria d) Fasciola
11. **Which of the following worm is found in the caecum, colon or vermiform appendix of human being and is more common in children?**
a) Wuchereria b) Ancylostoma c) Enterobius d) Trichinella
12. **Water vascular system is a distinctive feature of phylum Echinodermata, this system helps in**
a) Locomotion b) Capture and transport of food
c) Respiration d) All of these
13. **Chemical nature of pearl is**
a) CaCO_3 b) CaSO_4 c) Chitin d) Silica
14. **Infection of hook worm occurs through**
a) Measled pork b) Contaminated food/drink
c) Bare foot, while walking on soil d) Bite of mosquito
15. **Tube feet/podia of the echinoderm is related to**
a) Locomotion b) Respiration c) Excretion d) All of these
16. **The invertebrate group having Enterocoel and Deuterostomia condition is**
a) Arthropoda b) Echinodermata c) Mollusca d) Annelida
17. **Mark the correct match**
a) Brittle star – Auricularia b) Feather star – Ophiopluteus
c) Sea star – Doliolaria d) Sea urchin – Echinopluteus
18. **Which of the following is incorrectly matched?**

- a) Sponging type - House fly
b) Chewing and lapping type - Honey bees
c) Siphoning type - Butterflies and moths
d) Piercing and sucking - Grasshoppers
19. In which class of phylum Echinodermata anus is absent, mouth and madreporite are present on oral surface?
a) Asteroidea b) Ophiuroidea c) Holothuroidea d) Crinoidea
20. Eutely is related with
a) Taenia solium b) Ascaris c) Sabella d) Fasciola
21. Which of the following is given a status of a phylum under non-Chordata by recent taxonomists?
a) Urochordata b) Cephalochordata c) Hemichordata d) Tunicata
22. Assertion (A): Echinoderms have water vascular system which is of enterocoelic origin
Reason (R): During metamorphosis, a bilaterally symmetrical larva transforms into a radially symmetrical adult.
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false d) If, both A and R are false statements
23. Find out the mismatched pair
a) Limulus – Connecting link between annelids and arthropods
b) Locusta – Gregarious pest
c) Julus – Worm like with 2 pair of legs on each abdominal segment
d) Scolopendra – Each body segment with 1 pair of legs and first pair of legs are modified into poison claws
24. Which one of the following acts as a chemoreceptor organ for testing the chemical nature and pH of water in molluscs like Pila
a) Statocyst b) Radula c) Osphradium d) Ctenidium
25. Which of the following is not a matching set of class and its three examples?
a) Crustacea – Palaeomon, Cancer, Astacus
b) Arachnida – Aranae, Sarcoptes, plaemneus

- c) Insecta – Glow worm, ship worm, blind worm
- d) Diplopoda - Julus, Spirobolus & Spirostreptus
- 26. Which of the following is a common characteristic of earthworm, prawn and cockroach?
 - a) Cutaneous respiration
 - b) Metameric segmentation
 - c) Chitinous exoskeleton
 - d) Open circulatory system
- 27. Which one is mismatched?
 - a) Apis - Honey bee
 - b) Tachardia - Lac insect
 - c) Locusta - Gregarious pest
 - d) Limulus - Fossil arthropod

- 28. Match the generic name listed under column-I with the common name given under column-II. Choose the answer which gives the correct combination of the alphabets of the two columns:

Column- I (Genus)	Column- II (Common name)
A. Millepora	p. sea wasp
B. Pennatula	q. Blue coral
C.Heliopora	r. Sea pen
D. Chiropsalmus	s. Stinging coral

- a) A = s, B = q, C = r, D = p
 - b) A = q, B = r, C = s, D = p
 - c) A = s, B = r, C = q, D = p
 - d) A = r, B = q, C = s, D = p
- 29. Which of the following possesses a hard exoskeleton formed by calcium carbonate?
 - a) Aurelia
 - b) Physalia
 - c) Corallium
 - d) Halistemma

- 30. Assertion (A): Metagenesis is exhibited by hydra and Aurelia

Reason (R): Metagenesis in Hydra and Aurelia is like that of alternation of generation in plants

- a) If both A & R are true and the reason is the correct explanation of the A
- b) If both A & R are true, but the reason is not the correct explanation of the A
- c) If A is true statement, Reason is false
- d) If both A and R are false statements

31. **In the ommatidium of cockroach the primary pigmented cells are formed by**
a. semper cells b. reticular cells c. rhabdomeres d. lenticular cells.
32. **Solenocytes are associated with:**
a) Nutrition b) excretion c) respiration d) reproduction
33. **Parasitic animals have well-developed:**
a) Respiratory system b) digestive system c) reproductive system
d) excretory system
34. **What is common amongst tapeworm, liver fluke and planarian?**
a) They are all segmented b) They all have a coelom
c) They are all found in gut d) They all have flattened body
35. **Alimentary canal is absent in:**
a) Cestoda b) Nematoda c) Gastropoda d) Pelecypoda
36. **Anus is absent in:**
a) Unio & Fasciola b) Fasciola & Ophiothrix
c) Phetetima & Gorgonocephalus d) Periplanata & Phetetima
37. **In the life – history of liver fluke one comes across the following stages:**
1. Cercaria 2. Metacercaria
3. Miracidium 4. Radia 5. Sporocyst
Which of the following is the proper sequence in its life- history?
a) 3-5-4-2-1 b) 3-5-1-2-4 c) 3-5-4-1-2 d) 3 – 5- 4 -2-1
38. **In which of the animals female lives in male?**
a) Bonellia b) Schistosoma c) Both (a) & (b) d) none of these
39. **Eggs of cockroach are fertilized in:**
a) Cocoon b) ootheca c) Fallopian tube d) genital pouch of female
40. **Embryonated egg of Ascaris is:**
a) An egg with gastrula b) an egg with ovum
c) An egg with blastula d) an egg with juvenile
41. **The route through which the developmental stages of Ascaris serially pass in man includes**
a) Outside → intestine → liver → heart → lung → intestine → out side
b) Outside → trachea → lung → heart → liver → intestine → outside
c) Outside → oesophagus → stomach → heart → lung → heart → trachea → outside
d) Outside → stomach → oesophagus → heart → lung → trachea → outside

42. Study the following with reference to body wall in cockroach.
 1. Exocuticle 2. layer of polyphenols 3. lipoprotein layer 4. wax layer.
 Arrange the above layers from the innermost to the outermost layers
 A. 3-2-1-4. b. 1-2-3-4 c. 1-2-4-3 d. 3-4-2-1
43. Parapodia are found in
 a) Hirudinea b) Polychaeta c) Oligochaeta d) Arthropoda
44. Titillator in cockroach is borne by:
 a) Ovipositor b) left Phallomeres c) ventral Phallomeres d) right phallomere
45. In Pheretima, the cells that are analogous to hepatic cells of vertebrates are:
 a) Amoeboid cells b) circular cells c) mucous cells d) chloragogen cells

Mock test Question paper in Non Chordate Animal Phyla KEY

46) d	47) d	48) d	49) c	50) c	51) b	52) d	53) b	54) c	55) a
56) c	57) d	58) a	59) c	60) d	61) b	62) d	63) d	64) b	65) b
66) c	67) b	68) a	69) c	70) c	71) b	72) d	73) c	74) c	75) d
76) b	77) b	78) c	79) d	80) a	81) b	82) c	83) b	84) d	85) a
86) a	87) b	88) b	89) b	90) d					

QUESTION BANK EXERCISE -3

01. Which of the following is not a match between the protozoan and its locomotor organelles?
Protozoans Locomotory organs
 a) Trypanosoma - Flagellum
 b) Paramecium - Cilia
 c) Giardia - Flagella
 d) Monocystis - Pseudopodia
02. Organism that does not belong to class mastigophora is
 a) Trypanosoma b) Trichomonas
 c) Leishmania d) Balantidium
03. Which of the following type of cell of poriferans provide food to the developing cells and Are called nurse cells?
 a) Scleroblasts b) Myocytes c) Gland cells d) Trophocytes
04. Which of the following statement is an incorrect w.r.t sponge?

- a) All sponges are aquatic
b) They are primitive multicellular
c) Digestion is extracellular
d) Paragastric cavity is present
- 05. Cliona is the boring sponge which can penetrate the rocks and break them into pieces. It belongs to**
- a) Calcarea b) Hexactinellida c) Calcispongiae d) Demospongiae
- 06. Siliceous spicules which are triaxon with six rays are present in**
- a) Calcarea b) Hexactinellida c) Demospongiae d) Euspongia
- 07. Assertion (A): Paramecium is a surface feeder**
Reason (R): Nutrition is holozoic in Paramecium
- a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
- 08. Assertion (A): Sponges reproduce asexually by fragmentation and sexually by the formation of gametes**
Reason (R): In sponges fertilization is internal and development is indirect having a larval stage which is morphologically distinct from adult
- a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
- 09. Which of the following is commonly known as brain coral?**
- a) Heliopora b) Meandrina c) Hippospongia d) Fungia
- 10. Which of the following cells are present in the endoderm of Hydra, but not in epidermis?**
- a) Cnidoblasts and interstitial cells
b) Glandular cells and endothelio-muscular nutritive cells
c) Cnidoblasts and germ cells
d) Interstitial cells and sensory cells
- 11. Choose the correct match**
- a) Adamisa – Blue coral b) Pennatula – Sea pen
c) Gorgonia – Organ pipe coral d) Beroe – Venus girdle
- 12. Which of the following is/are exclusively marine, radially symmetrical and diploblastic?**
- a) Pleurobranchia b) Hydra c) Ctenoplana d) Both 1 & 3
- 13. Which of the following stages in the life cycle of Fasciola hepatica infects the primary and secondary hosts respectively?**

- a) Miracidium, redia
c) Miracidium, cercaria
- b) Metacercaria, miracidium
d) Cercaria, metacercaria
14. Among the following organisms, which one possesses high regeneration power?
a) Taenia b) Schistosoma c) Planaria d) Fasciola
15. Which of the following organism is not free living?
a) Rhabditis b) Planaria c) Ancylostoma d) Pheretima
16. Assertion (A): In flatworms, flame cells are meant for excretion and osmoregulation
Reason (R): In flatworms, ammonia is the chief excretory waste product
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
17. Assertion (A): In annelids, neural system consists of paired ganglia connected by lateral nerves to a double ventral nerve cord.
Reason (R): Nereis possesses lateral appendages, parapodia which help in swimming
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
18. Assertion (A): Hirudinaria is blood sucking leech
Reason (R): It exhibits bilateral symmetry and enterocoelom
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false d) If both A and R are false statements
19. Chloragogen cells in earthworm help in
a) Cutaneous respiration b) Formation of blood cells
c) Excretion d) Helps in digestion like liver
20. Find the odd one w.r.t ctenophore
a) Polyp phase is absent in life cycle
b) Biradially symmetrical without cnidoblasts
c) Tentacles when present contain colloblasts
d) Asexual reproduction
21. Which of the following has nerve cells but no brain?
a) Hydra b) Sponge c) Cockroach d) Mosquito
22. Digestion in sponges is/occurs

33. **Chemically pearls contain calcium carbonate and are secreted by mantle of Pinctada when**
- a) Attacked by enemies
 - b) Stimulated by some silica or other particles or parasites
 - c) Starvation occurs for a long period
 - d) More food is available
34. **Which of the following is not a characteristic feature of annelids?**
- a) The body is covered by definite cuticle secreted from the ectoderm
 - b) The body wall of annelids has both longitudinal and circular muscles
 - c) In soft bodied earthworms, with a segmented body, there is a separate coelom in each segment. Here it acts as a hydraulic skeleton
 - d) Polychaetes are monocious. Larva is typical trochophore
35. **Assertion (A): In sponges Archaeocytes are totipotent in nature**
Reason (R): Archaeocytes are undifferentiated cells which are able to develop into all type of cells
- a) If both A & R are true and the reason is the correct explanation of the A
 - b) If both A & R are true, but the reason is not the correct explanation of the A
 - c) If A is true statement, Reason is false
 - d) If both A and R are false statements
36. **Which of the following has proboscis supported by a buccal diverticulum?**
- a) asidian b) lancelet c) acorn worm d) Salpa
37. **Which of the following are the common characters of all arthropods?**
- a) Head, thorax and abdomen b) Chitinous, exoskeleton and jointed appendages
 - c) Malpighian tubules and jointed appendages d) Tracheal system and green glands
38. **Torsion is a characteristic of**
- a) Gastropods only b) Cephalopods only
 - c) Gastropods and cephalopods d) All molluscs
39. **Find out the incorrect statement w.r.t. Arthropods**
- a) Adult culex and Anopheles can be distinguished with the help of sitting posture
 - b) Halteres are second pair of reduced wings of housefly and mosquito which help in balancing
 - c) Spider spins the web by means of a secretion of abdominal glands
 - d) Blood helps in transportation of O₂ and CO₂ within the body in insects
40. **Which of the following is a common characteristic of earthworm, prawn and cockroach?**
- a) Cutaneous respiration b) Metameric segmentation
 - c) Chitinous exoskeleton d) Open circulatory system

41. Which of the following character is evolved for the first time in phylum annelida?
a) Organ-system level of body organization b) Bilateral symmetry
c) Triploblastic d) Metameric segmentation
42. Neural system in annelid consists of paired ganglia connected by lateral nerves to nerves cord. The nerve cord is/are
a) Double, ventral and solid b) Double, dorsal and hollow
c) Single, ventral and hollow d) Single, ventral and solid
43. Which one is mismatched?
a) Nereis - Chloragogen cells b) Earthworm - Citellum
c) Leech - Botryoidal tissue d) Nereis - Trochophore larva
44. In Mollusca the space between the hump and the mantle is called ____
a) Pleral cavity containing lungs b) Pericardial cavity containing heart
c) Haemocoel containing blood d) Mantle cavity containing gills
45. Assertion (A): Nereis shows indirect development
Reason (R): Life cycle includes trochophore larva
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
46. Which of the following insect is not beneficial to man?
a) Locusta b) Apis c) Bombyx d) Laccifer
47. Some characters with reference to arthropods are given below, mark wrong one
a) Circulatory system is of open type
b) Mostly dioecious
c) Mostly oviparous with external fertilization
d) Development may be direct or indirect
48. Which of the following match is incorrect?
a) Peripatus – Nephridia b) Limulus – Book gills
c) Scorpion – Book lungs d) Crab – Malpighian tubules
49. Which of the following match is incorrect w.r.t animal and their larval form?
a) Silk worm – Catepillar b) Beetle – Grub
c) Housefly – Maggot d) Anopheles – Mysis
50. Mark the odd one
a) Bombyx b) Musca c) Tereido d) Periplaneta
51. Which of the following organism is viviparous?
a) Cockroach b) Scorpion c) Prawn d) Leptocorisa
52. Select the incorrect statement regarding arthropods
a) In land arthropods, fertilization is internal
b) In all arthropods the body is divided into head, thorax and abdomen

- c) The heart is dorsal and the circulatory system is open
d) These are triploblastic and schizocoelomate organisms
53. **In which of the following polyp stage is absent in their life cycle. They are radially symmetrical devoid of cnidoblasts but contain colloblasts, and exhibit bioluminescence**
a) Aurelia and Vellala
b) Physalia and Homiphora
c) Meandrina and Madrepora
d) Ctenoplana and Cestrum
54. **Metagenesis is usually distinct in the following cnidarian animals, except**
a) Obelia
b) Hydra
c) Physalia
d) Aurelia
55. **Which of the following cells are not present in the gastrodermal layer of Hydra?**
a) Nerve cell
b) Interstitial cell
c) Gland cell
d) Cnidoblast cell
56. **'Lasso' present in the nematoblasts of Hydra is meant for**
a) Ejection of the thread tube
b) Uncoiling of thread tube
c) Preventing detachment of nematocyst from nematoblast
d) Opening of operculum
57. **A unicellular green alga Zoochlorellae makes symbiotic association with Chlorohydra viridissima. This alga is present**
a) In the gastrovascular cavity
b) With mesenteries separating the gastrovascular cavity
c) In interstitial space
d) in gastrodermal cells
58. **Which of the following ctenophore is commonly known as the Venus girdle?**
a) Homiphora
b) Pleurobrachia
c) Ctenoplana
d) Cestum
59. **Type of symmetry present in the larval forms of echinoderms is**
a) Radial
b) Biradial
c) Bilateral
d) Asymmetrical
60. **Which of the following are pincer like structures and keep the body surface clear of debris and minute organisms?**
a) Papulare
b) Dermal branchiae
c) Pedicellariae
d) Madreporite
61. **Aristotle's lantern is a masticatory apparatus and is present in**
a) Crinoidea
b) Echinus
c) Ophiothrix
d) Antedon
62. **Which of the following are members of the same class?**
a) Asterias, Clypeaster, Pentaceros
b) Echinus, Ophiura, Echinarachinus
c) Asterias, Pentaceros, Astropecten
d) Holothuria, Antedon, Cucumaria
63. **Which of the following animals have gills for respiration, proboscis gland for excretion and external fertilization?**
a) Echinus
b) Cucumaria
c) Balanoglossus
d) Pentaceros
64. **Molluscs typically employ a feeding organ called radula which is armed with rows of chitinous teeth but radula is absent in which of the following mollusc?**

- a) Pila b) Unio c) Doris d) Limax
65. Which of the following phylum is second largest?
a) Arthropoda b) Mollusca c) Annelida d) Echinodermata
66. Which of the following statement is/are correct w.r.t molluscs?
a) Body is generally covered with calcareous shell
b) Body is generally unsegmented with distinct head, muscular foot and visceral hump
c) Molluscs generally have rasping organ for feeding called radula
d) All of these
67. Which of the following is not a characteristic of phylum Annelida?
1) Metamerically segmented body 2) Coelomate condition
3) Only longitudinal muscles for locomotion 4) Double ventral nerve cord
a) 1 only b) 3 only c) 2 & 3 only d) 3 & 4 only
68. Which of the following cannot be considered as advancement of annelids over nematodes?
a) Metameric segmentation b) Longitudinal and circular muscles for locomotion
c) Tube within tube body plan d) Closed circulatory system
69. Which of the following nematode is monogenetic and is found in small intestine?
a) Ascaris lumbricoides b) Ancylostoma duodenate
c) Enterobius d) Both 1 & 2
70. Animals having soft, unsegmented body with a distinct head, muscular foot and visceral hump belong to phylum
a) Annelida b) Arthropoda c) Mollusca d) Echinodermata
71. Which of the following animals is not dioecious?
a) Ascaris b) Wuchereria c) Nereis d) Earthworm
72. Assertion (A): Pearls are made up of calcium carbonate
Reason (R): They are secreted by shell
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false d) If both A and R are false statements
73. Assertion (A): Hirudinaria is sanguivorous and its saliva contains anticoagulant, hirudin
Reason (R): Hirudin prevents clotting of blood during blood meal in Hirudinaria
a) If both A & R are true and the reason is the correct explanation of the A
b) If both A & R are true, but the reason is not the correct explanation of the A
c) If A is true statement, Reason is false
d) If both A and R are false statements
74. Assertion (A): Gastropods body is asymmetrical due to torsion

Reason (R): In gastropods body is asymmetrical but during development the body twists by 360° so that the body becomes asymmetrical

- a) If both A & R are true and the reason is the correct explanation of the A
- b) If both A & R are true, but the reason is not the correct explanation of the A
- c) If A is true statement, Reason is false
- d) If both A and R are false statements

75. Which of the following acts as a distinguishing character between Periplanata and Blatta?

- a) Anal style
- b) Anal cerci
- c) Reduced wings in **Blatta** while developed in **Periplanata**
- d) reverse of above

76. If corpora allata are removed from 1st instar of a nymph, then:

- a) Duration of stadia increases
- b) It will remain nymph forever
- c) It will become adult immediately
- d) It will enter into secondary stage of juvenile

77. Study the following

- | | |
|----------------|------------------|
| A. spider | 1. uric acid |
| B. prawn | 2. NH_3 |
| C. Earth worm | 3. guanine. |
| D. silver fish | 4. urea. |

Choose the correct set of matching

- | | A | B | C | D | | A | B | C | D |
|----|---|---|---|---|----|---|---|---|---|
| a) | 3 | 4 | 1 | 2 | b) | 4 | 3 | 2 | 1 |
| c) | 2 | 1 | 3 | 4 | d) | 3 | 2 | 4 | 1 |

78. Cellulase is secreted by the microbes living in

- a. crop
- b. Gizzard
- c. mesenteron
- d. proctodaeum.

79. The number of alary muscles and the number of chamber present in the heart of cockroach are respectively:

- a. 12 & 13
- b. 12 pairs & 13
- c. 10 & 12
- d. 12 & 13 pairs.

80. The muscles that help in the breathing movements in cockroach are

- a. adductor and alary muscles
- b. dorsoventral & longitudinal muscles
- c. tergosternal & alary muscles
- d. longitudinal & abductor muscles.

UNIT-III:: INVERTEBRATE PHYLA Question Bank key

81) d	82) d	83) d	84) c	85) d	86) b	87) b	88) b	89) b	90) b
91) b	92) d	93) b	94) c	95) c	96) b	97) b	98) c	99) c	100) d
101) a	102) b	103) c	104) d	105) d	106) c	107) d	108) b	109) c	110) a
111) b	112) b	113) b	114) d	115) a	116) c	117) b	118) a	119) d	120) b
121) d	122) a	123) a	124) d	125) a	126) a	127) c	128) d	129) d	130) c
131) b	132) b	133) d	134) b	135) d	136) c	137) d	138) d	139) c	140) c
141) b	142) c	143) c	144) b	145) b	146) d	147) b	148) c	149) d	150) c
151) d	152) c	153) a	154) c	155) c	156) b	157) d	158) d	159) b	160) b