



Chapter 10

Kingdom Animalia

TOPIC-WISE MULTIPLE CHOICE QUESTIONS

INTRODUCTION, GENERAL CHARACTERISTICS

KIPS MCQs

- (1) In traditional two-kingdom systems, one-celled animals were placed in:
 - (a) Parazoa
 - (b) Protozoa
 - (c) Metazoa
 - (d) Eumetazoa
- (2) All of the following are true about animals except:
 - (a) Multicellular Forms
 - (b) Diploid eukaryotic forms
 - (c) Absorptive heterotroph
 - (d) None of these
- (3) Animals are considered to be evolved from:
 - (a) Monerans
 - (b) Protists
 - (c) Fungi
 - (d) Animals
- (4) Following feature is not associated with proterostomes:
 - (a) Radial & indeterminate cleavage
 - (b) Mouth arising from blastopore
 - (c) Coelom derived from splitting of mesoderm
 - (d) Mesoderm derived from anterior lip of blastopore
- (5) The fate of each blastomere is foretold in:
 - (a) Spiral & indeterminate cleavage
 - (b) Radial & determinate cleavage
 - (c) Radial & indeterminate cleavage
 - (d) Spiral & determinate cleavage
- (6) System arising from endoderm in animals is:
 - (a) Nervous system
 - (b) Skeletal system
 - (c) Digestive system
 - (d) Reproductive system
- (7) Which system is developed in acoelomates:
 - (a) Tube-like digestive system
 - (b) Excretory system
 - (c) Special transport system
 - (d) None of these
- (8) Pseudocoelom is not considered as true coelom because:
 - (a) It develops from splitting of mesoderm
 - (b) It develops as an outpocketing of archenteron
 - (c) It develops from blastocoel
 - (d) It is lined by coelomic epithelium

PAST PAPERS MCQs

- (9) Reproductive system is formed from: (DGK 2019)
 - (a) Mesoderm
 - (b) Endoderm
 - (c) Ectoerm
 - (d) Hypoderm
- (10) Blastopore forms anus in: (LHR 2022)
 - (a) Echinodermata
 - (b) Annelida
 - (c) Nematoda
 - (d) Mollusca
- (11) Which one is not a pseudoceolomate? (FSD 2022)
 - (a) Ascaris
 - (b) Earthworm
 - (c) Ancylostoma
 - (d) Round worms
- (12) Bilateral symmetry in animals is best correlates with: (SGD 2022)
 - (a) Diploblastic
 - (b) Trophoblastic
 - (c) No tissue
 - (d) Prods

PARAZOA / PORIFERA**KIPS MCQs**

- (13) According to 5-Kingdom classification systems. The simplest of the animals belong to subkingdom:
 (a) Protozoa (b) Parazoa
 (c) Metazoan (d) None of these
- (14) Out of total 5000 species of sponges, how many live in fresh water?
 (a) 150 (b) 250
 (c) 500 (d) 1000
- (15) A sponge that is more than a meter tall is:
 (a) *Sycon* (b) *Leucoselenia*
 (c) *Euplectella* (d) *Scolymastra joubini*
- (16) In sponges, there is a single cavity in the body called:
 (a) Gastrovascular cavity (b) Spongocoel
 (c) Pseudocoelom (d) Coelom
- (17) In sponges, the pores through which water enters and leaves the body are respectively:
 (a) Osculum (b) Ostia
 (c) Osculum & ostia (d) Ostia & osculum
- (18) Skeleton found in bath sponge is made of:
 (a) Calcareous spicules (b) Siliceous spicules
 (c) Spongin fibers (d) All of these
- (19) Fertilization in sponges occurs in:
 (a) Water (b) Spongocoel
 (c) Mesenchyme (d) None of these
- (20) It is fresh water sponge:
 (a) *Sycon* (b) *Spongilla*
 (c) *Leucoselenia* (d) *Euplectella*

PAST PAPERS MCQs

- (21) An example of beautiful and delicate sponge called venus flower basket is: (FSD 2017)
 (a) *Sycon* (b) *Leucosolenia*
 (c) *Euplectella* (d) *Spongilla*
- (22) The pores by which the water leaves the body of sponges is called: (MTN 2017)
 (a) Ostia (b) Mouth
 (c) Anus (d) Osculum
- (23) The asexual reproduction in sponges occurs by: (DGK 2017)
 (a) Budding (b) fragmentation
 (c) spores (d) Conidia
- (24) 80 % food of sponges consists of: (SWL 2019)
 (a) Detrital organic matter (b) Algae
 (c) Phytoplankton (d) Zooplankton
- (25) In sponges the food enters the spongocoel cavity through (DGK 2019)
 (a) Ostia (b) Osculum
 (c) Spiracles (d) Mouth
- (26) Which one of the following is freshwater sponge? (MTN 2021)
 (a) *Sycon* (b) *Leucoselenia*
 (c) *Spongilla* (d) *Euplectella*

ENTRY TEST BASED MCQs

- (27) Tissues are not found in the following animal: (UHS 2022)
 (a) Flatworms (b) Sponges
 (c) Cnidarians (d) Roundworms

GRADE RADIATION COELENTRATA

KIPS MCQs

- (28) Radial symmetry is found in animals belonging to phylum:
 (a) Porifera (b) Cnidaria
 (c) Platyhelminthes (d) Both 'a' & 'b'
- (29) Free swimming forms in coelenterates are:
 (a) Polyps (b) Gastrozooids
 (c) Medusae (d) All of these
- (30) Hydra, an example of coelenterate, is:
 (a) Marine water coelenterate (b) Occurs only in polyp form
 (c) Shows alternation of generation (d) Umbrella like in appearance

PAST PAPERS MCQs

- (31) Tentacles is a characteristic of: (LHR 2017)
 (a) Hydra (b) Snail
 (c) Amoeba (d) Euglena
- (32) Sea anemone belongs to phylum: (LHR 2017)
 (a) Coelenterata (b) Arthropoda
 (c) Echinodermata (d) Annelida
- (33) In phylum coelenterate special cells cnidocytes give rise to: (LHR 2017)
 (a) Polyps (b) Nematocysts
 (c) Gastrozooids (d) Gemmules
- (34) Colonial coelenterates such as corals produce hard exoskeleton formed of: (GRW 2017)
 (a) NaCO₃ (b) CaCO₃
 (c) NaOH (d) CaOH
- (35) Nematocysts are the characteristics of phylum (SGD 2017)
 (a) Nematoda (b) Coelenterata
 (c) Platyhelminthes (d) Volvox
- (36) Polyp and medusa are example of: (MTN 2017)
 (a) Coelenterata (b) Porifera
 (c) Nematoda (d) Arthropoda
- (37) The polyp is reduced and medusa is dominant is: (DGK 2017)
 (a) Actinia (b) Macroporine
 (c) Aurelia (d) Obelia
- (38) Sea anemone belongs to phylum: (LHR 2017)
 (a) Coelenterata (b) Arthropoda
 (c) Echinodermata (d) Annelida
- (39) Which of the following is a motile coelenterate? (GRW 2018)
 (a) Hydra (b) Obelia colony
 (c) Jelly fish (d) Corals
- (40) Coral reefs are mostly formed of: (MUL 2019)
 (a) Calcium carbonate (b) Silica
 (c) Chitin (d) Lignin

- (41) The member of coelenterate commonly called Portuguese man of war is (LHR 2021)
 (a) obelia (b) hydra
 (c) Physalia (d) Aurelia
- (42) Which one is good example of polymorphism? (MUL 2022)
 (a) Hydra (b) Dugesia
 (c) Starfish (d) Obelia

BILATERIA, ACOELOMATES / PLATYHELMINTHES

KIPS MCQs

- (43) Digestive system in tapeworm is:
 (a) Absent (b) Sac-like
 (c) Tube-like (d) Branching sac-like
- (44) Asexual reproduction in platyhelminthes is by:
 (a) Budding (b) Conjugation
 (c) Fission (d) None of these
- (45) The embryo of tape worm is round in shape and has ____ chitinous hooks:
 (a) 1 (b) 3
 (c) 6 (d) 10
- (46) Following is parasite of human large intestine:
 (a) *Enterobius vermicularis* (b) *Fasciola hepatica*
 (c) *Ancylostoma duodenale* (d) None of these

PAST PAPERS MCQs

- (47) Flame cells are excretory cells in: (GRW 2017)
 (a) Flat worms (b) Segmented worms
 (c) Round worms (d) Insects
- (48) All “flatworms” belong to phylum: (GRW 2019)
 (a) Annelida (b) Platyhelminthes
 (c) Arthropoda (d) Nematoda
- (49) Scientific name for planaria is (DGK 2019)
 (a) *Taenia sloium* (b) *Fasciola hepatica*
 (c) *Schistosoma* (d) *Dugesia*
- (50) Dugesia is a free-living flatworm with a ciliated outer surface. It is commonly called: (SGD 2019)
 (a) Tape worm (b) Liver fluke
 (c) Blood Fluke (d) Planaria
- (51) Excretory structures present in animal are: (MUL 2021)
 (a) Flame cells (b) Kidneys
 (c) Nephridia (d) Malpighian tubes
- (52) A free living flatworm with ciliated outer surface is (DGK 2021)
 (a) Round worm (b) Pin worm
 (c) Planaria (d) Coral
- (53) Excretory are generally believed to have evolved from: (DGK 2021)
 (a) Nephridiat (b) Flame cell
 (c) Malpighian (d) Kidney
- (54) Example of free living fresh water flat worm is: (FSD 2021)
 (a) *Dugesia* (b) *Fasciola*
 (c) *Taenia* (d) *Hydra*

- (55) The excretory system of flatworms is composed of: (RWP 2021)
 (a) Nephron (b) Nephridia
 (c) Flame cells (d) Ganglia
- (56) Which one of the given is intermediate host for *Taenia*? (SVL 2022)
 (a) Snail (b) Pig
 (c) Sparrow (d) Man

ENTRY TEST BASED MCQs

- (57) Snails are the intermediate hosts in: (MDCAT 2017)
 (a) *Fasciola hepatica* (b) *Schistoma*
 (c) *Teniasolium* (d) *Ancylosomaduodenale*
- (58) Following group is the example of acoelomates: (MDCAT 2018)
 (a) Platyhelminthes (b) Aschelminthes
 (c) Molluscs (d) Annelids

PSEUDOCOELOMATES / ASCHELMINTHES

KIPS MCQs

- (59) Excretory system of nematodes contains:
 (a) Flame cells (b) Longitudinal canals
 (c) Nephridia (d) Malpighian tubules
- (60) Which system is absent in nematodes?
 (a) Digestive (b) Muscular
 (c) Respiratory (d) Excretory
- (61) Tube-like digestive system first time appeared in:
 (a) Platyhelminthes (b) Nematodes
 (c) Annelids (d) Arthropods

PAST PAPERS MCQs

- (62) The body cavity of Nematoda is: (MTN 2017)
 (a) Blastocoel (b) Pseudo coelom
 (c) Coelom (d) Haemocoelom
- (63) Pseudocoelom is characteristic feature of phylum (GRW 2018, RWP 2017)
 (a) Nematoda (b) Echinodermata
 (c) Mollusca (d) Annelida
- (64) *Ascaris Lumbricoides* is an intestinal parasite of: (LHR 2017, LHR 2018, LHR 2019)
 (a) Monkey (b) Man
 (c) Horse (d) Camel
- (65) *Ancylostoma duodenal* is commonly known as: (GRW 2019)
 (a) Earthworm (b) Pin worm
 (c) Tape worm (d) Hook worm
- (66) The parasite which produces anticoagulant to prevent blood clotting is: (LHR 2022)
 (a) Hook worm (b) Pin worm
 (c) *Ascaris* (d) *Fasciola*
- (67) Pseudocoelom body cavity is found in: (FSD 2021)
 (a) *Ascaris* (b) Earthworm
 (c) *Neries* (d) Mosquito

ENTRY TEST BASED MCQs

- (68) _____ is an intestinal parasite of man belonging to phylum nematoda: (MDCAT 2017)
 (a) *Taeniasolium* (b) *Ascarislumbricoides*
 (c) *Wuchereiabancrofti* (d) *Schistosoma*

- (69) Round worms belong to which phylum? (UHS 2022)
 (a) Annelida (b) Coelenterata
 (c) Nematoda (d) Platyhelminthes

COELOMATES, PROTEROSTOMES, ANNELIDA

KIPS MCQs

- (70) Marine example of annelids is:
 (a) Nereis (b) Stylaria
 (c) Earthworm (d) Leech
- (71) Closed circulatory system first time appeared in:
 (a) Platyhelminthes (b) Nematodes
 (c) Annelids (d) Arthropods
- (72) Contraction of circular muscles produces a pressure in the coelomic fluid that forces the body to:
 (a) Shorten (b) Elongate
 (c) Widen (d) Does not produce any change
- (73) The organs of locomotion are parapodia in class:
 (a) Polychaeta (b) Oligochaeta
 (c) Hirudinae (d) All of these
- (74) The common mode of reproduction in annelids is:
 (a) Sexual (b) Asexual
 (c) Both of these (d) None of these

PAST PAPERS MCQs

- (75) Neries belongs to phylum: (DGK 2017)
 (a) Nematoda (b) Annelida
 (c) Arthropoda (d) Mollusca
- (76) Which of the following annelids is marine? (GRW 2021, LHR 2021)
 (a) Stylaria (b) Neries
 (c) Hirudo (d) Pheritima
- (77) A free swimming trochophore larva produced during life cycle of: (RWP 2021)
 (a) Annelida (b) Protozoa
 (c) Coelenterate (d) Arthropods
- (78) Pheretima posthuma is the zoological name of: (SGI 2022)
 (a) Neries (b) Earthworm
 (c) Leach (d) Chaetotents

ARTHROPODA

KIPS MCQs

- (79) Largest phylum of animal kingdom whose members are in all types of habitats is:
 (a) Annelida (b) Arthropoda
 (c) Mollusca (d) Chordata
- (80) Body cavity of arthropods is:
 (a) Coelom (b) Pseudocoelom
 (c) Haemocoel (d) Body cavity not present
- (81) Aquatic arthropods respire through:
 (a) Gills (b) Spiracles
 (c) Gills and spiracles (d) Gills & book lungs
- (82) Carapace in exoskeleton is found in:
 (a) Crustacean (b) Insecta
 (c) Arachnida (d) Myriapoda

- (83) **True metamorphosis does not exist in:**
 (a) Crustacean (b) Insecta
 (c) Arachnida (d) Myriapoda
- (84) **Chitin is _____ in nature:**
 (a) Polysaccharide (b) Protein
 (c) Lipids (d) None of these
- (85) **Chitinous structures are not involved in:**
 (a) Crushing and biting of food (b) Defense and offense
 (c) Lens of the compound eyes (d) None of these
- (86) **Process of shedding of exoskeleton is called:**
 (a) Ecdysis (b) Moulting
 (c) Metamorphosis (d) Both a & b
- (87) **Crustacean have _____ pairs of maxilla:**
 (a) One (b) Two
 (c) Three (d) Four
- (88) **The pairs of antennae present in Arachnida is:**
 (a) 1 (b) 2
 (c) 3 (d) 0
- (89) **In scorpion respiration take place by means of:**
 (a) Gills (b) Skin
 (c) Book lungs (d) Tracheal system
- (90) **Arachnida have _____ pair of legs.**
 (a) 4 (b) 3
 (c) 5 (d) 6
- (91) **Excretion in arthropoda take place by means of:**
 (a) Protonephridia (b) Meta nephridia
 (c) Malpighian tubules (d) Kidneys
- (92) **Nitrogenous wastes in arthropods are excreted in the form of:**
 (a) Ammonia (b) Urea
 (c) Uric acid (d) Creatinine
- (93) **Blood of _____ cannot carry oxygen and carbon dioxide.**
 (a) Annelida (b) Arthropoda
 (c) Cephalopoda (d) None of these

PAST PAPERS MCQs

- (94) **Spiracals are found in:** (FSD 2019)
 (a) Hydra (b) Trench
 (c) Birds (d) Fishes
- (95) **The insects that move in large number and cause damage to standing crops is:** (DGK 2021)
 (a) Fleas (b) Bugs
 (c) Grasshopper (d) Locusts

ENTRY TEST BASED MCQs

- (96) **Silver fish is a/an:** (UHS 2022)
 (a) Insect (b) Mollusc
 (c) Jawless fish (d) Cartilaginous fish

MOLLUSCA**KIPS MCQs**

- (97) **Largest invertebrate animal is:**
 (a) Neries (b) Giant squid
 (c) *Brachioceranthus* (d) *Scolymastra joubini*
- (98) **Phylum mollusca includes over _____ living species.**
 (a) 5000 (b) 25000
 (c) 50000 (d) 75000
- (99) **Mantle in molluscs is present over:**
 (a) Head region (b) Dorsal visceral region
 (c) Ventral muscular foot (d) All of these
- (100) **Respiratory pigment in molluscs is:**
 (a) Haemoglobin (b) Myoglobin
 (c) Haemocyanin (d) None of these
- (101) **Shell is divided into two pieces in class:**
 (a) Gastropoda (b) Pelecypoda
 (c) Cephalopoda (d) Hirudinae
- (102) ***Loligo* is:**
 (a) Snail (b) Slug
 (c) Squid (d) Cuttle fish
- (103) **Members of this class are bilaterally symmetrical with dorso-ventrally flattened body:**
 (a) Gastropoda (b) Pelecypoda
 (c) Cephalopoda (d) Hirudinae
- (104) **The brain of _____ is exceptionally large and complex for an invertebrate.**
 (a) Giant squid (b) Octopus
 (c) Cuttlefish (d) Slug
- (105) **The length of giant squid may be upto:**
 (a) 50 feet (b) 15 feet
 (c) 50 meters (d) 32 meters
- (106) **The shell is much reduced or even absent in:**
 (a) Gastropoda (b) Bivalvia
 (c) Cephalopoda (d) Pelecypoda
- (107) ***Helix aspersa* is commonly known as:**
 (a) Squid (b) Slug
 (c) Fresh water mussel (d) Garden snail

PAST PAPERS MCQs

- (108) **In Mollusca, a blue respiratory pigment is present called: (LHR 2018)**
 (a) Haemoglobin (b) Haemoerythrin
 (c) Prothrombin (d) Haemocyanin
- (109) **Mollusca has a respiratory pigment of blue colour, called (BWP 2019)**
 (a) Haemocrythrin (b) Heamocyanin
 (c) Haemoglobin (d) Myoglobin
- (110) **A respiratory pigment of blue in color called haemocyanin is present in animals of which phylum (LHR 2021)**
 (a) Porifera (b) Coelentrata
 (c) Mollusca (d) Arthropoda

- (111) **In Mollusca and Annelida, the Larva is:** (BWP 2021)
 (a) Trochophore (b) Bipinnaria
 (c) Brachiolaria (d) Amphiblastula

ECHINODERMATA & HEMICHORDATA

KIPS MCQS

- (112) **Echinoderms are not:**
 (a) Triploblastic (b) Coelomate
 (c) Bilaterally symmetrical (d) Marine
- (113) **Body is biscuit like in:**
 (a) Cake urchin (b) Sea urchin
 (c) Sea cucumber (d) Snail
- (114) **Which of the following is true about nervous system of echinoderms?**
 (a) True brain present (b) Oesophageal nerve ring
 (c) Pharyngeal nerve ring (d) Diffused type of nervous system
- (115) **Pre-chordates is another name used for:**
 (a) Echinoderms (b) Hemichordates
 (c) Urochordates (d) Cephalochordates
- (116) **Presence of _____ shows certain biochemical peculiarities among echinoderms and chordates:**
 (a) Cytochrome c (b) Phosphocreatin
 (c) Haemoglobin (d) Mesodermal skeleton
- (117) **Madreporite is:**
 (a) Sieve-like plate through which water enters in canals
 (b) A part of tube feet used for locomotion
 (c) Spiny structure present only in sea urchin
 (d) A network of canals through which water circulates
- (118) **Echinoderms are placed close to chordates because:**
 (a) Mesoderm is derived from the cells close to blastopore
 (b) They possess mesodermal skeleton
 (c) They show radial cleavage
 (d) All of these
- (119) **In *Balanoglossus* the body consist of:**
 (a) Head, thorax and abdomen (b) Head trunk and tail
 (c) Head proboscis and trunk (d) Proboscis, collar and trunk

PAST PAPERS MCQS

- (120) **Sea Urchine belongs to phylum:** (MPN 2017)
 (a) Coelantrata (b) Porifera
 (c) Nematoda (d) Echinodermata
- (121) **The animal with exceptionally large brain is:** (LHR 2017)
 (a) Star fish (b) Octopus
 (c) Snail (d) Sepia
- (122) **The largest invertebrate animal is:** (SWL 2019)
 (a) Whale (b) Squid
 (c) Octopus (d) Dragon fly
- (123) **In Echinodermata the larva is:** (DGK 2019)
 (a) Planula (b) Trochophore
 (c) Bipinnaria (d) Echino

- (124) Sea urchin belongs to phylum: (RWP 2019)
 (a) Arthropoda (b) Echinodermata
 (c) Annelida (d) Protozoa
- (125) The larvae such as bipinnaria are found in phylum. (SWL 2021)
 (a) Porifera (b) Coelenterata
 (c) Echinodermata (d) Annelida
- (126) Sea urchin belongs to phylum. (SGD 2021)
 (a) Arthropoda (b) Echinodermata
 (c) Annelida (d) Protozoa
- (127) The phylum which is exclusively marine is: (BWP 2022)
 (a) Echinodermata (b) Hemichorda
 (c) Chordata (d) Nematoda
- (128) Which one of the following is included in tunicates: (BWP 2022)
 (a) Amphioxus (b) Molgula
 (c) Balanoglossus (d) Saccoglossus

ENTERY TEST BASED MCQs

- (129) Water vascular system or ambulacral system is a unique and complex system especially present in: (UHS 2022)
 (a) Sponges (b) Arthropods
 (c) Echinoderms (d) Fishes

PHYLUM CHORDATA

KIPS MCQs

- (130) It consists of a number of vacuolated cells filled with a protein-rich fluid which develops high hydrostatic pressure:
 (a) Pseudocoelom (b) Notochord
 (c) Haemocoel (d) Nerve cord
- (131) Notochord is present throughout life in:
 (a) Urochordates (b) Cephalochordates
 (c) Pre-chordates (d) Chordates
- (132) Adult animal has only pharyngeal gill slits as chordate character:
 (a) Ascidia (b) *Amphioxus*
 (c) Cyclostomata (d) Chondrichthyes
- (133) Which is not the example of tunicate?
 (a) *Oikopleura* (b) Ascidia
 (c) *Salpa* (d) *Branchiostoma*
- (134) Nerve cord in chordates is present:
 (a) Ventral to notochord (b) dorsal to notochord
 (c) Ventral side of the body (d) lateral to notochord
- (135) The paired gills openings are developed in all chordates but non – functional in (RWP 2022)
 (a) Rat (b) Fish
 (c) Frog (d) Amphioxus

FAST PAPERS MCQs

- (136) Example of tunicate is: (MTN 2019)
 (a) Amphioxus (b) Molgula
 (c) Amphibia (d) Reptilia

PICES

KIPS MCQs

- (137) The pairs of gills present in cyclostomata are:
 (a) 6-14 (b) 5-7
 (c) 10-12 (d) 4-5
- (138) _____ is the largest fish.
 (a) Whale (b) Lamprey
 (c) Shark (d) Sting ray
- (139) _____ muscles of electric ray are specialized produce electric shock in water.
 (a) Ventral (b) Dorsal
 (c) Both (d) None
- (140) Shark liver oil is a source of vitamin:
 (a) A & K (b) B & D
 (c) A & D (d) A & E
- (141) Swim bladder is present in:
 (a) Cyclostomata (b) Chondrichthyes
 (c) Osteichthyes (d) All of these
- (142) The scales of cartilaginous fishes are:
 (a) Placoid (b) Cycloid
 (c) Ganoid (d) Both b & c
- (143) Fishes can respire without water:
 (a) Cyclostomata (b) Chondrichthyes
 (c) Osteichthyes (d) Dipnoi
- (144) Which is not the adaptation for aquatic mode of life in fishes?
 (a) Swim bladder
 (b) Paired fins
 (c) Sensory organs are more developed than terrestrial animals
 (d) Afferent & efferent branchial system

PAST PAPERS MCQs

- (145) Shark liver oil is used in medicine as a source of vitamins (LHR2021)
 (a) A and B (b) A and C
 (c) A and D (d) A and E
- (146) Among vertebrates sting rays are _____. (GRW 2021)
 (a) Reptiles (b) Amphibians
 (c) Fishes (d) Mammals
- (147) J-shaped stomach is found in: (SWL 2021)
 (a) Shark (b) Perch
 (c) Trout (d) Plaice
- (148) The cartilaginous fish have scales (DGK 2021)
 (a) Cycloid (b) Ganoid
 (c) Placoid (d) Ctenoid
- (149) Ancient fish that have developed lungs are called: (SGD 2021)
 (a) Dipnoi (b) Asterias
 (c) Thaliacea (d) Leptocardii

AMPHIBIANS

KIPS MCQs

- (150) Amphibians are evolved from:
 (a) Cartilaginous fishes (b) Reptiles
 (c) Dipnoi (d) Cyclostomata
- (151) Pigment cells called chromatophores present in:
 (a) Reptiles (b) Amphibian
 (c) Chondrichthyes (d) Mammals
- (152) Amnion is not present around the embryo of:
 (a) Reptiles (b) Amphibian
 (c) Birds (d) Mammals
- (153) Scales are totally absent in:
 (a) Birds (b) Toad
 (c) Lizard (d) Both a & b

REPTILES

KIPS MCQs

- (154) The reptiles of today have been derived from dinosaurs of:
 (a) Jurassic period (b) Cretaceous period
 (c) Devonian period (d) Both a & b
- (155) Reptiles flourished throughout _____ era.
 (a) Cenozoic (b) Devonian
 (c) Proterozoic (d) Mesozoic

PAST PAPERS MCQs

- (156) One of these is an early Reptile: (BWP 2017)
 (a) Platypus (b) Varanope
 (c) Archaeopteryx (d) Snake
- (157) The reptiles of today has been derived from Dinosaurs of Jurassic period and: (BWP 2021)
 (a) Silurian (b) Cretaceous
 (c) Ordovician (d) Cambrian
- (158) A leathery shelled egg with massive yolk is: (DIK 2022)
 (a) An-amniotic egg (b) Amniotic egg
 (c) Shelled egg (d) Yolcked egg

AVES-BIRDS

KIPS MCQs

- (159) The organ of voice in bird called syrinx is situated in:
 (a) At upper side of trachea (b) At lower end of trachea
 (c) Just behind the pharynx (d) In the middle of trachea
- (160) Birds do not have teeth so the function of teeth is performed by:
 (a) Beak (b) Pharynx
 (c) Stomach (d) Gizzard
- (161) In _____ both ovaries and oviducts are functional.
 (a) Robin (b) Kestrel
 (c) Eagle (d) Kingfisher
- (162) *Archaeopteryx* is connecting link between:
 (a) Reptiles & mammals (b) Reptiles & birds
 (c) Birds & mammals (d) amphibian and fishes

PAST PAPERS MCQs

- (163) Organ of voice in birds is called: (GRW 2017)
 (a) Syrinx (b) Larynx
 (c) Tongue (d) Pharynx
- (164) Syrinx is organ of voice in: (GRW 2017)
 (a) Amphibian (b) Reptiles
 (c) Birds (d) Mammals
- (165) In birds, the organ of voice is called: (FSD 2017, LHR 2016, FSD 2019, BWP 2019)
 (a) Syrinx (b) Arynix
 (c) Vocal card (d) Parabronchi

MAMMALIA

KIPS MCQs

- (166) Which of them is not poikilotherm?
 (a) Spiny ant eater (b) Lizard
 (c) Crocodile (d) Snake
- (167) Mammals have evolved from reptilian ancestors:
 (a) *Dinosaurs* (b) *Dipnoi*
 (c) *Cotylosaurs* (d) *Archaeopteryx*
- (168) The mammal-like reptile that was found as fossil in Texas:
 (a) *Archaeopteryx* (b) *Duck bill platypus*
 (c) *Varanope* (d) *Opossum*
- (169) The lower jaw is composed of only one large bone:
 (a) Reptiles (b) Amphibian
 (c) Chondrichthyes (d) Mammals
- (170) Mammals become dominant in the:
 (a) Cenozoic period (b) Jurassic period
 (c) Devonian period (d) Cambrian period

PAST PAPERS MCQs

- (171) The pouched mammals are: (RWP 2017)
 (a) Prototheria (b) Metatheria
 (c) Eutheria (d) Egg Lying mammals
- (172) Marsupium is character of: (FSD 2019)
 (a) Opossums (b) Dolphin
 (c) Duck bill platypus (d) Bat
- (173) Kangaroo belong to sub-class: (BWP 2017, RWP 2019)
 (a) Eutheria (b) Metatheria
 (c) Prototheria (d) megatheria
- (174) Dolphin is: (MUL 2019)
 (a) Fish (b) Bird
 (c) Mammal (d) Amphibian

- (175) Mammals have evolved from reptilian ancestors called: (LHR 2021)
 (a) Cotylosaurs (b) Echidna
 (c) Opossum (d) Archaeopteryx
- (176) Which one the following is placental mammal: (LHR 2021)
 (a) Echidna (b) Kangaroo
 (c) Bat (d) Kingfish
- (177) Duckbill platypus belongs to subclass: (MUL 2021)
 (a) Eutheria (b) Atheria
 (c) Metatheria (d) Prototheria
- (178) Which one of the following is included in tunicates: (BWP 2022)
 (a) Amphioxus (b) Molgula
 (c) Balanoglossus (d) Saccoglossus

ANSWER KEY

(Topic-Wise Multiple Choice Questions)

1	b	31	a	61	b	91	c	121	d	151	b
2	c	32		62	b	92	c	122	b	152	b
3	b	33	b	63	a	93	b	123	c	153	b
4	a	34	b	64	b	94	c	124	c	154	d
5	d	35	b	65	d	95	d	125	c	155	d
6	c	36	a	66	a	96	a	126	b	156	b
7	b	37	c	67	a	97	b	127		157	b
8	c	38	a	68	b	98	c	128		158	b
9	a	39	a	69	c	99	b	129	c	159	b
10	a	40	a	70	a	100	c	130	b	160	d
11	b	41	c	71	c	101	b	131	b	161	c
12	b	42	d	72	b	102	c	132	a	162	b
13	b	43	a	73	a	103	b	133	d	163	a
14	b	44	c	74	a	104	b	134	a	164	c
15	d	45	c	75	b	105	a	135	c	165	a
16	b	46	a	76	b	106	c	136	b	166	a
17	d	47	a	77	a	107	d	137	a	167	c
18	c	48	b	78	b	108	d	138	e	168	e
19	c	49	d	79	b	109	b	139	b	169	b
20	b	50	d	80	b	110	c	140	c	170	a
21	c	51	a	81	a	111	a	141	c	171	b
22	b	52	c	82	a	112	c	142	a	172	a
23	a	53	b	83	c	113	a	143	d	173	b
24	a	54	a	84	a	114	a	144	c	174	C
25	a	55	c	85	d	115	b	145	c	175	a
26	c	56	b	86	d	116	b	146	c	176	c
27	b	57	b	87	b	117	a	147	a	177	d
28	b	58	a	88	d	118	d	148	c	178	
29	c	59	b	89	d	119	d	149	a		
30	b	60	c	90	c	120	d	150	c		

Introduction, General Characteristics

SHORT QUESTIONS

Q.1 What is the main difference between diploblastic and triploblastic organisms?

Ans: The body of diploblastic animals consist of two layers of cells ectoderm and endoderm. There is a jelly like mesenchyme or mesoglea between the two layers, which in most cases is non-cellular. The body of triploblastic animals is made of three layers ectoderm, mesoderm and endoderm.

Q.2 Differentiate between Acoelomata, Pseudocoelomata and Coelomata?

Ans:

ACOELOMATE	PSEUDOCOELOMATE	COELOMATE
The animals which do not have a body cavity are grouped under acoelomata.	The animals which have a false coelom, the pseudocoel, have been grouped under pseudocoelomata.	The animals which have a true coelom have been grouped under coelomata.
Members of phylum platyhelminthes.	Nematoda in which blastocoel persists throughout the life.	Annelida to Chordata all the animals possess coelom.

Q.3 What are Protozoa and Metazoa?

Ans: In two-kingdom system of classification the multicellular animals were referred to broadly as Metazoa and the unicellular animals were called Protozoa.

Q.4 What is blastocoel?

Ans: Blastocoel is a fluid-filled cavity formed in embryo during developmental stage called blastula.

Q.5 What is a coelom?

Ans: Coelom is a cavity present between the body wall and the alimentary canal and is lined by mesoderm. The mesoderm splits into outer parietal layer which underlines the body wall and the visceral layer which covers the alimentary canal, and the cavity between the two layers is filled with a fluid called coelomic fluid.

Q:36 Distinguish between radial and bilateral symmetry.

Radial Symmetry	Bilateral Symmetry
Radial symmetry is a condition or organization in which the parts of the body are arranged around a central axis in such a way that any plane passing through the centre divide the animal into two halves that are almost same.	Bilateral symmetry is a condition in which the right of the animal is approximately the same as the left side and a distinct anterior end is present. The animal can be divided into two equal halves by an imaginary line only in one plane.
For example members of cnidaria.	The animals belonging to phyla Platyhelminthes to Chordata exhibit bilateral symmetry.

Q:37 Differentiate between schizocoelous and enterocoelous.

Ans:

Schizocoelous	Enterocoelous
Cleavage or division of the zygote is spiral and determinate.	Cleavage is radial and indeterminate.
Mesoderm is derived from cells of lip of blastopore.	Mesoderm is derived from wall of developing gut (archenteron)
During development process, the mouth in these animals arises from the blastopore or from its anterior margin	During embryonic development, mouth is formed at some distance anterior to the blastopore and blastopore forms the anus.
Coelom or body cavity is formed due to splitting of mesoderm (Schizocoelous)	Coelom is developed as an outpouching of archenteron (Enterocoelous).
This series proterostomia includes animals belonging to phyla, annelida, mollusca and arthropoda.	This series deuterostomia includes animals belonging to phyla echinodermata, hemichordata and chordata.

PAST PAPERS QUESTIONS

- Q:38** What are coelomates? Give example? (DGK 2017)
- Q:39** What is pseudocoelom? (RWP 2017)
- Q:40** Write down any two differences between protostomia and deuterostomia. (DGK 2017)
- Q:41** Differentiate between parazoa and eumetazoa. (LHR 2017)
- Q:42** Differentiate between coelomates and acoelomates. (LHR2018)
- Q:43** Differentiate between diploblastic and triploblastic animals. (FSD 2017, LHR 2018)
- Q:44** Differentiate between enterocoelous and schizocoelous feature. (LHR 2019)
- Q:45** Differentiate between “radial cleavage” and “spiral cleavage” (GRW 2019)
- Q:46** Give two characters of deuterostomes. (SGD 2019)
- Q:47** Define radial symmetry and bilateral symmetry. (SGD 2019, FSD 2021)
- Q:48** Give two characters of deuterostomes. (FSD 2021)
- Q:49** Differentiate between Proterostomia and deuterostomia. (LHR 2019, LHR 2021)
- Q:50** Differentiate between radial and biradial symmetry. (LHR 2017, LHR 2021)
- Q:51** Write down two differences between protostomes and deuterostomes along with examples. (GRW 2021)
- Q:52** What are pseudocoelomates? (SWL 2019, MTN 2021)
- Q:53** Define radial and bilateral symmetry with examples. (LHR 2022)
- Q:54** What are deuterostomes? (DGK 2022)
- Q:55** Define protostomes with examples. (MTN 2022)
- Q:56** What are triploblastic animals? (MTN 2022)
- Q:57** Differentiate between protostomes and deuterostomes for the formation of mouth and Ant. (BWP 2022)

PARAZOA / PORIFERA

KIPS QUESTIONS

Q:58 Why sponges depend on water canal system for their life?

Ans: This system helps in providing food to them and also in reproduction (Fertilization).

PAST PAPERS QUESTIONS

- Q:59** Define spongocoel. (BWP 2017)
- Q:60** Give two examples of sponges. (LHR 2017)
- Q:61** What is the importance of sponges? (GRW 2017)
- Q:62** Differentiate between budding and gemmules. (SWL 2019)
- Q:63** What are spicules? (MUL 2019)

- Q:64 How sponges reproduce? (SWL 2019)
 Q:65 Define term protandrous and gemmules. (LHR 2021)
 Q:66 Give asexual reproduction in sponges. (GRV 2021)
 Q:67 Differentiate between ostium and osculum of a sponge. (MTN 2021)
 Q:68 What are gemmules? (FSD 2019, DGK 2022, DGK 2021)

Grade Reproduction / Coelenterata

KIPS QUESTIONS

- Q:69 What are coral reefs?
Ans: Many colonial coelenterates such as corals produce a hard exoskeleton formed of calcium carbonate (CaCO₂). It is secreted by epidermal cells that take lime from sea water. This skeleton of coral is responsible for formation of small coral islands or large coral reefs.

Q.121 **What is polymorphism? Also give examples.**

Ans: Polymorphism:

The occurrence of structurally and functionally more than two different types of individuals, called the zooids within the same organism is called polymorphism.

Example:

Obelia and *Physalia* show polymorphism.

Q.122 **Differentiate between polyps and medusae?**

Ans:

Polyps	Medusae
Polyps are cylindrical animals, which in most cases are nutritive in function.	The medusa is umbrella like in form. These are free swimming.
They are involved in asexual reproduction.	The medusa is involved in sexual reproductions as they have gonads.

Q.123 **What are gastrozooids, gonozooids and blastostyle?**

Ans: Gastrozooids:

are feeding zooids of *Obelia*,

Gonozooids:

are asexually reproducing zooids,

Blastostyle:

is a kind of zooid in *Obelia* which gives rise to individual zooids called medusae by sexual method.

Q.124 **What are cnidocytes?**

Ans: The cnidocytes are special cells found in coelenterates due to which they are also called Cnidaria. The cnidocytes give rise to nematocyst, the stinging cells which can paralyze the prey.

Q.125 **What is importance of Medrepora?**

Ans: Medrepora:

These are commonly called corals, the skeleton of which form large coral reefs and even small islands. Coral reefs are mostly formed of calcium carbonates.

Importance:

These coral reefs are the source of chalk and lime stone. They also provide shelter to small animals.

PAST PAPERS QUESTIONS

- Q.126 Differentiate between Corals and Coral Reefs. (BWP 2017)
 Q.127 Define polymorphism. Also give example. (LHR 2019)
 Q.128 What are polyps and medusae? (GRW 2021)
 Q.129 Differentiate between polyp and medusa. (LHR 2017, LHR 2022, RWP 2021, DGK 2021)
 Q.130 What are coral reefs and where they are found? (FSD 2022)

Bilateria, Acoelomates / Platyhelminthes**KIPS QUESTIONS****Q.157** What do you know by infestation and disinfestations?**Ans: Infestation:**

Infestation means development and abundance of pathogens or parasites and disease production within the body of an organism.

Disinfestation:

Disinfestations means removal of pathogens/parasites by treatment with drugs.

Q.158 Give two examples of phylum platynelminthes.**Ans:** Planaria and liver fluke are two common flatworms.**Q.159** What are proglottids?**Ans:** The body of tape worm is ribbon-like and divided into segments called proglottids which contain mainly sex organs.**Q.131** Assign following animals into their respective phyla:

(1) Tapeworm (2) Octopus

Ans:

(1) Tapeworm (Phylum Platyhelminthes)

(2) Octopus (Phylum Mollusca)

Q.160 What are hermaphrodites?**Ans: Hermaphrodite:** The animals in which both male and female sex organs are present in the same individual are called hermaphrodites.**PAST PAPERS QUESTIONS****Q:161** Write two adaptations for parasitic mode of life in Platyhelminthes. (FSD 2017)**Q:162** Give four parasitic adaptations of flatworms. (SGD 2017)**Q:163** Write down any four adaptations of parasitic mode of life in Platyhelminthes. (MTN 2017)**Q:164** Describe disinfestation of Taenia. (MTN 2019)**Q:165** How reproduction occurs in Platyhelminthes? (DGK 2019)**Q:166** What do you know about flame cells? (FSD 2019)**Q:167** Write down two adaptations for parasitic mode of life in Platyhelminthes. (DGK 2021)**Q:168** Differentiate between Sac-like and tube-like Digestive system. (BWP 2021)**Q:169** Differentiate between infestation and disinfestation. (RWP 2019, RWP 2021)**Q:170** Give four parasitic adaptations in Platyhelminthes. (LHR 2021)**Q:171** How platyhelminthes have adapted themselves to the parasitic mode of life? (SWL 2021)**Q:172** What is infestation? (DGK 2022)**Q:173** Give four parasitic adaptations in Platyhelminthes. (SWL 2022)**Pseudocoelomates/Aschelminthes****KIPS QUESTIONS****Q:174** Give four character of phylum nematoda.**Ans: Shape of body:**

The name Nematoda means "pointed ends" These animals have elongated worm like body with pointed ends. One end of the body is called **anterior end**. However, the head is not clearly marked. There are no special sense organs at this end.

Body layers:

The nematodes are triploblastic

Symmetry:

They show bilateral symmetry. Their body is unsegmented.

Coelom:

They are **pseudocoelomate**. Their body cavity is called **Pseudocoel**. It is derived from the hollow space, the **blastocoel**. Blastocoel is formed in **blastula** stage during embryological development. Thus their coelom is not formed from mesoderm. Pseudocoel has a large number of vacuolated cells. These cell are filled with a protein rich fluid. This fluid produces high hydrostatic pressure.

PAST PAPERS QUESTIONS

- Q:175** What are hook worms? (DGK 2017)
Q:176 Write scientific and common names of two intestinal parasites of man from phylum Aschelminthes. (DGK 2019)
Q:177 What is blastostyle? (LHR 2019)
Q:178 What is the important of hook worm from parasitic point of view? (RWP 2022)
Q:179 Define metameric segmentation. In which phylum is it found. (RWP 2022, LHR 2017)

Coelomates, Protostomes, Annelida**KIPS QUESTIONS**

Q:196 The body of annelids is metamerically segmented. Discuss.

Ans: The body becomes divided transversely into a number of similar parts or segments, which originate in mesoderm. The subdivisions may be indicated externally by constrictions of the body surface. Internally the segments are separated from each other by septa extending across the coelom.

Q:197 Write down two characters of phylum annelida.

Ans:

- (1) The body is metamerically segmented.
- (2) They are first group of invertebrates that have developed a closed circulatory system.

PAST PAPERS QUESTIONS

- Q:198** What is metameric segmentation? In which phylum is it present? (LHR 2017)
Q:199 Name three classes of phylum Annelida. (SGD 2017)
Q:200 What are anticoagulants? Give their role (DGK 2017)
Q:201 Differentiate between oligochaeta and polychaeta. (LHR 2018)
Q:202 What do you know about class hirudinea? (LHR 2019)
Q:203 How locomotion takes place in annelids? (LHR 2021)
Q:204 What is the agricultural importance of Earthworms? (RWP 2019, RWP 2021)

Arthropoda**KIPS QUESTIONS**

Q:205 Why arthropods are believed to have common origin with annelids?

Ans: The arthropods are believed to have common origin with annelids because both have some common characteristics such as segmented body, appendages and cuticle.

Q:206 What is metamorphosis?

Ans: This is a spontaneous change of form or structure during the life cycle. There are three morphologically distinct stages in the life cycle, the egg develops into larva which is converted into motionless pupa that develops into an adult.

Q:207 What is nymph?

Ans: In some primitive insects the metamorphosis is incomplete. The larva resembles adult and called nymph or instar. It lives in the same habitat as a adult.

Q:208 Give similarities between annelids and arthropods.

Ans: Arthropods share certain characteristics with annelids. These include:

- (1) The body is divided into segments.
- (2) Both have jointed appendages.

Q:209 Write the four names of harmful insects.

Ans: The harmful insects are: Anopheles, Tse-tse fly of Africa, fleas and lice.

Q:210 What is moulting or ecdysis? How is it beneficial to arthropods?

Ans: **Moulting:**

The process of shedding skeleton is called moulting or ecdysis.

Benefit:

In the young arthropods as in the insect larvae, skeleton is shed from time to time, allowing growth of the larva.

Q:211 Differentiate between closed and open circulatory systems.

Ans:

Open Circulatory System	Closed Circulatory System
A system in which whole blood comes out of the blood vessels, bathes the body organs and then returned to the heart is called open circulatory system.	A system in which a circulatory fluid called blood flows in a network of vessels known as blood never comes out of the vessels is called closed circulatory system.
For example in a thropods	For example annelids and chordates

PAST PAPERS QUESTIONS

- Q.216 What are the harms caused by insects? (GRW 2017)
- Q.217 How does metamorphosis occur in arthropoda? (GRW 2017)
- Q.218 What is metamorphosis? Give its three stages. (BWP 2017)
- Q.219 Name two beneficial insects. (RWP 2017)
- Q.220 Give the names of four harmful insects. (SWL 2017)
- Q.221 What are the harms caused by insects? (GRW 2017)
- Q.222 How does metamorphosis occur in arthropoda? (GRW 2017)
- Q.223 What is meant by arachnida, give its two features? (LHR 2018)
- Q.224 Define metamorphosis and nymph. (GRW 2018)
- Q.225 What are Tetrapoda? (GRW 2018)
- Q.226 How insects are beneficial to man? (GRW 2019)
- Q.227 Write a short note on ecdysis or moulting. (GRW 2019)
- Q.228 Give two common characters of Annetids and Arthropods. (MTN 2019)
- Q.229 What are harmful effects of insects? (MTN 2019)
- Q.230 How complete metamorphosis is different from incomplete metamorphosis? (DGK 2019)
- Q.231 Comment on the metamorphosis is different from incomplete metamorphosis? (DGK 2019)
- Q.232 Write are Beneficial Insects? (BWP 2019)
- Q.233 What is nymph? (FSD 2019)
- Q.234 Write two beneficial properties of insects. (MUL 2021)
- Q.235 Define metamorphosis. (DGK 2021, LHR 2021)
- Q.236 Enlist two beneficial insects (DGK 2021)
- Q.237 Why Annelida and arthropods are considered having same organ? (RWP 2021)
- Q.238 What is metamorphosis? (LHR 2017, SGI 2022,)
- Q.239 What do you know about harmful insects? (LHR 2022)
- Q.240 Define Moulting. (SWL 2022)
- Q.241 What do you know about locusts? (SWL 2022)
- Q.242 How respiration occurs in Arthropods? (BWP 2022)
- Q.243 Differentiate between complete and incomplete metamorphosis. (BWP 2022)

Mollusca

KIPS QUESTIONS

Q.244 What is mantle?

Ans: In molluscs, the body is covered by a glandular epithelial envelope called mantle, which secretes calcareous shell.

Q.245 Describe two main characters of Molluscs.

Ans:

- (1) Molluscs are a diverse group of triploblastic bilaterally symmetrical coelomates that constitute the second largest phylum of invertebrates.
- (2) The body is unsegmented, soft and covered by a calcareous protective shell secreted by glandular epithelial envelope called mantle.

Q.246 What is the economic importance of mollusca?

Ans: Most molluscs are beneficial; however some mollusks are indirectly harmful.

- (1) Molluscs such as clams, oysters and mussels are source of food.
- (2) The shells of freshwater mussel are used in button industry.
- (3) The shells of oysters are mixed with tar for making roads.
- (4) Some oysters produce valuable pearls.
- (5) Molluscs like slugs and shipworms are harmful. Slugs eat leaves and destroy plants by cutting their roots and stems. A ship worm (*Teredo*) damages wooden parts of ships.

Q.265 Differentiate between haemoglobin and haemocyanin.

Ans:

HAEMOGLOBIN	HAEMOCYANIN
Haemoglobin is a respiratory pigment red in colour, found in the blood of annelids and chordates	Haemocyanin is also a respiratory pigment blue in colour, present in the blood of molluscs.

Q.266 Differentiate between cephalopoda and cephalochordate.

Ans:

CEPHALOPODA	CEPHALOCHORDATA
Cephalopods are bilaterally symmetrical molluscs with dorsoventral body. The shell is much reduced and internal	Cephalochordata is sub-phylum of Phylum Chordata in which notochord and nerve cord extend along the entire length of the body and persist throughout life.
For example <i>Loligo</i> , <i>Octopus</i> etc.	For example <i>Amphioxus</i> .

Q.247 What is radula?

Ans: In the mouth cavity of many molluscs there is a rasping tongue-like radula provided with many horny teeth.

PAST PAPERS QUESTIONS

- Q.248** What are gastropods? (GRW 2017)
- Q.249** What is haemocyanin? (GRW 2018)
- Q.250** Give two beneficial roles of Mollusca. (GRW 2018)
- Q.251** Differentiate between gastropods and cephalopods. (LHR 2018)
- Q.252** Define mantle. (SWL 2019)
- Q.253** What is Mantle? (MTN 2019)
- Q.254** Differentiate between mantle and radula. (SWL 2021)
- Q.255** What is radula? (, SGI 2018, FSD 2019, MTN 2021)
- Q.256** What is radula and in which phylum it is present? (FSD 2017, DGK 2021)
- Q.257** What is Mantle? In which phylum it is present (BWP 2021)
- Q.258** Describe economic importance of phylum Mollusca. (MTN 2022)
- Q.259** Give economic importance of mollusca. (FSD 2022)
- Q.260** Give name and harms of any two harmful Molluscs. (BWP 2022)

ECHINODERMATA**KIPS QUESTIONS**

Q.261 Name the phylum of starfish.

Ans: Starfish is included in phylum Echinodermata

PAST PAPERS QUESTIONS

- Q.262** Name two larvae found in Echinoderms (DGK 2017)
Q.263 How are Echinoderms related to hemichordates? (MTN 2017)
Q.264 What is regeneration, give its importance? (LHR 2018)
Q.265 Write down affinities of echinoderms with hemi-chordates. (LHR 2018)
Q.266 How madrepora is important? (LHR 2019)
Q.267 Give some affinities of Echinoderms with hemichordates (RWP 2019, RWP 2021)
Q.268 Define the term regeneration and name animal which exhibit it. (FSD 2022)

CHORDATA**KIPS QUESTIONS**

Q.269 What are three fundamental features of chordates?

Ans: All chordates possess three basic characters which are as follows:

- (1) All possess notochord.
- (2) All have central nervous system that is dorsal in position and hollow.
- (3) They develop paired gill openings in embryonic stage.

Q.270 Give two fundamental characters of chordates.

Ans:

- (1) All chordates possess notochord.
- (2) All chordates have central nervous system that is dorsal in position and is hollow.

Q.271 Differentiate between acraniata and craniata.

Ans:

Acraniata	Craniata
Brain case or skull is absent in these animal	Brain case or skull is present in these animal
Example: Amphioxus	Example: Reptiles, mammals

PAST PAPERS QUESTIONS

- Q.272** Differentiate between anamniotes and amniotes. (DGK 2017)
Q.273 Give three basic characteristics of chordates. (LHR 2017)
Q.274 Give three basic characters of chordates. (RWP 2017)
Q.275 Differentiate between coelomates and acoelomates. (LHR 2018)
Q.276 Differentiate between diploblastic and triploblastic animals. (LHR 2018)
Q.277 Write down affinities of echinoderms with hemi-chordates. (LHR 2018)
Q.278 What are anamniotes and amniotes? (GRW 2019)
Q.279 Name two super classes of vertebrates. Give example. (LHR 2021)
Q.280 Give three basic characters of chordates with examples. (MTN 2022)
Q.281 Differentiate between amniotes and Anamniotes. Give example. (RWP 2022)
Q.282 What are urchordate? (SGI 2022)
Q.283 Enlist three basic characteristics of chordate. (SWL 2017 SGI 2022)
Q.284 What are tunicates? (MTN 2019)
Q.285 Write down three basic characteristics of Chordates. (BWP 2019, SWL2021)
Q.286 Write two fundamental character of chordates (MTN 2021)
Q.287 Write down two characteristics of chordata. (DGK 2021)
Q.288 What is Notochord? Write down its function. (BWP 2021, RWP 2022)

PICES**KIPS QUESTIONS****Q.267** How swim bladder helps in locomotion of fishes?

Ans: This is sac-like structures found in most bony fishes except a few, it may or may not be connected to pharynx. It is mainly a hydrostatic organ & can change the gravity of fish by filling itself with gas. The fish can thus float high or sink lower in water. The gases that fill the swim bladder are either oxygen, carbon dioxide and nitrogen and may be secreted by the gland in the swim bladder itself.

Q.289 Give the economic importance of sharks.**Ans:**

- They destroy fish, lobsters and crabs.
- Sharks are used as food in some parts of the world.
- The oil from the liver of sharks is extracted. This oil has Vitamin A and (d) so it is used in medicines.
- The skin of sharks is used for making articles.

PAST PAPERS QUESTIONS

- Q.290** Give economic importance of Shark. (Two points). (RWP 2017)
- Q.291** How sharks are economically important? (SGD 2017)
- Q.292** Write down function of swim bladder. (MTN 2017)
- Q.293** Write down any four characteristics of class osteichthyes (bony fishes). (DGK 2017)
- Q.294** Write down some general characteristics of class chondrichthyes. (LHR 2019)
- Q.295** Give two uses of sharks. (MTN 2019)
- Q.296** What is swim bladder? Give its function. (MTN 2019)
- Q.297** Give function of Swirn Bladder and sources of Gases in it. (BWP 2019)
- Q.298** Write economic importance of sharks. (MTN 2021)
- Q.299** What is swim bladder? Give its function. (RWP 2021)
- Q.300** Write any four characters of class Osteichthyes (Bony fish) (LHR 2021)
- Q.301** Give four characteristics of bony fishes. (GRW 2021)
- Q.302** Give two difference between osteopathy and chondriticyes. (SWL 2022)
- Q.303** What is swim bladder? In which fishes it is found? (SGI 2022)

AMPHIBIANS**PAST PAPERS QUESTIONS**

- Q.304** Give two characteristics of class Amphiba. (RWP 2017)
- Q.305** Why amphibians were not successful on land? (RWP 2017)
- Q.306** Write down the characteristics of amphibians. (LHR 2021)

REPTILES**PAST PAPERS QUESTIONS**

- Q.307** Give any four characteristics of reptilian. (MTN 2017)
- Q.308** Write similarities of birds and reptiles. (LHR 2019)
- Q.309** What is archaeopteryx? Give its two characters (LHR 2017, LHR 2021)

AVES-BIRDS**KIPS QUESTIONS****Q.310** What do you know about *archaeopteryx*?

Ans: The earliest known bird fossil is that of *archaeopteryx*, two species of which have been found from rocks of Jurassic period of earth's history. It was about the size of a crow with skull similar to that of present day birds. It has bony teeth in the jaw socket. Jaws extended into a beak and there was a long tail. Each wing had three claws. These birds showed resemblance to the dinosaurs (giant reptiles of the past).

PAST PAPERS QUESTIONS

Q.311 What are running birds? Give examples.

(LHR 2021)

Q.312 What is syrinx?

(MTN 2021)

Q.313 What is syrinx and where it is situated?

(DGK 2021)

MAMMALIA**KIPS QUESTIONS**

Q.314 Give names of any two sub-classes of mammalian.

Ans: Class Mammalia can be sub-divided into three sub-classes:

- a. Prototheria,
- b. Metatheria
- c. Eutheria.

Q.315 What is placenta?

Ans: Placenta is a structure found in eutherians (placental mammals) through which the foetus is nourished. It has an endocrine function as well and produces certain hormones.

Q.316 Give two examples of sub-class Metatheria.

Ans:

- i. Opossum
- ii. Kangaroo
- iii. Tasmanian wolf

PAST PAPERS QUESTIONS

Q.317 Write down four exclusive characters of mammals.

(SGD 2017)

Q.318 Give any four characteristics of mammals.

(DGK 2017)

Q.319 What is Marsupium?

(RWP 2017)

Q.320 What is placenta?

(RWP 2017)

Q.321 What are Marsupials?

(BWP 2019)

Q.322 Give two important characteristics of mammals.

(RWP 2021, RWP 2019)

Q.323 Define placenta. What is its function?

(RWP 2021, BWP 2021, MTN 2021)

Q.324 How mammals have evolved from reptilian ancestors?

(LHR 2021)

Q.325 Give four diagnostic characters of mammals.

(LHR 2022)

Q.326 Write four characteristics of mammals.

(FSD 2022)

Q.327 Name the bones present in human ear.

(DGK 2022)