

ZOOLOGY, PAPER-I

**FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION FOR
RECRUITMENT TO POSTS IN BPS-17 UNDER
THE FEDERAL GOVERNMENT, 2010**

Roll Number

ZOOLOGY, PAPER-I

TIME ALLOWED:	(PART-I) 30 MINUTES	MAXIMUM MARKS:20
	(PART-II) 2 HOURS & 30 MINUTES	MAXIMUM MARKS:80

- NOTE: (i) First attempt PART-I (MCQ) on separate Answer Sheet which shall be taken back after 30 minutes.**
(ii) Overwriting/cutting of the options/answers will not be given credit.

PART – I (MCQ)
(COMPULSORY)

Q.1. Select the best option/answer and fill in the appropriate box on the Answer Sheet. (20)

- (i) Chano cysts are found in?
 (a) Coelentrate (b) Annelida (c) Porifera
 (d) Arthropoda (e) All of these
- (ii) House fly is a common insect having _____ legs.
 (a) 4 (b) 6 (c) 8 (d) None of these
- (iii) Silver fish is included in:
 (a) Pisces (b) Arthropoda (c) Annelida (d) None of these
- (iv) Number of vertebrae in neck of a giraffe are:
 (a) 10 (b) 5 (c) 7 (d) None of these
- (v) Flame cell is typical of:
 (a) Annelida (b) Chordata (c) Porifera (d) Platyhelminthes
 (e) None of these
- (vi) Nervous system originates from:
 (a) Epidermis (b) Mesodermis (c) Endodermis (d) None of these
 (e) All of these
- (vii) Mammals are characterized by:
 (a) Mammary Glands (b) Hair (c) All of these (d) None of these
- (viii) Nucleus is not present in RBC of:
 (a) Fish (b) Snake (c) Bird (d) Mammal
 (e) None of these
- (ix) Scales in fish derive their origin from:
 (a) Epidermis (b) Mesodermis (c) Endodermis (d) None of these
- (x) Sound in insect is produced through:
 (a) Mouth (b) Tracheal movements (c) Wing beat (d) None of these
- (xi) Sole of foot in man has _____ location:
 (a) Dorsal (b) Ventral (c) lateral (d) None of these
- (xii) Coelome in adult mammals is represented by:
 (a) Visceral cavity (b) Cavity in brain (c) Both of these (d) None of these
- (xiii) The Skelton in insects is:
 (a) Exoskeleton (b) Endoskeleton (c) None of these (d) Both of these

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- (xiv) Sea horse is included in:
(a) Mammals (b) Fish (c) Reptiles (d) None of these
- (xv) Circulatory system is open type in:
(a) Annelida (b) Insecta (c) Mammals (d) None of these
- (xvi) The body cavity is regarded as pseudocoel in Nematodes because:
(a) Has ectodermal origin
(b) Not completely lined by Mesodermal epithelium
(c) Has endodermal origin
(d) None of these
(e) All of these
- (xvii) True metaneric segmentation is characteristic of:
(a) Molluses (b) Annelida (c) Arthropoda (d) None of these
- (xviii) Hollow dorsal nervous system is present in:
(a) Amphioxus (b) Fish (c) Mammals (d) None of these
(e) All of these
- (xix) Contractile vacuole in protozoa is mainly responsible for:
(a) Excretion (b) Osmoregulation (c) respiration (d) None of these
- (xx) Scorpion is included in:
(a) Insecta (b) Arachnida (c) Echinodermata (d) None of these

PART – II

NOTE:	<p>(i) PART-II is to be attempted on the separate Answer Book.</p> <p>(ii) Attempt ONLY FIVE questions from PART-II, selecting THREE questions from SECTION-I and TWO from SECTION-II. All questions carry EQUAL marks.</p> <p>(iii) Be precise in your answers and draw labelled diagrams, wherever required.</p> <p>(iv) Extra attempt of any question or any part of the attempted question will not be considered.</p>
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SECTION – I

- Q.2.** (a) “A protozoan cell is not equal to a cell of multicellular organism”. Discuss the statement. (8)
(b) “Sponges are at colonial level of cellular organization”. Justify the statement. (8)
- Q.3.** (a) How will you differentiate between corals and coral reefs? How are different types of coral reefs formed? (3+7)
(b) Discuss parasite adaptation with special reference to platyhelminthes. (6)
- Q.4.** (a) Define metameric segmentation. Explain with reference to Annelida. (2+6)
(b) Discuss metamorphosis with reference to insects. (8)
- Q.5.** Write short notes on: (16)
(i) Echinoderm affinity (ii) Shell in Mollusca (iii) Importance of Nematodes (4+4+4+4)
(iv) Polymorphism – coelentrata

SECTION – II

- Q.6.** (a) Discuss Amphioxus as a complete chordate. (8)
(b) “Hemichordates have both chordate and non-chordate character”. Justify. (8)
- Q.7.** (a) Discuss evolution of heart in different chordate groups. (8)
(b) Give a brief account of embryonic membranes. (8)
- Q.8.** (a) Define biological migration. Discuss the phenomenon with reference to birds. (8)
(b) “Birds are said to be glorified reptiles”. Justify the statement. (8)
- Q.9.** Write short notes on: (16)
(a) Scales in Fishes (b) Exoskeleton in mammals (4+4+4+4)
(c) Feathers in Birds (d) Desert adaptations in Reptiles
