# FEDERAL PUBLIC SERVICE COMMISSION



## COMPETITIVE EXAMINATION FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT, 2011

Roll Number

## **ZOOLOGY, PAPER-I**

TIME ALLOWED:		(PART-I MCQs)	30 MINUTES	<b>MAXIMUM MARKS: 20</b>						
THREE HO	URS	(PART-II)	2 HOURS & 30 MINUTES	<b>MAXIMUM MARKS: 80</b>						
NOTE: (i)	First attempt PART-I (MCQs) on separate Answer Sheet which shall be taken back after 30									
	minutes	S.								
(ii) Overwriting/cutting of the options/answers will not be given credit.										

#### (PART-I MCQs) (COMPULSORY)

				(1 AK1-1 M)	$\mathcal{L}(\mathbf{S})$	COMI OLSOKI	<u>. )</u>					
Q.1.	S	elect the best opti	ion/an	swer and fill in the	appı	opriate box on th	ne <b>Ansv</b>	wer Sheet.	(1 x 2	0=20)		
(i)	The	e disease causing	protoz	zoan is:								
	(a)	Amoeba	(b)	Paramecium	(c)	Stentor	(d)	Trypanosoma	(e)	None of these		
(ii)	Bin	ucleate protozoar	ı is:									
	(a)	Mastigo-amoeb	a (	(b) Toxoplasma	(c)	Didymium (d)	Trick	nonympha	(e)	None of these		
(iii)	Spicules in sponges are secreted by cells called:											
	(a)	Chromocytes	(b)	Thesocytes	(c)	Scleroblasts	(d)	Spongoblast	(e)	None of these		
(iv)	Which one of the following coelenterate is also called Portuguese-man of war:											
	(a)	Hydra	(b)	Velella	(c)	Obelia	(d)	Physalia	(e)	None of these		
(v)	Pse	udocoelomate an	imals	are:								
	(a)	Coelenterates	(b)	Nematodes	(c)	Annelids	(d)	Arthropods	(e)	None of these		
(vi)	Ear	th worm belongs	to:									
	(a)	Phylum platyhelm	ninthe	s (b) Nematode	)	(c) Mollusca	(d)	Arthropoda	(e)	None of these		
(vii)	The number of arms in octopus is:											
	(a)	Four	(b)	Six	(c)	Eight	(d)	Ten	(e)	None of these		
(viii)	The excretor organ of cockroach is:											
	(a)	Flame cell	(b)	Nephridia	(c)	Coxal gland	(d)	Green gland	(e)	None of these		
(ix)	The	The compound eyes are present in:										
	(a)	Cuttle fish	(b)	Sea urchin	(c)	Sea mouse	(d)	Honey bee	(e)	None of these		
(x)	Balanoglossus belongs to:											
	(a)	Hemichordata	(b)	Cephalochordata	(c)	Urochordata	(d)	Craniata	(e)	None of these		
(xi)	The											
	(a)	Elasmobranchi	(b)	Placodermi	(c)	Osteichthyes	(d)	All of these	(e)	None of these		
(xii) The type of scales found in shark is:												
	(a)	Placoid scale	(b)	Ganoid scale	(c)	Cosmoid scale	(d)	Cycloid scale	(e)	None of these		
(xiii)	All	All of the following animals have three chamber heart except:										
	(a)	Uromastix	(b)	Snake	(c)	Wall lizard	(d)	Crocodile	(e)	None of these		
(xiv)	An	An animal group having radially symmetrical adults but bilaterally larvae are:										
	(a)	Annelids	(b)	Echinoderm	(c)	Chordates	(d)	All of these	(e)	None of these		

#### **ZOOLOGY, PAPER-I** (xv) Which one of the following is not an extra embryonic membranes? None of these (a) Pleura Amnion Chorion (d) Allontoise (b) (c) (e) (xvi) The egg laying mammals such as Duck billed platypus and spiny anteater are found in: South America None of these (a) Asia (b) North America (c) (d) Australia (e) (xvii) Renal portal system is absent in: None of these (a) Mammals Reptiles (b) Fish (c) Amphibian (d) (e) (xviii) Swim bladder is present in: Giant turtle All of these None of these (a) Amphibia (b) (c) Sea snake (d) (e) (xix) Diencephalons is a part of: (a) Circulatory system (b) Excretory system (c) Nervous system (d) None of these Respiratory system (e) (xx) Microlecithal egg is found in: All of these None of these (a) Reptiles (b) **Birds** (c) Amphibian (d) (e) **PART-II** NOTE:(i) **PART-II** is to be attempted on separate Answer Book. Attempt ONLY FOUR questions from PART-II, selecting TWO questions from each (ii) **SECTION.** All questions carry EQUAL marks. (iii) Extra attempt of any question or any part of the attempted question will not be considered. **SECTION - I** Q.2. (a) Describe reproduction in paramecium. (10)Explain the different kinds of spicules in ponfera. **(b)** (10)Discuss polymorphism in coelenterates. Q.3. (a) (10)Explain the life cycle of obelia.. **(b)** (10)Q.4. What are platehelminths. (10)(a) Describe the life cycle of any medically important platehelminths. **(b)** (10) $(5 \times 4 = 20)$ Q.5. Write short notes on: Mouth parts of insects. Metamerism **(b)** (a) (c) Foot in Mollusca (d) Larvae of Echinoderm. SECTION – II Q.6. (a) Give an account of arterial system of pigeon. (10)**(b)** Explain hepatic portal system. (10)**Q.7.** (a) What is Gastrulation? Describe gastrulation in frog. (10)Write an essay on parental care in Mammals. (10)**(b)** $(5 \times 4 = 20)$ Write short notes on the following: Q.8. Hairs in Mammals Development of bone (a) **(b)**

\*\*\*\*\*\*

Egg types.

**(d)** 

(c)

Fish migration