



**FEDERAL PUBLIC SERVICE COMMISSION**  
**COMPETITIVE EXAMINATION-2020**  
**FOR RECRUITMENT TO POSTS IN BS-17**  
**UNDER THE FEDERAL GOVERNMENT**

Roll Number

**ZOOLOGY**

<b>TIME ALLOWED: THREE HOURS</b>	<b>PART-I (MCQS)</b>	<b>MAXIMUM MARKS = 20</b>
<b>PART-I(MCQS): MAXIMUM 30 MINUTES</b>	<b>PART-II</b>	<b>MAXIMUM MARKS = 80</b>
<p><b>NOTE: (i) Part-II is to be attempted on the separate Answer Book.</b></p> <p><b>(ii) Attempt ONLY FOUR questions from PART-II. ALL questions carry EQUAL marks.</b></p> <p><b>(iii) All the parts (if any) of each Question must be attempted at one place instead of at different places.</b></p> <p><b>(iv) Write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper.</b></p> <p><b>(v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.</b></p> <p><b>(vi) Extra attempt of any question or any part of the question will not be considered.</b></p>		

**PART-II**

- Q. No. 2.** Explain in detail the circulation, gas exchange and temperature regulation in reptiles. **(20)**
- Q. No. 3.** Describe various hormones of the mammalian adrenal gland with their functions. **(20)**
- Q. No. 4.** Write a detailed account on maintenance functions of class Arachnida. **(20)**
- Q. No. 5.** Define linked genes. Explain in detail the inheritance of X-linked recessive genes. **(20)**
- Q. No. 6.** Explain the body wall, digestion, nervous system and sensory organs of flat worms. **(20)**
- Q. No. 7.** How does excretion and osmoregulation occur in mammals? **(20)**
- Q. No. 8.** Write short notes on any **FOUR** of the following: **(05 each) (20)**
- (a)** Hardy-Weinberg theorem
  - (b)** Sedimentary cycle
  - (c)** Metamerism
  - (d)** Mechanism of neuron action
  - (e)** Invertebrate sensory receptors
  - (f)** Gas exchange in Mammals

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