



**FEDERAL PUBLIC SERVICE COMMISSION**  
**COMPETITIVE EXAMINATION-2021**  
**FOR RECRUITMENT TO POSTS IN BS-17**  
**UNDER THE FEDERAL GOVERNMENT**  
**ZOOLOGY**

Roll Number

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

**PART-II**

- Q. No. 2.** Explain X-linked inheritance with the description of hemophilia disease in humans. (20)
- Q. No. 3.** Describe cellular processes that occur in various phases of cell cycle. (20)
- Q. No. 4.** How the theory of evolution was incorporated into the science of Taxonomy? (20)
- Q. No. 5.** Discuss the evidence that link hemichordate with chordate animals. (20)
- Q. No. 6.** Discuss the integumentary system in invertebrates. (20)
- Q. No. 7.** How evolution is reflected in body plans of animal kingdom? (20)
- Q. No. 8.** Explain the action of hormones on membrane bound and nuclear receptors. (20)

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