



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

Roll Number

GEOLOGY

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

PART – II
SECTION – I

- Q. No. 2.** Differentiate between weathering, erosion and transportation. Elaborate the various agents and types of weathering. **(20)**
- Q. No. 3.** What are lithostratigraphic and chronostratigraphic unit? Discuss the various laws of stratigraphy. **(20)**
- Q. No. 4.** Explain isomorphism and polymorphism through examples. Give a detailed account of classification of silicate minerals. **(20)**
- Q. No. 5.** Differentiate between lineation and foliation. Discuss various structural controls on the mechanical properties of materials. **(20)**

SECTION-II

- Q. No. 6.** Differentiate between eustatic and relative sea level curve. Discuss the relationship between eustasy, accommodation space and sedimentation. **(20)**
- Q. No. 7.** Differentiate between hydrocarbon source and reservoir rocks. Elaborate the various trapping mechanisms of hydrocarbons. **(20)**
- Q. No. 8.** Write short notes on any TWO of the following: **(10 each)** **(20)**
- (a)** Coal rank and coal series.
- (b)** Geological controls on the selection of mega dam sites.
- (c)** Occurrences of Radioactive deposits in Pakistan.
