



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 30 MINUTES	PART-I (MCQS) MAXIMUM MARKS = 20 PART-II MAXIMUM MARKS = 80
NOTE: (i) Part-II is to be attempted on the separate Answer Book. (ii) Attempt ONLY FOUR questions from PART-II by selecting TWO questions from EACH SECTION. 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
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 eustacy, 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.
