FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION FOR
RECRUITMENT TO POSTS IN BS-17
UNDER THE FEDERAL GOVERNMENT, 2015

GEOLOGY, PAPER-I

TIME ALLOWED: THREE HOURS	PART-I (MCQS)	MAXIMUM MARKS = 20
PART-I(MCQS): MAXIMUM 30 MINUTES	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. 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) Candidate must 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 attempted question will not be considered.

PART-II

Q. No. 2. Discuss compositional variations between the end members and describe substitutions of the major cations in the feldspars, pyroxenes and olivines. **(20)**

Q. No. 3. Discuss the Primary clastic structures in sedimentary rocks. **(20)**

Q. No. 4. Explain the relationship between magma chemistry and the production of pyroclastic material and discuss the classification of pyroclastic rocks. **(20)**

Q. No. 5. What processes cause the origination of flood plains and how do they contribute to the development of floodplains? Also compare and contrast the Depositional and Erosional Terraces. **(20)**

Q. No. 6. Describe the nature of contacts in the stratigraphic record. Also discuss the types of grain size trends associated with transgression and regression. **(20)**

Q. No. 7. Discuss the Barrovian type metamorphism with the example from Indian plate margin in Kaghan valley. **(20)**

Q. No. 8. Write notes on any **TWO** of the following: **(10 each) (20)**
    (a) Fauna of Permean Sequence of Salt Range
    (b) Ditrigonal Scalenohedral Class or Calcite type.
    (c) Sites of magma generation on the basis of tectonic setting

****