



**FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION-2017
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
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) 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
SECTION-I**

- Q. No. 2.** Describe structure of neso silicates. Also draw its sketch. Narrate physical and optical properties of olivine group of minerals. (20)
- Q. No. 3.** Describe development of different types of metamorphic facies during subduction process. With the help of temperature-pressure diagram, elaborate regimes of metamorphic facies. (20)
- Q. No. 4.** What categories of information we depict from the fossils found in sedimentary strata? Give examples. Describe some of common processes of fossilization. (20)
- Q. No. 5.** Outline important events of Indian Plate drift and subsequent tectonics from Mesozoic onwards in Pakistan region. Draw sketches. (20)

SECTION-II

- Q. No. 6.** Enlist methods of surface and near surface prospecting methods of oil and gas. Describe implementation details of any two methods, leading to successful discovery of hydrocarbon in a region. (20)
- Q. No. 7.** Discuss the geological conditions that normally trigger land sliding in northern Pakistan. Describe some of the measures to mitigate its effects. (20)
- Q. No. 8.** Write notes on any **TWO** of the following: (10 each) (20)
- a. Polarizing microscope
 - b. Paleobotany
 - c. Geothermal energy
