



PUNJAB PUBLIC SERVICE COMMISSION
COMBINED COMPETITIVE EXAMINATION
FOR RECRUITMENT TO THE POSTS OF
PROVINCIAL MANAGEMENT SERVICE, ETC-2021
CASE NO. 3C2022

SUBJECT: GEOLOGY (PAPER-I)

TIME ALLOWED: THREE HOURS

MAXIMUM MARKS: 100

NOTE:

- i. All the parts (if any) of each Question must be attempted at one place instead of at different places.
- ii. Write Q. No. in the Answer Book in accordance with Q. No. in the Q. Paper.
- iii. No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
- iv. Extra attempt of any question or any part of the question will not be considered.

NOTE:

Attempt Five Questions in all. Attempt in Urdu or English.
Where necessary, use neat sketches to elaborate the answers

Q No. 1: Define faults and discuss the ways they can be classified. Also differentiate between slickensides and fault breccia.

(20 Marks)

Q No. 2: What parameters are most commonly used to characterize the structure of paleo-communities, and which of these parameters are likely to be influenced by Taphonomic Processes?

(20 Marks)

Q No. 3: Describe in detail about sedimentary facies and their role in understanding depositional environments.

(20 Marks)

Q No. 4: What is unconformity? What are the three types of unconformities and how do they form?

(20 Marks)

Q No. 5: Describe the following
i- Magmatic ore deposits
ii- Polymorphism and crystal habit

(10+10=20 Marks)

Q No. 6: Define the different types of rocks. Discuss the mineral composition, texture, origin, and uses of Granite, Limestone, Marble and Schist.

(20 Marks)

Q No. 7: Differentiate between rare earth and trace elements. Discuss about the significance of rare earth elements in understanding geochemical evolution of mantle and crust.

(20 Marks)

Q No. 8: Write a short note on the following:

(4 x 5 = 20 Marks)

- i- Interior of the Earth
- ii- Nebular Hypothesis
- iii- Physical Properties of Minerals
- iv- Applications of GIS in Geology