



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

**SUBJECT: GEOLOGY (PAPER-II)**

**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 any FIVE Questions in all. Attempt in Urdu or English.**

- Q No. 1:** Discuss Geology of the Permian Sequence of the Salt Range of the Pakistan? **(20 Marks)**
- Q No. 2:** Define basin? Describe different types of basin margins with examples? **(20 Marks)**
- Q No. 3:** Describe the following: **(10+10=20 Marks)**
- a. Internal structure of Earth
  - b. Remote sensing and GIS significance in geology
- Q No. 4:** What is fault and its framework? Explain it with the help of sketches. Discuss Different types of faults and their characteristic features? **(20 Marks)**
- Q No. 5:** Explain the classification of sandstone and their characteristic features? **(20 Marks)**
- Q No. 6:** What is continental drift theory? Explain it with the help of different evidences? **(20 Marks)**
- Q No. 7:** Define Dam and its types? Discuss geological investigations for the selection of a dam-site? **(20 Marks)**
- Q No. 8:** Write short notes on following: **(5X4=20 Marks)**
- a. Cross bedding
  - b. Geothermal energy
  - c. Igneous rocks
  - d. landslides