



**PUNJAB PUBLIC SERVICE COMMISSION**  
**COMBINED COMPETITIVE EXAMINATION**  
**FOR RECRUITMENT TO THE POSTS OF**  
**PROVINCIAL MANAGEMENT SERVICE -2020**

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

**TIME ALLOWED: THREE HOURS**

**MAXIMUM MARKS: 100**

**NOTE:**

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

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

- Q No. 1:** Describe the theories regarding the Origin of Earth, also describe the Internal Structure of the Earth. **(20 Marks)**
- Q No. 2:** Define Drainage Pattern and discuss different types of drainage patterns. **(20 Marks)**
- Q No.3:** Describe the followings, **(20 Marks)**  
a) Earth Satellite Systems for remote sensing  
b) Principles of Stratigraphy
- Q No. 4:** Describe the scientific reasons for climate changing phenomenon and discuss the theories regarding climate change. **(20 Marks)**
- Q No. 5:** Describe fossil, fossilization and discuss the modes of fossil preservation. **(20 Marks)**
- Q No. 6:** Differentiate between fracture and joint, and describe the Genetic Classification of Joints. **(20 Marks)**
- Q No.7:** Define Igneous Rocks and describe the classification of Igneous Rocks, with examples, on the basis of chemical composition. **(20 Marks)**
- Q No. 8:** Write notes on the followings:- **(4x5=20 Marks)**  
a) Dam site investigation  
b) Uranium and Strategic metals  
c) Clastic Sedimentary Rocks  
d) Geothermal Energy