

III B. Tech I Semester Supplementary Examinations, May -2019

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)2. Answering the question in **Part-A** is compulsory3. Answer any **THREE** Questions from **Part-B**

~~~~~

**PART -A**

- |   |    |                                                           |      |
|---|----|-----------------------------------------------------------|------|
| 1 | a) | What is the importance of physical geology?               | [3M] |
|   | b) | What is erosion?                                          | [3M] |
|   | c) | What are the types of forms?                              | [4M] |
|   | d) | What is water table?                                      | [4M] |
|   | e) | What are the parameters, principle in electrical methods? | [4M] |
|   | f) | What are the causes of landslides?                        | [4M] |

**PART -B**

- |   |    |                                                                                                      |       |
|---|----|------------------------------------------------------------------------------------------------------|-------|
| 2 | a) | What is weathering?                                                                                  | [4M]  |
|   | b) | Explain the process of weathering.                                                                   | [8M]  |
|   | c) | What are the geological agents?                                                                      | [4M]  |
| 3 | a) | What is metamorphism?                                                                                | [3M]  |
|   | b) | Explain the types of metamorphism, based on temperature, pressure and chemical active fluids.        | [8M]  |
|   | c) | What is structure of metamorphic rock?                                                               | [5M]  |
| 4 | a) | Define the term strike, dip and outcrop.                                                             | [6M]  |
|   | b) | What are the parts of faults? Give their types of faults with sketches.                              | [10M] |
| 5 | a) | What are the types of earthquakes? Give their details.                                               | [8M]  |
|   | b) | Explain the construction of building in earthquake prone areas.                                      | [8M]  |
| 6 | a) | What are the branches of geophysics?                                                                 | [6M]  |
|   | b) | Explain the civil engineering importance of electrical resistivity method of profiling and sounding. | [10M] |
| 7 | a) | What are the purposes of tunnels?                                                                    | [6M]  |
|   | b) | Explain the association of geological structures for successful tunneling.                           | [10M] |

\*\*\*\*\*