Total No. of Questions—8]

[Total No. of Printed Pages—3

| Seat |  |
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[4757]-1008

## S.E. (Civil Engineering) (Second Semester) EXAMINATION, 2015 ENGINEERING GEOLOGY (2012 PATTERN)

Time: Two Hours

Maximum Marks: 50

- **N.B.** :— (i) Write the answers to any four questions in a single answerbook.
  - (ii) Neat diagrams must be drawn wherever necessary.
  - (iii) Figures to the right indicate full marks.
  - (iv) Assume suitable data if necessary.
- 1. (a) Explain different forms of Minerals with suitable examples. [6]
  - (b) Describe Civil Engineering significance of foliations of metamorphic rocks. [6]

Or

- 2. (a) What are extrusive and intrusive Igneous bodies? Describe various Discordant Igneous intrusive bodies with neat diagrams.
  - (b) State and explain general principles of Stratigraphy. [6] P.T.O.

| <b>3.</b> | (a)          | What is Fold? Give nomenclature of the FOLD. Describe how           |
|-----------|--------------|---|
|           |              | fold passes into the Fault. [6]                                     |
|           | ( <i>b</i> ) | What are Joints? How do they occur in igneous and metamorphic       |
|           |              | rocks? Describe types of Joints and their Civil Engineering         |
|           |              | significance. [6]   |
|           |              | Or  |
| 4.        | (a)          | What is Rejuvenation ? Explain two features resulting due to        |
|           |              | rejuvenation. [6]   |
|           | (b)          | Write in detail mineral wealth of Gondwana. [6]                     |
| <b>5.</b> | (a)          | What are the geological requirements for the foundation of          |
|           |              | Dam ? [6]   |
|           | (b)          | Describe geological work of groundwater in detail. [7]              |
|           |              | Or  |
| 6.        | (a)          | What is Artesian condition? Explain any three geological conditions |
|           |              | leading to artesian well. [7]                                       |
|           | ( <i>b</i> ) | Describe any three features developed due to marine                 |
|           |              | erosion. [6]  |

- 7. (a) What difficulties you may face while tunnelling through: [7]
  (i) Axial portion of Syncline
  (ii) Dyke crossing the alignment.
  - (b) Define Remote sensing. Enlist elements of Remote Sensing.Explain any two elements. [6]

Or

- 8. (a) What observations and precautions are necessary during Core

  Drilling for Preliminary Geological Exploration ? [7]
  - (b) What is Landslide? What are the causes of it? [6]