Total No. of Questions—8]

[Total No. of Printed Pages—3

| Seat | | , |
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[5152]-510

S.E. (Civil Engineering) (Second Semester) EXAMINATION, 2017 ENGINEERING GEOLOGY (2015 PATTERN)

Time: Two Hours

Maximum Marks: 50

- **N.B.**:— (i) Solve/Write the Answers to any four questions in single answer book only.
 - (ii) Neat diagrams must be drawn wherever necessary.
 - (iii) Figures to the right indicate full marks.
 - (iv) Assume suitable data, if necessary.
- 1. (a) How are sedimentary rocks formed? Explain types of sedimentary deposits with examples. [6]
 - (b) Write note on INTERIOR of THE EARTH.

[6]

Or

- 2. (a) What is Metamorphism? Describe GNEISSOSE and SCHISTOSE texture with neat sketches. [6]
 - (b) What are CLASTIC and NONCLASTIC secondary rocks? Describe CLASTIC texture with neat diagram. [6]
- **3.** (a) Describe any three features developed by RIVER deposition. [6]
 - (b) Why are observations and precautions necessary in the core drilling process? [6]

P.T.O.

| 4. | (<i>a</i>) | Write note on ARCHEANS and DHARWARS. [6] |
|-----------|--------------|--|
| | (<i>b</i>) | How can nature of the rocks be assessed on number of pieces |
| | | present in one RUN ? [6] |
| | | |
| 5. | (a) | Describe any two geological conditions leading to natural |
| | | springs ? [7] |
| | (<i>b</i>) | Write note on feasibility of TUNNELLING through: [6] |
| | (-) | (i) Anticline |
| | | (ii) Syncline. |
| | \ \hat{\chi} | Sylicinic. |
| | | |
| | | |
| 6. | (a) | Explain with appropriate example feasibility of dam alignment |
| | | across a DYKE. [7] |
| | (<i>b</i>) | What is seismology? Explain various seismic waves. Describe |
| | | CIRCUMPACIFIC RING OF FIRE. [6] |
| | | |
| 7. | (a) | What are Natural and Artificial causes of Landslides? Enlist |
| | | measures to prevent landslide. [7] |
| | (<i>b</i>) | What Geological studies are required to be carried out in reservoir |
| | | area of proposed dam site ? [6] |
| | | |
| | | Or Signature of the state of th |
| 0 | | |
| 8. | (a) | What are CORE RECOVERY and RQD? On the basis of the |
| | | further logging data calculate core recovery and RQD. [7] |
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| Run in | Piece No. | Length of | Nature of | Remark | | | |
|--------|-----------|------------|--------------|----------------|--|--|--|
| meters | | each piece | fracture at | | | | |
| | | in em' | lower end | | | | |
| | 1 | 09 | M | Basaltic rocks | | | |
| | 2 | 10 | J | | | | |
| | 3 | 09 | \mathbf{M} | | | | |
| | 4 | 40 | J | 6 | | | |
| (| 5 | 20 | J | | | | |
| | 6 | 34 | J | | | | |
| | 7 | 55 | 3 | | | | |
| W. | 8 | 42 | J S | | | | |
| | 9 | 50 | J | | | | |
| | 10 | 31 | J | | | | |

Describe feasibility of dam in folded areas. Draw neat diagrams. (*b*)

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