Third Semester B.E. Degree Examination, Dec.2018/Jan.2019 Mining Geology - I

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

- What is Mining Geology? Add a note on the role of Geology in Mining Industry. (10 Marks) 1
 - With a neat sketch, Describe the internal structure and composition of earth. b.

(10 Marks)

Explain the geological action of wind. Describe the development of pedestal rock. 2 a.

(10 Marks)

Explain seismic hazards. Describe engineering protection against earth quakes. b.

(10 Marks)

Module-2

Explain the physical properties of minerals. Give example. 3 a.

(10 Marks)

Explain the Quartz group of minerals. b.

(10 Marks)

OR

What are rocks? Explain the types of rocks with examples. a.

(08 Marks)

What is sedimentary rock? Explain the classification of sedimentary rocks based on grain b. size. (12 Marks)

- 5 Briefly explain the physical properties of
 - i) Granite ii) Gabbro
- iii) Dynite iv) Basalt

(20 Marks)

OR

- Describe the physical features of following rocks:
 - i) Sandstone
- ii) Shale
- iii) Gneros
- iv) Marble.

(20 Marks)

Module-4

What is Geological Time Scale?

(10 Marks)

b. What is a fossil? Mention the types of fossil and their uses.

(10 Marks)

OR

Explain Physio-graphic divisions of India.

(10 Marks)

Give an account of the Dharwar group of rocks. Add a note on their economic importance. (10 Marks)

Module-5

With a neat sketch, describe any three Primary Structure noticed in rocks. 9

(10 Marks)

- Write short note on: i) Dip and Strike ii) Compass Clinometers. b.

(10 Marks)

OR

- Explain classification of faults. Add a note on its importance in mining operation. (10 Marks) 10
 - What is unconformity? Explain the different types of unconformity.

(10 Marks)

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.