

B.E. Mining Engineering Fourth Semester  
**MN401 - Mining Geology Paper-II**

P. Pages : 1

Time : Three Hours



**GUG/W/18/1584**

Max. Marks : 80

- Notes :
1. All questions carry equal marks.
  2. Assume suitable data wherever necessary.
  3. Illustrate your answers wherever necessary with the help of neat sketches.

1. Describe various principles of stratigraphy and Geological time scale. **16**

**OR**

2. Describe the distribution, lithology and economic importance of Gondwana group of rocks. **16**

3. Give brief account of the Hydrothermal ore deposits with suitable diagrams. **16**

**OR**

4. Write short notes on : **16**

- a) Residual concentration deposits.
- b) Magmatic ore deposits.

5. What is mineral prospecting ? Describe the electrical resistivity method of geophysical exploration with suitable diagram. **16**

**OR**

6. Differentiate between rock burst and subsidence and discuss the geological characteristics that influence the rock burst and subsidence. **16**

7. Describe hydrological cycle with a suitable sketch add a note on ground water zones with a suitable diagram. **16**

**OR**

8. Distinguish between the following : **16**

- a) Confined and Unconfined aquifers.
- b) Artesian well and Non artesian well
- c) Influent stream and effluent stream
- d) Porosity and permeability

9. What is Remote sensing technique ? Discuss the principle and advantage of remote sensing techniques. **16**

**OR**

10. Write short notes on the following. **16**

- a) Geostationary and Sunsynchronous satellites.
- b) GIS
- c) Digital data products.
- d) Analog data products.

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