



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

1. What do you understand by the principles of stratigraphy? Discuss in brief the standard geological time scale. **16**
- OR**
2. Describe briefly the distribution lithology climate condition and mineral wealth of Gondwana system in India **16**
3. Describe oxidation and supergene sulphide enrichment process of formation of economic minerals deposits. **16**
- OR**
4. Write short notes on following.
 - a) Placer deposits. **8**
 - b) Cavity filling deposits. **8**
5. Describe various geological characteristics influencing subsidence and rock bursts. **16**
- OR**
6. What is Geophysical prospecting? Describe seismic method of geophysical prospecting in detail. **16**
7. Describe the various zones of ground water in the rocks that occurs below the earth surface. Explain aquifer, aquiclude, aquifuge. **16**
- OR**
8. Write short notes on following.
 - a) Confined and unconfined aquifer. **16**
 - b) Hydrological cycle.
 - c) Water table map and their uses.
 - d) Perched water table.
9. What is remote sensing satellite? How the remote sensing is useful in mining operations. **16**
- OR**
10. Discuss the following.
 - a) Analog and digital data products of remote sensing. **8**
 - b) G.I.S and its applications. **8**
