

19. Elaborate physical properties and mode of occurrence of the following economic mineral deposits in India :

- (a) Gypsum
- (b) Monazite
- (c) Steatite
- (d) Gold.

20. Elaborate on the theories of origin of Petroleum resource.

S.No. 15437

MBEGL 2

(For candidates admitted from 2008-2015 Batch)

B.Sc. DEGREE EXAMINATION

APRIL-2022

Part III — Geology — Major Based Elective

ECONOMIC GEOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20)

Answer ALL the questions.

1. What are gangue minerals?
2. What are Geologic thermometers?
3. Define the principles of hydrothermal processes.
4. What are the criteria of replacement deposits?
5. What are eluvial placers?
6. What is Gossan?
7. Define any two uses of Graphite.

8. Define the mode of occurrence of Phosphatic nodules.

9. Define any two uses of copper deposits.

10. Write any two important oilfields of India.

SECTION B — ($5 \times 5 = 25$)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Describe the structural controls of ore localization.

Or

(b) Describe the metallogenetic epochs and provinces.

12. (a) Describe the deposits formed by contact metasomatic process.

Or

(b) Describe the factors that affect the hydrothermal deposits.

13. (a) Explain the sedimentary process of deposition of economic minerals.

Or

(b) Explain the mechanical concentration of economic mineral deposits.

14. (a) Describe the physical properties and chemical composition of Barite.

Or

(b) Describe the mode of occurrence and distribution of magnesite.

15. (a) Explain the mineralogy and mode of occurrence of iron ore deposits of India.

Or

(b) Describe the classification of coal and their uses.

SECTION C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Elaborate on the classification of economic minerals proposed by Bateman

17. Enumerate on the magmatic process of economic mineral deposits.

18. Elucidate on the oxidation and supergene sulphide enrichment deposits.