

**20P252**

(Pages: 2)

Name.....

Reg. No.....

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2021**

(CUCSS - PG)

(Regular/Supplementary/Improvement)

**CC19P GEL2 C06 - ECONOMIC GEOLOGY**

(Applied Geology)

(2019 Admission onwards)

Time: Three Hours

Maximum: 30 Weightage

I. Short Answer Type Questions. Answer any *four* questions. Each question carries 2 weightage.

1. Reserve and Resource.
2. Saprolite.
3. Mineral concession.
4. VMDS ores.
5. Critical minerals of India.
6. Exclusive Economic Zone (EEZ)
7. Gas hydrates.

**(4 × 2 = 8 Weightage)**

II. Short Essay Type questions. Answer any *four* questions. Each question carries 3 weightage.

8. What is an *enrichment factor* of ore? Give the enrichment factor of gold, copper, zinc, molybdenum, iron and tin.
9. Thermometry of ores using fluid inclusions.
10. Differences and similarities between the Sadbury and Noril'sk nickel (Ni) deposits.
11. Genesis of Archean iron ore deposits of south India.
12. Geology and genesis of U deposits of Jaduguda.
13. Distribution of coal fields of India.
14. Explain the geologic setting and distribution of Neyveli lignite deposits.

**(4 × 3 = 12 Weightage)**

III. Long essay type questions. Answer any *two* questions. Each question carries 5 weightage.

15. Explain the steps involved in extracting a metal from an ore deposit. Discuss the geological factors affecting economics of ore extraction.
16. Explain classification of ore deposits-Lindgren and Bateman Classification.
17. Explain different types of oil traps and add a note on distribution of oil fields of India.

18. What are the elements of National Mineral Policy with a special emphasis on The Mines and Minerals (Development and Regulation) (MMDR) Act?

**(2 × 5 = 10 Weightage)**

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