| 17P449 | (Pages: 2) | Name |
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FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2019

(CUCSS - PG)

(Applied Geology)

CC15P GEL4 C12 – ECONOMIC GEOLOGY

(Regular/Improvement/Supplementary) (2015 Admission onwards)

Time: Three Hours Maximum: 36 Weightage

Part A

Answer *all* questions. Each question carries 1 weightage.

- 1. Grinding and Impregnation.
- 2. Strategic minerals vs. Critical minerals.
- 3. Hydrothermal deposits.
- 4. Pegmatitic deposits.
- 5. Metallogenic provinces.
- 6. Reflectivity vs. Bireflectance.
- 7. Zoning of ore minerals.
- 8. Gas hydrates.
- 9. Geologic thermometry.
- 10. Skarn deposits.
- 11. Evaporite deposits.
- 12. SEDEX deposits.
- 13. Organic theory of origin of petroleum.
- 14. Gondwana coal fields of India.

(14 x 1= 14 Weightage)

Part B

Answer any *seven* questions. Each question carries 2 weightage.

- 15. Principle of ore microscopy.
- 16. Physical and chemical properties of petroleum.
- 17. Micro-textures of ore minerals.
- 18. Controls of ore localization.
- 19. Physical and optical properties of Sphalerite.
- 20. Ores of carbonatite associations.
- 21. Stratabound and stratiform ore deposits.

- 22. Ore deposits in relation to metamorphism.
- 23. Tertiary coalfields of India.
- 24. Classification of reservoir traps.

 $(7 \times 2 = 14 \text{ Weightage})$

Part C

Answer any *two* questions. Each question carries 4 weightage.

25. Give an account of the National Mineral Policy. Add a note on India's status in mineral production.

Or

- 26. Describe the form, distribution, setting, constitution and origin of ores of Ultramafic-mafic chromium platinoid associations.
- 27. Discuss the ore deposits related to plate boundaries.

Or

28. Describe the classification, petrography and origin of coal. Add a note on the major periods of coal formation.

 $(2 \times 4 = 8 \text{ Weightage})$
