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.
( $14 \times 1=14$ 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.

## ( $7 \times 2=14$ 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 Ultramaficmafic 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.
( $2 \times 4=8$ Weightage)
