

45041

M.Sc. DEGREE EXAMINATION, APRIL 2018.

Geology

FOURTH SEMESTER

Paper I — MINERAL EXPLORATION, MINING AND ORE BENEFICIATION

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each questions carries 3 marks.

Each questions should not exceed 1 page.

1. Stratigraphic guides.
2. Geobotanical guides.
3. Colour ratio.
4. Spectral bands.
5. Over burden.
6. Acid mine drainage.
7. Heavy fluid separation.
8. Froth flotation.

PART B — (4 × 15 = 60 marks)

Answer All questions.

Each Answer carries 15 Marks.

Each question should not exceed 6 pages.

9. Write an essay on physiographic guides in mineral exploration?

Or

10. Briefly outline the geophysical methods used in mineral exploration?

11. Discuss the application of remote sensing in Bauxite exploration?

Or

12. Write an essay on spectral characteristics of altered minerals?

13. Discuss in detail about underground mining methods?

Or

14. What are the advantages of open cast mining?

15. Write an essay on properties considered for ore dressing?

Or

16. Briefly discuss ore dressing methods adopted for non sulphide ores?

