

B. Sc. Third Year Science 2020-2021
Paper-II: GEOEXPLORATION AND PRINCIPLES OF MINING

Time: 3 hrs

MM 50

UNIT-I

Geological techniques and procedures of exploration stages, planning and operation of exploration. Procedure for obtaining a mining lease.

UNIT-II

Geological aspects of drilling: drilling methods, selection of sites, angles and direction of bore holes. Core-logging.

UNIT-III

Methods of sampling, weighing of samples and calculation of average grades. Classification of ore reserves, calculation of cut-off grade. Grade and tonnage. Principles of geochemical and geophysical prospecting.

UNIT-IV

Mineral Economics and its concept, tenor, grade and specifications for important minerals used in industries. Methods of ore reserve estimation. Principles and methods of ore dressing.

UNIT-V

Introduction to remote sensing. Elements of mining methods: Introduction to open cast and underground mining methods.

Checked and Approved
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