

Total No. of Printed Pages:02

S.E. (Mining) Semester- IV (Revised Course 2007-08)
EXAMINATION NOV/DEC 2019
Mining Geology II

[Duration : Three Hours]

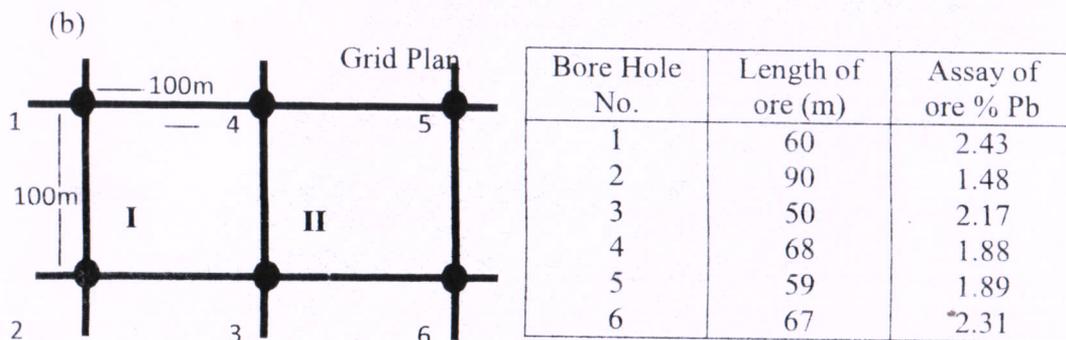
[Total Marks : 100]

Instructions:

- 1) Answer **any five** questions with **at least one** from **each** Module.
- 2) **All** questions carry **equal** marks.
- 3) **Draw** neat sketches in pencil, **wherever** required and necessary.
- 4) Figures to the **right** indicate **full** marks assigned to that question.

MODULE-I

Q.1 (a) Briefly explain any two methods of Ore Research Estimation. 08



With the help of the grid plan and the field & laboratory computations which are tabulated above calculate,

- 1) Volume, Tonnage and Grade of the ore in each block.
- 2) Average grade of both the blocks.

Given: Tonnage Factor for Block I = 3.0

Tonnage Factor for Block II = 3.5

Q.2 What is UNFC? Briefly explain the three dimensional approach of UNFC. Also add a note on codes of UNFC. 20

MODULE-II

- Q.3** Explain any four types of geophysical exploration methods along with their advantages and disadvantages. **20**
- Q.4**
- a) How ore bodies are dislocated due to the structural discontinuities? **10**
 - b) What is Remote Sensing? What is the fundamental principle involved in Remote Sensing? **10**

MODULE- III

- Q.5** Explain in brief the significance of Drilling. Also add a note on any two commonly used types of drilling. **20**
- Q.6** Write explanatory notes on **any four** of the following: **5 × 4 = 20**
- a) Drill Hole Pattern
 - b) Types of Drilling Fluids
 - c) Deep Drilling Practice
 - d) TC bits
 - e) Sampling
 - f) Offshore Drilling

MODULE- IV

- Q.7**
- a) Explain different deposits formed at Late stage of magmatism. **08**
 - b) Explain in brief the concept of Groundwater and its importance in Mining. **12**
- Q.8** What do you mean by the terms Syngenetic and Epigenetic deposits? Explain the process of oxidation and supergene enrichment for ore formation. **20**