

BGYET-141

ASSIGNMENT BOOKLET

Bachelor's Degree Programme (BSCG)

ORE GEOLOGY AND INDUSTRIAL MINERALS

Valid from 1st January, 2022 to 31st Dec., 2022

It is compulsory to submit assignment prior to filling Examination form



**School of Sciences
Indira Gandhi National Open University
Maidan Garhi, New Delhi-110068**

(2022)

Dear Student,

Please read the section on assignments in the Programme Guide for B. Sc. that we sent you after your enrolment. A weightage of 30 percent, as you are aware, has been earmarked for continuous evaluation, **which would consist of one tutor-marked assignment** for this course. The assignment is in this booklet, and it consists of two parts, Part A and B. The total marks of all the parts are 100, of which 35% are needed to pass it.

Instructions for Formatting Your Assignments

Before attempting the assignment please read the following instructions carefully:

- 1) On top of the first page of your answer sheet, please write the details exactly in the following format:

ROLL NO.:
NAME:
ADDRESS:
.....
.....
COURSE CODE:
COURSE TITLE:
ASSIGNMENT NO.:
STUDY CENTRE: **DATE:**

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

- 2) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- 3) Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 4) Your answers should be precise.
- 5) Solve Part A and Part B of this assignment, and **submit the complete assignment answer sheets containing Parts A and B within the due date.**
- 6) **The assignment answer sheets are to be submitted to your Study Centre within as per the schedule. Answer sheets received after the due date shall not be accepted.**
- 7) We strongly suggest that you retain a copy of your answer sheets.
- 8) This assignment is **valid from 1st Jan., 2022 to 31st Dec., 2022.** If you have failed in this assignment or fail to submit it by Dec., 2022, then you need to get the assignment for the year 2023, and submit it as per the instructions given in the Programme Guide.
- 9) **You cannot fill the examination form for this course** until you have submitted this assignment. For any queries, please contact: kakoligogoi@ignou.ac.in , mprashanth@ignou.ac.in

We wish you good luck.

Tutor Marked Assignment
ORE GEOLOGY AND INDUSTRIAL MINERALS

Course Code: BGYET-141
Assignment Code: BGYET-141/TMA/2022

Maximum Marks: 100

Note: Attempt all questions. The marks for each question are indicated against it. Write all answers in your own words; do not copy from the course material.

Part A

1. Write short notes on the following:
 - a) Explain the syngenetic deposits associated with different types of rocks. (5)
 - b) List the characteristic features of a typical Volcanogenic Massive Sulphide (VMS) deposit. (5)
2. What is reserve estimation? Discuss the main methods of ore estimation with suitable diagram. (10)
3. Discuss in detail the Lindgren's Classification of ore deposits. (10)
4. Discuss the different processes of formation of early magmatic deposits. (10)
5. Describe the classification of hydrothermal fluids with a neat diagram. (10)

Part B

6. Discuss the mode of occurrence of iron ores. (10)
7. Write short notes on:
 - a) Migration of petroleum (5)
 - b) Distribution of Uranium and Thorium in India (5)
8. Discuss the physical properties of chief ores of copper. (10)
9. Discuss the minerals used in refractory industry. (10)
10. a) Describe in detail the stages of mineral exploration. (5)
b) Write about the geochemical exploration methods. (5)