

**BGYET-141**

**ASSIGNMENT BOOKLET**

**Bachelor's Degree Programme (BSCG)**

**ORE GEOLOGY AND INDUSTRIAL MINERALS**

**Valid from 1<sup>st</sup> January, 2025 to 31<sup>st</sup> December, 2025**

**It is compulsory to submit assignment prior to filling Examination form**



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

**(2025)**

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:

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

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**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 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 1<sup>st</sup> January 2025 to 31<sup>st</sup> December 2025**. If you have failed in this assignment or failed to submit it by December 2025, then you need to get the assignment for the year 2026 and submit it as per the instructions given in the Programme Guide.
- 9) **You cannot fill out the examination form for this course** until you have submitted this assignment. For any queries, please contact: [kakoligogoi@ignou.ac.in](mailto:kakoligogoi@ignou.ac.in),  
[mprashanth@ignou.ac.in](mailto: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/2025**

**Maximum Marks: 100**

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**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. Write the answers in about 250 words for 5 marks questions and not exceeding 500 words for 10 marks questions.**

**Part A**

1. Write short notes on the following:
  - a) Metallogenic Epochs. (5)
  - b) Differences between syngenetic and epigenetic deposits. (5)
2. What are the sedimentary exhalative deposits? Explain the characteristics of ophiolite derived Cu-Zn deposits. (10)
3. Discuss the methods of reserve estimation with neat diagrams. (10)
4. Discuss the different processes of formation of late magmatic deposits. (10)
5. What are cavity filling ore deposits? Discuss the different types of cavity filling deposits. (10)

**Part B**

6. What are atomic minerals? Discuss their Indian occurrences. (10)
7. Write short notes on:
  - a) Mode of occurrence of manganese ores. (5)
  - b) Geochemical exploration. (5)
8. Discuss the physical properties of chief ores of lead and zinc. (10)
9. Discuss the rocks and minerals used in the abrasive industry. (10)
10. Describe different types of geological guides used in the prospecting. (10)