

BGYCT-133

ASSIGNMENT BOOKLET

Bachelor's Degree Programme (BSCM)

**CRYSTALLOGRAPHY,
MINERALOGY AND ECONOMIC
GEOLOGY**

Valid from 1st January, 2024 to 31st December, 2024

It is compulsory to submit assignment prior to filling Examination form



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

(2024)

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:.....

.....

.....

COURSECODE:

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 answersheet.
- 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 answersheets.
- 8) This assignment is **valid from 1st January, 2024 to 31st December, 2024.** If you have failed in this assignment or fail to submit it by December, 2024, then you need to get the assignment for the year 2025, and submit it as per the instructions given in the Programme Guide.

You cannot fill the examination form for this course until you have submitted this assignment.

For any queries, please contact: bdeshmukh@ignou.ac.in, and meenalmishra@ignou.ac.in

We wish you good luck.

Tutor Marked Assignment

CRYSTALLOGRAPHY, MINERALOGY AND ECONOMIC GEOLOGY

Course Code: BGYCT-133
Assignment Code: BGYCT-133/TMA/2024

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) Crystallographic axis (5)
 - b) Interfacial Angles and its measurement (5)
2. Discuss briefly about the crystallographic axes, symmetry elements and forms of tetragonal system. (10)
3. Give a detailed account of physical properties of minerals depending on light. (10)
4. Explain the structural classification of silicates. (10)
5. Describe the physical properties of mica minerals muscovite and biotite. (10)

Part B

6. Describe the parts and working of polarizing microscope. (10)
7. Write short notes on the following:
 - a) Nature of ore bodies (5)
 - b) Clarke and Clarke concentration (5)
8. Discuss optical properties of minerals studied between cross nicol. (10)
9. Discuss the optical properties of pyroxene group minerals. (10)
10. Write short notes on the following:
 - a) Magmatic Concentration (5)
 - b) Industrial minerals (5)