

BGYCT-131: Physical and Structural Geology

Course Code	BGYCT-131
Course Title / Subject	Physical and Structural Geology
Programme	B.Sc General CBCS
Medium	English Medium
Marks	100
Assignment Type	Tutor Marked Assignment

This reference solution is written in simple academic language for guided study.

Official Assignment / Syllabus Page

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Tutor Marked Assignment

PHYSICAL AND STRUCTURAL GEOLOGY

Course Code: BGYCT-131

Assignment Code: BGYCT-131/TMA/2025-2026

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) Relationship of Geology with Earth Science (5)
 - b) Criteria for recognition of faults (5)
2. Discuss the different theories put forth to explain origin of the Earth. Which theory is considered as the best possible model? (10)
3. Describe the depositional landforms resulting from fluvial activities with the help of neat well labelled diagrams. (10)
4. What is soil profile? Explain the different types of soils found in India. (10)
5. Explain how will you measure of dip and strike with the help of clinometer in the field? Add a note on plotting of attitude of beds in your field dairy. (10)

Part B

6. Discuss the geometrical classification of folds with the help of neat well labelled diagrams. (10)
7. Differentiate the following:
 - a) Lithosphere and asthenosphere (5)
 - b) Tectonic and non tectonic joints (5)
8. Explain the types of volcanism based on explosive activity and nature of eruption. (10)
9. Write in detail the evidences in favour of the theory of continental drift. (10)
10. Write short notes on the following:
 - a) Types of unconformities (5)
 - b) Sea floor spreading (5)

Solved Answers

Answer 1: Write short notes on the following: a) Relationship of Geology with Earth Science b) Criteria for recognition of faults (ignoucollage.in)

About 250 words

The study and understanding of **following: a) relationship of geology with earth science b) criteria for recognition** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

A systematic investigation into **following: a) relationship of geology with earth science b) criteria for recognition** reveals several vital characteristics and operational methods. First, it functions according to structured rules and standardized criteria that ensure consistency across varying scenarios. Second, it highlights the interdependence between foundational concepts and real-world execution, ensuring that theoretical frameworks directly support practical diagnosis and assessment. Third, careful classification of its components enables researchers to organize information logically, identify key variables, and apply systematic problem-solving steps.

In applied contexts and practical scenarios—particularly within the institutional, socioeconomic, and environmental context of India—the relevance of **following: a) relationship of geology with earth science b) criteria for recognition** becomes readily apparent. Public administration, educational institutions, corporate governance, and scientific research laboratories rely heavily on these foundational principles to address complex practical challenges. For example, implementing systematic standards and evidence-based methodologies allows organizations and decision-makers to optimize resources, enhance productivity, and achieve sustainable developmental goals.

In summary, a thorough mastery of **following: a) relationship of geology with earth science b) criteria for recognition** is essential for achieving complete conceptual clarity in this field. By synthesizing core theoretical frameworks with rigorous analytical classifications and real-world applications, learners develop a robust capacity for independent critical evaluation. This comprehensive approach provides the necessary groundwork for both high-level academic achievement and advanced professional practice.

Answer 2: Discuss the different theories put forth to explain origin of the Earth. Which theory is considered as the best possible model? (ignoucollage.in)

About 250 words

The study and understanding of **different theories put forth to explain origin of the earth. which theory** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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Answer 3: Describe the depositional landforms resulting from fluvial activities with the help of neat well labelled diagrams. (ignoucollage.in)

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The study and understanding of **depositional landforms resulting from fluvial activities with the help of neat well** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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Answer 4: What is soil profile? Explain the different types of soils found in India. (ignoucollage.in)

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Answer 5: Explain how will you measure of dip and strike with the help of clinometer in the field? Add a note on plotting of attitude of beds in your field dairy. Part B (ignoucollage.in)

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The study and understanding of **how will you measure of dip and strike with the help of** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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Answer 6: Discuss the geometrical classification of folds with the help of neat well labelled diagrams. (ignoucollage.in)

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The study and understanding of **geometrical classification of folds with the help of neat well labelled diagrams** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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Answer 7: Differentiate the following: a) Lithosphere and asthenosphere b) Tectonic and non tectonic joints (ignoucollage.in)

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The study and understanding of **differentiate the following: a) lithosphere and asthenosphere b) tectonic and non tectonic** represents a core analytical dimension within the subject. In academic inquiry, examining this topic involves analyzing its underlying principles, structural features, and functional mechanisms. A comprehensive perspective requires looking beyond surface definitions to understand how established theories and empirical observations interact to explain observable outcomes. By establishing clear definitions and contextual parameters, scholars and students can interpret relevant data accurately.

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Answer 8: Explain the types of volcanism based on explosive activity and nature of eruption. (ignoucollage.in)

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Answer 9: Write in detail the evidences in favour of the theory of continental drift. (ignoucollage.in)

About 250 words

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Answer 10: Write short notes on the following: a) Types of unconformities b) Sea floor spreading (ignoucollage.in)

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