

BGYET-147: Hydrogeology and Environmental Geology

Course Code	BGYET-147
Course Title / Subject	Hydrogeology and Environmental 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

Geomorphology and Geotectonics

Course Code: BGYET – 147

Assignment Code: BGYET-147/TMA/2025

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) Fundamental concepts of geomorphology (5)
 - b) Geomorphology of Himalayan Mountain System (5)
2. Discuss in detail, constructional and destructional geomorphic processes giving suitable examples. (10)
3. Describe erosional and depositional glacier features with the help of neat well labelled diagrams. (10)
4. Describe the different stages of landscape evolution. (10)
5. Describe the different erosional features formed in Karst topography with the help of neat well labeled illustrations. (10)

Part B

6. What is sea-floor spreading? Give a detailed account of its various supporting evidences. (10)
7. Write short notes on the following:
 - a) Geotectonic features of oceans (5)
 - b) Geotectonic features of continental margins (5)
8. Define palaeomagnetism. How is palaeomagnetism preserved in the rocks? Add a note on geomagnetic time scale. (10)
9. With the help of a neat diagram explain the constitution of lithosphere and asthenosphere. Also discuss their role in plate tectonics. (10)
10. Write short notes on the following:
 - a) India-Asia collision (5)
 - b) Proterozoic mobile belts of Indian Peninsula (5)

Solved Answers

Answer 1: Write short notes on the following: a) Fundamental concepts of geomorphology b) Geomorphology of Himalayan Mountain System (ignoucollage.in)

About 250 words

The study and understanding of **following: a) fundamental concepts of geomorphology b) geomorphology of himalayan mountain system** 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) fundamental concepts of geomorphology b) geomorphology of himalayan mountain system** 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) fundamental concepts of geomorphology b) geomorphology of himalayan mountain system** 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) fundamental concepts of geomorphology b) geomorphology of himalayan mountain system** 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 in detail, constructional and destructional geomorphic processes giving suitable examples. (ignoucollage.in)

About 250 words

The study and understanding of **in detail, constructional and destructional geomorphic processes giving suitable examples** 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 erosional and depositional glacier features with the help of neat well labelled diagrams. (ignoucollage.in)

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The study and understanding of **erosional and depositional glacier features with the help of neat well labelled** 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: Describe the different stages of landscape evolution. (ignoucollage.in)

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Answer 5: Describe the different erosional features formed in Karst topography with the help of neat well labeled illustrations. Part B (ignoucollage.in)

About 250 words

The study and understanding of **different erosional features formed in karst topography with the help of neat** 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: What is sea-floor spreading? Give a detailed account of its various supporting evidences. (ignoucollage.in)

About 250 words

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Answer 7: Write short notes on the following: a) Geotectonic features of oceans b) Geotectonic features of continental margins (ignoucollage.in)

About 250 words

The study and understanding of **following: a) geotectonic features of oceans b) geotectonic features of continental margins** 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: Define palaeomagnetism. How is palaeomagnetism preserved in the rocks? Add a note on geomagnetic time scale. (ignoucollage.in)

About 250 words

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Answer 9: With the help of a neat diagram explain the constitution of lithosphere and asthenosphere. Also discuss their role in plate tectonics. (ignoucollage.in)

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