

5. (a) Outline the major erosional and depositional landforms associated with glacial processes. (5)
- (b) Provide an account of continental collision and the formation of the Himalaya—emphasising the tectonic and erosional/depositional features. (10)
6. (a) What are batholiths, dykes and sills? Provide examples from the Indian region. (5)
- (b) Trace the development of the IndoGangetic Plains from tectonic, fluvial and anthropogenic perspectives. (10)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5748

K

Unique Paper Code : 2182011101

Name of the Paper : Environmental and Earth
Surface Processes (DSCC-
1)

Name of the Course : **B.Sc. Hons. Environmental
Sciences-Core**

Semester : I

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **four** questions.
3. All questions carry equal marks.

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1 (a) Write short notes on the following : (2×5=10)

- (i) Seafloor spreading
- (ii) Orogeny
- (iii) Sedimentary rocks
- (iv) Glacier dynamics
- (v) Monsoon evolution in the Indian subcontinent

(b) Fill in the blanks : (1×5=5)

- (i) The supercontinent Pangaea began to break up about million years ago
- (ii) The rockcycle concept was first formalised by
- (iii) The boundary between the troposphere and stratosphere is called the
- (iv) The Indian peninsular mountain chain of the Aravallis is primarily composed of rocks.
- (v) The process by which wind removes fine particles from the land surface is termed

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2. Write short notes on **any three** of the following :
(5×3=15)

- (a) Plate tectonics and major plates
- (b) Aeolian transportation and deposition
- (c) Formation of the Eastern and Western Ghats
- (d) Three rock laws
- (e) Coastal processes

3. (a) Compare and contrast igneous, sedimentary and metamorphic rocks in terms of their origin, texture and occurrence. (7)

(b) Discuss the mechanisms of mantle convection and how they drive plate tectonics. (8)

4. (a) Define and explain the atmosphere–land, atmosphere–ocean and ocean–land interfaces, and describe their significance in Earthsurface processes. (7)

(b) Describe the major physical and optical properties of Earth's atmosphere and their role in climate and weather. (8)

P.T.O.