

Parvatibai Chowgule College of Arts and Science
Autonomous

B.Sc. Semester End Examination, January/February 2022

Semester: III

Subject: Geology

Course Title: Physical Geology (Elective)

Duration: 2 Hours (10.00 am to 12.00 pm)

Submission: before 1.00 pm.

Max. Marks: 45

Instructions:

- All questions are compulsory. Internal choice is available.
- Figures to the right indicate maximum marks.
- Draw neat diagrams wherever necessary.
- Answers must be relevant to the questions.

- Students should write down the answers, scan/photograph the same and upload the handwritten answer sheets on the Google Classroom.
- Typed answer sheets shall not be assessed.
- The answer scripts produced by the students will need to have the following information on each answer page submitted:

Roll No:

Subject:

Semester:

Course Title:

Date Session: Morning/Evening

Page Number: (every page must be numbered as per the format: 1 OF 5 pages)

Student's Signature:

- The entire set of scanned documents must be converted into a **single PDF file** in the ascending order of page numbers before uploading the same on Google Classroom/CLAAP/email to the course teacher. If not, the course teacher will not be held responsible for any missing pages.
 - The uploaded file **must be named with details of respective Roll Number.**
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Q.1 Answer ANY THREE of the following: (09)

- a. What is differential weathering? Explain causes for the same.
- b. What is 'stream piracy'?
- c. What is a glacial budget?
- d. Explain the process of formation of glacier.

Q.2 Answer ANY TWO of the following: (12)

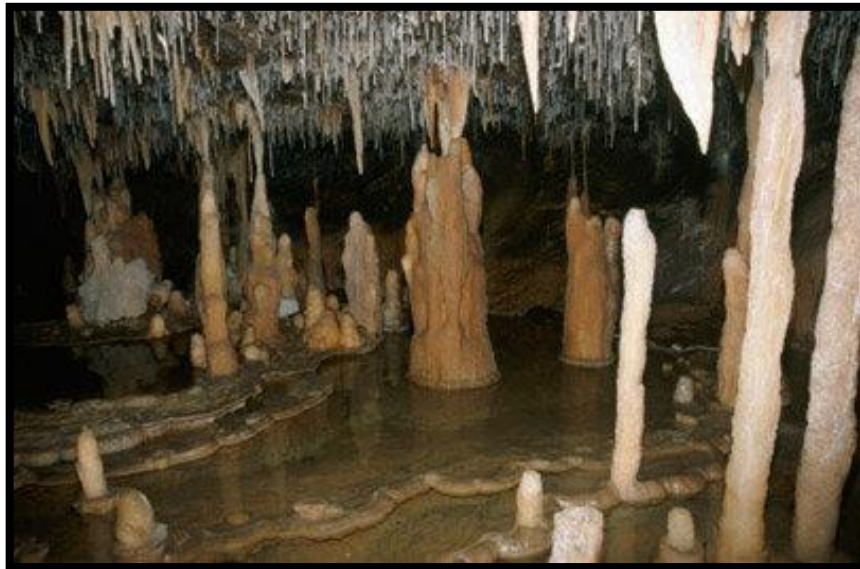
- e. Enlist and describe the various characteristics of desert environment.
- f. Describe the erosional and depositional features associated with middle Course of the river.
- g. Draw a neat sketch and explain the formation of tombolo from an initially isolated nearshore island.

Q.3 Answer ANY TWO of the following: (12)

- h. Sketch a neat diagram illustrating various modes of sediment transport through fluid media. Discuss the factors that affect this process.
- i. What is a Delta? Discuss the types of deltas with examples.
- j. Provide classification and describe the various types of glacial moraines.

Q.4 Answer ANY ONE (I or II) from the following: (12)

- I.k. What are the limitations of the Stoke's law of settling velocity?
- I.l. With a neat sketch explain the formation of desert pavements.
- I.m. Comment on the geomorphic evolution of the landform in the photograph given below.



P.T.O

OR

- II.n. What are the factors that determine the location and dynamics of equilibrium (the firm line)?
- II.o. Explain the wave transformation process.
- II.p. Comment on the geomorphic evolution of the landform in the photograph given below.