

Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Science and Technology
100 Level 1st Semester Examination – July/August 2016



MRT 151-3 Earth Materials and Processes

Instructions to candidates

Duration: 03 hours (Part A: ½ hr, Part B: 01 hr, Part C: 1 ½ hr)

Number of questions: Part C: Essay 03

Answer ALL questions

Mark allocation: 120

Illustrate your answers with sketches/diagrams where necessary

Part C

1.
 - a) Discuss “rock weathering” in detail.
 - b) Using appropriate illustrations describe the formation of three (03) erosional features associated with stream erosion.
 - c) Explain the process of “glacial abrasion”

(40 mark)

2.
 - a) Describe “Watershed”.
 - b) Explain the difference between infiltration and percolation.
 - c) Distinguish between precipitation and rainfall.
 - d) A stream segment could receive water from groundwater for a portion of the year and lose water to groundwater at other times. Explain how.
 - e) A stream could receive water from groundwater and lose water to groundwater at the same time. Explain how

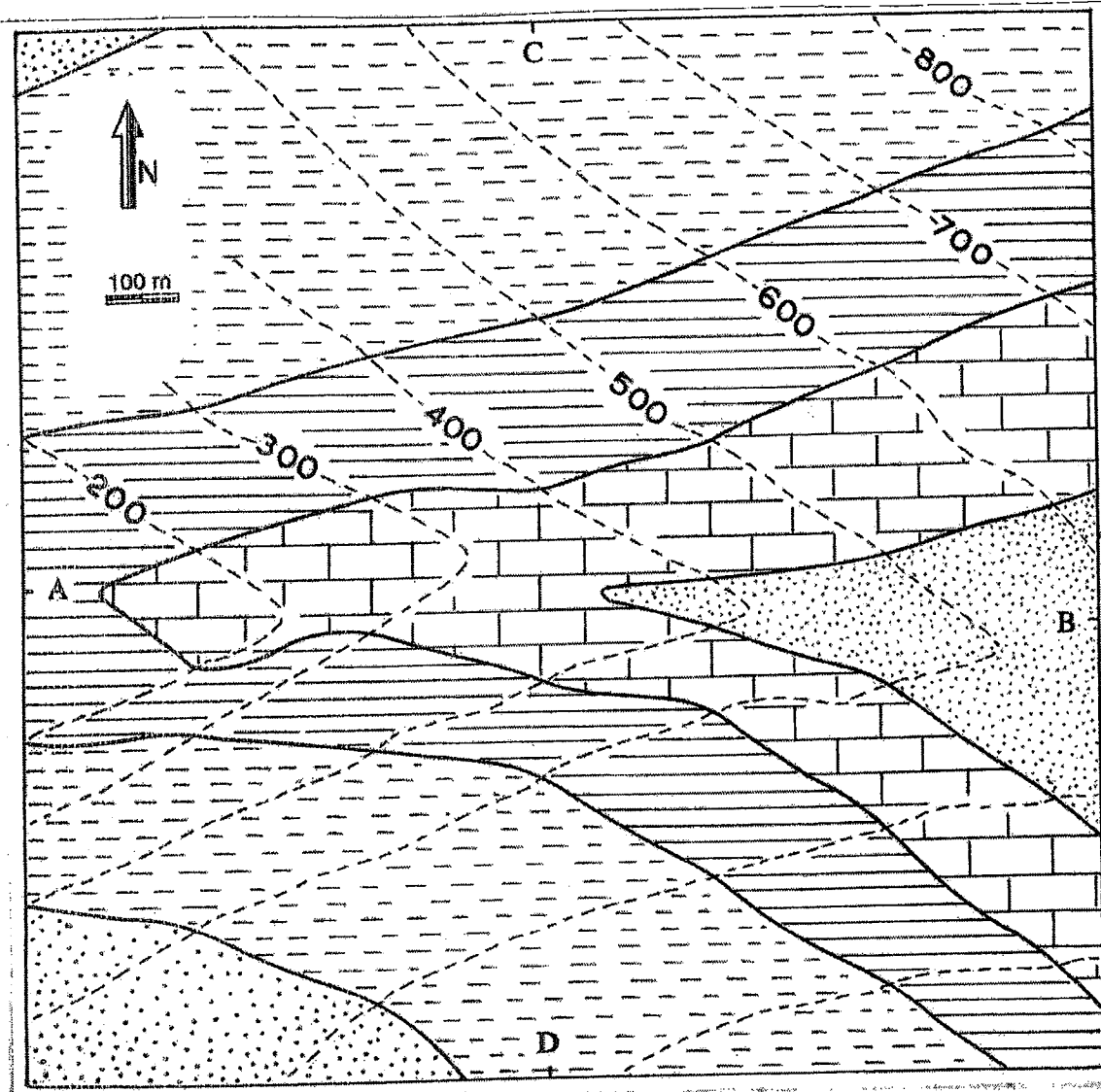
(40 mark)

3. Use the given geological map to answer following questions. Answers should be provided on the same sheet.
 - a) Construct structural contours and geologic cross-section along the section line A-B.
 - b) What is the geologic structure present in the map area?
 - c) Calculate the dip angle and the dip direction of tilted strata.



Index Number: -

(a)



(20 Marks)

(b) Geologic Structure

(05 Marks)

(c) Dip Angle

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(10 Marks)

Dip Direction

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(05 Marks)