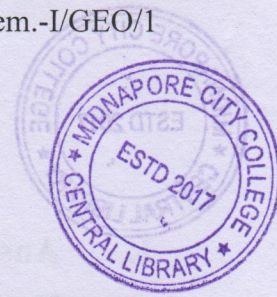


PG (NEW) CBCS
M.Sc. Semester-I Examination, 2018
GEOGRAPHY
PAPER: GEO-103
 (Climate, Soil and Agriculture)

**Full Marks: 40****Time: 2 Hours**

Write the answer for each unit in separate sheet

The figures in the right-hand margin indicate full marks.
 Candidates are required to give their answers in their own words as far as practicable.

GEO103.1: Climatology

Marks: 20**GROUP-A**

- 1. Answer any one question: 1×8=8**
- a) Discuss the evidences of past climatic changes with proper example. 8
- b) What is sea surface temperature? Explain the role of Walker circulation in the regulation of tropical sea surface temperature. 8

Group-B

- 2. Answer any two questions: 2×4=8**
- a) Describe the formation of Tropical cyclone with proper diagram. 4
- b) Explain the 'Conditional Instability' in relation to lapse rates. 4
- c) Elucidate the role of Tropical Easterly Jet stream on Indian monsoon. 4
- d) Explain the impact of global warming on human health. 4

Group-C

- 3. Answer any two questions: 2×2=4**
- a) Discuss the climatic characteristics of 'Am' climatic zone. 2
- b) Why annual and diurnal range of temperature is high in 'BWh' climate? 2
- c) Define 'MONEX' 2
- d) Why is it said that 'night is the winter of the tropics'? 2

(Turn Over)

GEO103.2: Soil and Agriculture**Marks: 20****GROUP-A**

- 1. Answer any one question: 1×8=8**
- a) How soil and climate determine the regional variation in agricultural pattern? 5+3=8
- b) Critically discuss the chronosequences of Soil profile at local level. 8

Group-B

- 2. Answer any two questions: 2×4=8**
- a) How does soil catena develops under tropical humid environment? 4
- b) Write a short note about methods of precision farming. 4
- c) Why is soil considered combined reflector of soil properties? 4
- d) What are the roles of Green Revolution on degrading Soil quality in Punjab? 4

Group-C

- 3. Answer any two questions: 2×2=4**
- a) What do you mean by GM crops? 2
- b) Define agricultural system. 2
- c) Define wilting point. 2
- d) What is Capillary capacity? 2
