

2018

M.A./M.Sc. 1st Seme. Examination

GEOGRAPHY

PAPER—GEO-103

Full Marks : 40

Time : 2 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Unit—103.1

Climatology

[Marks : 20]

Group-A

1. Answer any one question : 1×8

- (a) What is index cycle of Jet Stream ? Discuss the characteristics of different types of Jet Stream. 4+4

(Turn Over)

- (b) What is sea surface temperature ? Briefly explain the role of SST in causing pre-monsoon depressions over Bay of Bengal and Arabian Sea.

Group-B

2. Answer any *two* questions : 2×4
- (a) What is thermocline line ? Explain the position of thermocline lines during El Nino and La Nina.
 - (b) Explain the role of Walker circulation in the regulation of tropical sea surface temperature.
 - (c) How does shifting of pressure influence the rainfall regime of savanna climate ?
 - (d) Briefly explain the maritime influence on Coastal Weather.

Group-C

3. Answer any *two* questions : 2×2
- (a) Why does Burst of monsoon occur at early monsoon ?
 - (b) What do you mean by 'Heat Island' ?
 - (c) Distinguish between thunderstorm and tropical cyclone.
 - (d) What is the driving mechanism of General Circulation Model ?
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Unit—103.2*Soil and Agricultural Geography***[Marks : 20]****1. Answer any one question :****1×8**

- (a) Explain how far the climate and dominance of local factors control in variation of physio-chemical properties of soil with special reference to soil colour and soil organic matter content.
- (b) Critically assess the impact of green revolution on food security issues in India.

2. Answer any two questions :**2×4**

- (a) Briefly explain the significance of soil landscape analysis in relation to geomorphic surfaces and morphometric aspects.
- (b) Give the reasons of variation in clay mineralogy in different soils of the multiple landscapes.
- (c) Write a short note on the significance of recent agricultural policy in India.
- (d) Mention one approach to study agricultural geography and justify why is it significant to study.

3. Answer any *two* questions :

2×2

- (a) Define soil catena.
 - (b) What is chronosequence in soil morphology ?
 - (c) What do you mean by precision farming ?
 - (d) Give two examples of agricultural hazards in India.
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