M.A./M.Sc. 1st Semester Examination, 2009 GEOGRAPHY

COURSE No. — 1103

Full Marks: 40

Time: 2 hours

The figures in the right-hand margin indicate marks

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

Illustrate the answers wherever necessary

Write the answers to questions of each Unit in separate books

UNIT-V

(Climatological Processes)

Marks: 20

Time: 1 hour.

GROUP --- A

1. Answer any one question:

 8×1

- (a) "Climatology does not belong entirely within the fields of meteorology or geography." Explain.
- (b) Examine the force that drives air into motion and those which control direction and velocity of wind.

GROUP—B

- 2. Answer any two of the following questions: 4x2
 - (a) How are the space-and time-scales are associated with respect to the climatological events? Give examples.
 - (b) Explain why air warms whenever it sinks.
 - (c) Why does adiabatic rate of cooling change when condensation begins?
 - (d) How does CO₂ influence distribution of heat energy in the earth-atmospheric system?

GROUP—C

- 3. Answer any *two* of the following questions: 2×2
 - (a) Write about the significance of micro-climate.
 - (b) What is conditional instability?
 - (c) In which condition a 'gradient wind' becomes 'supergeostrophic' in nature?
 - (d) What do you mean by Vorticity?

UNIT-VI

(Population Geography)

Marks: 20

Time: 1 hour

GROUP-A

1. Answer any one question:

- 8 x 1
- (a) How the concept of carrying capacity can be adopted in sustainable utilization of natural resources?

(b) How do the different compositions of population construct heterogeneous social space in a country? Explain with suitable example.

GROUP-B

2. Answer any two questions:

4 x 2

- (a) Discuss the factors affecting mortality.
- (b) Discuss briefly the concept of population equilibrium.
- (c) Explain how the perception of overpopulation is changed both in time and space through technological changes.
- (d) What traits of population determine the level of development?

GROUP-C

3. Answer any two questions:

2 x 2

- (a) Give an account of "Ecological Footprint".
- (b) State the significance of exponential population growth.

- (c) Distinguish between Gross reproduction rate and Net reproduction rate.
- (d) What do you understand by Zero population growth?