2008

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

(*Climatology*-I)

1. Answer any *one* question: 8 x 1

(*a*) State the physical laws that govern radiation from a black body and apply them to bring out the nature of radiation from the Sun and the Earth.

(*b*) Present a critical appreciation of tri-cellular simulation of global atmospheric circulation.

2. Answer any *two* questions: 4x2

(*a*) How do the rain drops grow as the consequence of interplay between super-cooled water droplet and tiny ice crystals in the cold clouds.

(*b*) Distinguish between El-Nino and La-Nina.

(*c*) Elaborate the conditions for atmospheric instability.

(*d*) Explain the relationship between jet stream and monsoon circulation.

3. Answer any *two* questions: 2x2

(*a*) How is the balance among pressure gradient force, Coriolis force and centripetal acceleration achieved in a low pressure system of wind flow?

(*b*) Why does Rossby wave follow meandering path?

(*c*) Differentiate climatology from meteorology.

(*d*) What is the environmental significance of Bowen Ratio.

UNIT—VI

(*Population Geography*-I)

4. Answer any *one* question: 8 x 1

(*a*) Under what circumstances population equilibrium take place?

(*b*) Enumerate and discuss the factors affecting fertility.

5. Answer any *two* questions: 4 x 2

(*a*) Distinguish between logistic and exponential growth of population.

(*b*) Identify the problems of zero population.

(*c*) Why does carrying capacity change over time?

(*d*) Assess the nature of spatio-temporal variation of Male-Female ratio in India.

6. Answer any *two* questions: 2×2

(*a*) What are the components of Human Development Index?

(*b*) Differentiate *morbidity* from *mortality*.

(*c*) "Literacy is the best contraceptive." Elucidate.

(*d*) Distinguish between *over population* and *under-population*.
