P2951

SEAT No. :

[Total No. of Pages : 1

[5535]-11 ^{[To} M.A./M.Sc. GEOGRAPHY Gg-101 : Principles of Geomorphology (2008 Pattern) (Semester - I)

Time : 3 Hours]

[Max. Marks : 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain the nature and scope of geomorphology.
- **Q2)** What is plate tectonics? Describe the mechanics and movements of plates with reference to Indian plate.
- **Q3)** Explain different denudational processes with reference to mass movement and weathering.
- **Q4)** Critically examine the Davisian cycle of Erosion.
- **Q5)** Describe various depositional landforms formed by glacial processes.
- Q6) Give an account of erosional landforms produced by sea waves.
- Q7) Write notes on any two :
 - a) Ergodic principle.
 - b) Concept of pediplanation.
 - c) Slope replacement model.

P2952

SEAT No. :

[Total No. of Pages : 1

[5535]-12 M.A./M.Sc. - II GEOGRAPHY Gg-102 : Principles of Climatology (2008 Pattern) (Semester-I)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** In what way various factors affect atmospheric pressure. Explain how geostrophic and gradient wind develop.
- **Q2)** Describe different types of humidity. With the help of a diagram discuss various processes that occur when water changes from one state to the other.
- Q3) Explain katabatic and anabatic winds. Describe various types of local winds.
- **Q4)** How is latitudinal heat balance maintained? Using illustrations discuss the total heat budget of the Earth.
- **Q5)** List at least five basic characteristics of a front. Discuss various air mass modifications.
- **Q6)** Why is wet adiabatic lapse rate less than the dry adiabatic lapse rate? What is meant by stable and unstable air? What is conditional instability and when does it occur?
- *Q7*) Write notes on any two:
 - a) Electromagnetic spectrum.
 - b) Methods of weather forecasting.
 - c) Tropical climatology.



P2953

SEAT No. :

[Total No. of Pages :1

[5535]-13 M.A/M.Sc. GEOGRAPHY

Gg-103: Principles of Economic Geography (2008 Pattern) (Semester - I)

Time : 3 Hours] Instructions to the candidates: [Max. Marks : 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Draw figures/maps wherever necessary.
- 4) Use of map stencils is allowed.
- **Q1)** Give an account of recent trends in economic geography.
- **Q2)** Critically examine Von Thilnen's model.
- **Q3)** Explain how the human resources play a significant role in the economic development.
- **Q4)** Explain the importance of various factors in production.
- **Q5)** Classify the countries according to level of economic development and justify.
- **Q6**) Discuss the problems and prospects of the international trade.
- Q7) Write notes on any two:
 - a) Nature of economic geography
 - b) Testing of hypothesis
 - c) Globalisation and economic development in India.

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P2954

SEAT No. :

[Total No. of Pages : 1

[5535]-14 M.A / M. Sc. GEOGRAPHY

Gg - 104 : Principles of Population and Settlement Geography (2008 Pattern)

Time : 3 Hours] Instructions to the candidates: [Max. Marks : 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Discuss the man-environment relationship with respect to growth and Distribution of settlements.
- Q2) Explain the effects of technology on shelter and Pattern of settlement from neolithic to modern period.

Q3) Discuss the various concepts related to study of settlements.

- Q4) Describe the influence of physical factors on population distribution.
- **Q5)** Critically examine the Ricardo's theory of population growth.
- Q6) Explain the growth and health aspects of population as a resource.
- Q7) Write notes on any two :
 - a) Approaches to the study of population geography.
 - b) Losch's model.
 - c) Influence of economic factors on growth of settlements.



P2956

SEAT No. :

[Total No. of Pages : 1

[Max. Marks : 80

[5535]-22 M.A./M.Sc. GEOGRAPHY Gg-210 : Tropical Geomorphology (2008 Pattern) (Semester - II)

Time : 3 Hours]

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Give an account of 'Classification of tropics'.
- Q2) Discuss various factors influencing tropical weathering.
- **Q3)** Give an account of process of soil formation in the tropics.
- **Q4)** Define Duricrusts. Describe types of duricrusts and their distribution.
- **Q5)** Give a complete account of various divisions of lateritic profile.
- **Q6)** Give an account of 'Tropical coasts'.
- Q7) Write notes (any two):
 - a) Morphogenetic regions.
 - b) Double surfaces of planation.
 - c) Chemical denudation.

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P2957

[5535]-23 M.A./M.Sc. GEOGRAPHY Gg-211 : Synoptic Climatology (2008 Pattern) (Semester - II)

Time : 3 Hours]

[Max. Marks : 80

[Total No. of Pages : 1

SEAT No. :

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Give types of tropical cyclones and explain formation and decay of hurricanes in details.
- Q2) Explain the types of airmasses of Europe and types of fronts.
- **Q3)** Explain life cycle of wave cyclones and associated idealized weather conditions in details.
- **Q4)** Explain the formation process of fog and clouds.
- Q5) Explain the synoptic and numerical methods of weather forecasting.
- Q6) Give benefits of weather forecasting in aviation.
- Q7) Write notes on any two :
 - a) Scope of synoptic climatology.
 - b) Collection and reporting weather data by India Meteorological Services.
 - c) Formation of easterly waves.

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P2958

SEAT No. :

[Total No. of Pages : 1

[5535]-24 M.A./M.Sc. GEOGRAPHY Gg-212 : Agricultural Geography (2008 Pattern) (Semester - II)

Time : 3 Hours]

Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain the nature and scope of agricultural geography.
- **Q2)** "Agriculture is the backbone of Indian economy". Explain.
- Q3) Describe the physical factors influencing agriculture.
- **Q4)** Write an essay on intensive subsistance farming.
- Q5) Explain with suitable examples the role of irrigation in drought prone areas.
- **Q6)** Describe agricultural regions of India.
- Q7) Write notes on any two :
 - a) Systematic approach to the study of agricultural geography.
 - b) Mixed farming in India.
 - c) Weaver's method of crop combination.

P2959

SEAT No. :

[Total No. of Pages : 1

[5535]-25 M.A./M.Sc. GEOGRAPHY Gg-213 : Population Geography (2008 Pattern) (Semester - II)

Time : 3 Hours]

Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Define population geography. Explain its nature and scope.
- **Q2)** Critically evaluate Malthus population theory.
- Q3) Describe the physical factors affecting population distribution.
- Q4) Discuss the causes and consequences of migration.
- Q5) Explain the causes of low and high fertility in developing countries.
- Q6) Describe the population composition in terms of age and sex.
- Q7) Write notes (Any Two) :
 - a) Use of population projection in planning.
 - b) Infant mortality.
 - c) Laws of migration.

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P2960

SEAT No. :

[Total No. of Pages : 1

[5535]-26 M.A./M.Sc. GEOGRAPHY

Gg-214 : Geoinformatics - I (2008 Pattern) (Semester - II) (Paper - I)

Time : 3 Hours]

[Max. Marks : 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1**) Define GIS. Explain the objectives and potential of GIS.
- Q2) Describe the spatial and functional relationships in GIS.
- **Q3)** What is DBMS? Explain any two models in DBMS with suitable examples.
- Q4) Write an account of different types of digitizers.
- **Q5)** Describe the various applications of GIS.
- **Q6)** Explain the concept of map algebra and describe grid operations.
- Q7) Write notes (Any Two) :
 - a) Elements of GIS.
 - b) Nominal, Ordinal and ratio scales.
 - c) Topology building.

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P2961

SEAT No. :

[Total No. of Pages : 1

[5535]-27 M.A./M.Sc. GEOGRAPHY Gg-220: Fluvial Geomorphology (2008 Pattern) (Semester-II)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencil is allowed.
- **Q1)** Define fluvial geomorphology and elaborate its scope.
- **Q2)** Explain regimes of flow. How do you distinguish between laminar and turbulent flow?
- **Q3)** Give an account of 'at-a-station hydraulic geometry'.
- Q4) Explain channel morphology with respect to channel types.
- **Q5)** What are fluvial erosive processes? Write in detail about factors of fluvial erosion.
- Q6) Write an account of 'River Terraces'.
- Q7) Write notes (any two):
 - a) Laws of Allometric Growth.
 - b) Critical Tractive Force.
 - c) Quaternary fluvial systems.

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P2962

[5535]-28 M.A./M.Sc. GEOGRAPHY Gg-221: Monsoon Climatology (2008 Pattern) (Semester-II)

Time : 3 Hours] Instructions to the candidates: [Max. Marks : 80

[Total No. of Pages : 1

SEAT No. :

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1**) Give an account of winter monsoon.
- Q2) Explain the effect of temperature at the surface and aloft on summer monsoon.
- Q3) Give an account of annual cycle of summer monsoon.
- **Q4)** Give an account of onset and withdrawal of monsoon.
- **Q5)** Explain long period trends in Indian monsoon.
- **Q6)** Explain the important ENSO indicators and effects of regional conditions in monsoon forecasting.
- Q7) Write notes (any two):
 - a) Economic importance of Monsoon Climatology.
 - b) Monsoon of East Asia.
 - c) Eurasian snow cover and monsoons.



P2963

[5535]-29 M.A./M.Sc. GEOGRAPHY Gg-222: Industrial Geography (2008 Pattern) (Semester-II)

Time : 3 Hours] Instructions to the candidates: [Max. Marks : 80

[Total No. of Pages : 1

SEAT No. :

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain the impact of physical factors on industrial location.
- **Q2)** Critically examine Greenhut's Model.
- Q3) Give an account of changing pattern and distribution of cotton textile industry.
- **Q4)** Give an account of any two industrial regions of Western Europe.
- Q5) Explain the locational factors for industries in India.
- **Q6)** Describe the problems and prospects of IT industry in India.
- Q7) Write notes (Any Two):
 - a) Nature of study of Industrial Geography.
 - b) Manufacturing and regional economics.
 - c) Industrial linkages.



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SEAT No. :

[Total No. of Pages : 1

[5535]-30 M.A./M.Sc. GEOGRAPHY Gg-223: Geography of Rural Settlements

(2008 Pattern) (Semester-II)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain with suitable examples the reflection of various aspects in the place names of rural settlements.
- **Q2)** Describe the factors affecting growth of settlements.
- **Q3)** Explain functional analysis of rural service centers and trading centers with suitable examples.
- Q4) Discuss functional growth and socio-economic transformation in rural areas.
- **Q5)** Describe various factors affecting rural house types.
- **Q6)** Explain in brief various aspects of rural development planning.
- *Q7*) Write notes (any two):
 - a) Von Thunen's model.
 - b) Central place theory.
 - c) Seasonal Migration.

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P2965

SEAT No. :

[Total No. of Pages : 1

[5535]-30A ^{[To} M.A./M.Sc. GEOGRAPHY Gg-224 : Geoinformatics - II (2008 Pattern) (Semester-II) (Paper-II)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- Q1) Discuss various data sources in Geoinformatics.
- **Q2)** Outline the importance of remotely sensed data as a data source in Geoinformatics.
- Q3) Discuss various theories of EMR.
- Q4) Discuss optical aspects of an aerial camera and its various components.
- Q5) Describe various platforms used in satellite remote sensing.
- **Q6)** Give an amount of data products.
- Q7) Write notes (any two):
 - a) GPS co-ordinates.
 - b) Atmospheric windows.
 - c) Air borne satellite platforms.

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SEAT No. :

[Total No. of Pages : 1

[5535]-31 M.A./M.Sc. GEOGRAPHY Gg-301 : Theoretical and Applied Geography

(2008 Pattern)

Time : 3 Hours]

[Max. Marks : 80

Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain the major contributions during the medieral period in the development of Geography.
- **Q2)** Discuss the contribution of Humboldt and Ritter in the development of geographical thought.
- **Q3)** Discuss in brief dualism and dichotomies in geography.
- Q4) Describe the structure and elements of systems with their relationships.
- **Q5)** Describe the quantitative revolution in geography.
- *Q6)* Write an essay on the application of geographical concepts and techniques in natural hazard management.
- Q7) Write notes on any two :
 - a) Contributions of Arab scholars.
 - b) Significance of Applied geography.
 - c) Hypothesis testing.

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P2967

SEAT No. :

[Total No. of Pages : 1

[5535]-32 M.A./M.Sc. GEOGRAPHY Gg-310 : Coastal Geomorphology

(2008 Pattern) (Semester-III) (Credit System)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- Q1) Explain various components of coastal systems.
- **Q2)** Compare and contrast between wave induced and tide induced currents giving suitable examples.
- **Q3)** Give an account of mechanism of sea level changes with reference to relative and eustatic sea level change.
- Q4) Write an account of equilibrium theory of tides.
- **Q5)** Describe various coastal issues with reference to India.
- **Q6)** Give an account of tide-dominated coasts giving suitable examples.
- Q7) Write notes on any two:
 - a) Indicators of former sea levels.
 - b) Corals and coral reefs.
 - c) Salt intrusion and subsidence of coastal aquifers.



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SEAT No. :

[Total No. of Pages : 1

[5535]-33 M.A./M.Sc. GEOGRAPHY Gg-311 : Applied Climatology (2008 Pattern) (Semester-III)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Describe how climate influences air and water transport.
- Q2) Discuss different uses of remote sensing technique in agriculture.
- **Q3)** What is climate change? What are its internal and external causes? Explain various techniques used to construct past climate.
- *Q4)* Describe various radiation laws and explain in detail at least two instruments used to measure radiation.
- **Q5)** Distinguish between evaporation and evapotranspiration. Elaborate direct and indirect methods used to measure evapotranspiration.
- *Q6)* How does climate affect occurrences of pests and diseases? In detail, explain different methods of artificially controlling plant environment.
- Q7) Write notes on any two:
 - a) Heating degree-days and cooling towers.
 - b) Urban air pollution problems.
 - c) Development of applied climatology.



SEAT No. :

P2969

[Total No. of Pages : 1

[5535]-34 M.A./M.Sc. GEOGRAPHY Gg-312 : Trade and Transport Geography (2008 Pattern) (Semester-III)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1**) Give an account of development and distribution of roadways in the world.
- **Q2)** Explain the economic factors associated with the location of seaports and airports.
- Q3) Describe the urban transport problems in developing countries.
- Q4) Explain the role of trade in different economies of the world.
- **Q5)** Critically examine the Neo-Classical Theory of trade.
- Q6) Describe the geographical factors influencing the international trade.
- Q7) Write notes on any two:
 - a) Approaches to the study of trade and transport geography.
 - b) Measurement of accessibility.
 - c) Traffic congestion in urban areas.

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P2970

SEAT No. :

[Total No. of Pages : 1

[5535]-35 M.A./M.Sc. GEOGRAPHY Gg-313: Urban Geography (2008 Pattern) (Semester-III)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt Any Four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain the Harris and Ullman's morphological model of urban structure.
- **Q2)** Give a detailed account of functional classification of towns by H.J. Nelson.
- Q3) Explain Age, sex and occupational structure of urban population with suitable examples.
- Q4) Explain the nature of urban influence with suitable examples.
- **Q5)** Explain how price of land is associated with horizontal and vertical growth of cities.
- **Q6)** Explain the need of city planning and elements of city plan.
- *Q7*) Write notes on <u>Any Two</u>:
 - a) Significance of urban geography.
 - b) Spatio temporal variations in urbanization in developing countries.
 - c) Suburbanisation.



P2971

SEAT No. :

[Total No. of Pages : 1

[5535]-36 M.A./M.Sc. GEOGRAPHY Gg-314: Geo-Informatics - III (2008 Pattern) (Semester-III) (Paper-III)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencil and calculator is allowed.
- **Q1)** Write a brief account of grid operations in spatial data analysis.
- **Q2)** Give an account of spatial interpolation.
- Q3) Explain spatial analysis with reference to network and surface analysis.
- Q4) Explain the methods employed in image enhancement.
- Q5) Explain training, classification and output stages in supervised classification.
- **Q6)** Write an explanatory note on Microwave Remote Sensing.
- Q7) Write notes on any two:
 - a) TVI and GNDVI.
 - b) Hyper spectral RS.
 - c) Spectral resolution.

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P2972

[5535]-37 M.A/M.Sc. **GEOGRAPHY Gg-320:** Multivariate Statistics

(2008 Pattern) (Semester - III)

Time : 3 Hours] [Max. Marks : 80 Instructions to the candidates: 1) Attempt any four questions. 2) All questions carry equal marks. 3) Use of calculators, Statistical tables etc. is allowed. Explain with examples bivariate and multivariate analysis. *Q1*) a) [10] Write an explanatory note on data reduction and simplification. b) [10] *Q2*) a) Find inverse of the following matrix. [10] $N = \begin{bmatrix} 2.5 & 4.6 & 2.0 \\ 3.2 & 2.5 & 3.0 \\ 0.8 & 3.3 & 4.0 \end{bmatrix}$ Define matrix and explain types of matrices. b) [10]

Q3) Compute the multiple regression equation from the following matrix of correlations and interpret the results. [20]

X2	Y
0.40	07
0.30	08
0.58	04
0.92	08
0.88	10
0.62	0.9
0.22	12
0.86	10
0.65	08
0.74	09
	0.40 0.30 0.58 0.92 0.88 0.62 0.22 0.86 0.65

[Total No. of Pages :2

P.T.O.

Q4) Find the first two principal components, eigen vector and explained variance from the matrix of correlation. [20]

	X1	X2	X3	X4	X5
X1	1				
X2	0.3	1			
X3	0.7	0.8	0.1		
X4	0.5	0.7	0.2	1	
X5	0.3	0.5	0.7	0.4	1

Q5) a) Describe principles and use of trend surface analysis in Geomorphology.

[12]

- b) Explain the computer applications of multivariate analysis. [8]
- *Q6)* Extract the first factor of loading and calculate eigen value for the following interpret the results. [20]

	X1	X2	X3	X4	X5
X1	1				
X2	0.2	1			
X3	0.4	0.5	1		
X4	0.8	-0.2	0.9	1	
X5	0.4	-0.4	0.6	0.2	1

Q7) Write notes on any two.

[20]

- a) Hypothesis testing
- b) Application of PCA in remote sensing
- c) Multicolinearity



P2973

SEAT No. :

[Total No. of Pages :1

[5535]-38 M.A./M.Sc. GEOGRAPHY Gg-321: Political Geography (2008 Pattern) (Semester - III)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain global strategic views of Spykman and Cohen.
- Q2) Write in detail the relation between geography and politics.
- **Q3)** Describe the geographical perspectives with reference to the formation of the state and nation.
- Q4) Give an account of the classification of international boundaries.
- **Q5)** Discuss the interstate water dispute Issues in India.
- Q6) Write an explanatory note on the stability and instability in state politics.
- Q7) Write notes on any two.
 - a) Nationalism
 - b) Resources and national strategy
 - c) Insurgency in boarder states.



P2974

SEAT No. :

[Total No. of Pages :1

[5535]-39 M.A/M.Sc. II GEOGRAPHY

Gg-322: Soil Geography

(2008 Pattern) (Credit System) (Semester - III)

Time : 3Hours] Instructions to the candidates: [Max. Marks : 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Draw figures/maps wherever necessary.
- 4) Use of map stencils is allowed.
- **Q1)** 'Parent material and topography are the important factors affecting soil formation process.' Elaborate.
- Q2) Describe in detail the chemical properties of soils.
- Q3) Write an explanatory note on Genetic structure of soils.
- Q4) Describe the various types of physical weathering processes.
- **Q5)** Write an explanatory note on land capability classification.
- **Q6)** Discuss the various problems related to soil degradation.
- Q7) Write notes on any two.
 - a) Buried soils and paleosoils.
 - b) Morphological features of soil horizons.
 - c) Soil texture and structure.

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P2976

SEAT No. :

[Total No. of Pages : 2

[5535]-42

M.A./M.Sc.

GEOGRAPHY

Gg-420 : Regional Planning and Development (2008 Pattern) (Semester-IV) (Old Course)

Time : 3 Hours]

[Max. Marks: 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use maps and diagrams wherever necessary. Use of Stencil is allowed.
- **Q1)** What is regional planning? How does it focus on social, economic and environmental justice? Highlight the distinctive role of geographers in planning.
- **Q2)** Considering a river basin planning, highlight how the Damodar valley Corporation helped in Meso level planning.
- **Q3)** What is multi level planning? Why do you think India's adoption to such type of planning has helped in reduction of regional disparity. Justify your answer.
- *Q4)* What are the tools and techniques available with a social geographer for planning of any functional region.

- **Q5)** "Even after more than 60 years of India's freedom and planning process, regional disparity exists." Justify. Taking the case of India, discuss any two types of disparities and state the reasons for the same.
- **Q6)** Why do you think geography is interrelated to regional planning? Give some suitable examples to show the relevance of geographical phenomena in regional planning.
- *Q7*) Write Notes on (any two):
 - a) Government schemes for tribal development.
 - b) Types of regions.
 - c) Development strategies in Developed nations of the world.



[Total No. of Pages : 1

SEAT No. :

P2977

[5535]-43 M.A./M.Sc. GEOGRAPHY

Gg-421 : Geography of Water Resources (2008 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks: 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Give an account of distribution of world's surface and subsurface water resources.
- **Q2)** Describe agricultural, industrial and municipal uses of water, giving suitable examples.
- **Q3)** Discuss various methods of distribution of water to farms.
- Q4) Give an account of industrial utilisation of water resources.
- **Q5)** Discuss various measures of water management giving suitable examples.
- **Q6)** Give an account of integrated basin planning.
- Q7) Write notes on any two :
 - a) Landuse regulations.
 - b) India water Treaty.
 - c) Water harvesting techniques.

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SEAT No. :

[Total No. of Pages : 1

[5535]-44 M.A./M.Sc. GEOGRAPHY Gg-422 : Biogeography (2008 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- Q1) Describe the role of bio-geography in environmental studies.
- Q2) Discuss the distributional patterns of biodiversity.
- Q3) What is environmental gradient? Explain ecological succession.
- **Q4)** Discuss patterns of climate and interaction of factors as physical limitation of life.
- **Q5)** Give an account of changing patterns of continents and evolution of life on earth.
- Q6) Mention major terrestrial biomes and explain any two of them in detail.
- Q7) Write notes on any two :
 - a) Hazards on island life.
 - b) Micro climate.
 - c) History of biogeography.

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SEAT No. :

[Total No. of Pages : 1

[5535]-45 M.A./M.Sc. GEOGRAPHY Gg-423 : Geography and Ecosystem (2008 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 80

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1**) What is an ecosystem? Describe the lithospheric components of ecosystem.
- Q2) Explain the flow of energy in ecosystem with examples.
- *Q3)* What do you mean by terrestrial ecosystem? Describe the grassland ecosystem in details.
- **Q4)** Write a geographical essay on land resources and food security in the world.
- *Q5)* What do you mean by biodiversity? Describe the methods of conservation of biodiversity.
- **Q6)** Bring out the salient features of the Forest Act in India.
- Q7) Write notes on <u>any two</u> of the following :
 - a) Geography as human ecology.
 - b) Spatial and temporal dimensions of ecosystems.
 - c) Ecological changes and rational parks.

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P2980

[5535]-46 M.A./M.Sc. GEOGRAPHY Gg-424 : Research Methodology (2008 Pattern) (Semester-IV)

Time : 3 Hours] Instructions to the candidates: [Max. Marks : 80

[Total No. of Pages : 1

SEAT No. :

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1**) Describe principles and methods of theodolite survey.
- **Q2)** Explain the data base creation for physical and cultural features in SOI toposheet.
- **Q3)** Describe the geometry of aerial photograph.
- Q4) Explain bivariate and multivariate analysis with suitable examples.
- Q5) Discuss the use of GIS in spatial data analysis and modelling.
- **Q6)** Describe briefly various steps of report writing.
- Q7) Write notes on (any two):
 - a) U.T.M. Projection.
 - b) Field survey.
 - c) Traverse Survey.

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SEAT No. :

[Total No. of Pages : 1

[5535]-47 M.A./M.Sc. GEOGRAPHY Gg-430 : Social & Cultural Geography (2008 Pattern) (Semester-IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencil is allowed.
- *Q1*) Discuss the recent trends and development of cultural geography.
- **Q2)** What is Radicalism? Explain Radicalism as philosophical base in social geography.
- **Q3)** Discuss models of Assimilation and Segregation.
- Q4) Describe the different cultural regions of India.
- Q5) Discuss the basic components of regional and social cultural indicators of social well-being.
- **Q6)** Discuss about the types and structure of social groups.
- Q7) Write notes on any two:
 - a) Language and Dialect.
 - b) Social and physical infrastructure.
 - c) Globalization.



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SEAT No. :

[Total No. of Pages : 1

[5535]-48 M.A./M.Sc. GEOGRAPHY Gg-431 : Computer Geography (2008 Pattern) (Semester-IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Discuss the application of computer techniques in Physical Geography.
- Q2) Give an account of Windows operating system.
- Q3) Discuss the importance of AutoCAD as supporting software in GIS.
- Q4) State the significance of coral photo paint and images in maps making.
- **Q5)** Discuss the application of Digitization in Computer Geography.
- **Q6)** Mention various types of charts and discuss its significance in geographical data presentation.
- Q7) Write notes on any two:
 - a) Computer languages.
 - b) Significance of Corel DRAW.
 - c) Raster and vector based GIS software's.



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SEAT No. :

[Total No. of Pages : 1

[5535]-49 M.A./M.Sc. GEOGRAPHY Gg-432 : Oceanography (2008 Pattern) (Semester-IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain the post-war oceanography and foundation of modern oceanography.
- Q2) Explain the theory of continental drift and critically examine the same.
- Q3) Describe the factors affecting origin and nature of ocean currents.
- **Q4)** Explain the origin tsunamis. Describe the characteristics of tsunamis in shallow and deep water.
- Q5) Describe the factors affecting the temperature of sea water and its distribution.
- *Q6)* Discuss the classification of marine deposits on the basis of their distribution on the ocean floor.
- Q7) Write notes on any two:
 - a) Types of tides.
 - b) Continental margin and abyssal plain.
 - c) Tidal currents and their effects.



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SEAT No. :

[Total No. of Pages : 1

[5535]-50 M.A./M.Sc. GEOGRAPHY Gg-433 : Natural and Manmade Hazards

(2008 Pattern) (Semester-IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1**) Describe the causes and effects of soil erosion.
- Q2) Explain the impact of large river projects.
- **Q3)** Discuss the importance of hydrological cycle.
- Q4) Explain the influence of release of toxic elements in the air and water.
- Q5) Discuss the pollution of rivers with religious importance in India.
- **Q6)** Describe the causes, effects and affected areas of thermal power stations.
- Q7) Write notes on any two:
 - a) Structural measures in management of disaster.
 - b) Effect of Global warming.
 - c) Causes of subsidence.



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SEAT No. :

[Total No. of Pages : 1

[5535]-51 M.A./M.Sc. GEOGRAPHY

Gg - 441 : Regional Geography of Meso Regions - Europe (2008 Course) (Semester - IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Explain the relationship between relief and drainage in Europe.
- **Q2)** Discuss the salient features of agriculture in Europe.
- **Q3)** Give an account of major industries and their distribution in Europe.
- Q4) Explain the international trade and trading partners of Europe.
- **Q5)** Describe the growth and distribution of settlements in Europe with examples.
- **Q6)** Explain the characteristics of European common market.
- Q7) Write notes on any two:
 - a) Importance of tourism in Europe.
 - b) Migrations in Europe.
 - c) Major vegetation types of Europe.



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SEAT No. :

[Total No. of Pages : 1

[5535]-52 M.A./M.Sc. GEOGRAPHY

Gg - 442 : Regional Geography of Mesoregion - South East Asia (2008 Course) (Semester - IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1**) Describe the major rivers of South-East Asia.
- Q2) Discuss in detail the salient features of agriculture of South-East Asia.
- Q3) Give an account of the distribution of major industries of South-East Asia.
- **Q4)** Describe the role of South-East Asia in international trade in the post globalization era.
- Q5) What do you mean by population resource? Give a description of population of South-East Asia.
- *Q6)* Give an account of the growth and distribution of settlements in South-East Asia.
- Q7) Write notes on any two:
 - a) Vegetation of South-East Asia.
 - b) Internal trade of South-East Asia.
 - c) Scope of tourism in South-East Asia.



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SEAT No. :

[Total No. of Pages : 1

[5535]-53 M.A./M.Sc. GEOGRAPHY

Gg - 443 : Regional Geography of Meso Region - North America (2008 Course) (Semester - IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- Q1) Mention major soil types and describe their distribution in North America.
- Q2) Discuss water and land resources in North America.
- **Q3)** Give detailed account of agriculture regions of North America.
- Q4) Describe international trade of North America.
- Q5) How the growth affects the distribution of settlement in North America.
- Q6) Write a geographical essay on 'problems and prospects of industrialization in North America'.
- Q7) Write notes on any two:
 - a) Geographical location and significance of North America.
 - b) Population resources of North America.
 - c) Development of tourism in North America.



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SEAT No. :

[Total No. of Pages : 1

[5535]-54 M.A./M.Sc. GEOGRAPHY Gg - 444 : Geography of Japan (2008 Course) (Semester - IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Japan is called as the "Britain of the East" Elaborate.
- Q2) Discuss in detail the soil characteristics of Japan.
- **Q3)** Give an account of the Hydel power of Japan.
- Q4) Explain the importance of fishing industry in the economy of Japan.
- Q5) Describe the factors affecting industrial development of Japan.
- Q6) Give a brief account of sex ratio, literacy and migration of population in Japan.
- Q7) Write notes on any two:
 - a) Oceanic transport system of Japan
 - b) Population density of Japan
 - c) Tourism in Japan



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SEAT No. :

[Total No. of Pages : 1

[5535]-55 M.A./M.Sc. GEOGRAPHY Gg - 445 : Geography of India (2008 Course) (Semester - IV)

Time : 3 Hours] Instructions to the candidates:

- 1) Attempt any four questions.
- 2) All questions carry equal marks.
- 3) Use of map stencils is allowed.
- **Q1)** Give an account of Godavari and Krishna river systems in India.
- Q2) Explain the summer season and associated weather conditions in India.
- Q3) Discuss the impact of soil degradation and measures for the soil conservation in India.
- Q4) Explain the distribution of hydro thermal and atomic power projects in India.
- **Q5)** Explain Green Revolution with its socio-economic and ecological importance in India.
- Q6) Explain the regional development of Telangana.
- Q7) Write notes on any two:
 - i) Economic position of India in relation to world.
 - ii) Sugar Industries in India.
 - iii) Population composition of India.

