



[4333] – 211

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| Seat No. | |
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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY
Gg. 224 : Geoinformatics – II
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions:** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Bring out the significance of fieldwork and surveys as a major data sources in spatial analysis
2. Discuss the historical development of remote sensing at international level.
3. Give an account of types of remote sensing and atmospheric windows.
4. Describe various geometric characteristics of an aerial photograph and explain the methods of measurement of scale and height on an aerial photograph.
5. Describe special characteristics of Land sat and IRS sensors.
6. What is GPS ? Explain space segment, control segment and user segment of GPS.
7. Write notes on **any two**.
 - i) Electromagnetic spectrum.
 - ii) SPOT.
 - iii) Factors governing the interpretability.



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| Seat No. | |
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M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY
Gg. 301 : Theoretical and Applied Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- N.B. :** i) Attempt **any four** questions.
ii) **All** questions carry **equal** marks.
iii) Draw figures/map **wherever** necessary.
iv) Use of map stencils is **allowed**.

1. Discuss the contribution of Roman philosophers to the development of geographical thoughts.
2. Explain in brief the development of geographical thoughts in medieval period.
3. Describe views of various geographers on determinism and possibilism.
4. Discuss the system approach used in geographical studies.
5. Write an explanatory note on applications of computer in geography.
6. Explain the application of geographical concepts and techniques in regional and environmental resource management.
7. Write notes on **any two**.
 - a) Contribution of W.M. Davis.
 - b) Application of geographical concepts in scenic evaluation.
 - c) Age of Discoveries.



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M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY (Special Paper – I)
Gg. 310 : Coastal Geomorphology
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) Draw figures/maps **wherever** necessary.
4) **Use** of map stencils is **allowed**.

1. Give an account of components of coastal system.
2. What are shore currents ? Explain how different types of currents are produced.
3. What is meant by sea level change ? Explain mechanism of sea level changes with suitable examples.
4. What are clastic and biogenetic sediments ? Explain their sources in coastal environment.
5. Give an account of formation and morphology of coastal deltas with examples.
6. Discuss various strategies adopted for 'storm hazard management'.
7. Write notes (**any two**).
 - a) Types of waves.
 - b) Fossil beach ridge.
 - c) Estuaries and Mud flats.



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M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY (Special Paper – I)
Gg. 311 : Applied Climatology
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- N.B. :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Explain different radiation laws. Describe various instruments used to measure temperature.
2. How is plant environment controlled artificially ? Discuss climate and soil management.
3. Give an account of the influence of climate on human health and clothing.
4. Describe in detail the formation of urban heat island and problems associated with urban air pollution.
5. Elaborate the role of remote sensing in agriculture.
6. Discuss internal and external causes of climatic change.
7. Write notes on **any two**.
 - a) Development of applied climatology.
 - b) Clear air turbulence.
 - c) Effect of climate on industrial and commercial activities.



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M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY (Special Paper – I)
Gg. 312 : Trade and Transport Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) Use of map stencils is **allowed**.

1. Give an account of the contribution made by different scholars in the development of transport geography.
2. Describe the factors associated with the development of land transport.
3. Give an account of alternative transport system in mega cities in India.
4. Describe the role of trade in the world economy.
5. Explain the trade theory of comparative advantage.
6. Explain various problems and prospects of international trade in globalisation.
7. Write notes on **any two**.
 - a) Physical factors affecting seaports.
 - b) Hinterland.
 - c) Gravity Model.



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M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY
Special Paper – I
Gg. 313 : Urban Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** i) Attempt **any four** questions.
ii) **All** questions carry **equal** marks.
iii) **Use** of map stencil is **allowed**.

1. Write a brief review of spatio-temporal variations in world urbanization.
2. Critically examine the Park and Burgess Model of Urban structure.
3. Describe various urban functions in brief.
4. Describe the methods of demarcation of rural-urban fringe.
5. Discuss the Central Place Theory and Urban hierarchy.
6. Explain the need of city planning and elements of city plan.
7. Write notes on **any two**.
 - a) Relation of urban geography to other disciplines.
 - b) Density of population in cities.
 - c) Vertical and Horizontal growth of cities.



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**M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY (Special Paper – I)
Gg. 314 : Geoinformatics – III
(2008 Pattern)**

Time : 3 Hours

Max. Marks : 80

- Instructions :** i) Attempt **any four** questions.
ii) **All** questions carry **equal** marks.
iii) **Use of map stencil and calculator is allowed.**

1. Explain in detail the grid operations required in spatial analysis.
2. Discuss in detail the techniques of spatial interpolation for generation of surfaces. Give suitable examples.
3. Discuss various analytical tasks for spatial analysis.
4. What do you understand by image rectification ? Explain systematic and non-systematic errors to be corrected in digital image processing.
5. Explain in detail the supervised classification technique employed in Digital Image Processing (DIP).
6. Write a brief account of 'Thermal Remote Sensing'.
7. Write notes on **any two**.
 - a) Density slicing and spatial filtering.
 - b) Producer's accuracy and User's accuracy.
 - c) Spectral and radiometric resolutions.



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M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY (Special Paper – II)
Gg. 320 : Multivariate Statistics
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** i) Attempt **any four** questions.
ii) **Use** of calculators and statistical tables is **allowed**.
iii) Figures to **right** indicate marks.

1. a) Define Matrix. Giving suitable examples. Describe the terms-element of a matrix, determinant of a matrix and dimension of a matrix. 6

b) Find inverse of the product matrix $A * B$. 6

$$A = \begin{bmatrix} 3 & 7 & 9 \\ 6 & 1 & 3 \\ 2 & 1 & 4 \end{bmatrix} \quad B = \begin{bmatrix} 3 & 4 & 1 \\ 2 & 9 & 0 \\ 1 & 5 & 0 \end{bmatrix}$$

c) Find determinant and adjoint of the following matrix. 8

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 6 & 1 & 3 \\ 2 & 1 & 4 \end{bmatrix} \quad D = \begin{bmatrix} 2 & 5 \\ 3 & 8 \end{bmatrix}$$

2. a) Find curvilinear regression equation of type $y = a + b_1 x^1 + b_2 x^2$ from the following data. 15

| X (Distance in 100 m) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------------------------|-----|---|-----|---|---|-----|---|---|---|
| Y (Depth of depression in m) | 1.2 | 2 | 2.5 | 4 | 5 | 3.5 | 3 | 2 | 1 |

b) What are curvilinear bivariate relationships ? Describe with the help of suitable examples in Geography. 5

P.T.O.



3. Using the following data compute multiple regression equation, obtain the explained variance and coefficient of multiple correlation. Interpret the results. **20**

| | | | | | | | | | | |
|----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|
| X1 | 0.6 | 0.7 | 0.9 | 1.3 | 1.6 | 1.8 | 2.5 | 3 | 2.5 | 4 |
| X2 | 2 | 3 | 5 | 4 | 1 | 3 | 7 | 8 | 2 | 8 |
| Y | 15 | 20 | 25 | 36 | 42 | 10 | 5 | 12 | 22 | 30 |

4. In the study of an agricultural plot following spatial variation was recorded in the moisture content of surface soils. Find the linear trend surface equation and plot the surface to a suitable scale. Determine the explained variance. **20**

| | | | | | | | | | | |
|---|----|----|----|----|----|----|---|----|---|----|
| X | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Y | 3 | 5 | 7 | 9 | 8 | 3 | 2 | 10 | 5 | 4 |
| Z | 20 | 18 | 15 | 10 | 10 | 10 | 9 | 5 | 5 | 5 |

5. a) Find first two principal components from the following matrix of correlations. **15**

| | | | | | | |
|----------------|----------------|----------------|----------------|----------------|------|----------------|
| | X ₁ | X ₂ | X ₃ | X ₄ | | X ₅ |
| X ₁ | 1.00 | 0.83 | 0.92 | 0.71 | 0.62 | 0.43 |
| X ₂ | | 1.00 | 0.55 | 0.48 | 0.35 | 0.36 |
| X ₃ | | | 1.00 | 0.23 | 0.25 | 0.18 |
| X ₄ | | | | 1.00 | 0.88 | 0.78 |
| X ₅ | | | | | 1.00 | 0.68 |
| X ₆ | | | | | | 1.00 |

- b) Explain the significance of PCA in regionalization. **5**
6. Find first factor from the matrix of correlations given in the Q.5 a) above and find the explained variance. **20**
7. Write notes (**any two**). **20**
- i) Crammers Rule.
 - ii) Higher order trend surfaces.
 - iii) Data reduction.



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M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY (Special Paper – II)
Gg. 321 : Political Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- N.B. :** i) Attempt **any four** questions.
ii) **All** questions carry **equal** marks.
iii) Draw figures/maps **wherever** necessary.
iv) **Use** of map stencils is **allowed**.

1. What is meant by geopolitics ? Explain how it became helpful for development of political geography.
2. Describe various approaches to study of political geography.
3. Differentiate between State and Nation and explain the process of state formation.
4. Explain Mackinder's Heartland Theory and Global Geostrategic views.
5. Describe how power of nation depends on resource management.
6. Explain the political geography of SAARC region.
7. Write notes on **any two** :
 - a) Genetic classification of boundaries.
 - b) Stability and instability in state politics.
 - c) Interstate water disputes in India.



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M.A./M.Sc. (Semester – III) Examination, 2013
GEOGRAPHY (Special Paper – II)
Gg. 322 : Soil Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** i) Attempt **any four** questions.
ii) **All** questions carry **equal** marks.
iii) **Use** of map stencils is **allowed**.

1. Discuss the relationship between physical geography and soils.
 2. Describe the importance of climate and vegetation in soil formation.
 3. Give an account of chemical properties of soil.
 4. Explain genetic structure of soil with reference to primary minerals and organic matter.
 5. Giving suitable examples explain the process of physical weathering.
 6. Write an account of land capability classification.
 7. Write notes on **any two**.
 - a) Soil colloids.
 - b) Soil contamination.
 - c) Overgrazing.
-



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg. 401 : Resource Management
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Explain various models and approaches to resource management.
 2. Write an essay on the various methods of conservation of soil and minerals.
 3. Explain with suitable examples, applications of remote sensing in resource management.
 4. 'Management of transportation in urban area takes care of air pollution'. Discuss.
 5. Elaborate the concept of resource development with suitable examples.
 6. Give an account of water resources in India and their development policies.
 7. Write notes on **any two**.
 - i) Cultural classification of resources.
 - ii) Population as a resource.
 - iii) Integrated resources.
-



[4333] – 402

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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg. 420 : Regional Planning and Development
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. What is Region ? Explain the role of geography in regional planning.
2. Explain the various criteria used in typology of regions.
3. Examine the importance of techno-economic survey for regional planning..
4. Discuss the sectoral, temporal and spatial dimensions used in the delineation of a region.
5. Describe the development strategies in plans of developing countries with reference to regional concentration and dispersion.
6. Examine the experience of regional planning in India with reference to the Indian five year plans.
7. Write notes on **any two**.
 - i) District level planning.
 - ii) Formal region.
 - iii) Command area development.



[4333] – 403

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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg. – 421 : Geography of Water Resources
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions** : 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Describe hydrological cycle in detail with the help of suitable diagram.
2. Bring out the relationship between soil, water and crop and highlight the need of water conservation in agriculture.
3. Discuss the issue of municipal water use and water treatment in urban areas.
4. Elaborate how availability and non-availability of water create environment problems.
5. Outline the measures to be taken for conservation, planning and development of water resources.
6. Discuss different case studies of treaties and agreements related to water resources.
7. Write notes on **any two** :
 - a) Surface water distribution
 - b) Rainwater harvesting
 - c) Ground water resources.



[4333] – 404

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| Seat No. | |
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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg. – 422 : Biogeography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions** : 1) **All** questions carry **equal** marks.
2) Attempt **any four** questions.
3) **Use of map stencil is allowed.**

1. Define biogeography and describe its history in detail.
 2. Describe major zoogeographical provinces in the world.
 3. Discuss dispersal and colonisation as a basic biogeographic processes.
 4. Critically examine the factors of physical limitation of life.
 5. Give a detailed account of evolution of life on earth.
 6. Describe temperate broad leaf forest biomes with respect to species richness and regional climate.
 7. Write notes on **any two** :
 - i) Biomes and lifeforms.
 - ii) Tropical savanna biome.
 - iii) Changing patterns of continents.
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| Seat No. | |
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M.A./M.Sc. (Semester – I) Examination, 2013
GEOGRAPHY
Gg-101 : Principles of Geomorphology
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions:** i) Attempt **any four** questions.
ii) **All** questions carry **equal** marks.
iii) **Use of map stencils is allowed.**

1. What is Geomorphology ? Write an essay on the concept of process geomorphology.
2. Explain in detail theory of plate tectonics.
3. Explain the various sources of knowledge of interior of the earth.
4. What is weathering ? Explain the chemical weathering in detail.
5. Give an account of work of river with reference to mechanics of erosion, transportation and deposition.
6. Give the details of erosional landforms produced by the work of waves and tides along the coast.
7. Write notes on **any two** :
 - a) Slope morphology.
 - b) Erosional landforms of glaciers.
 - c) "Drainage basin as a geomorphic unit".

B/I/13/635



[4333] – 102

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| Seat No. | |
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M.A./M.Sc. (Semester – I) Examination, 2013
GEOGRAPHY
Gg-102 : Principles of Climatology
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- N.B.:** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Define climatology and explain its nature and scope.
2. Describe physical properties and chemical composition of the earth's atmosphere.
3. Give an account of the horizontal and vertical distribution of temperature.
4. Explain primary and secondary circulation of the atmosphere in detail.
5. Discuss various factors affecting the process of condensation.
6. Explain in detail absolute stability and absolute instability of the atmosphere.
7. Write notes on **any two** :
 - a) Scattering and diffusion of solar radiation
 - b) Geostrophic wind
 - c) Classification of air masses.



[4333] – 103

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| Seat No. | |
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M.A./M.Sc. (Semester – I) Examination, 2013
GEOGRAPHY
Gg-103 : Principles of Economic Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

Instructions : i) Attempt **any four** questions.
ii) **All** questions carry **equal** marks.
iii) **Use of map stencils is allowed.**

1. Explain the nature and scope of economic geography.
2. Describe the tribal and village economy with suitable examples.
3. Explain Von Thunen's model.
4. Discuss the significance of human resources in economic development.
5. With suitable examples explain the significance of labour in production.
6. Discuss the problems and prospects of international trade.
7. Write notes (**any two**) :
 - i) Internal economies of scale
 - ii) Rostow's model
 - iii) Impact of globalization on the economic development of India.

B/I/13/330



[4333] – 104

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| Seat No. | |
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M.A./M.Sc. (Semester – I) Examination, 2013
GEOGRAPHY
Gg – 104 : Principles of Settlement and Population Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

Instructions : 1) *Attempt any four questions.*
2) *All questions carry equal marks.*
3) *Use of map stencil is allowed.*

1. Describe the influence of physical and economic factors on distribution of settlements.
2. Explain the effect of technology on shelter and pattern of settlements.
3. Describe the factors related to nucleation of settlements.
4. Describe the factors responsible for urban growth.
5. Critically examine Thomas Malthus's Theory of population growth.
6. Discuss population as a resource.
7. Write notes on **any two** :
 - a) Approaches to the study of settlement geography.
 - b) Economic factors influencing population distribution.
 - c) Centrality and nodality.

B/I/13/345



[4333] – 201

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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY
Gg – 201 : Quantitative Techniques in Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- N.B.:** 1) Attempt **any four** questions.
2) **Use** of calculator and statistical table are **allowed**.
3) The figures in the **right** hand side bracket indicate **full** marks.

1. a) Write a short note on spatial and temporal data. 6
- b) The following table represents data of age in years and number of cases. Calculate mean and median for the following data and comment. 14

| Age in years | 09.5 – 19.5 | 19.5 – 29.5 | 29.5 – 39.5 | 39.5 – 49.5 | 49.5 – 59.5 | 59.5 – 69.5 | 69.5 – 79.5 | 79.5 – 89.5 |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| No. of cases (f) | 1 | 2 | 3 | 10 | 19 | 42 | 12 | 5 |

2. a) Write a note on descriptive and inferential statistics. 6
- b) A day long interview was conducted for 315 students from a college and 275 were found to be pass and remaining fail. If a sample of 6 students is selected at random, find the probability that : 14
- i) Three students are pass
- ii) None of them is pass
- iii) Four students are pass
- iv) Five students are pass.
3. a) Describe the Poisson Probability Distribution. 6

P.T.O.



- b) The following table gives decadal population of India. Using least square method, obtain best fit equation. Estimate the population of India for 2011. 14

| | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|
| Year | 1921 | 1931 | 1941 | 1951 | 1961 | 1971 | 1981 | 1991 | 2001 |
| Population (Population in million) | 251 | 279 | 318 | 361 | 439 | 548 | 684 | 846 | 1027 |

4. a) Write properties of time series. 6

- b) The table provides data of age of husbands (X) and age of wives (Y). Find out the Pearson’s product moment correlation coefficient and test the level of significance at 0.05 and interpret the value. 14

| | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|
| X | 24 | 23 | 25 | 33 | 29 | 36 | 33 | 38 | 47 | 45 |
| Y | 20 | 19 | 22 | 28 | 25 | 34 | 30 | 36 | 45 | 43 |

5. Small survey was carried out on two residential areas following data were obtained. The row X contains the ages of a random samples of 10 heads of households and the row Y contains ages of a similar sample in other residential area. Use Student’s ‘t’ test to find whether there is significant difference between two samples. Test the hypothesis at 0.05 level of significance and comment. 20

| | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|
| X | 39 | 45 | 51 | 54 | 49 | 30 | 61 | 41 | 31 | 41 |
| Y | 50 | 62 | 61 | 52 | 48 | 45 | 36 | 23 | 59 | 61 |

6. The data of rainfall in cm (X) and yield of paddy in quintals (Y) per hectare in a region have been given in the following table. Find regression equation for the data. Plot the scatter and draw best fit line. Comment on it. 20

| | | | | | | | |
|----------|-----|-----|----|-----|-----|-----|-----|
| X | 115 | 101 | 97 | 125 | 141 | 132 | 128 |
| Y | 19 | 14 | 12 | 18 | 12 | 22 | 18 |

7. Write short notes on **any two** : 20
- Residuals and explained variance
 - Properties of time series
 - Grouped and ungrouped data.



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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY
Gg – 210 : Tropical Geomorphology
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- N.B. :** i) Attempt **any four** questions.
ii) **All** questions carry **equal** marks.
iii) **Use** of map stencils is **allowed**.

1. Discuss the climatic and environmental factors in the tropics, affecting tropical landscape.
2. Explain the process of solubility and mobility of minerals in the tropics.
3. Discuss the various theories put forward for the origin of iron in laterites and discuss landform development in lateritic terrain.
4. Describe the relief characteristics and valley forms in the tropics.
5. Write Geographical essay on tropical landscape with respect to tropical coasts.
6. Discuss the role of tectonics and climate change in the development of landforms in the tropics.
7. Write notes on **any two** :
 - i) Deep weathering profile
 - ii) Process of erosion and deposition in tropical rivers
 - iii) Double surface of planation.



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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY
(2008 Pattern)
Gg – 211 : Synoptic Climatology

Time : 3 Hours

Max. Marks : 80

Instructions : 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Explain the significance of synoptic approach in the study of synoptic climatology.
2. Describe life cycle and structure of tropical cyclone.
3. Explain in detail the origin of structure and stages in the development of thunderstorm.
4. Define Front and differentiate between warm and cold fronts.
5. Explain in detail the Rossby waves and life cycle of extra-tropical cyclone.
6. Give an account of short, medium and long range forecasting.
7. Write notes on **any two** :
 - i) Analysis of weather charts.
 - ii) Classification of clouds.
 - iii) Importance of weather forecasting in agro-climatological services.

B/I/13/200



[4333] – 204

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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY
Gg – 212 : Agricultural Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

Instructions : 1) *All questions carry equal marks.*
2) *Attempt any four questions.*
3) *Use of map stencils is allowed.*

1. Describe origin and dispersal of agriculture.
2. 'Agriculture is basic and significant activity in any economy' - Explain with suitable examples.
3. What is the role of cultural determinants in agricultural development ?
4. Write an essay on the salient features of commercial farming.
5. What is crop combination ? Describe Weaver and Thomas method of crop combination.
6. Give an account of agricultural land use patterns in India.
7. Write short notes on **any two** :
 - i) Use of Bio chemical inputs.
 - ii) Approaches to the study of Agricultural Geography.
 - iii) Role of irrigation in an region.

B/I/13/430



[4333] – 205

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| Seat No. | |
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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY (2008 Pattern)
Gg-213 : Population Geography

Time : 3 Hours

Max. Marks : 80

- Instructions:** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Define population geography and explain its relation with other disciplines.
2. Discuss the factors influencing population growth.
3. Account for the uneven distribution of world populations.
4. Give a comparative account of fertility levels and trends in developed and developing countries.
5. Explain the causes and consequences of migration.
6. Explain the importance of population projections in industrial and agricultural development planning.
7. Write notes (**any two**) :
 - I) Marx's population theory
 - II) Foetal and infant mortality
 - III) Occupational composition of population.



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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY
Gg.214 – Geoinformatics Paper – I
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

Instructions : 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencil is allowed.**

1. Describe with suitable examples various applications of GIS.
2. Give a comparative account of functional and logical relationship in spatial database.
3. Explain why raster model is well suited for spatially continuous variables giving suitable examples.
4. What is spatial data editing ? Explain various topological errors.
5. Elaborate various operations from algebraic theory in data analysis in GIS.
6. Describe various operations from 'Set theory' in GIS.
7. Write notes on **any two** :
 - i) Spatial Information Theory.
 - ii) Hardware and Software requirement in GIS.
 - iii) Tessellation.



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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY
Gg-220 : Fluvial Geomorphology
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Define fluvial geomorphology and elaborate its scope.
2. Explain regimes of flow. How do you distinguish between uniform and non uniform flows ?
3. Give an account of downstream hydraulic geometry.
4. Explain channel morphology with respect to channel type.
5. Give an account of fluvial erosional features.
6. Define river metamorphosis. Explain long term and short term adjustment of river.
7. Write notes on **any two** :
 - i) Suspended load and bed load
 - ii) Types of river terraces
 - iii) Concept of grade.



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**M.A./M.Sc. (Semester – II Examination, 2013
GEOGRAPHY
(2008 Pattern)
Gg-221 : Monsoon Climatology**

Time : 3 Hours

Max. Marks : 80

Instructions : 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) Use of map stencils is **allowed**.

1. Describe the thermal and fohn's concepts of origin of monsoon.
2. Explain in detail the classical theory of Indian Monsoon.
3. Differentiate between monsoon of East Asia and South Asia.
4. Give an account of withdrawal of monsoon and monsoon depressions.
5. Explain in detail Walker circulation and Eurasian snow cover in teleconnection.
6. Bring out the importance of historical perspective and regional conditions in forecasting.
7. Write notes on **any two** :
 - i) Development of monsoon climatology
 - ii) Compressibility of atmosphere
 - iii) Tibetan anticyclone.



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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY (2008 Pattern)
Gg – 222 : Industrial Geography

Time : 3 Hours

Max. Marks : 80

Instructions : 1) **All** questions carry **equal** marks.
2) Attempt **any four** questions.
3) **Use of map stencils is allowed.**

1. Define industrial geography and explain its nature.
2. Describe socio-cultural factors influencing on industrial location.
3. Critically examine Isard's model.
4. Give an account of changing pattern and distribution of Iron and Steel industry.
5. Describe industrial regions in Western Europe.
6. Explain disparities in regional development of industries in India.
7. Write short notes on **any two** :
 - i) Software industry in Maharashtra.
 - ii) Assumptions of Weber model.
 - iii) Agglomeration.

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M.A./M.Sc. (Semester – II) Examination, 2013
GEOGRAPHY
Gg-223 : Geography of Rural Settlements
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- N.B. :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Describe the evolution of settlements in different parts of the world.
2. Describe the factors affecting growth of settlements.
3. Explain the various factors affecting rural land use.
4. Discuss functional growth and socio-economic transformation in rural areas.
5. Describe the various factors affecting rural house types.
6. Discuss, land use and transport are the vital aspects of rural development planning.
7. Write notes (**any two**) :
 - a) Land tenancy system
 - b) Seasonal migration
 - c) Patterns of rural settlements.



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M.A. / M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg 423 : Geography and Ecosystem
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :**
- 1) **All** questions carry **equal** marks.
 - 2) Attempt **any four** questions.
 - 3) Use of map stencil is used.

1. Describe biotic and abiotic components of ecosystem.
2. Give an account of biogeochemical cycles as a functioning component of an ecosystem.
3. Give an account of land resources and world food security.
4. Write an explanatory note on man-made ecosystems.
5. Explain the need of conservation of biodiversity.
6. Elaborate man induced environmental and ecological changes with reference to India.
7. Write notes on **any two** :
 - i) Stockholm conference
 - ii) Pyramid of energy
 - iii) Food chain and food web.



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg – 424 : Research Methodology
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

Instructions : 1) **All** questions carry **equal** marks.
2) Attempt **any four** questions.
3) **Use of map stencil is allowed.**

1. Give an account of UTM projection and bring out the importance of its utility.
2. Explain the methodology for creation of database for physical features from toposheets.
3. What do you understand by the concept of stereoscopic view and discuss the methodology to obtain relative heights from the aerial photograph.
4. Give an account of nature of data in geographical research.
5. Give an account of preparation of questionnaire for household surveys.
6. Discuss how the research problem can be put up with justification in geographical research, give suitable examples.
7. Write notes on **any two** :
 - i) Nature of data in geography
 - ii) Use of GIS in geographical research
 - iii) Non-parametric tests



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg – 430 : Social and Cultural Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

Instructions : 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Give an account of early contributions, trends and development of social and cultural geography.
2. Define space and explain structure and processes of social patterns in social and cultural geography.
3. Explain various groups in society.
4. Describe various elements in the formation of cultural regions.
5. Give an account of basic components and socio-cultural indicators of social well-being.
6. Explain the need of redistribution of resources in human settlements with respect to social justice, equality and welfare.
7. Write notes on **any two** :
 - i) Impact of technology on human settlements.
 - ii) Patterns of social well-being.
 - iii) Social and physical infrastructure of human settlements.



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg – 431 : Computer Geography
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

Instructions : 1) **All** questions carry **equal** marks.
2) Attempt **any four** questions.
3) **Use** of calculator and statistical table is **allowed**.

1. Discuss the application of computers in Physical Geography.
2. Describe the role of language, software and internet in computer studies.
3. Explain in detail windows operating system.
4. Discuss the image resampling, cropping and enhancement functions of CorelDRAW.
5. Define GIS. Correlate the role of AutoCAD and GIS in mapmaking.
6. Explain the types of graphical representation that can be done in Excel.
7. Write notes on **any two** :
 - i) Internet
 - ii) Digitization
 - iii) Application of paint in mapmaking.



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M.A. /M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
(2008 Pattern)
Gg 432 – Oceanography

Time : 3 Hours

Max. Marks : 80

- Instructions :**
- 1) Attempt **any four** questions.
 - 2) **All** questions carry **equal** marks.
 - 3) **Use of map stencils is allowed.**

1. Give the meaning of 'Oceanography' and discuss the stages of development of oceanography as a separate discipline.
2. 'Plate tectonics is the basis of ocean basin formation.' Elaborate.
3. Explain how the ocean water temperature varies with respect to depth and latitudes ?
4. Critically examine the 'equilibrium theory of tides'.
5. Discuss different types of ocean waves and their properties.
6. Describe the factors responsible for the formation of ocean currents.
7. Write notes on **any two** :
 - a) Ocean bottom relief
 - b) Salinity of ocean water
 - c) Oceanic oozes.



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY (2008 Pattern)
Gg – 433 : Natural and Manmade Hazards

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Define disaster. Explain risk and vulnerability assessment of disaster.
2. Give an account of causes and effects of climatic hazards.
3. Discuss the causes and effects of landslides.
4. Explain the influence of large river project on environment with reference to Sardar Sarovar.
5. Discuss the world population growth and its impact on biodiversity.
6. Describe the causes and effects of global warming.
7. Write notes (**any two**) :
 - I) Effects of droughts.
 - II) Causes of floods.
 - III) Structural measures in management of disaster.



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg – 441 : Regional Geography of Europe
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Give an account of distribution of major types of Vegetation of Europe.
2. Give an account of mineral and energy resources of Europe.
3. Explain various problems and prospects of industrialization in Europe.
4. Explain the growth and distribution of population in Europe.
5. Give an account of development of megalopolis and problems of urbanization in Europe.
6. Explain the political and economic impact of I and II World War on industrial revolution in Europe.
7. Write notes on **any two** :
 - i) Euro - currency
 - ii) Locational significance of Europe
 - iii) Major tourist centers of Europe.



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
Gg – 442 : Regional Geography of South East Asia
(2008 Pattern)

Time : 3 Hours

Max. Marks : 80

Instructions : 1) *Attempt any four questions.*
2) *All questions carry equal marks.*
3) *Use of Map stencils is allowed.*

1. Explain major climatic and vegetation regions of South East Asia.
2. Give an account of problems and prospects of agriculture in South East Asia.
3. Explain in detail the internal and international trade of South East Asia.
4. What is urbanization ? Describe various problems of urbanization in South East Asia.
5. Give an account of military regime in Myanmar and growth of fundamentalists in Indonesia.
6. Explain in detail the importance and scope of tourism in South East Asia.
7. Write notes on **any two** :
 - i) Distribution of major soil types in South East Asia.
 - ii) Development of transportation in South East Asia.
 - iii) Age and Sex structure of population in South East Asia.



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M.A. /M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
(2008 Pattern)
Gg – 443 : Regional Geography of North America

Time : 3 Hours

Max. Marks : 80

Instructions : 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Give an account of relief characteristics and vegetation regions of North America.
2. Discuss mineral resources of North America.
3. How irrigation affecting development of agriculture in North America ? Explain.
4. Discuss major industries and their distribution in North America.
5. Explain balance of trade in North America with examples.
6. Explain relationship between migration and population growth in North America.
7. Write notes on **any two** :
 - i) U.S.A.'s involvement in International issues in post cold war period.
 - ii) Tourist centers in North America.
 - iii) Urbanization problems with respect to megalopolis in North America.



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY
(2008 Pattern)
Gg – 444 : Geography of Japan

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Explain the geographical factors affecting the development of Japan up to 18th Century.
2. Give an account of climatic characteristics and vegetation regions in Japan.
3. Explain types and management of hazards in Japan.
4. Explain the factors affecting agriculture of Japan.
5. Give an account of industrial regions in Japan.
6. Explain major export import partner's of Japan with respect to trade.
7. Write notes on **any two** :
 - i) Literacy in Japan
 - ii) Rural settlements in Japan
 - iii) Characteristics of population in Japan.



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M.A./M.Sc. (Semester – IV) Examination, 2013
GEOGRAPHY (2008 Pattern)
Gg – 445 : Geography of India

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) Attempt **any four** questions.
2) **All** questions carry **equal** marks.
3) **Use of map stencils is allowed.**

1. Describe main physiographic regions of India and explain North Indian plain in detail.
2. Describe various seasons and associated weather conditions in India.
3. Describe major soil types and their distribution in India.
4. Give the distribution of iron ore, manganese and bauxite in India.
5. Give the distribution and production of rice and wheat in India.
6. Give an account of cotton textile and sugar industries in India.
7. Write notes (**any two**) :
 - I) Relative location of India.
 - II) West flowing rivers in India.
 - III) Population composition of India.

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