[3826] - 102

M.A./M.Sc. (Semester – I) Examination, 2010 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. Describe various types of lapse rate. Which is the most common type of instability ? Under which conditions does it occur ?
- 2. What is a front ? What are its basic characteristics ? Explain different types of fronts with illustrations.
- 3. What is wind ? How is it measured ? In detail, describe various factors that affect wind.
- 4. Explain electromagnetic spectrum and the factors that affect insolation.
- 5. What are auroras and why do they occur ? Give a table describing chemical composition of atmosphere and explain physical properties of the atmosphere.
- 6. Discuss different factors that control horizontal distribution of temperature. What is temperature inversion ?
- 7. Write notes on **any two** :
 - A) Methods of weather forecasting
 - B) Factors affecting evaporation
 - C) Green house effect.

M.A./M.Sc. (Semester – I) Examination, 2010 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 stencils is allowed.

- 1. Describe the approaches to the study of settlement and population geography.
- 2. Describe the various patterns of settlements with suitable examples.
- 3. Discuss the factors influencing dispersion of settlements.
- 4. Describe in detail the concentration of population and level of urbanization.
- 5. Critically examine the Thomas Malthus Theory of population.
- 6. Discuss the education and age aspects of population as a resource.
- 7. Write notes on **any two** :
 - a) Threshold and hierarchy
 - b) Nearest Neighbour method
 - c) Physical factors influencing on population distribution.

B/II/10/860

[3826] - 204

M.A./M.Sc. (Semester – II) Examination, 2010 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 nature of Agricultural Geography and its significance.
- 2. Describe various economic and technological factors influencing agricultural pattern.
- 3. Distinguish between intensive and extensive type of agriculture.
- 4. Describe various problems of agriculture in arid region.
- 5. Describe various agricultural regions of India.
- 6. Describe general land use in India.
- 7. Write notes on **any two** :
 - i) Commercial grain farming.
 - ii) Influence of climate on agriculture.
 - iii) Kendall's ranking coefficient.

M.A./M.Sc. (Semester – II) Examination, 2010 GEOGRAPHY Gg. 214 : Geoinformatics – 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 stencils is allowed.

- 1. What is GIS ? Explain major objectives and elements of GIS.
- 2. Giving suitable examples discuss nominal, ordinal, ratio and cyclic scales in GIS as non-spatial database.
- 3. Distinguish between spatial and non spatial data models in GIS and explain the significance of vector data models.
- 4. Give an account of "Topological building" in GIS.
- 5. What is attribute query ? Explain the significance of 'Structured Query Language' (SQL) in GIS.
- 6. What are grid operations in data analysis ? Explain with suitable examples focal grid operations in GIS.
- 7. Wrie notes on **any two** :
 - i) Error detection and correction
 - ii) Spatial query
 - iii) Application of GIS.

B/II/10/215

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg-301 : Theoretical and Applied Geography (2005 Pattern) (Old)

Time : 3 Hours

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. Give a brief account of contribution of scholar in ancient period in the development of geographical thought.
- 2. Explain the deterministic and possibilistic traditions in geography.
- 3. Explain the concept of structure, elements and relationships in the system analysis in geography.
- 4. Describe the various types of models used in geographical studies.
- 5. Bringout the salient features of quantitative revolution in geography.
- 6. What is applied geography ? Give the need and significance of applied geography.
- 7. Write notes on (any two) :
 - a) Paradigms in geography
 - b) Contribution of Humboldt and Ritter to geography
 - c) Application of geographical concepts in urban planning.

B/II/10/110

[3826] - 31

Max. Marks : 80

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg-314 : Geo-informatics – III (2005 Pattern) (Old)

Time : 3 Hours

Instructions : i) Attempt any four questions. ii) All questions carry equal marks.

iii) Use of map stencil and calculator is allowed.

- 1. Give an account of local, zonal and global grid operations in spatial data analysis.
- 2. 'Topology building is an integral part of spatial analysis'. Discuss.
- 3. Describe methods of network and surface analysis with suitable examples.
- 4. Describe various sources of distortions that need to be corrected in digital image processing.
- 5. Give a comparative account of supervised and unsupervised classification in DIP.
- 6. Explain classification accuracy in digital image processing.
- 7. Write notes on **any two** :
 - a) GCP tools
 - b) DEM and DTM
 - c) Single layer operation.

B/II/10/100

[3826] - 36

Max. Marks : 80

[3826] - 403

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2008 Pattern) Gg-421 : Geography of Water Resources (New)

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. Write an account on 'the distribution of water on the earth's surface'.
- 2. Give an account of water utilization in different sectors and explain the need of treatment of polluted water in industrial sector.
- 3. Comment on the 'Industrial water use and its effect on water resources'.
- 4. Discuss various measures of water management in drought prone areas.
- 5. Explain how planning and policies play an important role in water resource management.
- 6. Discuss various water harvesting techniques as a step taken for soil and water conservation.
- 7. Write notes on any two :
 - a) Planning and development of water resources.
 - b) Soil-water-crop relationship.
 - c) Agricultural water demand.

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg-422 : Biogeography (2005 Pattern) (Old)

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. Give an account of zoogeographical provinces.
- 2. Describe dispersal and colonization as biographical processes.
- 3. Discuss climate and soil as the physical limitations of life.
- 4. Describe hazards of island life.
- 5. Explain the idea of continental drift.
- 6. Describe the biomass of grasslands and Mediterranean scrub.
- 7. Write notes **any two** :
 - i) Biodiversity
 - ii) Environmental gradients
 - iii) Biomass of tropical savanna.

B/II/10/100

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg – 441 : Regional Geography of a Mesoregion – Europe (2005 Pattern) (Old)

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. Discuss in detail the distribution of major vegetation types and climatic regions of Europe.
- 2. Define resource and explain mineral and water resources of Europe.
- 3. Explain various problems and prospects of industrialization in Europe.
- 4. Give an account of development of transportation of Europe.
- 5. Define urbanization and give an account of development of megalopolis in Europe.
- 6. Explain the impact of I and II World War on the Political and Economic development of Europe.
- 7. Write notes on **any two** :
 - i) Euro-Currency
 - ii) Scope of tourism in Europe
 - iii) Distribution of major industries in Europe.

B/II/10/100

[3826] - 208

M.A./M.Sc. (Sem. – II) Examination, 2010 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. Define monsoon climatology and describe its environmental and economical importance.
- 2. Explain the regional aspects of origin of Asian Monsoon.
- 3. Differentiate between summer and winter monsoon.
- 4. Give an account of intra-seasonal active and break monsoon situation.
- 5. Explain the role of ocean and upper atmosphere in teleconnection.
- 6. Bring out the importance of parametric and multiple power regression model.
- 7. Write notes on **any two** :
 - i) Fohn's concept of origin of monsoon.
 - ii) Sea level pressure pattern.
 - iii) Tibetan anticyclone.

[3826] - 32

M.A./M.Sc. (Sem. – III) Examination, 2010 GEOGRAPHY Gg – 310 : Coastal Geomorphology (Old) (2005 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. Give an account of spatial and temporal scales in coastal geomorphology.
- 2. Describe types of sea waves and explain wave refraction and diffraction in detail.
- 3. Explain equilibrium theory of tides.
- 4. Describe various indicators of former sea levels.
- 5. Give an account of classification of coastal deltas.
- 6. Discuss the characteristics of tide-dominated coasts giving suitable examples.
- 7. Write notes on **any two** :
 - a) Flood and ebb tides
 - b) Wave breakers
 - c) Management of beaches and sand dunes.

[3826] - 37

M.A./M.Sc. (Sem. - III) Examination, 2010 **GEOGRAPHY**

Gg – 320 : Multivariate Statistics (2005 Pattern) (Old)

Time: 3 Hours

Max. Marks: 80

Instructions : i) Attempt any four questions.	
ii) All questions carry equal marks.	
iii) Use of calculators, Statistical tables etc. is allowed.	
1. a) Explain sorting and grouping in multivariate statistics.	15
b) Explain with suitable examples, major types of matrices.	5
2. a) Find inverse of the following matrix	12

- b) Find the unknowns of the following simultaneous equations by Crammer's rule
 - 4x + 3y = 485x - y = 033x + 4y = 57

8x - 2y = 0

P.T.O.

8

- [3826] 37
 - 3. The following table represents correlations between different morphometric characteristics of drainage basin. Extract first two principle components from the correlation matrix and interpret the results.

	X1	X2	X3	X4	X5
X1	1	0.08	0.34	0.14	- 0.23
X2	0.08	1	0.30	0.40	- 0.45
X3	0.34	0.30	1	0.36	- 0.36
X4	0.14	0.40	0.36	1	- 0.59
X5	- 0.23	- 0.45	- 0.36	- 0.59	1

X1 = Absolute relief

X2 = Relative relief

- X3 = Dissection Index
- X4 = Drainage density
- X5 = Stream frequency.
- 4. Compute the multiple regression equation from the following matrix of correlations and interpret the results.

X1	X2	Y
22.4	6	0.7
11.2	10	0.9
14.1	14	0.8
5.4	18	0.6
9.6	20	0.2
11.5	10	1.0
7.2	26	0.8
5.7	12	0.6
2.5	14	0.4

20

5. a) Give an importance of trend surface analysis in the study of spatially distributed data.
b) Explain – bivariate curvilinear relationships.
6. Following table represents the ground water depths (Z) and location coordinates of wells (X and Y). Compute a suitable trend surface equation and explained variance and check its statistical significance. Interpret the results.
20

-3-

X (km)	Y (km)	Z (m)
7	12	7.5
8	14	6.8
9	17	5.4
10	07	8.6
3	3	9.2
5	6	4.4
04	09	2.2
06	06	1.8
09	10	6.5
11	12	7.9
12	12	2.2

- 7. Write notes on **any two** :
 - i) Data reduction and simplification
 - ii) Hypothesis testing
 - iii) Regionalization from factor analysis.

20

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2005 Pattern) Gg – 433 : Natural and Man made Hazards (Old)

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 causes and effects of droughts.
- 2. Discuss the causes and areas affected by earthquakes.
- 3. Describe the various types of manmade hazards.
- 4. Describe the causes and effects of forest fire.
- 5. Discuss the effects of over exploitations of resources on environment.
- 6. Discuss the importance of hydrological cycle.
- 7. Write notes (any two) :
 - i) Nuclear hazards
 - ii) Effects of cyclonic storms
 - iii) Environmental effects of Tehari dam.

B/II/10/110

M.A./M.Sc. (Sem. – IV) Examination, 2010 GEOGRAPHY (2005 Pattern)

Gg – 443 : Regional Geography of a Mesoregion – North America (Old)

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 relief characteristics and drainage pattern in North America.
- 2. Give an account of major industries and their distribution in North America.
- 3. Give an account of population composition of North America.
- 4. Explain problems and prospects of agriculture in North America.
- 5. Give an account on trading partners of North America.
- 6. Describe the problems of urbanization in North America.
- 7. Write notes on **any two** :
 - i) Scope of tourism North America.
 - ii) Development of international issues in NorthAmerica.
 - iii) Balance of trade.

B/II/10/130

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg-321 : Political Geography (2008 Pattern) (New)

Time : 3 Hours

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 historical development of political geography.
- 2. Discuss the various approaches to the study of political geography.
- 3. Differentiate between boundaries and fraontiers and explain genetic classification of international boundaries.
- 4. "Mackinder's vews of global strategy are obsolete in the 21st Century". Discuss.
- 5. Give an account of political geography of SAARC region.
- 6. Discuss the relevance of issues related to emergence of new States in Idnia.
- 7. Write notes on **any two** :
 - a) State and Nation
 - b) Water resources
 - c) Unified field theory.

B/II/10/445

[3826] - 308

Max. Marks: 80

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2008 Pattern) Gg-401 : Resource Management (New)

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 are the bases of classification of physical resource ?
- 2. What is conservation ? What are the various ways through which it can contribute to resource management ? Illustrate your answer with suitable examples.
- 3. Give an account of teh apprisal of physical resources with suitable example.
- 4. 'India can be a world leader in human resources, only if they are managed properly'. Comment.
- 5. Bring out the importance of sustainable management in developing countries.
- 6. Discuss the priority area issues regarding resource management in India.
- 7. Write notes on **any two** :
 - i) Resource evaluation and geography
 - ii) Multiple use of resoruces
 - iii) Aspects of conservation.

B/II/10/200

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg-423 : Geography and Ecosystem (New) (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. Write an account of spatial and temporal dimensions of ecosystem.
- 2. Give an account of structure and functioning of an ecosystem.
- 3. Describe forest and agriculture ecosystems of the world.
- 4. Give an account of ecological imbalance with reference to forest and energy resources.
- 5. Write an explanatory note on 'preservation and conservation of the ecosystem through resource management'.
- 6. Describe Environment Protection and National Environment Tribunal Act in India.
- 7. Write notes on **any two** :
 - i) Spatial and temporal dimension of ecosystem
 - ii) Eco tourism
 - iii) WildlifeAct.

B/II/10/170

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg : 431 : Computer Geography (2008 Pattern) (New)

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 Human Geography.
- 2. Explain the types of computers and discuss the anatomy of computers.
- 3. Discuss the functions of operating system in windows.
- 4. Explain the significance of corel Draw in map making.
- 5. What is Digitization ? Discuss the significance of digitization in map making.
- 6. Explain the data analysis functions available in Excel software.
- 7. Write notes on any two :
 - i) Input-output devices
 - ii) AutoCAD
 - iii) GIS.

B/II/10/120

[3826] - 101

M.A./M.Sc. (Semester – I) Examination, 2010 GEOGRAPHY Gg – 101 : Principles of 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. What is geomorphology? Explain the different geomorphological concepts with suitable examples.
- 2. Describe how endogenic forces are responsible for landform formation.
- 3. What is mass movement ? Explain the factors that influence the processes of mass movement.
- 4. Give an account of sea floor spreading.
- 5. Give the details of landforms produced by wind and water in semiarid and arid regions.
- 6. Compare different models of slope evolution.
- 7. Write notes on **any two** :
 - a) Isostasy
 - b) Physical Weathering
 - c) Erosional landforms of alpine glaciers.

[3826] - 103

M.A./M.Sc. (Semester – I) Examination, 2010 GEOGRAPHY Gg – 103 : Principles of Economic 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. Explain the nature and scope of economic geography.
- 2. Give a brief history of evolution of economic landscape.
- 3. "The human resources have an important role to play in the economic development". Discuss.
- 4. Explain various types of economies of scale and their importance in reducing the cost of production.
- 5. Critically examine the Rostow's model of economic development.
- 6. Describe the various physical factors influencing the international trade.
- 7. Write notes on **any two** :
 - a) Elaboration and testing of hypothesis.
 - b) Significance of labour in economic activity.
 - c) Regional disparities in India's economic development.

[3826] – 201

Max. Marks: 80

M.A./M.Sc. (Semester – II) Examination, 2010 GEOGRAPHY Gg-201: Quantitative Techniques in Geography (2008 Pattern)

Time : 3 Hours

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 discrete and continuous data.
 - b) The following table represents data of age in years and number of deaths. Calculate mean and median for the following data and comment. (14)

Age in Years					49.5- 59.5	59.5- 69.5	69.5- 79.5	79.5- 89.5
No. of Deaths (f)	1	0	1	10	17	38	9	3

- 2. a) Write a note on descriptive and inferential statistics.
 - b) 215 students from a college were interviewed and 175 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.

full

(6)

(6)

3. a) Describe the Poisson Probability Distribution.

b) Find out 3 and 5 year moving averages for the annual rainfall of the Trimbakeshwar Taluka of the Nashik District. Plot the data and comment on it. (14)

-2-

Year	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Rainfall in cm.	162	284	270	304	179	222	437	135	282	173
Year	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Rainfall in cm.	201	226	174	211	204	255	286	212	192	273

- 4. a) Write a note on concept of bivariate correlation and regression. (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	22	25	26	28	30	32	34	37	41	45
Y	18	20	21	25	26	29	32	35	40	44

5. The following table contains some data obtained from a small survey carried out on two residential areas. 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	37	46	53	50	48	27	65	39	28	42
Y	48	63	62	51	46	43	39	21	57	60

(6)

6. The following table represents the yields of three strains of wheat planted in four blocks of three plots each under a completely rendomized design. All the 12 plots are of qual area. Perform the analysis of variance to test whether the strains are significantly different with regard to yield. Test the hypothesis at 0.05 level of significance. (20)

Strains	Block I	Block II	Block III	Block IV
Α	20	21	23	16
В	18	20	17	15
С	25	28	22	28

- 7. Write short notes on **any two** :
 - a) Properties of time series
 - b) Null and alternate hypothesis
 - c) Confidence interval for means.

B/II/10/355

(20)

-3-

M.A. / M.Sc. (Semester - II) Examination, 2010 **GEOGRAPHY Gg 210 : Tropical Geomorphology** (2008 Pattern)

Time : 3 Hours

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

- 1. Explain the morphogenetic regions in the tropics.
- 2. Discuss the process of soil formation in the tropics and give a brief account of clay minerals.
- 3. Define the term laterite and give an account of classification of laterites.
- 4. Write a detailed account of the relief characteristics of the tropical landscape.
- 5. Define planation surface and discuss the formation and morphology of planation surfaces.
- 6. Give an account of changes in climate during quarternary period.
- 7. Write notes on any two :
 - i) Peculiarities of tropical climate
 - ii) Domed and boulder inselbergs
 - iii) Process of Erosion and deposition in tropical rivers.

B/II/10/225

[3826] - 202

Max. Marks: 80

M.A./M.Sc. (Semester – II) Examination, 2010 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 analytical approach in the study of synoptic climatology.
- 2. Describe the role of Indian meteorological services in the weather data processing.
- 3. Elaborate the easterly waves and tropical cyclones.
- 4. Describe in detail the profile and decay of hurricanes in a weather system.
- 5. Define fronts and discuss various types of fronts.
- 6. Give an account of convectional and orographic precipitation.
- 7. Write notes on **any two** :
 - i) Life cycle of wave cyclone.
 - ii) Short and long range forecasting.
 - iii) Benefits of weather forecasting in marine activities.

B/II/10/100

M.A./M.Sc. (Semester – II) Examination, 2010 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. Give an account of evolution of population geography.
- 2. Critically examine the population theory of Thomas Robert Malthus.
- 3. Describe the influence of physical and demographic factors on population distribution.
- 4. Explain the fertility differential with reference to economic status and occupational groups.
- 5. Describe the factors influencing mortality levels and trends in developing countries.
- 6. Critically examine Lee's theory of migration.
- 7. Write notes on **any two** :
 - I) Age-sex pyramid
 - II) Approaches to the study of population geography
 - III) Population polices after Second World War.

B/II/10/225

[3826] - 207

M.A./M.Sc. (Semester – II) Examination, 2010 GEOGRAPHY (2008 Pattern) Gg 220 : Fluvial Geomorphology

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 term belt of no erosion. Discuss why and how the length of this belt changes with development of drainage network.
- 2. Explain mechanics of fluvial erosion with respect to Horton's overland flow.
- 3. Explain the relation of discharge with width, depth, velocity and gradient of a channel.
- 4. Discuss the cross section morphology of a channel and elaborate capacity and competence of a channel.
- 5. Give an account of fluvial depositional features.
- 6. Define river metamorphosis. Elaborate quaternary fluvial system.
- 7. Write notes on **any two** :
 - i) Laws of allometric growth
 - ii) At a station hydraulic geometry
 - iii) Uniform and non uniform flow.

M.A./M.Sc. (Semester – II) Examination, 2010 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. Describe nature and scope of industrial geography.
- 2. Describe geographical factors influencing on the location of industry.
- 3. Critically examine Losch's model.
- 4. Give an account of chemical industries in the world.
- 5. Describe industrial regions in Japan.
- 6. Describe problems and prospects of IT industry in India.
- 7. Write short notes on any two :
 - i) Agglomeration.
 - ii) Criticism on Weber's theory.
 - iii) Textile industry in Maharashtra.

B/II/10/200

M.A./M.Sc. (Semester – II) Examination, 2010 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. Explain with suitable examples the reflection of various aspects in the place names of rural settlements.
- 2. What is nucleation ? Describe the factors of nucleation of settlements.
- 3. Critically examine Von Thiinen's Model.
- 4. Explain Socio-cultural morphogenesis of rural settlements.
- 5. Discuss the causes and consequences of rural-urban migration.
- 6. Explain in brief various aspects of rural development planning.
- 7. Write notes (any two).
 - a) Ricardo's theory
 - b) Centrality and hierarchy
 - c) House types in Maharashtra.

B/II/10/185

M.A./M.Sc. (Semester – II) Examination, 2010 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. Discuss the significance of remotely sensed and GPS data in spatial analysis.
- 2. Define remote sensing and explain electromagnetic spectrum with suitable diagram.
- 3. Explain the EMR with respect to earth's surface.
- 4. Describe various components of an aerial camera and out line the optical aspects of it.
- 5. Describe spectral, spatial, radiometric and temporal characteristics of satellite remote sensing.
- 6. State the major elements of interpretaion of satellite images and aerial photographs. Discuss the factors governing the interpretability.
- 7. Write notes on **any two** :
 - i) Spectral signatures
 - ii) Data formats of Remote sensing
 - iii) MSS

B/II/10/245

M.A./M.Sc. (Semester - III) Examination, 2010 **GEOGRAPHY Gg-301 : Theoretical and Applied Geography** (2008 Pattern) (New)

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 a brief account of Greek and Roman school of thought to the development of geographical thought.
- 2. Discuss the contribution of Columbus and Captain Cook in the development of geographical thought.
- 3. Examine the concept of dualism with reference to determinism and possibilism.
- 4. Bring out the significance of models in geographical studies.
- 5. Explain the significance of applications of statistical techniques in geography.
- 6. Define applied geography and discuss its need and significance.
- 7. Write notes on **any two** :
 - a) Contribution of W.M. Davis in development of geographical thought.
 - b) Paradigms in geography.
 - c) Applications of GIS.

B/II/10/650

[3826] – 301

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg – 310 : Coastal Geomorphology (2008 Pattern) (New)

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. Give an account of spatial and temporal scales in coastal geomorphology.
- 2. What do you understand by process of shoaling ? Explain wave reflection, refraction and diffraction.
- 3. Explain tidal dynamics with reference to tides in bays and estuaries.
- 4. Discuss various indicators of former sea levels.
- 5. Describe various sources of sediments and pathways of sediment transport.
- 6. Give an account of wave-dominated coasts giving suitable examples.
- 7. Write notes on **any two** :
 - a) Genetic coastal classification.
 - b) Flood and ebb currents.
 - c) Sea level rise.

B/II/10/300

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg-311 : Applied Climatology (2008 Pattern) (New)

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. Distinguish between ship sweat and cargo sweat. Describe the effect of climate on water transport.
- 2. Discuss the nature of applied climatology and explain its development.
- 3. Describe various techniques of reconstruction of past climate.
- 4. What are Urban heat islands ? Why do they occur ? Highlight urban-rural contrasts with reference to climatic parameters.
- 5. Explain different instruments used to measure humidity and precipitation.
- 6. Describe turbulence and gustiness associated with wind. Explain the effect of wind on crop production.
- 7. Write notes on **any two** :
 - A) Remote sensing applications in crop monitoring.
 - B) Construction operations and weather
 - C) Climate and behaviour of pests and diseases.

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg-312 : Trade and Transport Geography (2008 Pattern) (New)

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 functional approach in trade and transport geography.
- 2. Describe the factors associated with the development and distribution of air ways.
- 3. Bring out the significance of transport network in economic development.
- 4. Explain the problem of environmental degradation due to development of transportation.
- 5. Trace out the development of trade from early to modern period.
- 6. Explain the Modern Theory of trade.
- 7. Write notes on **any two** :
 - a) Hinterlands
 - b) Vehicular pollution.
 - c) Trade areas and economic blocks.

B/II/10/400

[3826] – 304

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg – 313 : Urban Geography (2008 Pattern) (New)

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 a brief account of Spatio-temporal variations in urbanization in the world.
- 2. Describe various characteristics of CBD with suitable examples.
- 3. Describe various approaches to the study of Urban classification.
- 4. Define city region and explain various criteria used to demarcate the city region.
- 5. Explain the rank-size relationship and rank-size rule in Urban settlements.
- 6. Describe the need of city planning and policies of Urban development in India.
- 7. Write notes on **any two** :
 - a) Relation of Urban geography to other disciplines.
 - b) Characteristics of Urban explosion in developing countries.
 - c) Urban Sprawl.

B/II/10/270

[3826] - 306

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg-314 : Geoinformatics (New) – 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 simple to complex grid operations in spatial analysis.
- 2. Discuss various applications of DEM (Digital Elevation Models) and DTM (Digital Terrain Models).
- 3. Explain single layer and multiple layer operations as analytical tasks in spatial analysis.
- 4. What is an image rectification ? Explain systematic and non-systematic errors to be corrected in digital image processing.
- 5. Explain density slicing, contrast stretching and spatial filtering as methods in digital image processing.
- 6. Give an account of classification accuracy in digital image processing.
- 7. Write notes on **any two** :
 - a) SRTM.
 - b) Topological overlays.
 - c) Spatial resolutions.

B/II/10/280

M.A./M.Sc. (Semester – III) Examination, 2010 **GEOGRAPHY Gg- 320 : Multivariate Statistics (2008 Pattern) (New)**

Time: 3 Hours

Instructions : i) Attempt **any four** questions.

- ii) All questions carry equal marks.
- iii) Use of calculators, Statistical tables etc. is allowed.

1. a) Define and give one example of the following : Triangular matrix, column matrix, unit matrix, diagonal matrix and scalar matrix. 10

b) Find $[A] \times [B] + [C]$ and [A] - [B] + [C]

A= 1.1 2.6 0.6	B= 0.8 0.4 0.6 C=	1 2 3
1.8 1.4 2.5	0.6 0.2 0.1	2 4 5
0.6 2.0 3.4	0.1 0.7 0.2	3 6 7

2. a) Find and plot a quadratic equation for the following observations. 12

X	14	13	10	07	12	13	17	19	20
Y	0.3	0.5	0.7	0.9	1.1	1.3	1.5	1.7	1.9

b) Find the unknowns of the following simultaneous equations by Crammer's rule.

3x + 2y = 382x - y = 09

- 5x 5y = 05
- 8x 6y = 22

Max. Marks: 80

[3826] – 307

10

[3826] - 307

3. Compute the multiple regression equation from the following matrix of correlations and interpret the results.

X 1	X 2	Y
1	1.8	1
1.2	1.7	4
0.5	1.6	6
0.8	1.5	9
2	1.8	2
2.5	1.6	3
3.0	2.0	7
3.0	2.0	10
3.0	2.0	1
4.0	2.2	7
3.5	2.5	10

 X_1 = Depth of regolith in cm

 $X_2 =$ Moisture in percentage

Y = Number of borrowing organisms.

Find the linear trend in the pool depths on wave cut platform and plot the surface to a suitable scale.
 20

X	Y	Z
1	3	0.4
2	5	0.6
3	7	0.8
4	9	1.0
5	10	0.4
6	5	1.3
7	13	0.3
8	6	0.8
9	7	0.9
10	3	1.1

20

5. Find the first two principal components, eigen vector and explained variance from the matrix of correlation.

	X1	X2	X3	X4	X5
X1	1	0.7	0.3	0.5	0.7
X2	0.7	1	0.1	0.2	0.5
X3	0.3	0.1	1	0.9	0.3
X4	0.5	0.2	0.9	1	0.8
X5	0.7	0.5	0.3	0.8	1

6. Extract the first factor of loading and calculate eigen value for the following. Interpret the results.

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

- 7. Write notes on **any two** :
 - i) Hypothesis testing
 - ii) Application of FA in Human geography
 - iii) Computer applications of multivariate analysis.

B/II/10/300

20

20

[3826] - 307

20

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg-322 : Soil Geography (2008 Pattern) (New)

Time : 3 Hours

Max. Marks: 80

N.B.: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. Explain the importance of the study of soil in physical geography, agriculture and forestry studies.
- 2. 'Climate and time are the important factors affecting soil formation process'. Elaborate.
- 3. Describe physical properties of the soil with reference to temperature, permeability, soil water and moisture.
- 4. Define soil profile and discuss the process of development of soil profile with reference to deposition of iron, aluminium, calcium-carbonate, clays.
- 5. Describe the various types of chemical weathering processes.
- 6. Give an account of soil classification by United States.
- 7. Write notes on **any two** :
 - a) Soil conservation
 - b) Vegetation and soil
 - c) Morphological features of soil horizons.

B/II/10/235

M.A./M.Sc.(Semester – III) Examination, 2010 GEOGRAPHY Gg-311 : Applied Climatology (2005 Pattern) (Old)

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. Explain the nature and scope of applied climatology.
- 2. Describe various instruments to measure temperature.
- 3. Define agro climatology. Explain the relationship between climate and soil.
- 4. Explain the impact of climate on human health with suitable examples.
- 5. Explain the application of climatic information in specific industries.
- 6. Explain the role of remote sensing in agriculture.
- 7. Write notes on **any two**.
 - a) Human-bio-meteorology
 - b) Urban air pollution
 - c) Remote sensing in India.

B/II/10/100

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg – 312 : Trade and Transport Geography (2005 Pattern) (Old)

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. Give an account of history and development of trade and transport geography.
- 2. Explain the characteristics and significance of waterways and airways as modes of transportation.
- 3. Describe various factors influencing the growth of airports.
- 4. Explain the role of transport network in economic development.
- 5. Explain the impact of transport in environmental degradation.
- 6. Explain in detail the Neo-classical theory of trade with suitable examples.
- 7. Write notes on **any two** :
 - a) Significance of trade
 - b) Gravity models
 - c) Development of National highways in India.

B/II/10/110

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg – 313 : Urban Geography (2005 Pattern) (Old)

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 Urban Geography and explain its relation to other disciplines.
- 2. Explain the Harris and Ullman's morphological model of urban structure in detail.
- 3. Compare the functional classification of towns by H.J.Nelson and C.D. Harris.
- 4. Define city region and explain the various criterion used to demarcate the city region.
- 5. Explain rank-size rule, rank-size relationship and its significance in the study of Urban Geography.
- 6. Give an account of scarcity of housing, growth of slums and environmental pollution problems in Urban centres.
- 7. Write notes on any two :
 - a) Hierarchy of Urban settlements.
 - b) Mann's model of urban morphological structure.
 - c) Nature of Urban influence.

B/II/10/100

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg-321 : Political Geography (2005 Pattern) (Old)

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 concept of geopolitics and its relation with politics.
- 2. Explain the importance of unified field theory in the study of political geography.
- 3. Differentiate between frontiers and boundaries.
- 4. Explain the concepts of federalism and colonialism.
- 5. Correlate the geopolitical significance of Indian ocean and the political interrelations of SAARC countries.
- 6. Describe the centripetal and centrifugal forces in relation to unity and diversity in India.
- 7. Write notes on (any two) :
 - a) Nature of political geography.
 - b) Functional classification of boundaries.
 - c) Emergence of new States in India.

B/II/10/110

M.A./M.Sc. (Semester – III) Examination, 2010 GEOGRAPHY Gg – 322 : Soil Geography (2005 Pattern) (Old)

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 Utility of soils for agriculture.
- 2. Explain the physical properties of soil in detail.
- 3. Explain the development of soil profile with reference to deposition of iron, aluminum and calcium carbonates.
- 4. Describe the genetic structure of soils.
- 5. Give an account of classification of soils.
- 6. Discuss the problems related to soil degradation, give suitable examples.
- 7. Write short notes on **any two** :
 - a) Hydrology and Soils
 - b) Soil biomass
 - c) Ion mobilities.

B/II/10/110

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg-420 : Regional Planning and Development (2008 Pattern) (New)

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 ? Write a note on scope of regional planning.
- 2. Discuss in detail macro, meso and micro regions with suitable examples.
- 3. Examine the importance of regional survey for regional planning.
- 4. Explain the need and process of long term and short term perspective in planning.
- 5. Discuss the development strategies about regional concentration and dispersion.
- 6. Give an account of regionalization for planning of tribal and hilly areas.
- 7. Write notes on **any two** :
 - i) State level planning
 - ii) Administrative region
 - iii) River basin development.

B/II/10/180

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg 422 : Biogeography (New) (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 used.

- 1. Explain the nature and scope of biogeography.
- 2. Outline major eco-geographic trends in the subject matter of biogeography.
- 3. Discuss evolution and adaptation as a basic biogeographic processes.
- 4. What do you understand by ecological succession ? Outline major environmental gradient as a physical limitation of life.
- 5. Describe life on islands and discuss island as an area of isolation.
- 6. State major biomes of the world and describe tropical broadleaf evergreen forest in detail.
- 7. Write notes on **any two** :
 - i) The evidence of Paleomagnetism
 - ii) Environmental gradients
 - iii) Tundra bioms.

B/II/10/170

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg-424 : Research Methodology (New) (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. Discuss various principles and methods of dumpy level and theodolite survey.
- 2. Write detailed methodology for delineation of drainage basin and cross profiles giving suitable examples.
- 3. Discuss the major elements of interpretation of satellite image and an aerial photograph.
- 4. What is testing of hypothesis ? Bring out the application of parametric and non parametric statistical tests in geographical research.
- 5. Bring out the significance of use of GIS in the geographical research giving suitable examples.
- 6. Write an explanatory note on report writing in geographical research.
- 7. Write notes on **any two** :
 - i) UTM projection
 - ii) Flight line and overlap
 - iii) Field sampling.

B/II/10/170

M.A./M.Sc. (Semester – IV)Examination, 2010 GEOGRAPHY Gg 430 : Social and Cultural Geography (New) (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 approaches to the study of social and cultural geography.
- 2. Give an account of origin and diffusion of culture.
- 3. Explain the concepts of industrialization, urbanization, modernization and globalisation with examples.
- 4. Give an account of cultural regions of India.
- 5. Describe patterns of social well-being in India.
- 6. Discuss various disparities of rural-urban settlements.
- 7. Write notes on **any two** :
 - i) Human development Index
 - ii) Role of language and dialect in formation of cultural regions
 - iii) Cultural diversity.

B/II/10/110

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2008 Pattern) Gg-432 : Oceanography (New)

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 the term 'Oceanography' and explain nature and scope of oceanography.
- 2. Explain in detail, how ocean basins are formed ?
- 3. Give an account of 'the variations in the distribution of ocean water density'.
- 4. Define ocean waves and describe different types of ocean waves.
- 5. Elaborate tidal currents and their effects on the morphology of the coast.
- 6. Outline and discuss different causes of ocean water circulation.
- 7. Write notes on **any two** :
 - a) Ocean bottom topography
 - b) Physical properties of ocean water
 - c) Marine sediment deposits.

B/II/10/120

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2005 Pattern) (Old) Gg-401 : Natural Resource Management

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 the study of natural resource management.
- 2. Write an essay on methods of conservation of soil and water resources in India.
- 3. Write an essay on use and misuse of resources with suitable examples.
- 4. Elaborate the concept of resource appraisal and sustainable management.
- 5. Give an account of the appraisal of geophysical and geochemical resources with suitable examples.
- 6. Explain various applications of remote sensing in resource appraisal with suitable examples.
- 7. Write notes on (any two) :
 - i) Population pressure
 - ii) Historical background of forest resources in India.
 - iii) Approaches to conservation of mineral resources.

B/II/10/110

[3826] - 410

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2008 Pattern) Gg-433 : Natural and Man-made Hazards (New)

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 hazards. Discuss the different types of man made hazards.
- 2. Discuss the probability of occurrence and effects of thunderstorms and hail.
- 3. What is Tsunami ? Explain the causes and effects of Tsunamies.
- 4. Discuss the impact of Tehari dam on environment.
- 5. Explain the influence of release of toxic elements in the air and water.
- 6. Describe the hydrological cycle in detail.
- 7. Write notes (any two) :
 - I) Causes of droughts.
 - II) Rehabilitation after disaster.
 - III) Effects of excessive irrigation on soil.

B/II/10/120

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg-441 : Regional Geography of Europe (New) (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 relief and drainage characteristics of Europe.
- 2. Explain various salient features and prospects of agriculture of Europe.
- 3. Give an account of distribution of major industries of Europe.
- 4. Give an account of international trade and impact of globalisation in Europe.
- 5. Describe the growth and distribution of settlements of Europe.
- 6. Explain major tourist centres and importance of tourism in Europe.
- 7. Write notes on **any two** :
 - i) Migration in Europe
 - ii) Distribution of major energy resources of Europe
 - iii) Problems of agriculture in Europe.

B/II/10/100

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg-442 : Regional Geography of South East Asia (2008 Pattern) (New)

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 relief and drainage characteristics of South East Asia.
- 2. What is resource appraisal ? Describe mineral resources of South East Asia.
- 3. Explain various problems and prospects of industrialization in South-East Asia.
- 4. Give an account of growth and distribution of population in South East Asia.
- 5. Describe modern economic policy of Malaysia and its advantages and disadvantages.
- 6. Give an account of major tourist centres of South East Asia.
- 7. Write notes on **any two** :
 - i) Population as a resource.
 - ii) Problems of urbanization in South East Asia.
 - iii) Prospects of industrialization in South East Asia.

B/II/10/100

M.A./M.Sc. (Semester – IV Examination, 2010 GEOGRAPHY (2008 Pattern) Gg-443 : Regional Geography of North America (New)

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 location and significance of North America.
- 2. Explain energy resources of North America with examples.
- 3. Describe salient features of agriculture in North America.
- 4. Explain development of industrial activities in North America.
- 5. How globalization affecting development of trade and transportation in North America ?
- 6. Explain problems of urbanization in NorthAmerica.
- 7. Write notes on **any two** :
 - i) Relationship between U.S.A. and Canada.
 - ii) Scope of tourism activities in North America.
 - iii) Ethnic diversion in North America.

B/II/10/120

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2008 Pattern) Gg-444 : Geography of Japan (New)

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. "Japan is Britain of the east" Discuss.
- 2. "Climate is a major controlling factor of the distribution of soils in Japan". Justify.
- 3. Discuss the types of Hydel power and their importance in Japan.
- 4. Discuss the problem and prospects of fishing industry in Japan.
- 5. Describe the factors affecting industrial development in Japan.
- 6. Describe major ports and its link to the import export in Japan.
- 7. Write notes on **any two** :
 - i) Urban problems of Japan.
 - ii) Government policies of population in Japan.
 - iii) Japan's relations with India.

B/II/10/100

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2008 Pattern) Gg 445 : Geography of India (New)

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. Divide India into main physiographic regions and describe in detail peninsular plateau.
- 2. Explain the mechanism of monsoon in detail.
- 3. Describe major forest types and their distribution in India.
- 4. Write an essay on energy resources in India.
- 5. Give and discuss the distribution and production of cotton and sugarcane in India.
- 6. Describe the growth and distribution of population in India.
- 7. Write notes (**any two**) :
 - I) Geological structure of India.
 - II) Major river systems in Maharashtra.
 - III) Regional development of Telengana.

B/II/10/205

P.T

M.A./M.Sc. (Sem. – IV) Examination, 2010 GEOGRAPHY Gg-420 : Regional Planning and Development (2005 Pattern) (Old)

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 Regional concept ? Discuss changing concept of a region.
- 2. Discuss in detail about formal and functional region with suitable examples.
- 3. Examine importance of river valley regions with examples.
- 4. Discuss 'development of drought prone regions as a special purpose region'.
- 5. Describe the regional plans in India with reference to regional concentration and dispersion.
- 6. Give an account of development in India.
- 7. Write notes on **any two** :
 - i) Multilevel planning.
 - ii) Special purpose regions.
 - iii) Growth poles.

B/II/10/110

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2005 Pattern) (Old) Gg – 421 : Geography of Water Resources

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 in detail the world hydrological cycle with reference to quantitative estimates.
- 2. Give an account of water demand and uses in agriculture.
- 3. Explain 'soil water and crop relationship' and discuss water uses in agriculture.
- 4. Describe various problems of over irrigation.
- 5. Give an account of industrial and urban water demand and uses in India.
- 6. Discuss different case studies of major floods in India with respects to damages.
- 7. Write notes on **any two** :
 - i) Water quality parameters
 - ii) Soil and water conservation measures
 - iii) Types of droughts.

B/II/10/120

[3826] – 45

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg-423 : Geography of Ecosystem (2005 Pattern) (Old)

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 spatial and temporal dimensions of ecosystem.
- 2. Describe the biotic components of ecosystem.
- 3. Describe in brief major terrestrial ecosystem of the world.
- 4. Explain in brief man made ecosystem.
- 5. Discuss indetail mountain ecosystem with special reference to Aravali Hills.
- 6. Discuss Environmental Protection Act and National Environmental Act in India.
- 7. Write notes (any two) :
 - i) Abiotic components of ecosystem.
 - ii) Population growth and environment.
 - iii) Pyramid of energy.

B/II/10/110

M.A./M.Sc. Semester – IV Examination, 2010 GEOGRAPHY Gg-430 : Social and Cultural Geography (2005 Pattern) (Old)

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 social and cultural geography and explain early contributions and subject matter of it.
- 2. Explain the concepts of Positivism, Humanism, idealism and radicalism.
- 3. Give an account of theoretical scape in the study of social and cultural geography.
- 4. Explain the concepts of modernization, globalization, migration and sanskritization.
- 5. Describe unity in diversity with reference to class and power in India.
- 6. Explain various basic components, regional and socio-cultural indicators of social well being.
- 7. Write note on **any two** :
 - i) Equality and welfare in human settlements.
 - ii) Social areas in rural-urban settlements.
 - iii) Social Justice.

B/II/10/100

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg 431 : Computer Geography (2005 Pattern) (Old)

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. Give an account of types and anatomy of computers.
- 2. What is mean by arithmetic expression ? How it is used in programming in QBASIC ?
- 3. Write a program in BASIC to obtain linear trend equation for any 10 values given by the user. Edit the programme to estimate value of Y for any given value of X.
- 4. Write an EXCEL spread sheet for the calculation of variance and covariance matrix.
- 5. Illustrate with examples how to construct line graph, composite bar graph and Pie charts using MS Excel.
- 6. How editing, addition, substraction, multiplication division etc. used in Excel, giving suitable examples.
- 7. Write notes on **any two** :
 - i) Software
 - ii) Input out devices
 - iii) Internet.

B/II/10/120

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY Gg-442 : Regional Geography of a Mesoregion-South Asia (2005 Pattern) (Old)

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 climatic types and associated characteristics of South Asia.
- 2. Explain salient features of agriculture and irrigation of South Asia.
- 3. Give an account of balance of trade of South Asia.
- 4. Write an essay on Population composition of South Asia.
- 5. Give an account of fundamentalists in Malaysia and Indonesia.
- 6. Describe development of tourism and important tourist centres of South Asia.
- 7. Write notes on **any two** :
 - i) Problems of Urbanization in South Asia.
 - ii) Prospects of industrialization in South Asia.
 - iii) Population as a resource.

B/II/10/100

M.A./M.Sc. (Semester – IV) Examination, 2010 GEOGRAPHY (2005 Pattern) Gg-444 : Geography of Japan (Old)

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 distribution of natural vegetation and state the major types of it.
- 2. Give an account of coal and Hydel power resources in Japan.
- 3. Discuss the types of irrigation and its importance on major crops in Japan.
- 4. Discuss the major industries and changing scenario after II World War.
- 5. Give an account of development of transportation network in Japan.
- 6. Explain growth and distribution of settlement in Japan.
- 7. Write notes on **any two**.
 - i) Geological setting of Japan
 - ii) Earthquake hazards in Japan
 - iii) Major tourist centers in Japan.

B/II/10/110