

Total No. of Questions : 7]

SEAT No. :

PA-3288

[Total No. of Pages : 2

[5914]-11

M.A./M.Sc. - I

GEOGRAPHY

GGUT-111: Principles of Geomorphology

(2019 Pattern) (CBCS) (Semester - I) (4 Credits)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *Question No.1 is compulsory.*
- 2) *Solve any five questions from question No.2 to question No.7.*
- 3) *Questions 2 to 7 carry equal marks.*
- 4) *Use of map stencil is allowed.*

Q1) Solve any Five of the following (Around 20 words each): **[10]**

- a) Explain Davisian cycle of erosion:
- b) Types of glaciers.
- c) Ocean currents and tides.
- d) Work of water in desert and associated landforms.
- e) Hierarchy of spatial and temporal scales in Geomorphology.
- f) Define and explain geomorphology.

Q2) a) Explain Geologic time scale. **[7]**

b) Describe internal structure of the Earth based on physical properties. **[5]**

Q3) a) Write the Wegener's continental drift theory. **[7]**

b) Describe chemical weathering processes. **[5]**

P.T.O.

- Q4)** a) What is the Penck model of hill slope development? [7]
b) What are types of fluvial erosion? Draw diagrams of fluvial erosion. [5]
- Q5)** a) Describe fluvial erosional landforms with diagrams. [7]
b) Write a note on characteristics of sea waves. [5]
- Q6)** a) Describe glacial depositional landforms with diagram. [7]
b) Explain theory of isostasy. [5]
- Q7)** Write short notes on any **Two** of the following : [12]
a) Seismic waves and types.
b) Paleomagnetism.
c) Characteristics of aeolian environment.



Total No. of Questions : 7]

SEAT No. :

PA-3289

[Total No. of Pages : 2

[5914]-12
M.A./M.Sc. (Part - I)
GEOGRAPHY
GGUT - 112 : Principles of Climatology
(2019 Pattern) (CBCS) (Semester - I)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question no 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to 7 carry equal marks.*
- 4) *Use of map stencil is allowed.*

Q1) Solve any five of the following :

[10]

- a) Define climate.
- b) What is mean by atmosphere?
- c) Define terrestrial radiation.
- d) What is mean by geostrophic wind?
- e) Write the units of temperature measurements.
- f) Define evaporation.

Q2) a) Explain the structure of atmosphere.

[7]

b) Discuss on types of aurora.

[5]

Q3) a) Explain the factors affecting on horizontal distribution of temperature.**[7]**

b) Discuss the greenhouse effect.

[5]

Q4) a) Define wind. Explain the factors affecting wind.

[7]

b) Cyclones and anticyclones.

[5]

P.T.O.

- Q5)** a) What is mean by condensation? Explain the forms of condensation. [7]
b) Discuss on hydrologic cycle. [5]
- Q6)** a) Define lapse rate. Explain the various types of lapse rate. [7]
b) Discuss on stable and unstable air. [5]
- Q7)** Write short notes on any two of the following : [12]
a) Nature of climatology.
b) Electromagnetic spectrum.
c) Types of fronts.



Total No. of Questions : 7]

SEAT No. :

PA-3290

[Total No. of Pages : 2

[5914]-13

M.A./M.Sc. - I

GEOGRAPHY

**GGUT-113 : Principles of Economic Geography
(2019 Pattern) (CBCS) (Semester - I)**

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question No. 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions Q.2 to Q.7 carry equal marks.*
- 4) *Use of map stencil is allowed.*

Q1) Solve any five of the following :

[10]

- a) Give any two definitions of Economic Geography.
- b) What are exhaustible resources?
- c) What are the spatial aspects of economic development.
- d) State the importance of GDP as indicator of economic development.
- e) Define globalization.
- f) Enlist the characteristics of the stage of 'Age of high mass consumption'.

Q2) a) Describe the nature of economic Geography.

[7]

b) Discuss the causes of regional disparity in Maharashtra.

[5]

Q3) a) Explain significance of natural resources in economic development. **[7]**

b) Justify the importance of raw material in industrial location. **[5]**

P.T.O.

- Q4)** a) Give an account of India's post independence economic development. [7]
b) Describe Myrdal's model in brief. [5]
- Q5)** a) Explain the need of new green revolution in India. [7]
b) Describe the significance of privatization. [5]
- Q6)** a) Explain various approaches to the study of economic geography. [7]
b) Discuss the significance of human resource in economic development. [5]
- Q7)** Write short notes on any two of the following : [12]
a) Classification of economic activities.
b) Problems of India's international trade.
c) IT Industry in Maharashtra.



Total No. of Questions : 7]

SEAT No. :

PA-3291

[Total No. of Pages : 2

[5914]-14

M.A/M.Sc. - I

GEOGRAPHY

**GGDT - 114 : PRINCIPLES OF POPULATION AND
SETTLEMENT GEOGRAPHY**

(2019 Pattern) (Semester - I) (CBCS)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Q.1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Q.2 to Q.7 carry equal marks.*
- 4) *Use of map stencil is allowed.*

Q1) Solve any Five of the following:

[10]

- a) Define settlement geography.
- b) What is urbanization?
- c) What is dependency ratio?
- d) What is fecundity?
- e) Define village.
- f) What is nucleation?

Q2) a) Explore the scope of population geography.

[7]

b) Define Central Business District (CBD) and describe its characteristics.

[5]

Q3) a) Explain the approaches to study settlement geography.

[7]

b) Discuss the level and trend of urbanization in India.

[5]

P.T.O.

- Q4)** a) Explain the demographic transition theory. [7]
b) Discuss the types of settlement. [5]
- Q5)** a) Define literacy and explain the measures of literacy. [7]
b) Explore the economic factors affecting density of population. [5]
- Q6)** a) Describe the physical factors affecting dispersion and nucleation. [7]
b) Explain the concepts of age and sex structure of population. [5]
- Q7)** Write short notes on any Two of the following: [12]
a) Concepts of urban agglomeration and urban sprawl.
b) Stages of urbanization.
c) Size and spacing of villages.



Total No. of Questions : 7]

SEAT No. :

PA-3292

[Total No. of Pages : 2

[5914]-21
M.A./M.Sc.
GEOGRAPHY
GGUT-121: Geoinformatics - I
(2019 Pattern) (CBCS) (Semester - II)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *Q.1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to 7 carry equal marks.*
- 4) *Use of map stencil is allowed.*

Q1) Solve any five of the following :

[10]

- a) Which are the components of GIS?
- b) Give the definition of GIS.
- c) What is mean by topology?
- d) Name of the Spatial data models in GIS.
- e) Mention major grid operations.
- f) Give the type of errors in digitization.

Q2) a) Discuss potential of GIS.

[7]

b) Discuss the query and analysis as a GIS task.

[5]

Q3) a) Discuss the history of GIS.

[7]

b) Give an account of Grid operations in GIS.

[5]

P.T.O.

- Q4)** a) Give a brief account of Spatial information theory. [7]
b) What is nominal scale? Give examples. [5]
- Q5)** a) Explain the process of digitization in GIS. [7]
b) Describe non-spatial data with example. [5]
- Q6)** a) Explain GIS task. [7]
b) Discuss about application of GIS. [5]
- Q7)** Write short notes on any two of the following : [12]
a) Error detection.
b) Describe the DBMS.
c) Quad tree structure.



Total No. of Questions : 7]

SEAT No. :

PA-3293

[Total No. of Pages : 2

[5914]-22
M.A. / M.Sc.
GEOGRAPHY - I
GGUT-122 : Coastal Geomorphology
(2019 Pattern) (CBCS) (Semester - II)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question No. 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions Q.2 to Q.7 carry equal marks.*
- 4) *Use of map stencil is allowed.*

Q1) Solve any five of the following :

[10]

- a) What is temporal scales in coastal geomorphology?
- b) Define wave depth.
- c) What is mean by diurnal tides?
- d) Define estuaries.
- e) Define blow holes.
- f) Write any two grain size characteristics.

Q2) a) Explain the components of coastal system processes in detail.

[7]

b) Discuss types of waves.

[5]

Q3) a) Describe equilibrium theory of tides.

[7]

b) Discuss wind induced, river induced and tide induced currents.

[5]

P.T.O.

- Q4)** a) Explain consequences of sea level changes in detail. [7]
b) Discuss future sea level changes. [5]
- Q5)** a) Define coastal sediments. Explain in detail types of coastal sediments. [7]
b) Discuss the characteristics of wave dominated coast. [5]
- Q6)** a) Explain mangrove swamps and salt marshes in detail. [7]
b) Discuss on coastal erosion and progradation. [5]
- Q7)** Write short notes on any two of the following : [12]
a) Flood and ebb currents.
b) Coastal sand dunes.
c) Local and international case studies related to applied coastal geomorphology.



Total No. of Questions : 7]

SEAT No. :

PA-3294

[Total No. of Pages : 2

[5914]-23

M.A./M.Sc. (Geography)

GGUT - 123 : SYNOPTIC CLIMATOLOGY

(2019 Pattern) (CBCS) (Semester - II)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Q.No. 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to 7 carry equal marks.*

Q1) Solve any Five of the following : **[10]**

- a) Define synoptic climatology.
- b) What do you mean by meteorological code?
- c) List the type of fronts.
- d) What is the synoptic approach to the study of synoptic climatology?
- e) What is Cloud?
- f) Define cold wave.

Q2) a) Explain the various levels of climatological synthesis. **[7]**

b) Explain structure of Thunderstorm. **[5]**

Q3) a) Discuss the formation and characteristics of easterly wave. **[7]**

b) Describe weather reporting and analysis system of India Meteorological Department. **[5]**

Q4) a) Write a note on fog formation and its types. **[7]**

b) Describe the principle zones of frontogenesis and frontolyses. **[5]**

P.T.O.

- Q5)** a) Discuss air Masses of Europe. [7]
b) Explain the Bergeron process of precipitation. [5]
- Q6)** a) Explain various methods of weather forecasting. [7]
b) How synoptic climatology knowledge helps in Aviation? [5]
- Q7)** Write short notes on any Two of the following : [12]
a) Synoptic charts
b) Rossby waves
c) Medium range forecasting



Total No. of Questions : 7]

SEAT No. :

PA-3295

[Total No. of Pages : 2

[5914]-24
M.A./M.Sc. (Part - I)
GEOGRAPHY
GGUT - 124 : Agricultural Geography
(2019 Pattern) (CBCS) (Semester - II)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *Q.1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to 7 carry equal marks.*
- 4) *Use of map stencil is allowed.*

Q1) Solve any five of the following : **[10]**

- a) Give any two definitions of Agriculture Geography.
- b) What is crop rotation?
- c) Define commodity approach.
- d) What is agricultural drought?
- e) Mention geographical characteristics of wheat and sugarcane region in India.
- f) Mention the influence of rainfall on agriculture.

Q2) a) Discuss the influence of technological factors on agriculture. **[7]**

b) Discuss agricultural problems of arid region in India. **[5]**

Q3) a) Explain the nature of Agriculture Geography. **[7]**

b) Explain Weaver's crop combination method. **[5]**

Q4) a) Discuss agricultural regions in India. **[7]**

b) Explain plantation agriculture. **[5]**

Q5) a) Give an account of Whittlesey's agricultural regions. **[7]**

b) Discuss green revolution in India. **[5]**

P.T.O.

- Q6)** a) Describe the influence of relief and soil on agricultural pattern. [7]
b) How organic farming can help in achieving sustainable agricultural development in India, discuss with examples. [5]

Q7) Write short notes on any two of the following : [12]

- a) Agricultural efficiency
b) Mixed farming
c) Drought and its impact on agriculture.



Total No. of Questions : 7]

SEAT No. :

PA-3296

[Total No. of Pages : 2

[5914]-25
M.A./M.Sc. (Geography)
GGUT - 125 : POPULATION GEOGRAPHY
(2019 Pattern) (Semester - II)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Q.1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Question 2 to 7 carry equal marks.*

Q1) Solve any five of the following : **[10]**

- a) Define fertility.
- b) Define migration.
- c) What is population growth?
- d) Concept of brain-drain migration.
- e) Define census.
- f) What is sample registration survey?

Q2) a) Describe the population distribution in the world. **[7]**

b) Which are the measures of mortality? **[5]**

Q3) a) Explain the factors affecting on fertility. **[7]**

b) Discuss the demographic composition of population. **[5]**

Q4) a) Explain the scope of population geography. **[7]**

b) Discuss the factors affecting on population density. **[5]**

P.T.O.

- Q5)** a) Describe the Malthus theory of population growth. [7]
b) What are the sources of population data? [5]
- Q6)** a) Explain the Lee's theory of migration. [7]
b) Discuss NFHS. [5]
- Q7)** Write short notes on any two of the following : [12]
a) Relation between population and development.
b) Population policy of China.
c) Nature of population Geography.



Total No. of Questions : 7]

SEAT No. :

PA-3297

[Total No. of Pages : 2

[5914]-26

F.Y. M.A/M.Sc. (Geography)

GGUT - 126 : FLUVIAL GEOMORPHOLOGY

(2019 Pattern) (Semester - II) (CBCS)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Q.1 is compulsory.
- 2) Solve any five questions from Q.2 to Q.7.
- 3) Q.2 to Q.7 carry equal marks.

Q1) Solve any Five of the following (Around 20 words each) : **[10]**

- a) Define drainage basin.
- b) What is the law of allometric growth?
- c) Define entrainment of sediment.
- d) What is through flow or subsurface flow?
- e) Explain river discharge (Q) with formula.
- f) Explain the Manning's equation of flow velocity with formula.

Q2) a) What are the different channel patterns? Explain the meandering channel pattern in detail with suitable diagram. **[7]**

b) Distinguish between steady and unsteady flows. **[5]**

Q3) a) What are the types of erosion? Explain any four erosional landforms of bedrock channels with suitable diagrams. **[7]**

b) Distinguish between suspended load and bedload. **[5]**

P.T.O.

- Q4)** a) Define hydraulic geometry and distinguish between at-a-station and downstream hydraulic geometry with respect to form and flow behavior. [7]
- b) Explain cross section morphology of a river. [5]
- Q5)** a) Explain the phases of drainage network development of Glock's model with suitable diagram. [7]
- b) Differentiate between the alluvial and bedrock rivers. [5]
- Q6)** a) Define fluvial geomorphology and elaborate its scope. [7]
- b) Briefly explain any two landforms associated with floodplains. [5]
- Q7)** Write short notes on any Two of the following: [12]
- a) Any two evidence of river metamorphism.
- b) Flood stages and hydrograph.
- c) Formation of river terraces.



Total No. of Questions : 7]

SEAT No. :

PA-3298

[Total No. of Pages : 2

[5914]-27

M.A./M.Sc. (Part - I)

GEOGRAPHY

GGUT - 127 : Monsoon Climatology

(2019 Pattern) (CBCS) (Semester - II

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *Q.1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to 7 carry equal marks.*

Q1) Solve any five of the following :

[10]

- a) What do you mean by the term 'Monsoon'?
- b) How are normal dates of on set and withdrawal of Monsoon decided?
- c) Define heat low.
- d) What is full form of ENSO?
- e) List any two factors used for Monsoon forecasting.
- f) What is short forecatsing?

Q2) a) Describe East Asian Monsoon.

[7]

b) Explain the Monsoon model on non-rotating Earth.

[5]

Q3) a) Discuss wind pattern and pressure system over India during South West Monsoon Season.

[7]

b) Explain the role of Tibetan High in Indian Monsoon.

[5]

Q4) a) Explain the mid-tropospheric disturbances and offshore vortices.

[7]

b) How El-Nino Southern Oscillation (ENSO) affects inter-annual variability of Monsoon.

[5]

P.T.O.

- Q5)** a) Explain thermal concept of origin of Monsoon. [7]
b) Give an account of current Monsoon forecasting system followed by India Meteorological Department (IMD). [5]
- Q6)** a) Describe the role of upper atmosphere affecting inter-annual variability of Indian Monsoon. [7]
b) Explain the scope of Monsoon Climatology. [5]
- Q7)** Write short notes on any two of the following : [12]
a) Flohn's Concept
b) Monsoon Trough
c) MONEX



Total No. of Questions : 7]

SEAT No. :

PA-3299

[Total No. of Pages : 2

[5914]-28

M.A./M.Sc.

GEOGRAPHY

GGUT - 128 : Industrial Geography

(2019 Pattern) (Semester - II) (Credit - 4)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Q.1 is compulsory.
- 2) Solve any five questions from Q2 to Q7.
- 3) Questions 2 to 7 carry equal marks.

Q1) Solve any five questions of the following :

[10]

- a) What do you mean by an industrial region?
- b) Give the names of industrial regions in Anglo America.
- c) Characteristics of industries.
- d) Give any two functions of MTDC.
- e) Give any two names IT hubs in India.
- f) State any two names of cotton industrial region in India.

Q2) a) Critically examine the Israd's model.

[7]

b) Describe the industrial regions of Maharashtra.

[5]

Q3) a) Describe the impact of economical factors on industrial location.

[7]

b) Explain the concept of agglomeration of industries.

[5]

Q4) a) Discuss the role of software industries in India.

[7]

b) Give the distribution of automobile industry.

[5]

P.T.O.

- Q5)** a) Discuss the favorable conditions for iron & steel industries in Japan. [7]
b) Discuss the problems and prospects of industrial region in China. [5]
- Q6)** a) Discuss the current scenerious of small scale industries in India. [7]
b) Explain the prospect of agro-based industries in Maharashtra. [5]
- Q7)** Write short notes on any two of following : [12]
a) Assumptions of Weber's model.
b) FDI.
c) Chemical industry.



Total No. of Questions : 7]

SEAT No. :

PA-3300

[Total No. of Pages : 2

[5914]-29
M.A./M.Sc.
GEOGRAPHY
GGUT - 129 : Geography of Rural Settlements
(2019 Pattern) (Semester - II) (Credits system)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7*
- 3) *Questions 2 to 7 carry equal marks.*
- 4) *Use of map stencils is allowed.*

Q1) Solve any five of the following.

[10]

- a) What is dispersion?
- b) What do you mean by site of settlement?
- c) Define settlements.
- d) What is trading center?
- e) What do you mean by location of settlement?
- f) Define range of goods.

Q2) a) Define site and situation, briefly describe factors affecting site of settlements. **[7]**

b) Discuss the historical and cultural aspects of settlements reflected in place names. **[5]**

Q3) a) Describe the causes and consequences of rural-urban migration. **[7]**

b) Discuss the factors affecting intensity of land use. **[5]**

Q4) a) Explain how sequence of occupancy from Neolithic to modern period has influenced on rural settlements. **[7]**

b) Describe the system of land tenancy in rural area. **[5]**

P.T.O.

- Q5)** a) Critically examine the Christaller's theory. [7]
b) Describe the various factors affecting rural house types with the suitable examples. [5]
- Q6)** a) What is morphogenesis? Explain the Socio-cultural morphogenesis of rural settlements. [7]
b) Describe the rural house types in Maharashtra. [5]
- Q7)** Write short notes any two of the following. [12]
a) Ricardo's theory of land use.
b) Building material used for rural houses.
c) Age-sex and occupational composition of rural population.



Total No. of Questions : 5]

SEAT No. :

PA-3301

[Total No. of Pages : 2

[5914]-30

M.A./M.Sc.

Geography

GGDT-130: Geography Of Tourism

(2019 Pattern) (02 Credit Course) (Semester - II) (CBCS)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates :

- 1) Q. No.1 is compulsory.
- 2) Solve any Three questions from Q.2 to Q.5.
- 3) Que - 2 to Que - 5 carry equal marks.

Q1) Solve any Five of the following :

[5]

- a) Define 'eco - tourism'.
- b) State any two name of beaches in India.
- c) State any two names of Historical tourist places in India.
- d) Define 'Hotels'.
- e) Give any two advantages of air transportation in tourism activity.
- f) State any two names of religious tourist places in India.

Q2) a) Describe the impact of tourism on national economy.

[6]

b) Explain the impact of climate on tourism.

[4]

Q3) a) Explain the purpose of tourism.

[6]

b) Explain the differences between tourist & tourism.

[4]

P.T.O.

Q4) a) 'Tourism as a basic need of mankind.' Discuss. [6]

b) Distinguish between hotels and youth hostels. [4]

Q5) Write short notes on any Two of the following : [10]

a) Dharmashala.

b) Beaches: Ganpatipule.

c) Agro - Tourism



Total No. of Questions : 5]

SEAT No. :

PA-3302

[Total No. of Pages : 2

[5914]-30A
M.A./M.Sc. - I
GEOGRAPHY
GGDT-132: Geography of Disaster Management
(2019 Pattern) (CBCS) (Semester - II)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates :

- 1) *Q.1 is compulsory.*
- 2) *Solve any three questions from Q.2 to Q.5.*
- 3) *Q.2 to 5 carry equal marks.*

Q1) Solve any five of the following : **[5]**

- a) Define hazard.
- b) What do you mean by disaster resilience?
- c) Define Volcano.
- d) What is cyclone?
- e) Define first aid.
- f) Give any two examples of manmade disaster.

Q2) a) Explain the causes and effects of earthquakes? **[6]**

b) State the effects of fire? **[4]**

Q3) a) Describe the use of remote sensing in disaster management. **[6]**

b) Which are the phases of disaster cycle? **[4]**

P.T.O.

Q4) a) Describe the role of armed forces in disaster management. [6]

b) What is the difference between Vulnerability and risk. [4]

Q5) Write short notes on any two of the following : [10]

a) Use of GPS in disaster management.

b) Role of NGO's in disaster management.

c) Natural disasters.



Total No. of Questions : 7]

SEAT No. :

[Total No. of Pages : 2

PA-3303

[5914]-31

M.A./M.Sc. (Part - II)

GEOGRAPHY

GGUT-235 : GEOINFORMATICS - II

(2019 Pattern) (Semester - III) (Credits 4) (Theory)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Question 2 to Q.7 carry equal marks.*

Q1) Solve any five of the following.

[10]

- a) Give the range of visible spectrum in EMR.
- b) What is meant by radiation?
- c) What are sun-synchronous satellites?
- d) What is meant by push broom scanner?
- e) Define Temporal resolution.
- f) What is meant by Nadir Point?

Q2) a) Describe the components of Remote sensing.

[7]

b) Explain interaction of EMR with Earth's surface.

[5]

Q3) a) Describe Remote sensing platforms.

[7]

b) Discuss the LANDSAT series of satellites.

[5]

Q4) a) Describe Active & passive sensors.

[7]

b) Explain Spatial resolution.

[5]

P.T.O.

- Q5)** a) Explain the elements of image interpretation. [7]
b) Describe the vertical & oblique photograph. [5]
- Q6)** a) Explain the different films used in aerial camera. [7]
b) Explain across-track scanners. [5]
- Q7)** Write short notes (any two): [12]
a) Fiducial marks.
b) SPOT satellites.
c) LISS satellite sensors.



Total No. of Questions : 7]

SEAT No. :

PA-3304

[Total No. of Pages : 2

[5914]-32

M.Sc.

GEOGRAPHY

GGUT-236 : Geographical Thoughts

(2019 Pattern) (Credit System) (4 Credits) (Semester-III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Q.1 is compulsory.*
- 2) *Solve any five questions from Q. 2 to Q. 7.*
- 3) *Question 2 to 7 carry equal marks.*

Q1) Solve any five of the following.

[10]

- a) Write the name of the books written by Immanuel Kant.
- b) Write any two names of Roman school of thought.
- c) What do you mean by natural hazards.
- d) What is resource?
- e) Write any two names of computer based techniques in Geography.
- f) Write the name of any two American Geographer.

Q2) a) Describe brief account of German school.

[7]

b) Explain the contribution of Indian school of thoughts.

[5]

Q3) a) Write a brief account of contribution of Humboldt.

[7]

b) Explain the role of statistical techniques in Geography.

[5]

Q4) a) Describe the use of G.I.S. and Geoinformatics in Geography.

[7]

b) Explain the need and significance of regional planning.

[5]

Q5) a) Describe the paradigms in Geography.

[7]

b) Explain the contribution of W.M. Davis in the Development of geographical thought.

[5]

P.T.O.

- Q6)** a) Describe Determinism and possibilism. [7]
b) Discuss the field survey process in Geography. [5]

- Q7)** Write short notes on any two of the following. [12]
a) Systematic versus regional Geography
b) Remote sensing
c) Regional planning



Total No. of Questions : 7]

SEAT No. :

PA-3305

[Total No. of Pages : 2

[5914]-33

M.A./M.Sc. (Part-II)

GEOGRAPHY

GGUT-237 : Tropical Geomorphology

(CBCS 2019 Pattern) (Semester-III) (Credits-4) (Theory)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question 1 is compulsory.*
- 2) *Attempt any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to Q.7 carry equal marks.*

Q1) Solve any five of the following.

[10]

- a) Define morphogenetic regions.
- b) Types of weathering.
- c) Name the landforms developed on the lateritic terrain.
- d) Types of mass movements.
- e) What is duricrust?
- f) Define stream erosion.

Q2) a) Describe 'how tropical conditions are different then other regions. **[7]**

b) What is clay mineral? Explain different types clay minerals. **[5]**

Q3) a) Explain how tropical rivers differ from nontropic rivers. **[7]**

b) Discuss the properties of indurated laterite and their effects on laterite profile. **[5]**

Q4) a) Explain how tropical landscape changed during quaternary period. **[7]**

b) Differentiate between pediplain an peneplain. **[5]**

P.T.O.

- Q5)** a) Explain processes of chemical denudation. [7]
b) Describe effects of tectonics and climate change on tropical landform development. [5]
- Q6)** a) Explain different types of inselbergs. [7]
b) Describe the formation and types of planation surfaces. [5]
- Q7)** Write short notes on any two of the following. [12]
a) Deep weathering profile.
b) Morphogenetic regions.
c) Tropical Coast.



Total No. of Questions : 7]

SEAT No. :

[Total No. of Pages : 2

PA-3306

[5914]-34

M.A./M.Sc. - II

GEOGRAPHY

GGUT-238 : Applied Climatology

(2019 Pattern) (Semester-III) (Credits-4) (CBCS)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to Q.7 carry equal marks.*
- 4) *Use of map stencil is allowed.*

Q1) Write the answers of the following questions in about 20 words (any 5). **[10]**

- a) Differentiate between weather and climate.
- b) Name the instruments used to measure precipitation.
- c) Give any two reasons of urban air pollution.
- d) State any two factors affecting on evapotranspiration.
- e) Define urban heat island.
- f) Give any two climatic parameters which affect air transport.

Q2) a) Explain the scope of applied climatology. **[7]**

b) Describe various forms of precipitation. **[5]**

Q3) a) Describe the influence of climate on human health. **[7]**

b) Explain the concept of bio-meteorology. **[5]**

Q4) a) Explain the characteristics of urban climate. **[7]**

b) Describe the relationship between construction operations and climate. **[5]**

P.T.O.

- Q5)** a) Describe the nature of global environment change. [7]
b) Differentiate between heating degree days and cooling degree days. [5]
- Q6)** a) Explain the effect of climate on water transport. [7]
b) Describe the applications of remote sensing in detection of plant stress.[5]
- Q7)** Write short notes on any two of the following. [12]
a) Nature of applied climatology.
b) Estimation of evapo transpiration.
c) Climate and soil management.



Total No. of Questions : 7]

SEAT No. :

PA-3307

[Total No. of Pages : 2

[5914]-35

M.A./M.Sc. - II

GEOGRAPHY

**GGUT-239 : Geography of Rural Development
(2019 Pattern) (Semester-III) (Credits-4)**

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to 7 carry equal marks.*

Q1) Solve any five of the following:

[10]

- a) Define the term rural development.
- b) What do you mean by planning?
- c) Write the work of NGO's in rural development.
- d) What are rural basic services?
- e) Define the term e-agriculture?
- f) What is MGNREGA?

Q2) a) Explain Geographical factors affecting on rural development.

[7]

b) Describe the role of transportation & communication in rural development.**[5]**

Q3) a) Discuss the process of multi level planning.

[7]

b) Explain the Nature & scope of rural development.

[5]

Q4) a) Describe the role government in rural development.

[7]

b) Explain integrated rural development program.

[5]

P.T.O.

- Q5)** a) Describe role of Panchayat Raj in rural development. [7]
b) Explain the rural housing & rural health. [5]
- Q6)** a) Discuss the prospects of rural development in India. [7]
b) Explain the role of cartographic techniques in rural development. [5]
- Q7)** Write short notes on any two of the following. [12]
a) Smart village.
b) Ralegam siddhi.
c) NABARD.



Total No. of Questions : 7]

SEAT No. :

PA-3308

[Total No. of Pages : 2

[5914]-36

M.A./M.Sc. -II

GEOGRAPHY

GGUT-240 : Urban Geography

(2019 Pattern) (Semester-III) (Credits-4) (Theory)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question 1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Questions 2 to Q.7 carry equal marks.*

Q1) Solve any five of the following:

[10]

- a) What is market principle?
- b) Give any two significance of urban studies.
- c) Concept of city region.
- d) Define urban Geography.
- e) What is urban fringe?
- f) Name any two urban transport problems.

Q2) a) Explain the inter-disciplinary approach of urban Geography.

[7]

b) Elaborate meaning of urban settlement and concept of urbanization. **[5]**

Q3) a) Explain the sector theory of morphological pattern of cities.

[7]

b) Explain administrative and defence function of any town in India. **[5]**

Q4) a) Criticize the christaller's concept of central place.

[7]

b) "An Independent city cannot exist"-Justify.

[5]

P.T.O.

- Q5)** a) Explain urban development policies in India. [7]
b) State the 'Price of land' and 'vertical growth' problems in cities? [5]
- Q6)** a) Which are the contemporary factors urbanization. [7]
b) Which are the elements of city plan? [5]
- Q7)** Write short notes on any two of the following. [12]
a) Age sex demographic structures in urban areas.
b) Significance of central place theory.
c) Function of CBD.



Total No. of Questions : 5]

SEAT No. :

PA-3309

[Total No. of Pages : 2

[5914]-37

M.A./M.Sc. - II

GEOGRAPHY

GGUT - 242 : Hydrology

(2019 CBCS Pattern) (Credit - 02) (Semester - III)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *Question 1 is compulsory.*
- 2) *Solve any three question from Q.No. 2 to Q.No.5.*
- 3) *Question No. 2 to 5 carry equal marks.*

Q1) Solve any five of the following.

[5]

- a) Define 'Hydrology'.
- b) Give units of measurement for precipitation.
- c) What is mean by interception?
- d) Write definition of evaporation.
- e) What is mean by 'Hail'.

Q2) a) Describe the Hydrologic budget.

[6]

b) Explain the concept of probable maximum precipitation.

[4]

Q3) a) Write the sources of hydrologic data.

[6]

b) Describe any two units of hydrologic measurement.

[4]

P.T.O.

Q4) a) Write the factors affecting on interception. [6]

b) Explain the methods of transpiration control. [4]

Q5) Write short notes on any two of the following. [10]

a) Forms of precipitation.

b) Factors affecting on depression storage.

c) Evapotranpiration.



Total No. of Questions : 5]

SEAT No. :

PA-3310

[Total No. of Pages : 2

[5914]-38

M.A./M.Sc. - II

GEOGRAPHY

**GGUT-243 : Watershed Management
(2019 Pattern) (Semester - III) (CBCS)**

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *Question no.1 is compulsory.*
- 2) *Solve any three questions from Q.No. 2 to Q.No.5.*
- 3) *Question No. 2 to 5 carry equal marks.*

Q1) Solve any five of the following.

[5]

- a) Define 'watershed management'.
- b) Which are the artificial barriers in watershed delineation.
- c) What do you mean by surface run off?
- d) Define the 'Precipitation'.
- e) Define the Integrated watershed development plan.
- f) What is mean by 'micro watershed'?

Q2) a) Explain the necessity of watershed management.

[6]

b) Describe the land use and land cover characteristic of watershed.

[4]

Q3) a) Explain the importance of watershed management in national development. **[6]**

b) Write a note on interception and infiltration.

[4]

P.T.O.

Q4) a) Describe the methods of water conservation. [6]

b) Explain the principles of watershed management. [4]

Q5) Write short notes on any two of the following. [10]

a) Applications of remote sensing and GIS in watershed management.

b) Methods of watershed delineation.

c) Contour bunding and gully plugging.



Total No. of Questions : 7]

SEAT No. :

PA-3311

[Total No. of Pages : 2

[5914]-41

M.A./M.Sc. (Part - II)

GEOGRAPHY

GGUT 249 : Geography of India

(2019 Pattern) (Semester - IV) (Credits - 4)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Q. 1 is compulsory.*
- 2) *Solve any Five Q. from Q.2 to 7.*
- 3) *Q.2 to 7 carry equal marks.*
- 4) *Use of map stencils is allowed.*

Q1) Solve any Five of the following :

[10]

- a) Name the regional divisions of India.
- b) Write the source of river Godavari.
- c) Name any two flood prone regions in India.
- d) State any two factors of soil degradation in India.
- e) Write any two components of green revolution in India.
- f) List the major Hydro-electric power projects in India.

Q2) a) Write the major west flowing river of India and describe any one of them. [7]

b) What are the major problems of deforestation in India. [5]

Q3) a) Explain the mechanisms and associated weather conditions of Indian monsoon. [7]

b) Write the regions and production of major crops in India. [5]

P.T.O.

- Q4)** a) Discuss the need and methods of soil conservation in India. [7]
b) Write the distribution and utilization of Iron ore minerals in India. [5]
- Q5)** a) Write in details the problems of Industrial development in India. [7]
b) State the major environmental factors affecting on Indian agriculture.[5]
- Q6)** a) Describe the major Forest types and their distribution in India. [7]
b) Write the characteristics of Indian Northern plain. [5]
- Q7)** Write short notes (any two) : [12]
a) Strategic location of India.
b) Population composition of India.
c) Impact of El-Nino on Indian monsoon.



Total No. of Questions : 7]

SEAT No. :

PA-3312

[Total No. of Pages : 2

[5914]-42
M.A./M.Sc.
GEOGRAPHY
GGUT - 250 : Oceanography
(2019 Pattern) (Semester - IV) (Credits : 04)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Question 1 is compulsory.*
- 2) *Answer any 5 questions from Q.2 to Q.7.*
- 3) *Questions 2 to 7 carry equal marks.*

Q1) Solve any five of the following. **[10]**

- a) Define oceanography.
- b) Who proposed the theory of continental drift?
- c) Name any two oceanic plates of the world.
- d) What is a convergent plate boundary?
- e) What is abyssal plain?
- f) Define the term Halocline.

Q2) a) Discuss in brief the foundation of Modern Oceanography. **[7]**

b) Explain the origin of world oceans. **[5]**

Q3) a) Give a brief account of seafloor spreading with respect to the origin of ocean basins. **[7]**

b) Discuss the formation of coral reefs. **[5]**

Q4) a) Explain the types of continental margins. **[7]**

b) Discuss the role of volcanoes in the formation of oceanic landforms. **[5]**

P.T.O.

- Q5)** a) Elaborate on the origin and composition of sea salts. [7]
b) Write in brief about natural gas as one of the significant ocean resources. [5]
- Q6)** a) Discuss the nature of lithogenous sediments. [7]
b) Explain ocean pollution and their characteristics. [5]
- Q7)** Write short notes (any two) [12]
a) Causes of oceanic pollution
b) Post-war oceanography
c) Oceanic ooze



Total No. of Questions : 7]

SEAT No. :

PA-3313

[Total No. of Pages : 2

[5914]-43

M.A./M.Sc (Geography)

GGUT-251 Research Methodology

(2019 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *Q. No.1 is compulsory.*
- 2) *Solve any Five questions from Q.2 to Q.7.*
- 3) *Que - 2 to Que - 7 carry equal marks.*

Q1) Solve any Five of the following :

[10]

- a) What is footnotes?
- b) Define 'Hypothesis'.
- c) Name any two statistical tests used in research.
- d) State any two characteristics of a good questionnaire.
- e) Enlist types of research.
- f) What is Median?

Q2) a) Describe Significance of research ethics.

[7]

b) Write importance of Keywords in research article

[5]

Q3) a) Discuss characteristics of an interview.

[7]

b) What is variable? Explain its types.

[5]

P.T.O.

- Q4)** a) What is plagiarism? How do you avoid plagiarism? [7]
b) Explain time series analysis. [5]
- Q5)** a) Describe purpose of research design. [7]
b) Differentiate between sample and population. [5]
- Q6)** a) Explain importance of formulating a research problem. [7]
b) Discuss how research methods are useful in research. [5]
- Q7) Write short notes on any Two of the following :** [12]
a) Chi-square Test
b) Fieldwork methods.
c) Dissertation.



Total No. of Questions : 5]

SEAT No. :

PA-3314

[Total No. of Pages : 2

[5914]-44
M.A./M.Sc. (Part - II)
GEOGRAPHY
GGUT - 252 : Geography of Soils
(2019 Pattern) (Semester - IV) (2 Credit)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *Question no 1 is compulsory.*
- 2) *Solve any three questions from Que No 2 to Que No 5.*
- 3) *Question No. 2 to 5 carry equal marks.*

Q1) Any five out of six :

[5]

- a) Define soil
- b) Write any two factors that affect soil.
- c) Which are the three layers of the soil?
- d) Define soil profile.
- e) What are the physical properties of the soil?
- f) Name nutrients in the soil.

Q2) a) Describe the nature of soil Geography.

[6]

b) Write a note on development of soil geography.

[4]

Q3) a) Explain the factors affecting soil formation.

[6]

b) Write note on role of topography in formation of soil.

[4]

Q4) a) Discuss the mineral component of the soil.

[6]

b) Write a note on physical characteristics of the soil.

[4]

P.T.O.

Q5) Any two of the following (any two) :

[10]

- a) Define soil and discuss the role of soil as a natural resource.
- b) Explain the process of soil formation.
- c) Discuss the nutrients in soil.



Total No. of Questions : 5]

SEAT No. :

PA-3315

[Total No. of Pages : 2

[5914]-45

M.A/M.Sc. (Geography)

GGUT - 254 : POLITICAL GEOGRAPHY

(2019 Pattern) (Semester - IV) (CBCS) (Credit 2)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *Question No.1 is compulsory.*
- 2) *Solve any three questions from Q.No.2 to Q.No.5*
- 3) *Question No.2 to 5 carry equal marks.*
- 4) *Use of map stencil is allowed.*
- 5) *Draw figures/map wherever necessary.*

Q1) Solve any Five of the following:

[5]

- a) What is nationalism?
- b) Who is the father of political geography?
- c) Define geopolitics.
- d) Write any two examples of interstate water dispute in India.
- e) Define Heartland.

Q2) a) Explain the significance of political geography.

[6]

b) Elaborate the process of nation building.

[4]

Q3) a) Explain the morphological classification of boundaries.

[6]

b) Discuss the concept of modern geopolitics.

[4]

P.T.O.

Q4) a) Describe the geopolitical significance of Indian ocean. [6]

b) Write a note on changing political map of India. [4]

Q5) Write short notes on any two of the following: [10]

a) Problems of border states in India.

b) Recent trends in political geography.

c) Frontiers and boundaries.



Total No. of Questions : 5]

SEAT No. :

PA-3316

[Total No. of Pages : 2

[5914]-46

M.A./M.Sc. (Part - II)

GEOGRAPHY

GGUT-255 : Regional Planning

(2019 Pattern) (CBCS) (Semester - IV)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

- 1) *Question No. 1 is compulsory.*
- 2) *Solve any three questions from Q. No. 2 to Q. No. 5.*
- 3) *Question No. 2 to 5 carry equal marks.*
- 4) *Use of map stencil is allowed.*
- 5) *Draw figures/map wherever necessary.*

Q1) Solve any five of the following : **[5]**

- a) What is planning hierarchy?
- b) What is planning region?
- c) Enlist the surveys in regional planning.
- d) What is regional disparity?
- e) Write any two Government schemes for tribal development in India.
- f) What is Block level planning?

Q2) a) Describe the need of planning. **[6]**

b) Elaborate the concept of region. **[4]**

Q3) a) Discuss technoeconomic survey. **[6]**

b) Enlist the various type of region. **[4]**

P.T.O.

- Q4)** a) Describe the planning for metropolitan region. [6]
b) Explain the causes of regional disparity in India. [4]

Q5) Write short notes on any two of the following : [10]

- a) Indicators of Development.
b) Command area planning.
c) State level planning.



Total No. of Questions : 7]

SEAT No. :

PA-3317

[Total No. of Pages : 2

[5914]-47

M.A./M.Sc. (Part - II)

GEOGRAPHY

GGUT - 258 : Geography of World

(2019 Pattern) (Semester - IV) (CBCS) (Credit - 4)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Q.1 is compulsory.*
- 2) *Solve any five questions from Q.2 to Q.7.*
- 3) *Q.2 to Q.7 carry equal marks.*
- 4) *Use of Map stencils is allowed.*

Q1) Solve any Five of the following:

[10]

- a) What is 'Geological Time Scale'.
- b) What is World Trade Organization.
- c) Explain major characteristics of solar system.
- d) Define Pandemic.
- e) Enlist the names of continents and major Oceans.
- f) What do you mean by International Monetary Fund (IMF)

Q2) a) Explain the impact of Global Warming.

[7]

b) Describe the climate of South Asia.

[5]

Q3) a) Discuss the role of World Trade Organization in the World Economy.

[7]

b) Describe the major river systems of North America.

[5]

P.T.O.

- Q4)** a) Describe the Big bang theory. [7]
b) Write a brief about physiography of India. [5]
- Q5)** a) Discuss the impact of covid - 19 Pandemic. [7]
b) Give an account on population distribution of Australia. [5]
- Q6)** a) Give an account on major border disputes in the world. [7]
b) Write details about concept of climate change. [5]
- Q7)** Write short notes on any Two of the following: [12]
a) Poverty in the world.
b) Terrorism.
c) Rural to Urban Migration.

