Total	No.	of	Ques	tions	:	7]
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SEAT No.:	
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[Total No. of Pages: 2

[6481]-11 M.A./M.Sc. GEOGRAPHY

GGUT-111: Principles of Geomorphology (2019 Pattern) (Semester - I) (CBCS)

	(2019 I attern) (Semester - 1) (CDCS)	
Time : 3	Hours] [A	Max. Marks: 70
<i>111311 11011</i> <i>1</i>)	Question 1 is compulsory.	
2)	Attempt any five questions from Q. 2 to Q. 7.	
3)	Questions 2 to 7 carry equal marks.	
4)	Draw figures/maps wherever necessary	
5)	Use of map stencils and calculator is allowed.	
Q1) An	swer any five of the following:	[10]
a)	Define weathering.	
b)	Mention the names of hill slope evolution models	
c)	Write the names of different drainage patterns.	
d)	What are glaciers?	
e)	What is pangaea.	
f)	Define drainage basin	
Q2) a)	Write a note on basic concepts in geomorphology	[7]
b)	Explain with suitable diagram the internal structure of the	earth. [5]
		<i>P.T.O.</i>

Q3)	a)	Give an account of 'Global isostatic adjustment'.	[7]
	b)	Explain the process of folding and give landforms associated with foldi	ing. [5]
Q 4)	a)	Explain the chemical weathering with suitable examples.	[7]
	b)	Explain the process and types of mass movement.	[5]
Q 5)	a)	Give the genetic classification of streams.	[7]
	b)	Discuss the davisian cycle of erosion.	[5]
Q6)	a)	What is glacier? Give the types of glaciers.	[7]
	b)	Describe the landforms produced by the erosional work of glaciers.	[5]
Q7)	Write	e a short note on any two:	12]
	a)	History of geomorphology	
	b)	Landforms associated to faulting	
	c)	Coastal erosional landforms.	



Total No.	of Questions	:7]
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SEAT No.:	
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[Total No. of Pages: 2

[6481]-12 M.A./M.Sc. GEOGRAPHY

GGUT 112: Principles of Climatology (2019 Pattern) (CBCS) (Semester - I)

Time	e:31	Hours]	[Max. Marks: 70
Instr	ructio	ons to the candidates:	
	<i>1</i>)	Q.No. 1 is compulsory.	
	<i>2</i>)	Attempt any five questions from Q.2 to Q.7.	
	<i>3</i>)	Questions 2 to 7 carry equal marks.	
	<i>4</i>)	Draw figures/maps wherever necessary.	
	<i>5</i>)	Use of map stencils and calculator is allowed.	
Q 1)	Sol	ve any Five of the following:	$[5\times2=10]$
	a)	Give the meaning of weather.	
	b)	What is front?	
	c)	Define relative humidity.	
	d)	What is atmospheric pressure?	
	e)	What is normal lapse rate?	
	f)	What do you mean by composition of atmosphere?	
Q 2)	a)	Explain the heat budget of the atmosphere.	[7]
	b)	Explain the effects of atmosphere on insolation.	[5]
Q 3)	a)	Explain the factors affecting winds.	[7]
	b)	Describe types of inversion of temperature.	[5]
Q 4)	a)	Explain the factors affecting insolation.	[7]
= .	b)	Explain the jet streams.	[5]

<i>Q</i> 5)	a)	Explain the absolute instability of the atmosphere.	[7]
	b)	Explain the conditional instability.	[5]
Q6)	a)	Discuss the types of fronts.	[7]
	d)	Classify the various air masses.	[5]
Q 7)	Wri	ite short notes on any Two of the following:	[12]
	a)	Tropical climatology	
	b)	Ozone layer	
	c)	Electromagnetic spectrum	



Total No. of Questions: 7] SEAT No.	:	
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[Total No. of Pages: 2

PD-3363

[6481]-13 M.A./M.Sc. GEOGRAPHY

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

		lours] ns to the candidates:	[Max. Marks: 70
risir			
	1) 2)	Q.No. 1 is compulsory. Attempt any five questions from Q.2 to Q.7.	
	<i>3</i>)	Questions 2 to 7 carry equal marks.	
	<i>4</i>)	Draw figures/maps wherever necessary.	
	5)	Use of map stencils and calculator is allowed.	
Q1)	Solv	re any Five of the following:	$[5\times2=10]$
	a)	Define Economic Grography.	
	b)	Write any four names of primary economic activities.	
	c)	What do you mean by Human Resource?	
	d)	What is trade?	
	e)	Write two characteristics of green revolution of India.	
	f)	Define the term 'Agro-based industry'.	
Q2)	a)	Discuss the major problems of international trade.	[7]
	b)	Explain the various means of communication.	[5]
<i>Q3</i>)	a)	Explain the nature of Economic Geography.	[7]
	b)	Discuss the significance of forest and mineral resource development.	rces in economic [5]
Q4)	a)	Describe the classification of economic activities.	[7]
	b)	Explain the major assumption of Von Thunen Theory	z. [5]

Q 5) a)	Describe the Rostow's model in detail.
b)	Evaluin the relationship between calculations and system

- b) Explain the relationship between solar energy and sustainable development. [5]
- Q6) a) Write major advantages and disadvantages of road transportation. [7]
 - d) Explain the problems and prospects of agro-based industries in maharashtra. [5]

Q7) Write short notes any Two of the following:

[12]

[7]

- a) Need of new green revolution in India.
- b) Globalization and economic development.
- c) Problems of agro-based industries in maharashtra.



SEAT No.:	

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[6481]-14R M.A./M.Sc. GEOGRAPHY

GGDT - 114 : Principles of Population and Settlement Geography

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

		(201) Tuttern) (CDCS) (Semester	-)
Time	:31	Hours]	[Max. Marks : 70
Instr	ructio	ons to the candidates:	
	1)	Q. 1 is compulsory.	
	<i>2</i>)	Attempt any Five questions from Q.2 to Q.7.	
	<i>3</i>)	Questions 2 to Q.7 carry equal marks.	
	<i>4</i>)	Draw figures/maps wherever necessary.	
	<i>5</i>)	Use of map stencils and calculator is allowed.	
Q1)	Sol	ve any five of the following.	[10]
	a)	Enlist any two approaches of settlement Geography.	
	b)	Write the definition of 'Mortality'.	
	c)	What do you meant by 'Age structure'?	
	d)	Define the term 'Immigration'.	
	e)	What is 'Hamlet'?	
	f)	What is meaning of 'Urban place'?	
Q 2)	a)	Describe the concept of dependency ratio.	[7]
	b)	Discuss about Morbidity.	[5]
Q3)	a)	Explain the trend of population growth in India.	[7]
2-1	b)	Describe the educational composition of population.	[5]
	/	r - r - r - r - r - r - r - r - r - r -	[-]

Q4)	a)	Discuss the types of population density.	[7]
	b)	Explain the problems of urban-rural fringe.	[5]
Q 5)	a)	Describe the concept of nearest neighbour analysis.	[7]
	b)	Elaborate the problems of baby boom.	[5]
Q6)	a)	Explain the development of population geography as a discipline.	[7]
	b)	Discuss aging of population as a problem.	[5]
Q 7)	Writ	te short notes on any two of the following.	[12]
	a)	Central Business District (CBD)	
	b)	Dispersion of settlement	
	c)	Crude Birth rate	



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[6481]-21 M.A./M.Sc. (Part - I) GEOGRAPHY

GGUT - 121 : Geoinformatics - I (2019 Pattern) (CBCS) (Semester - II)

Time: 3 Hours] Instructions to the candidates:		[Max. Marks : 70	
Insu	1) 2) 3) 4)	Q. 1 is compulsory. Solve any Five questions from Q.2 to Q.7. Questions 2 to 7 carry equal marks. Use of map stencil is allowed.	
Q1)	Solv	re any Five of the following:	[10]
	a)	What is cyclic data?	
	b)	Define attribute query.	
	c)	What is logical relationship?	
	d)	What is ratio scale?	
	e)	Define topology building.	
	f)	What is local grid operation?	
Q2)	a)	Discuss the advantages of vector data models.	[7]
	b)	Explain SQL.	[5]
Q3)	a)	Give the advantages of DBMS.	[7]
	b)	Explain the types of Digitization.	[5]
<i>Q4</i>)	a)	What do you understand by spatial database?	[7]
(۳		•	
	b)	Explain Functional relationship.	[5]

Q 5)	a)	Describe the conceptual models.	[7]
	b)	Explain the local and focal grid operations in spatial data analysis.	[5]
Q6)	a)	Discuss the map algebra in data analysis.	[7]
	b)	Explain raster data model.	[5]
07)	Writ	e short notes on any two of the following	[12]

- $Q^{\prime\prime}$) Write short notes on <u>any two</u> of the following.
 - b) Automatic digitization.

GIS application.

a)

c) Nominal and ratio scale.



Total No. of	Questions	:	7]
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[Total No. of Pages: 2

[6481]-22

M.A./M.Sc. - I

GEOGRAPHY

GGUT - 122 Coastal Geomorphology

	(2019 Pattern) (Semester -II) (Credit - 4)			
Time	e:3 H	[Max. Marks : 1	70	
Instr	uction	to the candidates:		
	1)	Q.1 is compulsory.		
	2)	Solve any five questions from Q.2 to Q.7.		
	<i>3</i>)	Q.2 to Q.7 carry equal marks.		
	<i>4</i>)	Use of map stencil is allowed.		
Q1)	Solv	re <u>any Five</u> of the following: [1	0]	
	a)	What is a temporal scale in coastal geomorphology?		
	b)	What are the three different types of breaker waves?		
	c)	Mention the consequences of sea level changes.		
	d)	Define blow hole.		
	e)	Define Tsunami.		
	f)	Enlist the method of coastal conservation.		
Q2)	a)	Define tide and illustrate the various coastal land formed produced by the coastal processes.	he 7]	
	b)	Discuss on flood and ebb currents.	5]	
Q3)	a)	Illustrate the tide-dominated coasts with suitable examples. [7]	
	b)	Explain in detail quaternary Sea level changes.	5]	

Q4)	a)	Explain the properties and illustrate the various types of coastal sedim	ents. [7]
	b)	Illustrate fan delta and braid delta with a suitable examples.	[5]
Q 5)	a)	Explain in detail the wave-dominated coasts with suitable examples.	[7]
	b)	Discuss on tides in bays and estuaries.	[5]
Q6)	a)	Explain in detail international case studies on coastal hazard managen	nent. [7]
	b)	Discuss on salt intrusion and subsidence of coastal aquifers.	[5]
Q 7)	Writ	e short notes on any two of the following:	[12]
	a)	Coastal sand dune.	
	b)	Wave breakers	
	c)	Corals and coral reefs.	



Total No. of	Questions	:	7]
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SEAT No.:	
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[6481]-23 M.A./M.Sc. (Part - I) GEOGRAPHY

GGUT 123 : Synoptic Climatology (2019 Pattern) (Semester - II) (4 Credits)

	(2019 Pattern) (Semester - II) (4 Credits)				
		Hours] [Max. M ns to the candidates: Q. No. 1 is compulsory Solve any five questions from Q.2 to Q.7 Question 2 to 7 carry equal marks	Tarks: 70		
Q 1)	Solv	ve any Five of the following:	[10]		
	a)	Define synoptic climatology.			
	b)	Define air mass.			
	c)	What is a tornado?			
	d)	What is a heat wave?			
	e)	Mention type of fronts.			
	f)	Write any two methods of weather forecasting.			
Q2)	a)	Explain the nature and scope of synoptic climatology in detail.	[7]		
	b)	Describe the analytical approach of synoptic climatology.	[5]		
Q 3)	a)	Illustrate the formation of easterly waves.	[7]		
	b)	Describe the approaches of synoptic climatology.	[5]		
Q4)	a)	Elaborate air masses of Asia.	[7]		
	b)	Write the various types of fogs.	[5]		

Q 5)	a)	Classify the clouds and state with the suitable diagram.	[7]
	b)	Describe the formation of frontogenesis.	[5]
Q6)	a)	Explain the role of satellites in weather forecasting.	[7]
	b)	Application of synoptic climatology in agriculture.	[5]
Q 7)	Wri	ite short notes any Two of the following.	[12]
	a)	Synoptic charts.	
	b)	Wave cyclones.	



c) Application of synoptic climatology.

Total	No.	of	Ques	tions	:	7]
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SEAT No.:	
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[Total No. of Pages: 2

[6481]-24 M.A./M.Sc.-(Part-I) GEOGRAPHY

		GGUT-124: Agricultural Geography (2019 Pattern) (Semester - II) (CBCS)	
		Hours] [Ma ons to the candidate:	x. Marks: 70
	1)	Question 1 is compulsory.	
	2)	Solve any five questions from Q. 2 to Q. 7.	
	<i>3</i>)	Questions 2 to 7 carry equal marks.	
	<i>4</i>)	Use of map stencil is allowed.	
Q1)	Solv	ve any five of the following:	[10]
	a)	What is a dry drought?	
	b)	Define Horticulture.	
	c)	Enlist the types of agriculture.	
	d)	What is regional approach?	
	e)	Mention geographical characteristics of cotton region in In-	dia.
	f)	Define Mixed Farming.	
Q2)	a)	Write in brief about Bhatia's method of agricultural efficien	ncy. [7]
	b)	Explain the scope of agricultural geography.	[5]

P.T.O.

Q3)	a)	Describe the technological factors determinants the agricultural patterns	.[7]
	b)	Explain crop rotation method.	[5]
Q4)	a)	Distinguish between intensive subsistence farming and plantat agriculture.	ion [7]
	b)	Discuss the social factors influencing agriculture.	[5]
Q5)	a)	Explain the role of agro based industry in regional development.	[7]
	b)	Discuss the agricultural problems and prospects of with reference India.	to [5]
Q6)	a)	Describe Green Revolution in India.	[7]
	b)	Write a note on commercial grain farming	[5]
Q7)	Write	e a short note on any two of the following:	12]
	a)	Shifting cultivation	
	b)	Organic farming	



Modern technique in Indian agriculture.

c)

Total No. of Questions	:	7]
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	SEAT No.:	
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[6481]-25 M.A./M.Sc. GEOGRAPHY

GGUT-125: Population Geography (2019 Pattern) (Semester - II) (Credit System) Time: 3 Hours] [Max. Marks : 70] Instructions to the candidate: Question 1 is compulsory. Solve any five questions from Q. 2 to Q. 7. *2*) Questions 2 to 7 carry equal marks. *3*) **Q1**) Solve any five of the following: [10] **Define Fertility** a) Define Census. b) What is population density? c) Define morbidity d) What is population distribution? e) What is internal migration? f) Discuss the demographic composition. **Q2**) a) [7] Discuss preventive checks of Malthusian theory of population growth. b) [5]

P.T.O.

Q3)	a)	Explain the Lee's theory of migration.	[7]
	b)	Discuss the mortality trends of India.	[5]
Q4)	a)	Describe the population density of the world.	[7]
	b)	Discuss the economic composition.	[5]
Q5)	a)	Explain the push factors of migration	[7]
	b)	Critically examine the Malthus theory.	[5]
Q6)	a)	Discuss the factors affecting on fertility.	[7]
	b)	Discuss the determinants of population growth	[5]
Q7)	Writ	e short notes on any two of the following:	[12]
	a)	Human Development Index	
	b)	Population policy of India	
	c)	Sources of population data	



Total No. of Questions: 7]	SEAT No.:
PD-3370	[Total No. of Pages : 2

[6481]-26 M.A./M.Sc. (Part - I) **GEOGRAPHY**

GGUT - 126 : Fluvial Geomorphology

		(2019 Pattern) (Semester - II)	·
Time	: 3 H	Hours]	[Max. Marks : 70
Instr	uctio	ons to the candidates:	
	<i>1</i>)	Question 1 is compulsory.	
	2)3)	Solve any five questions from Question No. 2 to Question I Questions 2 to 7 carry equal marks.	No.7.
Q1)	Solv	ve any Five of the following (Around 20 words each):	[10]
	a)	What is a river basin?	
	b)	Law of allometric growth.	
	c)	How sediment is entrained?	
	d)	Explain throughflow.	
	e)	River discharge (Q).	
	f)	What is the necessity of the Manning's equation?	
Q 2)	a)	What are channel patterns? Describe the meandering codetail with diagram.	hannel pattern in [7]
	b)	Steady and unsteady flows.	[5]
Q 3)	a)	What is fluvial erosion? Describe any four bedrock chewith suitable diagrams.	nannel landforms
	b)	How suspended load is different from bedload?	[5]
Q 4)	a)	What is hydraulic geometry? How at-a-station hydra different from downstream hydraulic geometry?	ulic geometry is [7]
	b)	What is river cross section?	[5]

Q5) a) How Glock's model describes various phases of drainage network development? Show diagrammatically. [7]

b) What is the difference between bedrock and alluvial river channels? [5]

Q6) a) What is fluvial geomorphology and what is its scope? [7]

b) Give an account of two landforms of floodplain. [5]

Q7) Write short notes on any **Two** of the following:

[12]

- a) What are fluvial terraces?
- b) What is flood hydrograph and what are its segments?
- c) What is river metamorphism?



Total No.	of Questions	:	7]
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Total No.	OI.	Questions	•	/]

SEAT No. :	3
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[Total No. of Pages: 2

[6481]-27 M.A./M.Sc. (Part - I) **GEOGRAPHY**

GGUT 127: Monsoon Climatology

		(2019 Pattern) (CBCS) (Semester - II)	
		~ .	: 70
Q 1)	Solv	ve any Five of the following:	10]
	a)	What is monsoon climatology?	
	b)	What is monsoon trough?	
	c)	What is the full form of NAO?	
	d)	Define heat low.	
	e)	Enlist the models of monsoon forecasting.	
	f)	What is El - Nion.	
Q 2)	a)	Describe South Asian monsoon.	[7]
	b)	Explain the monsoon model on non-rotating Earth.	[5]
Q 3)	a)	Explain dates of on set and withdrawal of monsoon Rainfall.	[7]
	b)	Write note on Easterly Jet.	[5]
Q 4)	a)	Discuss El-Nino Southern oscillation [ENSO] and inter annual variabit of monsoon.	ility [7]
	b)	Give an account of active & break period of monsoon.	[5]

Q 5)	a)	Write information on Indian Ocean Dipole (IOD).	[7]
	b)	Explain the scope of monsoon climatology.	[5]
Q6)	a)	Discuss the significance of Tibetan High on origin of monsoon.	[7]
	b)	Explain Aerological concept of origin of monsoon.	[5]
Q 7)	Wri	te short notes on any Two of the following.	[12]
	a)	Driving mechanism of monsoon	
	b)	Time scales in monsoon forecasting	
	c)	MONEX	

Total No.	of Questions	:	7]
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[Total No. of Pages: 2

[6481]-28 M.A./M.Sc. **GEOGRAPHY**

GGUT-128: Industrial Geography

(2019 Pattern) (Semester - II) (CBCS) Time: 3 Hours 1 [Max. Marks: 70] Instructions to the candidate: Question No. 1 is compulsory. *1*) *2*) Attempt any five questions from Q. 2 to Q. 7. 3) Questions No.2 to 7 carry equal marks. Draw figures/diagrams wherever necessary. *4*) Use of map stencils and calculator allowed. 5) **Q1**) Solve any five questions of the following: [10] Define the Industrial Geography. a) Mention any two social factors of Industrial location. b) c) What is footloose industry? Mention any two assumptions of Waber's model. d) Write any two problems of Indian sugar industry. e) f) Mention any two major IT hubs in India. **Q2**) a) Explain the role of industries in development of India's economy. [7] b) Describe economic and political factors of industrial location. [5]

P.T.O.

Q3)	a)	Describe the iron and steel industries.	[7]
	b)	Describe the industrial regions in china.	[5]
Q4)	a)	Explain the agro based industries in India.	[7]
	b)	What is SEZ? Explain importance of SEZ in detail.	[5]
Q5)	a)	Explain the Western European Industrial region.	[7]
	b)	Describe the India's industrial policy.	[5]
Q6)	a)	Explain the problems of IT industry in India	[7]
	b)	What is MIDC? Explain the role of MIDC in economic development maharashtra.	t of
Q7)	a)	What is mean of FDS? Explain it role of development in India's industr	ries [7]
	b)	Describe the current scenario of industry sector in India.	[5]



Total	No.	of	Ques	tions	:	7]
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SEAT No.:

[Total No. of Pages: 2

[6481]-29 M.A./M.Sc.(Part-I) **GEOGRAPHY**

GGUT-129: Geography of Rural Settlements

(2019 Pattern) (Semester - II) (4 Credits) Time: 3 Hours 1 [Max. Marks : 70] Instructions to the candidate: 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] Define rural settlement geography. a) What is a site of settlement? b) Define range of goods. c) What do you mean by the morphogenesis of rural settlements? d) Define seasonal migration. e) What is the settlement pattern? f) Describe the evolution of settlement. **Q2**) a) [7] Discuss the methods of the measuring degree of dispersion. [5] b)

Q3)	a)	Discuss the Von thunen theory in detail	[7]
	b)	Describe the functional analysis of service in rural areas.	[5]
Q4)	a)	Discuss the social-cultural morphogenesis of rural settlements.	[7]
	b)	Explain the causes of migration in rural areas	[5]
Q5)	a)	Discuss the factors affecting rural house types.	[7]
	b)	Describe the building material used for rural settlements	[5]
Q6)	a)	Describe the rural settlement patterns in Maharashtra.	[7]
	b)	Discuss the geographical aspects of settlements reflected in place nar	mes. [5]
Q7)	Write	e short notes any two of the following:	[12]
	a)	Factors affecting nucleation	
	b)	Intensity of land use	
	c)	Functional analysis of service in rural areas	



Total	No.	of	Questions	:	5]
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[Total No. of Pages: 2

[6481]-30 M.A./M.Sc. - I **GEOGRAPHY**

GGDT-130: Geography of Tourism

(2019 Pattern) (Semester - II) (2 Credits) (CBCS) Time: 2 Hours] [Max. Marks : 35] Instructions to the candidates: 1) Question No.1 is compulsory. *2*) Solve any three questions from Q. 2 to Q. 5. Questions 2 to 5 carry equal marks. *3*) **Q1**) Solve any five of the following: [5] Define Tourism. a) Define term agro-tourism. b) Define 'House boats'. c) d) State any two names of dams in India. State any two names of waterfalls in India. e) Define 'International tourist'. f) **Q2**) a) Describe the classification of tourism on the basis of nationality. [6] Explain the difference between 'Hotels' and 'Motels'. b) [4]

P.T.O.

Q3)	a)	Explain the importance of accommodation in tourism.	[6]
	b)	Explain the religions factors of tourism.	[4]
Q4)	a)	Describe the Ajanta caves.	[6]
	b)	Explain the role of private accommodations in tourism.	[4]
Q5)	Writ	e short notes on any two of the following:	[10]
	a)	Eco-tourism	
	b)	Heritage tourism	
	c)	Beaches: Kalangut (Goa)	



Total No	of Questions	: 5]
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Total	110.0	I Quesi	nons:	IJ

SEAT No.	

[Total No. of Pages: 2

[6481]-31 M.A./M.Sc. GEOGRAPHY

GGDT 132 : Geography of Disaster Management (2019 Pattern) (Semester - II) (Credit System)

	Time: 2 Hours] [Max. Mar. Instructions to the candidates: 1) Q. No. 1 is compulsory.		
	2) 3)	Solve any three questions from Q.2 to Q.5.	
Q 1)	Solv	ve any Five of the following:	[5]
	a)	What do you mean by disaster?	
	b)	Define Volcano.	
	c)	What is fire?	
	d)	What is food poisoning.	
	e)	Define landslide.	
	f)	What is accidents?	
Q 2)	a)	Explain the use of GIS in disaster management.	[6]
	b)	Discuss the difference between vulnerability and risk.	[4]
Q 3)	a)	Discuss the role of police forces in disaster management	ent. [6]
	b)	Discuss the causes and effects of fire.	[4]
Q 4)	a)	Describe the phases of disaster cycle.	[6]
	b)	Discuss the causes and effects of terrorism.	[4]

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

[10]

- a) Role of NGO's in disaster management.
- b) Use of Remote sensing in disaster management.
- c) Natural disasters.



Total No.	of Questions	:	7]
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[6481]-41

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

GGUT 235: Geoinformatics - II

		GGUI 255. Geombinanes - 11			
	(2019 Pattern) (Semester - III) (4 Credits) (Theory)				
Time	e:3 H	Tours] [Max. Marks	: 70		
Instr	ructio	ns to the candidates:			
	<i>1</i>)	Q. 1 is compulsory.			
	<i>2</i>)	Solve any five questions from Q.2 to Q.7.			
	<i>3</i>)	Questions 2 to 7 carry equal marks.			
Q 1)	Solv	e any Five of the following:	[10]		
	a)	Define Remote Sensing.			
	b)	What is meant by Active sensors?			
	c)	List the remote sensing platforms.			
	d)	Name any two IRS series satellites.			
	e)	Give any two examples of optical mechanical scanner.			
	f)	Define spatial resolution.			
Q 2)	a)	Discuss the development of remote sensing in India.	[7]		
	b)	Describe electromagnetic spectrum with the suitable diagram.	[5]		
Q 3)	a)	Give the detailed specifications of any two earth resource satellites.	[7]		
	b)	Explain the Geo-stationary satellites.	[5]		
Q 4)	a)	Discuss the difference between LISS & PAN image.	[7]		
	b)	Explain the spectral resolution.	[5]		

<i>Q</i> 5)	a)	Describe the Geometry of Aerial Photograph.	[7]
	b)	Explain elements of image interpretation.	[5]
Q6)	a)	Explain the types of aerial photographs based on scale.	[7]
	b)	Describe characteristics of Aerial Photography.	[5]
Q7)	Wri	te short notes (Any Two):	[12]
	a)	IKONOS Satellite	
	b)	Blackbody radiation	
	c)	Principal axis	

SEAT No.:	
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[Total No. of Pages: 2

[6481]-42 M.A./M.Sc. GEOGRAPHY

GGUT-236: Geographical Thoughts (2019 Pattern) (Semester - III) (Credit System) (4 Credits) Time: 3 Hours 1 [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] Write about the expedition of captain cook. a) Write any two names of Roman schools of thoughts. b) What do you mean by scenic evaluation? c) d) Enlist the names of any two book by strabo. Write about visit of Vasco da gama in different countries. e) Enlist the places of visit by Columbus. f) Describe brief account of Arab school. **Q2**) a) [7] Explain the role of Immanuel kant in Geographical thought. b) [5]

Q3)	a)	Explain the paradigms in geography.	[7]
	b)	Describe the field study process in Geography.	[5]
Q4)	a)	Discuss the role of Indian school in the development of Geography.	[7]
	b)	Explain the statistical techniques in Geography.	[5]
Q 5)	a)	Describe any two approaches in Geography.	[7]
	b)	Explain the need and significance of environmental management.	[5]
Q6)	a)	Need of urban planning in Geography.	[7]
	b)	Describe any two models in Geographical studies.	[5]
Q7)	Write	e short notes on any two of the following:	[12]
	a)	Determinism versus possibilism	
	b)	Remote Sensing	
	c)	Application in land use planning	



Total N	o. of Qu	estions	:	7]
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[Total No. of Pages: 2

[6481]-43 M.A./M.Sc. (Part - II) **GEOGRAPHY**

GCUT-237. Tropical Geomorphology (Theory)

	(2019 Pattern) (Semester - III) (4 Credits)					
Time: 3 Hours] Instructions to the candidates:			[Max. Marks: 70			
	1)	Q. No. 1 is compulsory.				
	<i>2</i>)	Solve any five questions from Q. 2 to Q. 7.				
	3)	Questions 2 to 7 carry equal marks.				
Q1)	Solv	ve any five of the following:	[10]			
	a)	Types of minerals.				
	b)	What is laterite?				
	c)	Give the types of duricrusts.				
	d)	What is mass movements?				
	e)	Define planation surfaces.				
	f)	Describe stream erosion in the tropics.				
Q2)	a)	Describe deep weathering profile.	[7]			
	b)	Explain peculiarities of tropical climate.	[5]			

Q3)	a)	Give an account of tropical coast.	[7]
	b)	Discuss how temperture and rainfall affect the tropical region.	[5]
Q4)	a)	Differentiate duricrusted and non duricrusted profile.	[7]
	b)	What are particular relief characteristic found in the tropics.	[5]
Q 5)	a)	Explain slope wash processes in details.	[7]
	b)	How tectonical and climatic changes are responsible in the divelopm of tropical landforms?	nent [5]
Q6)	a)	Explain the concept of double surface of planation.	[7]
	b)	Describe landform development in the tropics.	[5]
Q7)	Write	e short notes on any two of the following:	[12]
	a)	Tropical soils.	
	b)	Morphogenetic regions.	



c) Inselbergs.

Total No. of	Questions	:	7]
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PD-3379

SEAT No.	:	

[Total No. of Pages : 2

[6481]-44

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

GGUT-238: Applied Climatology

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

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) Question 2 to 7 carry eqaul marks.
- 4) Use of map stencil is allowed.

Q1) Write the answers of the following questions in about 20 words (Any 5): [10]

- a) What is climate impact assessment?
- b) Name the instruments used to measure atmospheric pressure.
- c) State the difference between air and wind.
- d) State any two problems curses by urban air pollution.
- e) What is heating degree day?
- f) Give any two effects of construction operations on air quality.
- Q2) a) Describe the nature of applied climatology. [7]
 - b) Write about empirical methods used to Estimate Evapotranspiration. [5]
- Q3) a) Describe the influence of climate on livestock. [7]
 - b) Explain the effect of climate on human health. [5]

Q 4)	a)	Explain the characteristics of urban heat island.	[7]
	b)	What is the relationship between climate and industrial activities?	[5]
Q 5)	a)	Explain the relationship between soil management and climate.	[7]
	b)	Explain the meaning and type of cooling towers.	[5]
Q6)	a)	Describe the effect of climate on air transport.	[7]
	b)	Describe canopy transpiration and crop stress.	[5]
Q 7)	Wri	te short notes one any two of the following:	[12]
	a)	Scope of applied climatology.	
	b)	Climate and clothing.	
	c)	Application of remote sensing in crop monitoring	

Total No. of	Questions	:	7]
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SEAT No. :	

[Total No. of Pages : 2

[6481]-45 M.A./M.Sc. - II **GEOGRAPHY**

GGUT-239: Geography of Rural Development

		(2019 Pattern) (CBCS) (Semester-III)	
Time	: 3 H	Tours]	[Max. Marks : 70
Instr	uctior	ns to the candidates:	
	<i>1)</i>	Question 1 is compulsory.	
	2)	Solve any Five questions from question No.2 to Q No.7.	
	3)	Questions No.2 to Q No.7 carry equal marks.	
Q1)	Ans	wer any five of the following.	[10]
	a)	Write any two objectives of rural development.	
	b)	What is rural development.	
	c)	Enlist levels of planning in rural development.	
	d)	Define the term rural development.	
	e)	What is 'NGO'?	
	f)	Define the term 'GIS'.	
Q2)	a)	Explain economic factors affecting on rural development	t. [7]
	b)	Discuss the role of rural electrification in the developme	nt. [5]
Q3)	a)	Describe grassroot planning in rural development.	[7]
	b)	Role of government policies in rural development.	[5]
Q 4)	a)	Describe watershed management and rural development	. [7]
- 1	b)	Write a note on management of tribal village.	[5]

Q5)	a)	Explain the nature and scope of rural development.	[7]
	b)	Write notes on Green Revolution and rural development.	[5]
Q6)	a)	Explain major issues in the rural development.	[7]
	b)	Describe the concept of rural development.	[5]
Q7)	Writ	e short notes on any two of the following.	[12]
	a)	E-Governance	
	b)	E-Agriculture	
	c)	Panchayat raj.	



Total No. of Questions : 7]	SEA
Iotal No. of Questions: 7]	SEA

SEAT No.:		
[Total	No. of Pages :	2

[6481]-46 M.A./M.Sc. - II GEOGRAPHY

GGUT-240: Urban Geography

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

Time	: 3 H	Tours] [Max. Marks	: 70
Instr	uction	ns to the candidates:	
	1)	Question 1 is compulsory.	
	<i>2)</i>	Solve any Five questions from question No.2 to Q No.7.	
	3)	Question No.2 to Q No.7 carry equal marks.	
Q1)	Ans	wer any five of the following.	10]
	a)	What is threshold population?	
	b)	Give any two objectives of urban studies.	
	c)	Concept of city region.	
	d)	Define-Urbanization.	
	e)	What is urban planning?	
	f)	Give any two characteristics of CBD.	
Q2)	a)	Explain the nature of urban geography.	[7]
	b)	State the urban transport problems.	[5]
Q3)	a)	Explain the concentric theory of morphological pattern of cities.	[7]
	b)	What is urbanization curve? Explain in detail.	[5]
Q4)	a)	'Indian cities do not show positive relationship as postulated by Zi Elaborate it.	pf". [7]
	b)	Give functional classification of town.	[5]

Q5)	a)	Explain the Christaller's central place theory.	[7]
	b)	What are the civic amenities problems in cities.	[5]
Q6)	a)	Describe the growth of urban population with trend and ourbanization in India.	direction of
	b)	How can GIS be used in urban planning?	[5]

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

- a) City regions in India
- b) Hierarchical order of CBD
- c) Quality of life in towns



Total No. of Questions : 5]	SEAT No. :
PD-3382	[Total No. of Pages : 2

[6481]-47 M.A./M.Sc. GEOGRAPHY

		GEOGRAPHY	
		GGUT-242: Hydrology	
	(2	2019 Pattern) (Semester - III) (CBCS) (2 Credit)	
Time	e : 2 F	Hours] [Max. Marks:	35
Instr	uction	ns to the candidates :	
	1)	Q.1 is compulsory.	
	<i>2</i>)	Solve any three Que. from Q.No. 2 to Q.No. 5.	
	3)	Que No. 2 to 5 carry equal marks.	
Q1)	Solv	ve any five of the following.	[5]
	a)	Define 'Water cycle'.	
	b)	Give the units of measurement for stream flow.	
	c)	What do you mean by gross precipitation?	
	d)	What is mean by depression storage?	
	e)	Define 'Transpiration'.	
	f)	Give the units of measurement for infiltration.	
Q2)	a)	Explain the hydrologic cycle.	[6]
	b)	Give an account of sources of hydrologic data.	[4]
Q3)	a)	Briefly describe the global distribution of precipitation.	[6]
	b)	Explain precipitation and evaporation as a unit of hydrologic measurement	ent. [4]
Q4)	a)	Explain the factors affecting on depression storage.	[6]
	b)	Describe the concept of evapotranspiration	[4]

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

[10]

- a) Methods of evaporation control
- b) Application of Hydrology
- c) Types of precipitation

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Total No. of Questions: 5]	SEAT No.:
PD-3383	[Total No. of Pages : 2

[6481]-48 M.A./M.Sc.

GEOGRAPHY

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

		(2019 Pattern) (Semester - III) (CBCS)	
Time	2:21	Hours] [Max.	Marks: 35
nstr	uctio	ns to the candidates :	
	<i>1</i>)	Que. No. 1 is compulsory.	
	<i>2</i>)	Solve any three Que. from Q.No. 2 to Q.No. 5.	
	3)	Que No. 2 to 5 carry equal marks.	
Q1)	Solv	ve any five of the following.	[5]
	a)	What is watershed?	
	b)	Define 'Ridge Line'.	
	c)	What do you mean by interception?	
	d)	What is 'Check Dam'?	
	e)	Define 'Integrated watershed development plan.	
	f)	What is mean by 'contour banding'?	
Q2)	a)	Discuss the problems in watershed management.	[6]
	b)	Describe how physiography and drainage determines in	watershed
		management.	[4]
Q3)	a)	Describe the methods of watershed delineation.	[6]
	b)	Explain the process of evaporation and evapotranspiration.	[4]
Q4)	a)	Explain the importance of watershed management.	[6]
_ /	,	Describe the methods of soil conservation.	
	b)	Describe the methods of son conservation.	[4]

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

[10]

- a) Methods of water conservation
- b) Principle of watershed management
- c) Hydrological cycle

3

Total No.	of Q	uestions	:	7]
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PD-3384	

SEAT No.:	
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[Total No. of Pages: 2

[6481]-51 M.A./M.Sc. - II **GEOGRAPHY**

		GGUT 249 : Geography of India (2019 Pattern) (Semester - IV) (Credits - 4)	
	uction 1)	Hours] [Max. Mar. of the candidates: Q. No. 1 is compulsory Solve any five questions from Q.2 to Q.7 Question 2 to 7 carry equal marks.	ks : 70
Q 1)	Solv	ve any Five of the following:	[10]
	a)	Name the group of islands lying in the Bay of Bengal.	
	b)	Write any two tributaries of Indus.	
	c)	What is ITCZ?	
	d)	What is soil degradation?	
	e)	In which state of India found the moist tropical forest?	
	f)	Write any two thermal power stations in India.	
	g)	Enlist the advantages of green revolution.	
Q 2)	a)	Describe the frontiers of India.	[7]
	b)	Write in brief about the peninsular plateau of India.	[5]
Q 3)	a)	Explain in detail the Narmada river system.	[7]
	b)	Write summer season and associated weather conditions in india.	[5]
Q 4)	a)	Discuss the remedial measures of soil conservation.	[7]
	b)	Write the distribution of Manganese in India.	[5]
			P.T.O.

Q 5)	a)	Explain the major forest types in India.	[7]
	b)	Write the distribution of Cotton in India.	[5]
Q6)	a)	Describe problems of industrial development in India	[7]
	b)	Explain the distribution of population in India.	[5]
Q 7)	Wri	te short notes any Two of the following.	[12]
Q 7)	Wri	te short notes any Two of the following. Krishnariver	[12]
Q 7)		•	[12]
Q 7)	a)	Krishnariver	[12]
Q 7)	a) b)	Krishnariver El-Nino	[12]



Total No. of	f Questions	:	7]
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PD-3385

SEAT No.:	
SEAT No.:	

[Total No. of Pages: 2

[6481]-52 M.A./M.Sc. GEOGRAPHY - II

GEOGRAPHY - II GGUT-250: Oceanography (2019 Pattern) (Semester - IV) (Credit -4) Time: 3 Hours] [Max. Marks: 70] Instructions to the candidate: 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] Define oceanography a) Who proposed the hypothesis of seafloor spreading? b) What is a continental shelf? c) Define density of seawater. d) What is lithogenous deposit? e) Write any two natural disturbances causing pollution in the ocean? f) Enlist the major causes of ocean pollution g) **Q2**) a) Describe the modern trends of oceanography. [7] Write a note on origin of Atlantic Ocean [5] b)

Q3)	a)	Explain the oceanic ridge and rise	[7]
	b)	Describe the origin of sea salt	[5]
Q4)	a)	Discuss the biogenous marine sediments	[7]
	b)	Write in brief the available ocean resources	[5]
Q5)	a)	Describe the continental drift in the context of origin of ocean basin	[7]
	b)	Write about anthropogenic activities resulting in ocean pollution	[5]
Q6)	a)	Explain the factors affecting on density of seawater	[7]
	b)	Write characteristics of ocean pollutants	[5]
Q7)	Write	e short notes any two of the following:	[12]
	a)	Foundation of modern oceanography	
	b)	Radiolarian ooze	
	c)	Coral reef	
	d)	Liquefied ocean resources	



Total	No.	of	Questions	:	7]
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SEAT No. :	
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[Total No. of Pages : 2

[6481]-53 S.Y. M.A./M.Sc. GEOGRAPHY

GGUT-251: Research Methodology (2019 Pattern) (Semester - IV) (Credits - 4)

Instr	uctio 1) 2)	Hours] Ins to the candidates: Q.1 is compulsory. Solve any five questions from Q.2 to Q.7. Q.2 to Q.7 carry equal marks.	[Max. Marks : 70
<i>Q1</i>)	Sol	ve any Five of the following.	[10]
	a)	What is applied research?	
	b)	Define research design	
	c)	What is the population in research?	
	d)	Define questionnaire	
	e)	What is a hypothesis in research?	
	f)	What is a dissertation?	
	g)	Write any two softwares for plagiarism detection.	
Q2)	a)	Describe various steps in the research process.	[7]
	b)	Write in brief the purpose of the research design.	[5]
Q3)	a)	Explain in detail about research problem.	[7]
	b)	Write advantages of sampling.	[5]
Q4)	a)	Discuss the characteristics of an interview.	[7]
	b)	Write in brief about 't' test.	[5]
Q5)	a)	Explain the measures of central tendency.	[7]
	b)	Write the research ethics.	[5]

Describe the structure of research report. [7] **Q6**) a) Write in brief about simple random sampling. **[5]** b) Q7) Write short notes on any Two of the following. [12] Techniques involved in the identification of research problem a) Merits of questionnaire method b) Research Methodology c) d) Time series analysis

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[Total No. of Pages : 1

[6481]-54 M.A./M.Sc. - II GEOGRAPHY

	GGUT - 252 : Geography of Soils (2019 Pattern) (Semester - IV) (60424)	
Time: 2 Hours] Instructions to the candidates: 1) Question 1 is compulsory. 2) Attempt any three questions from Q.No. 2 to Q. No. 5. 3) Questions 2 to 5 carry equal marks.		[Max. Marks: 35
<i>4</i>) <i>5</i>)	Draw figures/maps wherever necessary. Use to map stencil is allowed.	
Q1) S a) b c) d e) f)	What is soil formation?Write any two physical characteristics of soil.What is land capability?What is soil pollution?	[5]
Q2) a) b		[6] [4]
Q3) a) b		[6] [4]
Q4) a) b		[6] [4]
Q5) W a) b c)	Micronutrients.	[10]



Total No. of Questions: 5]

SEAT No.:	
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[Total No. of Pages : 1

[6481]-55 M.A./M.Sc. - II GEOGRAPHY

	GEOGRAPHY GGUT - 254 : Political Geography (2019 Pattern) (Semester - IV) (60426)			
Time	:2		Max. Marks: 35	
Instr	ucti	ons to the candidates:		
	<i>1</i>)	Question 1 is compulsory.		
	<i>2</i>)	Attempt any three questions from Q.No. 2 to Q. No. 5.		
	3) 4)	Questions 2 to 5 carry equal marks. Draw figures/maps wherever necessary.		
	<i>5</i>)	Use to map stencil is allowed.		
Q 1)	So	lve any five of the following (Around 20 words each):	[5]	
	a)	What is political geography?		
	b)	Enlist the elements of state.		
	c)	What is nationalism?		
	d)	What is 'No Man Land'?		
	e)	Which states has Godavari water dispute?		
	f)	What is the name of the border line between India and Pal	xistan?	
Q 2)	a)	Describe scope of political geography.	[6]	
	b)	Explain territory as a element of state.	[4]	
Q 3)	a)	Elaborate the concept of frontiers with suitable examples.	[6]	
	b)	Discuss the importance of political geography.	[4]	
Q4)	a)	Describe border dispute between India and China.	[6]	
	b)	Explain heartland theory of Mackinder.	[4]	
Q 5)		rite short notes on any two of the following.	[10]	
	a)	Origin of state		
	b)	Modern Geopolitics		
	c)	Changing political map of India.		



Total No. of Questions: 5]

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		[0401]-30	
		M.A./M.Sc II	
		GEOGRAPHY	
		GGUT - 255 : Regional Planning	
		(2019 Pattern) (Semester - IV) (60427)	
Time	:2		[Max. Marks : 35
		ons to the candidates:	
	<i>1</i>)	Question No. 1 is compulsory.	
	2) 3)	Attempt any three questions from Q.No. 2 to Q. No. 5. Quetions 2 to 5 carry equal marks.	
	<i>4</i>)	Draw figures/maps wherever necessary.	
	5)	Use to map stencil is allowed.	
Q 1)	So	lve any five of the following (Around 20 words each):	[5]
~	a)	Define the term 'Region'.	
	b)	What is national capital region?	
	c)	What is Hierarchy of planning?	
	d)	Enlist the span of five years plan.	
	e)	What is regional disparity.	
	f)	Define 'river basin' area.	
Q2)	a)	Write in detail the role of geography is regional planning.	[6]
	b)	Describe the indicator's of development.	[4]
Q3)	a)	Explain the techno-Economic survey in - regional plannin	g. [6]
~ ′	b)	Describe the characteristics of regional policies in India.	[4]
Q 4)	a)	Explain the concept of metropolitian region.	[6]
~ ′	b)		[4]
Q 5)	Wı	rite short notes any two of the following.	[10]
	a)	Measurement of Regional Development.	
	b)	Levels of planning.	
	c)	Concept of Planning region.	
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Total No.	of Questions	:	7]
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SEAT No.:	

[Total No. of Pages: 2

[6481]-57 M.A./M.Sc.-II GEOGRAPHY

		GEOGRAPHY	
		GGUT-258: Geography of World	
		(2019 Pattern) (Semester - IV)	
		[ours]	[Max. Marks : 70
Instr	uctio	ns to the candidates:	
	<i>1</i>)	Question 1 is compulsory.	
	<i>2</i>)	Solve any five questions from Q. 2 to Q. 7.	
	<i>3</i>)	Questions 2 to 7 carry equal marks.	
	<i>4</i>)	Use to map stencil is allowed.	
Q1)	Solv	e any five of the following (Around 20 words each):	[10]
	a)	What is Geological time scale?	
	b)	Enlist the rivers of Europe continent.	
	c)	State any two countries with highest population of Asi	a.
	d)	Name any two major crops of Africa.	
	e)	What is global warming?	
	f)	Define Terrorism.	
Q2)	a)	Give an account on origin of the earth and solar system	m. [7]
	b)	Explain mineral resources of South America.	[5]

P.T.O.

Q3)	a)	Describe climatic characteristics of Antarctica.	[7]
	b)	Write note on border dispute between India and Pakistan.	[5]
Q4)	a)	Discuss the natural vegetation of Africa.	[7]
	b)	Write note on food security.	[5]
Q5)	a)	Explain global impact of COVID - 19	[7]
	b)	Describe tourism as a key of development.	[5]
Q6)	a)	Explain physical division of Asia.	[7]
	b)	Describe role of WTO.	[5]
Q7)	Write	e short notes any two of the following:	[12]
	a)	Merits of Globalization.	
	b)	Poverty in the world	
	c)	Wildlife of Antarctica	

