CENTRAL UNIVERSITY OF HARYANA

Term End Examinations, April- 2022

Programme : M.Sc. Geography
Semester : First
Course Title: Introduction to Geomorphology
Course Code: SBS GEO 1 1 01 C 3104

Session: 2021-22
Max. Time: 3 Hours
Max. Marks : 70

1. Question no. 1 has seven parts and students need to answer any four. Each part carries three and half Marks.

2. Question no. 2 to 5 have three parts and student need to answer any two parts of each question. Each part carries seven marks.

Q 1.   **(4X3.5=14)**

a) Concept of time
b) Concept of system in geomorphology
c) Sea floor spreading
d) Paleomagnetism
e) Dunes
f) Moraines
g) Applied Geomorphology

Q 2.   **(2X7=14)**
a. Explain 'Present is key to the past'. Explain with suitable maps and diagrams.
b. Elaborate the different approaches to study geomorphology.
c. Explain the concept and classification of morphogenetic regions.

Q 3.   **(2X7=14)**
a. What is Plate Tectonic? Describe the activities on destructive plate margins with suitable examples.
b. Explain the different stages of mountain building with suitable examples.
c. Critically examine the Penk's model of cycle of erosion.

Q 4.   **(2X7=14)**
a. Explain the Karst Topography (distribution and landforms) with suitable examples.
b. How does a glacier do the work of erosion? Explain the erosional land forms of glacier.
c. Critically examine the A. Wood's model of slope evolution.

Q 5.   **(2X7=14)**
a. What are geomorphic hazards? Explain the effects of geomorphic hazards.
b. Discuss the role of applied geomorphology in mining, construction and hazard management.
c. What is regional geomorphology? Explain the characteristics of any region of India.

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Instructions:

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2. Question no. 2 to 5 have three parts and students need to answer any two parts of each question. Each part carries seven marks.

Q 1.   (4X3.5=14)

    a) Define questionnaire and schedule.

    b) What is the difference between interval and ratio?

    c) What do you mean by measures of central tendency?

    d) The monthly average temperature figures for a station were given as 16.2, 19.0, 25.2, 30.5, 33.4, 32.9, 29.7, 28.9, 29.0, 23.4, 20.6 and 16.4 degree celsius, respectively from January to December. Calculate mean annual temperature.

    e) What is Ginni coefficient?

    f) Draw a Lorenz curve representing small degree of income inequality.

    g) What is linear regression equation?

Q 2.   (2X7=14)

    a) Explain the significance of statistics in geographical studies.

    b) Describe the merits and demerits of questionnaire method.

    c) Define data. Discuss primary and secondary data with suitable examples.

Q3.   (2X7=14)

    a) Calculate mode of the following distribution:

Class Interval	Frequency
4-8	10
8-12	12
12-16	16
16-20	14
20-24	10
24-28	8
28-32	17
32-36	5
36-40	4

    b) Calculate mean centre with the following data:

Points	Location Coordinate	
	X	Y
A	1.2	4.0
B	1.8	3.2
C	2.7	2.0
D	3.7	3.2
E	2.3	2.2
F	3.6	2.1
G	3.2	1.7
H	2.9	1.0

c) Discuss centrographic techniques in detail with suitable examples.

Q 4. (2X7=14)

a) Calculate standard deviation with the following data.

Class Interval	Frequency
0-10	15
10-20	15
20-30	23
30-40	22
40-50	25
50-60	10
60-70	5
70-80	10

b) Define the significance of measures of dispersion. How it is different from measures of central tendency.

c) Discuss the merits and demerits of mean deviation with suitable examples.

Q 5. (2X7=14)

a) Calculate Karl Pearson's correlation coefficient between the marks in English and Hindi obtained by 10 students.

Marks in English	10	25	13	25	22	11	12	25	21	20
Marks in Hindi	12	22	16	15	18	18	17	23	24	17

b) Define the scatter diagram? Describe the various applications of scatter diagram with suitable examples.

c) What is regression analysis technique? Explain the various types of regression analysis techniques.

CENTRAL UNIVERSITY OF HARYANA

End Semester Examinations April 2022

Programme: M.Sc. Geography   **Session: 2021-22**

Semester: First   **Max. Time: 3 Hours**

Course Title: Natural Hazards and Disaster Management   **Max. Marks: 70**

Course Code: SBS GEO 1 1 02 GE 3104

Instructions:

1. Question no. 1 has seven parts and students need to answer any four. Each part carries three and half Marks.

2. Question no. 2 to 5 have three parts and student need to answer any two parts of each question. Each part carries seven marks.

Q 1.   (4X3.5=14)

   a) Differentiate between Disaster and Hazard.

   b) What is Disaster Risk Resilience (DRR)?

   c) Provide classification of Disasters.

   d) What is susceptibility and vulnerability?

   e) How many seismic zones are in India as per Bureau of Indian Standards (BIS)?

   f) What are the possible criteria for cyclonic vulnerability Map?

   g) What are the different stages of disaster management?

Q 2.   (2X7=14)

   a) Define the terminologies 'Risk', 'Exposure', 'Vulnerability', and 'Adaptation' citing the example of a particular disaster.

   b) How is resilience critical in minimizing losses due to disaster?

   c) Describe in detail possible criteria for analyzing landslide vulnerability.

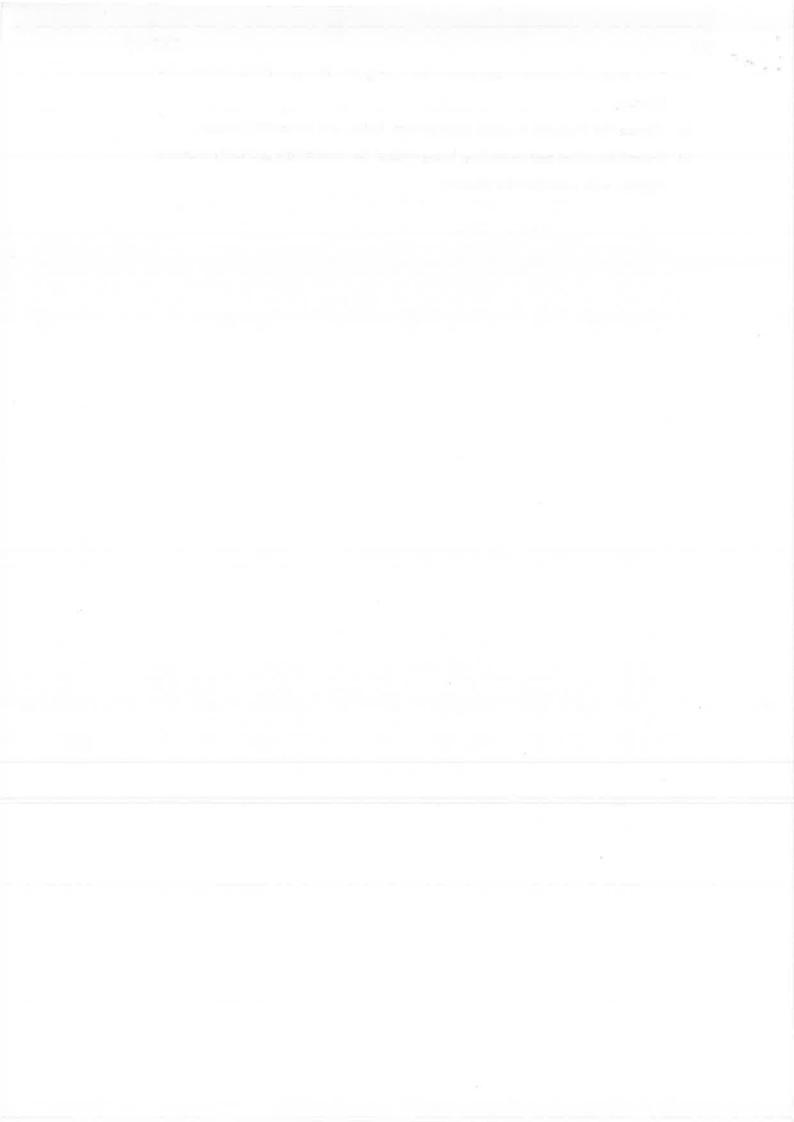Q3.   (2X7=14)

   a) When can developmental activities become the cause of disasters?

   b) Describe in detail the role of multiple stakeholders in disaster management.

   c) Discuss the role of prominent international organizations in disaster preparedness.

Q 4.   (2X7=14)

   a) Differentiate between disaster mitigation and adaptation by giving suitable example.

   b) What is Counter disaster planning? Discuss in detail with reference to a particular disaster.

   c) Elucidate the role of community and society in effective disaster management.

Q 5.   (2X7=14)

   a) "The study of Disaster Management has changed in the age of Geo-informatics",
      Discuss.

   b) Discuss the National Disaster Management Policy and its salient features.

   c) Hazard Zonation and modelling being critical for monitoring and early warning.
      Explain with example of a disaster.

CENTRAL UNIVERSITY OF HARYANA

<u>End Semester Examinations April 2022</u>

Programme: M.Sc. Geography

Semester: I

Course Title: Introduction to Climatology

Course Code: SBS GEO 1 1 02 C 3104

Session: 2021-22

Max. Time: 3 Hours

Max. Marks: 70

Instructions:

1. Question no. 1 has seven parts and students need to answer any four. Each part carries three and half Marks.

2. Question no. 2 to 5 have three parts and student need to answer any two parts of each question. Each part carries seven marks.

Q 1.   (4X3.5=14)

    a) Define solar constant.

    b) Discuss the types of Fronts.

    c) What are the characteristics of Tropical cyclone?

    d) What is Airmass?

    e) What are the forms of precipitation?

    f) Discuss Paris agreement.

    g) What is the main aim of Agenda-21?

Q 2.   (2X7=14)

    a) Discuss the composition and structure of the atmosphere in detail with a suitable diagram.

    b) What is Adiabatic Temperature? Discuss the difference between dry and wet adiabatic temperature change.

    c) Explain stability and instability of atmosphere with suitable examples.

Q3.   (2X7=14)

    a) Explain global air circulation by tricellular meridional circulation of the atmosphere.

    b) Explain Walker Circulation and El-Nino-Southern Oscillation (ENSO) in detail with suitable diagrams.

    c) Who propounded polar front theory? Explain the different stages of polar front theory with suitable diagrams.

Q 4.   (2X7=14)

    a) Discuss Koppen's World Climatic Classification in detail.

    b) Explain the Heat Budget of the earth with suitable diagrams.

    c) What is Insolation? Explain the various factors influencing insolation of the earth.

Q 5.   (2X7=14)

    a) What is Global Warming? Explain the various causes, effects and its evidences.

    b) What is Glacial Lake Outburst Flood (GLOF)?

    c) Discuss the various causes and theories of climatic change in detail.

CENTRAL UNIVERSITY OF HARYANA

<u>End Semester Examinations April 2022</u>

Programme: M.Sc. Geography

Semester: First

Course Title: Urban Geography

Course Code: SBS GEO 1 1 04 C 3104

Session: 2021-22

Max. Time: 3 Hours

Max. Marks: 70

Instructions:

1. Question no. 1 has seven parts and students need to answer any four. Each part carries three and half Marks.

2. Question no. 2 to 5 have three parts and student need to answer any two parts of each question. Each part carries seven marks.

Q 1.   (4X3.5=14)

    a) Global city

    b) Edge city

    c) Satellite town

    d) CBD

    e) Decentralized Planning

    f) Smart Cities

    g) Urbanism

Q 2.   (2X7=14)

    a) Describe the nature and scope of urban geography.

    b) How does site and situation influence the origin and growth of a town?

    c) What is rural-urban fringe? Describe the types and characteristics.

Q3.   (2X7=14)

    a) Discuss the problems of urbanization in developing countries.

    b) Discuss the silent features of urbanization in India.

    c) Explain the growth of metropolitan cities in India.

Q 4.   (2X7=14)

    a) What do you mean by Law of Primate City? Explain with suitable examples.

    b) Critically explain the Christaller's Central Place Theory.

    c) Discuss the Concentric Zone Theory of E.W. Burgess.

Q 5.   (2X7=14)

    a) Explain the concept of Urban E-Governance.

    b) What is urban planning? Discuss the importance of urban planning.

    c) Explain the components of AMRUT mission.