## **PG-CS-1140** MGEOS-11

## P.G. DEGREE EXAMINATION — FEBRUARY 2023.

### Geography

#### First Semester

#### PROCESSES OF GEOMORPHOLOGY

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Explain the scope and contents of Geomorphology.
- 2. Describe about Isostasy with a neat sketch.
- 3. Write a short note on Chemical Weathering.
- 4. Give a brief account on the depositional landforms of a glacier.
- 5. Discuss the importance of Geomorphology in River regulation.
- 6. Explain the salient features of Geological Structure and landforms.

- 7. Write a note on Mechanical Weathering.
- 8. List out and explain the landforms produced by coastal deposition

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Write an essay on the basic concepts of Geomorphology.
- 10. Give a detailed account on Vulcanicity and its results.
- 11. Describe the meaning and types of Mass movement.
- 12. Explain about the landforms of a Fluvial action.
- 13. Discuss the role of geomorphology on mineral exploration.

## PG-CS-1141 MGEOS-12

## P.G. DEGREE EXAMINATION — FEBRUARY 2023.

### Geography

#### First Semester

#### CLIMATOLOGY AND HYDROLOGY

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Give a short note on the structure of the atmosphere.
- 2. Illustrate and explain the Air-Masses.
- 3. Discuss the causes and consequences of drought.
- 4. Describe the physio-chemical characteristics of water.
- 5. Explain the significance of groundwater recharge.
- 6. Describe about the Heat Budget of the earth.

- 7. Differentiate Tropical and temperate Cyclones.
- 8. Explain the effects of green house gases.

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Write an essay on the pressure belts of the World with a neat sketch.
- 10. Explain in detail about the upper air circulation with suitable illustrations.
- 11. Describe the factors of climate change and give suggestions to overcome the crisis.
- 12. Give a detailed note on hydrological cycle and its elements with a diagram.
- 13. Discuss the various pollutions and its effects.

## **PG-CS-1142** MGEOS-13

## P.G. DEGREE EXAMINATION — FEBRUARY 2023.

### Geography

#### First Semester

#### ENVIRONMENTAL GEOGRAPHY

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Explain the role of Geography on Environmental Studies.
- 2. Illustrate and explain about the functions of energy flow.
- 3. Write a note on atmospheric pollution.
- 4. Explain about Brundtland Commission.
- 5. Describe the relationship between man and environment.
- 6. Illustrate and explain about the nitrogen cycle.

- 7. Write a brief note on atmospheric pollution.
- 8. Give an account on Kyoto Protocol

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Differentiate and Explain: Determinism, Possibilism and Neo Determinism.
- 10. Explain about the Food chain, Food web and Ecological Pyramid with suitable sketches.
- 11. Describe the cause and consequences of water pollution.
- 12. Discuss the role of international Programmes and Policies on environmental protection.
- 13. Write an essay on Global Warming.

## **PG-CS-1143** MGEOS-14

## P.G. DEGREE EXAMINATION — FEBRUARY 2023.

### Geography

#### First Semester

#### ADVANCED CARTOGRAPHY

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Explain the uses and purpose of projections.
- 2. Describe the importance of typography in cartography.
- 3. Write a brief note on map icon design.
- 4. Give a short note on Multivariate Mapping.
- 5. Explain the significances of visual hierarchy for a map.
- 6. Write a short note on Cartograms.

- 7. Give a note on Web Mapping.
- 8. Describe about the Mobile Maps.

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Write an essay on the various type of projections and their specific usages.
- 10. Explain the importance of Design and Aesthetics in mapping process.
- 11. Describe the methods involved on spatiotemporal representation with a neat sketch.
- 12. Give an account on Geo-Visualization.
- 13. Discuss the historical development of map production.

PG-CS-1143

## PG-CS-1144 MGEOSE-11

## P.G. DEGREE EXAMINATION — FEBRUARY 2023.

## Geography

First Semester

## CLIMATE CHANGE VULNERABILITY AND ADAPTATION

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Give short notes on Global Warming.
- 2. Brief the Understanding of climate change.
- 3. What is the Economic Vulnerability?
- 4. Analyse the impacts of Climate Change on Fauna in India.
- 5. Compare Climate change and Coastal degradation.
- 6. Give short notes on the methods of Vulnerability Assessment.

- 7. Shortly explain about National Action Plan on Climate Change.
- 8. Mention the mitigation measure responsibilities to Urban Local Bodies.

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Explain in detail about Global Climatic Assessment- IPCC.
- 10. Analyse the Physical Vulnerability and Climate Change.
- 11. Explain in detail about the Climate Change Impact on Human Health.
- 12. Describe the information sources and output of Vulnerability Assessment.
- 13. Explain in detail about National Action Plan on Climate Change.

## **PG-CS-1145** MGEOS-21

## P.G. DEGREE EXAMINATION — FEBRUARY 2023.

### Geography

#### Second Semester

#### AGRICULTURAL GEOGRAPHY

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Give short notes on scope of Agricultural Geography.
- 2. What are the Approaches to the study of Agricultural Geography?
- 3. What are the technological determinants of agricultural land use?
- 4. Write a short note on Pink Revolution.
- 5. Brief Von Thune's theory to the present-day location of agricultural activities.

- 6. Describe the Role of Remote Sensing in Land Use Studies.
- 7. Give an account on Regional variations in Agricultural Productivity.
- 8. Give short notes on Doi's method of Crop Diversification.

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Explain in detail about the Approaches to the study of Agricultural Geography.
- 10. Describe the Social and technological determinants of Agricultural Land Use.
- 11. Explain Von Thune's theory of agricultural location and its recent modifications
- 12. Describe the agricultural regions of India and Tamil Nadu.
- 13. Elaborate in detail about Rafiullah's methods of delineating crop combination regions.

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## **PG-CS-1146** MGEOS-22

## P.G. DEGREE EXAMINATION — FEBRUARY 2023.

### Geography

#### Second Semester

#### URBAN GEOGRAPHY

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Give short notes on nature of Urban Geography.
- 2. What are the Factors affecting urban growth.
- 3. Describe Demographic Composition.
- 4. Give short notes on Population Features of Cities.
- 5. Give short notes on Burgess and Hoyt Model of Urban land use.
- 6. Give short notes on Harris and Ullman Model of Urban land use..

- 7. Brief note on Umland demarcation.
- 8. Shortly Urban problems in Transport in Tamil Nadu.

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Explain in detail about the Urbanization in the India.
- 10. Explain in detail about the Central business district and its Delimitation.
- 11. Explain in detail about the Functional classification of cities.
- 12. Give detailed account on how Urban hierarchy.
- 13. Explain in detail the Sustainable of City and Smart City Project in India.

PG-CS-1146

## **PG-CS-1147** MGEOS-23

## P.G. DEGREE EXAMINATION — FEBRUARY 2023.

## Geography

### Second Semester

#### REMOTE SENSING

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Give short notes on history of Remote Sensing.
- 2. Shortly explain Remote Sensing Platforms.
- 3. Describe the Image rectifications.
- 4. Give short notes on Image restoration.
- 5. Give short notes on the importance of Supervised Classification.
- 6. Brief note on Object-Based Image Analysis (OBIA).

- 7. Give short notes about Aerial Image Interpretation.
- 8. Shortly explain the Remote Sensing applications in Water Resources.

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Define Remote Sensing. Write a detailed account on EMR interaction with Earth Surface.
- 10. Describe Image enhancement techniques Explain in detail, how Image rectifications and corrections are carried out in Digital Image Processing?
- 11. Broadly explain methods of unsupervised classifications.
- 12. Explain in detail the elements of Visual Image Interpretation.
- 13. Elaborate the Remote Sensing applications in Disaster Management.

## PG-CS-1148 MGEOSE-21

# P.G. DEGREE EXAMINATION — FEBRUARY 2023

### Geography

#### Second Semester

### QUANTITATIVE TECHNIQUES IN GEOGRAPHY

Time: 3 hours Maximum marks: 70

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

Answer any FIVE questions out of Eight questions in 300 words.

All questions carry equal marks.

- 1. Give short notes on Measure Levels.
- 2. Describe Elementary Probability Theory
- 3. Give short notes on Random Variables.
- 4. Shortly explain about T test analysis.
- 5. What is the Use of Non-parametric Tools in Spatial Analysis?

- 6. Give short notes on Product Moment Correlation
- 7. Brief Spearman's Rank Correlation.
- 8. What are methodological issues in Regression Analysis?

PART B — 
$$(3 \times 15 = 45 \text{ marks})$$

- 9. Explain in detail about Measures of Central Tendency and Dispersion.
- 10. Describe the Random Variables and Probability Distributions.
- 11. Explain in detail about the Use of Non-parametric Tools in Spatial Analysis
- 12. Explain in detail about the Areal Association and Spatial Autocorrelation.
- 13. Elaborate the Trend Surface Analyses.