

<b>R-4761</b>
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<b>Sub. Code</b>
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<b>646201</b>
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**M.B.A. DEGREE EXAMINATION, APRIL 2021**

**Second Semester**

**Disaster Management**

**RESEARCH METHODOLOGY**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. Write two characteristics of Research as a scientific activity.
2. What are the types of interview method?
3. What is Research design.
4. What is  $\chi^2$  test of goodness of fit?
5. What is non-parametric test?
6. Write the meaning of fundamental research.
7. Define probability sampling.
8. What do you understand by central tendency?
9. What are the sources of secondary data?
10. Define systematic research.

**Part B****(5 × 5 = 25)**Answer **all** questions

All questions carry equal marks

11. (a) State the importance of sampling.

Or

- (b) Write a note on different methods of measuring of dispersion.

12. (a) Highlight the advantages of questionnaire.

Or

- (b) State Type-I error.

13. (a) Write a short note on pilot survey.

Or

- (b) Mention characteristics of good hypothesis.

14. (a) State the types of measurement scale.

Or

- (b) Comparison between parametric test and non-parametric test.

15. (a) List out the merits of field survey.

Or

- (b) How to write bibliography and state an example?

**Part C** $(3 \times 10 = 30)$ 

Answer any **three** questions.

All questions carry equal marks.

16. Examine the different types of Research Design.
  17. "Report writing is more than an art that hinges upon practice and experience"-Discuss
  18. Explain the basis for determining point estimation and state its uses in the analysis of data.
  19. Describe the various non-comparative scaling techniques.
  20. Describe the various steps of conducting survey research.
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**R-4762**

**Sub. Code**

**646202**

**M.B.A. DEGREE EXAMINATION, APRIL 2021**

**Second Semester**

**Disaster Management**

**ENVIRONMENTAL ECONOMICS AND MANAGEMENT**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. Define sustainability.
2. State the meaning of growth paradigm of sustainability.
3. What is public good?
4. What is environmental externalities?
5. What is non-market instruments of environment?
6. Define social cost benefit.
7. What do you understand trade able pollution permits.
8. What is common property rights?
9. Define environmentalism.
10. Define effluent charge.

**Part B**

(5× 5 = 25)

Answer **all** questions.

All questions carry equal marks.

11. (a) Distinguish between weak and strong sustainability.

Or

- (b) Write a short note on quantity based instrument of environmental policy.

12. (a) Briefly explain market based instrument of environmental policy.

Or

- (b) State non-market instruments of environmental policy.

13. (a) Mention the importance of mixed instruments of environmental policy.

Or

- (b) Write a note on marketable pollution permits.

14. (a) Briefly explain Garrett Hardin's the tragedy of the commons.

Or

- (b) State Elinor Ostrom's covering the commons.

15. (a) Write a note on grassroots environmentalisms of chipko movement.

Or

- (b) Briefly explain environmentalism of save silent valley movement.

**Part C**

(3 × 10 = 30)

Answer any **three** questions.

All questions carry equal marks.

16. Discuss pigouvian tax and subsidiary approach of environmental policy.
17. Explain coase theorem of bar gaining solution of property rights.
18. Describe contingent environmental valuation method.
19. Enumerate Hardin's covering the commons.
20. Analyze environmental legal activism in Tamil Nadu especially palar river basins.

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<b>Sub. Code</b>
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<b>646203</b>
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**M.B.A. DEGREE EXAMINATION, APRIL 2021**

**Second Semester**

**Disaster Management**

**PRINCIPLES OF REMOTE SENSING AND GIS**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

Write the definitions of the following.

1. Electromagnetic spectrum.
2. Thematic maps.
3. Orbits.
4. INSAT.
5. Speckle.
6. Ground control points.
7. Digitizer and Digitization.
8. Dilution of precision.
9. Layer.
10. Digital elevation model.

**Part B****(5 × 5 = 25)**

Answer **all** questions, choosing either (a) or (b).

All questions carry equal marks.

11. (a) Discuss the importance of spectral signature.

Or

- (b) Explain the different types of maps.

12. (a) Explain spectral resolution of landsat 8 satellite.

Or

- (b) Describe the advantages of geostationary satellite.

13. (a) Elucidate the radiometric errors in the satellite images.

Or

- (b) List out any two visual interpretation equipment and explain.

14. (a) Describe the input components of GIS.

Or

- (b) Explain the space segment of GPS.

15. (a) What is overlay analysis and mention its types.

Or

- (b) Bring out the elements of map layout and composition.



**Part C** $(3 \times 10 = 30)$ 

Answer any **three** questions.

All questions carry equal marks.

16. Narrate and essay on history and development of remote sensing.
  17. What is platform and explain its types and uses.
  18. List out and explain the elements of visual interpretation.
  19. Elaborate the major areas of GIS applications.
  20. Explain the advantages of open source GIS software.
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<b>R-4764</b>
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<b>Sub. Code</b>
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<b>646502</b>
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**M.B.A. DEGREE EXAMINATION, APRIL 2021**

**Second Semester**

**Disaster Management**

**STATISTICAL METHODS**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. Give the meaning of stratified random sampling.
2. State the properties of good averages.
3. What is sampling error?
4. Define Mean and Median.
5. What are the uses of time series analysis.
6. Mention two properties of Regression co-efficient.
7. What are the advantages of probability sampling?
8. Define systematic sampling.
9. Point out few assumptions of the Karl Pearson's coefficient.
10. Write two advantages of case study research.

**Part B****(5 × 5 = 25)**Answer **all** questions, choosing either (a) or (b).

All questions carry equal marks.

11. (a) Calculate arithmetic mean from the following.

Marks:	0–10	10–30	30–60	60–100
No. of students	5	12	25	30

Or

- (b) Calculate the mode from the following data of the marks obtained by 10 students.

Sl.No.	Marks obtained	Sl. No.	Marks obtained
1	10	6	27
2	27	7	20
3	24	8	18
4	12	9	15
5	27	10	30

12. (a) Mention method of reducing sampling error.

Or

- (b) Explain the different parts of table.

13. (a) State the different components of time series.

Or

- (b) Briefly explain the importance of vital statistics in India.

14. (a) Calculate Yule's co-efficient of association
- $N = 250$
- ,
- $(AB) = 70$
- ,
- $(A) = 80$
- ,
- $(B) = 100$
- .

Or

- (b) Find rank of the given matrix.

$$A = \begin{bmatrix} 1 & 5 & 3 \\ 6 & 7 & 2 \\ 1 & 0 & 8 \end{bmatrix}$$

15. (a) What are the various types of contribution?

Or

- (b) Define Index Number.

**Part C**

(3 × 10 = 30)

Answer any **three** questions.

All questions carry equal marks.

16. Explain Addition and multiplication theorems of probability.
17. Describe Normal Distribution Theory.
18. “Correlation analysis deals with the association between two or more variables ” – Discuss.
19. Estimate all weighted indices for the following data.

	Base	Year	Current Year	
	Kilo	Rate (Rs.)	Kilo	Rate (Rs.)
Bread	10	3	8	4
Meat	20	15	15	20
Tea	2	25	3	23

20. Following is the distribution of students according to their height and weight.

Height in inches	Weight in lbs.			
	90–100	100–110	110–120	120–130
50–55	4	7	5	2
55–60	6	10	7	4
60–65	6	12	10	7
65–70	3	8	6	3

Calculate Arithmetic Mean, Medium and Mode.

**R5535**

**Sub. Code**

**646401**

**M.B.A. DEGREE EXAMINATION, APRIL – 2021**

**Fourth Semester**

**Disaster Management**

**CLIMATE CHANGE AND DISASTER MANAGEMENT**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. Define disaster.
2. Write a short note on Adaptation.
3. How can we reduce climate change impact in agriculture?
4. What is climate change?
5. List out any two functions of water resources management.
6. State the meaning of man-made disaster.
7. Risk assessment.
8. How is climate change measured overtime?
9. Express the term of mitigation.
10. Define disaster risk management.

**Part B**

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

All questions carry equal marks.

11. (a) Point out the effects of climate change in Indian agriculture.

Or

- (b) Explain the eight government missions under National Action plan on Climate Change (NAPCC).

12. (a) Describe the some policy measures for adaptation in agriculture.

Or

- (b) Differentiate between adaptation and mitigation.

13. (a) Interpret the impact of climate change on water resources.

Or

- (b) Write a note on Integrated Water Resources Management (IWRM).

14. (a) Bring out the impact of climate change on coastal zones.

Or

- (b) Describe the important international funding programs in coastal zone climate adaptation.

15. (a) What is the role of GIS and RS in disaster management?

Or

- (b) Point out the various adaptation options in disaster risk management.

**Part C**

(3 × 10 = 30)

Answer any **three** questions.

All questions carry equal marks.

16. “Climate change matters to everyone on the planet”- Discuss.
17. Examine the agricultural adaptation strategies to climate change impacts in India.
18. Describe the different adaptation at watershed, river basin and national levels.
19. “Climate adaptation is an essential component of Integrated Coastal Zone Management”- Give your own views about it.
20. Evaluate India's disaster management policy with reference to Kerala landslide (2020) in India.

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**R5536**

**Sub. Code**

**646402**

**M.B.A. DEGREE EXAMINATION, APRIL – 2021**

**Fourth Semester**

**Disaster Management**

**DISASTER RESPONSE**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

All questions carry equal marks.

1. What is warning?
2. Define post disaster assessment.
3. Write the meaning of supply chain management.
4. What are the five key building blocks?
5. What do you mean by disaster response?
6. What is SPHERE?
7. What is first responder?
8. Supply chain management.
9. Define stress management.
10. What is funding relief?



**Part B**

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the guidelines for provision of shelter management.

Or

- (b) Bring out the function of human resource management in disaster response.

12. (a) What are the logistics functions of supply chain management?

Or

- (b) Discuss the important steps in relief distribution of essential services.

13. (a) Explain the role of Non-governmental Organizations in disaster response.

Or

- (b) Write a note on the National Disaster Management Policy 2009.

14. (a) What is the difference between search and rescue?

Or

- (b) What are the role of search and rescue equipment management in India.

15. (a) Explain the individual and group behaviour management.

Or

- (b) Describe the importance of Trauma and Stress management.

**Part C**

(3 × 10 = 30)

Answer any **three** questions.

16. Examine the various types of plans in response management.
  17. Describe the characteristics of humanitarian supply chain management and flows.
  18. Explain the role of multiple stakeholders in disaster response.
  19. Discuss the Search and Rescue and its significance and phases.
  20. Discuss SPHERE standards in detail.
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**R5537**

**Sub. Code**

**646403**

**M.B.A. DEGREE EXAMINATION, APRIL – 2021**

**Fourth Semester**

**Disaster Management**

**DISASTER RECOVERY**

**(CBCS – 2019 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define Rehabilitation.
2. What is Relief work?
3. What is Damage Assessment?
4. What is Recovery plan?
5. Define Risk.
6. What is FBO?
7. What do you mean by Centralized Management?
8. Define Geological Hazards.
9. Build back better.
10. List out the two recent biggest forest fires in the world.

**Part B**

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

All questions carry equal marks.

11. (a) How Disaster affects the political environment in a country?

Or

- (b) What are the Social consequences of Disaster?

12. (a) Explain the various challenges in Recovery.

Or

- (b) Discuss the different phases of Disaster Recovery.

13. (a) Enumerate the role of NGOs in disaster management.

Or

- (b) How social media contributes to disaster management?

14. (a) Explain the importance of Risk Assessment methods.

Or

- (b) Explain the role and functions of Disaster Manager.

15. (a) What are the negative effects still persist due to Tsunami in Coastal areas of Tamil Nadu?

Or

- (b) Discuss the role played by Government of Kerala in 2019 floods.

**Part C**

(3 × 10 = 30)

Answer any **three** questions.

16. Describe the India's National Policy on Disaster Management.
  17. Classify the various types of Hazards.
  18. Discuss the role of local bodies in Disaster Recovery.
  19. Describe the major problems in Disaster Mitigation Process.
  20. Enumerate the recent developments in handling of Disaster by Government of India.
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