

**M.Sc Semester-2 Examination
Climate Change and Impact Management**

Paper CCIM - 408

Time: 2.30 Hours

Total Marks: 70

Instructions: All Questions carry equal marks
Attempt all Questions

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|-------|-------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Q I | Discuss in detail any case study on impact assessment. | 14 |
| OR | | |
| Q I | A. Discuss the three approaches of impact assessment i.e. sensitivity, adaptability and vulnerability | 7 |
| | B. What problems or complexities can be faced while doing impact assessment? | 7 |
| Q II | Explain in detail all the components and platforms of remote sensing? Write a brief note on types of satellite orbits. | 14 |
| OR | | |
| Q II | A. What are the various applications of GIS in natural resources management? | 7 |
| | B. What is GIS? Why it is the most viable option for estimating and monitoring LULUCF? | 7 |
| Q III | Make a diagram of earth's radiation budget with detailed information of radiation fluxes? | 14 |
| OR | | |
| Q III | A. Provide a historical perspective of climate modelling. How did the models evolve from IPCC first assessment report to the latest report? | 7 |
| | B. List all the most important greenhouse gases? Which is most important natural greenhouse gas and why? | 7 |
| Q IV | Highlight the benefits and disadvantages of future characterisation. | 14 |
| OR | | |
| Q IV | A. Define analogue. Explain the different types of analogues. What is advantage of the analogue tool in reference to the agricultural sector | 7 |
| | B. What is inductive and deductive research? Which is more important? Explain the four characteristic features of scientific method of research | 7 |
| Q V | Attempt any 7 out of 12 MCQs/Short question (One- or Two-line answer)/ Fill in the blanks/True or False etc. | 2 |
| 1 | Define spectral resolution | |
| 2 | What is geo-referencing? | |
| 3 | HEO satellites are at 2000 km altitude. (True or False) | |
| 4 | What is the meaning of degree of exposure to climate change? | |

- 5 Does increase in vulnerability increase the adaptive capacity of a region?
- 6 A highly sensitive region will have less impacts due to climate change?
- 7 What is comprehensive characterization?
- 8 Why does artificial experiments have zero probability?
- 9 Focus groups are conducted for how many hours or days?
- 10 El-nino is related to -
(a) unusual warming of Peru-Chile coast during December
(b) unusually high rainfall during monsoon
(c) earthquake in the Pacific
(d) hurricanes in the Atlantic
- 11 Which of the followings is not a greenhouse gas:
(a) N_2
(b) CO_2
(c) N_2O
 CH_4
- 12 What is the average depth of the ocean:
(a) 35 m
(b) 350 m
(c) 3500 m
(d) 35000 m

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