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PRESIDENCY UNIVERSITY

BENGALURU

SCHOOL OF ENGINEERING

MAKE-UP EXAMINATION - JULY 2024

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| **Semester :** 6th Sem | **Date :** 01-07-2024 |
| **Course Code :** CIV1001 | **Time :** 9:30AM to 12:30PM |
| **Course Name :** Disaster Management & Mitigation | **Max Marks :**100 |
| **Program :** B.Tech | **Weightage :**50% |

**Instructions:**

1. *Read all questions carefully and answer accordingly.*
2. *Question paper consists of 3 parts.*
3. *Scientific and non-programmable calculator are permitted.*
4. *Do not write any information on the question paper other than Roll Number.*

**PART A**

**ANSWER ANY 6 QUESTIONS**  **6Q X 5M=30M**

1. Define Cartography and Geodesy. (CO 3) [Knowledge]
2. Write a note on Global Positioning System. (CO 2) [Knowledge]
3. Define Geoinformatics and Remote sensing. (CO 3) [Knowledge]
4. What is full form of DDMP? Discuss any four objectives of DDMP. (CO 2) [Knowledge]
5. List the causes of nuclear accident. (CO 3) [Knowledge]
6. Answer to the following: (CO 1) [Knowledge]

A. Wildfires occur when vegetated areas are set alight and are particularly common during hot and dry periods. Identify among the following which is the impact of wildfires.

a) Loss of valuable timber resources b) Degradation of catchment areas

c) Global warming d) all the above

B. Hazard is any substance, phenomenon or situation, which has the potential to cause disruption. Identify among the four alternatives which is an example for hazard.

a) Climate change b) Loss of life c) Destruction of property d) All of the above

1. Write a detailed note on cyclone. (CO 1) [Knowledge]

**PART B**

**ANSWER ANY 4 QUESTIONS**  **4Q X 10M=40M**

1. Role of Remote sensing, ICT Tools and GIS for Disaster Monitoring and Management is significant. Discuss in detail the different Mobile Apps Developed by National Remote Sensing Centre to deal with disaster monitoring. (CO 3) [Comprehension]
2. Disaster monitoring is a continuous process that evaluates the progress of various programs by constant monitoring of the physical, social and economic environments. Illustrate with case studies the use of ICT in Disaster Management in India. (CO 3) [Comprehension]
3. Disaster Management is an applied science which seeks, by the systematic observation and analysis of disasters, to improve measures relating to prevention, mitigation, preparedness, emergency response and recovery. Illustrate in detail the Cycle of Disaster Management Process. (CO 1) [Comprehension]
4. Landslide refers to the downward sliding of huge quantities of land mass which occur along steep slopes of hills or mountains and may be sudden or slow. Illustrate the Impacts of Landslides and the landslide profile of India. (CO 1) [Comprehension]
5. Prepare detailed case study report on Tsunami disaster in Indonesia and Major Floods in India. (CO 2) [Comprehension]

**PART C**

**ANSWER ANY 2 QUESTIONS**  **2Q X 15M=30M**

1. A. A nuclear and radiation accident is defined by the International Atomic Energy Agency (IAEA) as "an event that has led to significant consequences to people, the environment or the facility”. Illustrate any two of the causes of nuclear accident in detail. (10 Marks)

B. Prepare detailed case study report on Gujarat Earthquake in India. (5 Marks)

(CO 3) [Comprehension]

1. A. India is highly vulnerable to floods, droughts, cyclones, earthquakes, landslides, avalanches and forest fires. Out of 35 states and union territories in the country, 27 of them are disaster prone. Discuss the factors affecting Disaster in India. (10 Marks)

B. India’s58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12 per cent of land) are prone to floods and river erosion. Classify the different types of Disasters. (5 Marks) (CO 1) [Comprehension]

1. A. Disaster monitoring is a continuous process that evaluates the progress of various programs by constant monitoring of the physical, social and economic environments. List out all the institutional framework of DM with their respective roles and functions in different levels. (10 Marks)

B. A flood is a condition that occurs when water overflows the artificial or natural boundaries of a stream, river, or other body of water onto normally dry land**.** Express the causes of Occurrence of floods. (5 Marks) (CO 2) [Comprehension]