

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**M.Tech., Winter 2019-20 Examination**

**Semester: 3**  
**Subject Code: 203216232**  
**Subject Name: Disaster Management**

**Date: 26/11/2019**  
**Time: 10:30am to 1:00pm**  
**Total Marks: 60**

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**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1** A) Define landslides. Explain types of landslides. (05)  
B) How you can relate disaster with development? (05)  
C) Define risk mapping and capacity development. (05)

**Q.2 Answer the following questions.** (Attempt any three) (Each five mark) (15)

- A) Define remote sensing. What are the components of remote sensing?
- B) Discuss salient features of Disaster management act 2005.
- C) Differentiate between disaster and hazard with example.
- D) Differentiate between GIS and GPS. Give applications of GPS.

**Q.3** A) Draw a neat sketch of disaster management cycle? Explain all the phases in disaster management cycle. (07)

- B) Define Early warning system (EWS). How to tackle flood and earthquake by early warning system? (08)

**OR**

B) Explain biological disaster in detail (08)

A) Discuss the functions of various authorities:

- Q.4** i. National Disaster Management Authority (NDMA) (07)  
ii. State Disaster Management Authority (SDMA)  
iii. District Disaster Management Authority (DDMA)

**OR**

A) Define vulnerability in brief and explain types of vulnerability in detail. (07)

B) Define man-made disaster. Explain Bhopal Gas tragedy. (08)