

FACULTY OF ENGINEERING & INFORMATICS

B.E. 4/4 (CE/EEE/Inst./ECE/CSE/IT) II - Semester (Main) Examination, May / June 2017

Subject : Disaster Mitigation and Management

Time : 3 Hours

Max. Marks: 75

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (25 Marks)

- 1 Mention some objectives of ISDR programme.
- 2 What are the losses caused by Landslides and avalanches?
- 3 What is vulnerability?
- 4 What are causes of Tsunami?
- 5 How does GIS help in disaster mitigation management?
- 6 What is the importance of public awareness and education in the drought mitigation?
- 7 Define RDBMS.
- 8 Write about Earthquake Zones of India.
- 9 What are reasons for the occurrence of land slides?
- 10 Describe the role of an individual and his contribution in the mitigation process.

PART – B (50 Marks)

- 11 (a) Explain the disaster management cycle.
(b) Give a brief account of the impact of natural disasters on environment and development.
- 12 (a) Describe the different types and causes of land slides.
(b) What are the remedial measures in controlling the land slides?
- 13 (a) What is a Tsunami? Describe the various precautions to be taken for reducing the effect of Tsunami.
(b) What are the effects of avalanches?
- 14 (a) Explain applications of Remote sensing in disaster management.
(b) Explain certain applications of GIS in disaster management and mitigation.
- 15 (a) Illustrate a chemical industrial hazard that you know.
(b) Write about major power break downs.
- 16 Write note on :
(a) Drought
(b) Floods
- 17 (a) Write about Disaster management structure in India.
(b) Explain Rich and Vulnerability to disaster.

FACULTY OF ENGINEERING**B.E. 4/4 (M/P/AE) II - Semester (Main & Backlog) Examination, May/June 2017****Subject : Rapid Prototyping Technologies (Elective – III)****Time : 3 Hours****Max. Marks: 75****Note: Answer all questions from Part-A and answer any five questions from Part-B.****PART – A (25 Marks)**

- 1 Distinguish between conventional prototyping and rapid prototyping.
- 2 List the important steps in RP process chain.
- 3 Name the important specifications of a SLS RP machine.
- 4 Write the steps in SGC RP process.
- 5 Enumerate the various materials used in LOM RP process.
- 6 List the applications of FDM process.
- 7 Differentiate between SLS and FDM.
- 8 Compare 3D Printing with SLS RP process.
- 9 List the applications of RP in engineering Analysis.
- 10 Write the application of RPT in Medical Model.

PART – B (50 Marks)

- 11 With a neat sketch, explain the RP process chain. (10)
- 12 With a neat sketch explain the concept of photo polymerization and mention the advantages and limitations of SLA RP process. (10)
- 13 With a neat sketch explain the working of LOM RP process. Also list the advantages, limitations and applications of it. (10)
- 14 (a) Discuss the working of 3D System's SLS RPT process. Also mention its applications (7)
(b) Compare SLS with SLA RP process. (3)
- 15 Classify different types of RP applications and discuss the application of RP in developing Art models. (10)
- 16 Explain the working principle of SGC with a neat sketch. Also mention its advantages limitations and applications. (10)
- 17 Write short notes on the following: (10)
 - (a) RP Data formats
 - (b) Case studies on LOM
 - (c) Case studies of 3D printing
 - (d) Vacuum casting