

B. Tech. 7th Semester (Civil Engineering)
F. Scheme Examination, May-2017
DISASTER MITIGATION AND MANAGEMENT
Paper-CE-403-F

Time allowed : 3 hours] [Maximum marks : 100

Note : (i) *Question No. 1 is compulsory. Attempt one question from each section.*

(ii) *All questions carry equal marks.*

(iii) *Assume missing data, if any suitably.*

1. (i) Define soft floor in multi-storied building.
(ii) Define disasters that take place in mines.
(iii) Describe the occurrence of a hurricane.
(iv) Explain briefly water driven disaster.
(v) What are the reasons of occurrence of flood ?
(vi) Define load bearing and framed structures.
(vii) How the landslide occurs ?
(viii) Soft floor
(ix) Write different types of disasters that occurred in coastal areas.
(x) Define 'Tectonic plates'. 10×2=20

Section-A

2. (a) Explain the role of engineer to reduce the effect of disaster. 10
(b) What is atmospheric disaster ? Describe in detail how the deforestation and industrialization effect the atmosphere. 10

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3. (a) In coastal areas, disasters occurred frequently. Describe the causes and integrated approach to control these disasters in detail. 10
- (b) What do you mean by hydrological disaster ? Describe the guidelines for Flood Prevention. 10

Section-B

4. (a) What do you understand by disaster mitigation ? Discuss the guiding principles underlying it. 10
- (b) What do you mean by damage profile analysis ? Describe Uttarkashi earthquake in detail. 10
5. (a) Land sliding is a common problem in hilly areas. What are the causes of it ? Also explain the preventive measures to control it. 10
- (b) Write an overview of natural disasters in India. 10

Section-C

6. (a) Define earthquake and earthquake zone. Describe its causes and ill-effects on the people. 10
- (b) Define cyclone and hurricane. Explain its occurrence and effects. Also describe the preventive measures. 10
7. (a) Describe in detail the causes and preventive measures of forest fire. 10
- (b) What do you mean by mine disaster ? Explain in detail. 10

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Section-D

8. (a) Describe in detail the ductile detailing of reinforcement. What is its necessity in earthquake resistant construction ? 10
- (b) Write general provisions as per code against earthquake for masonry load bearing structures. 10
9. Write a short note on any *four* :
- (i) Simple configuration
 - (ii) Eccentric loading
 - (iii) Causes and remedies of landslide
 - (iv) Seismic response of foundation and soil behaviour
 - (v) Framed structure to resist hazard. 20

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