

No. of Printed Pages : 4
Roll No.....

180762/170762/120762/30762

Branch : Civil, Brick Tech, Constr. Mgmt., (Spl Highway Engg.)

Subject : Earthequake Resistant Building Construction

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 Focus is also known as _____. (CO-1)
a) Hypo centre b) Focal Dept
c) Body wave d) Epicentre
- Q.2 The minor shocks preceding the major earthquake are called. (CO-1)
a) Tectonic b) Foreshocks
c) Tsunami d) Epicentre
- Q.3 The masonry construction is also known as _____. (CO-2)
a) Engineered b) None Engineered
c) Non structural d) None of these
- Q.4 Which is not a structural component of a building. (CO-2)
a) Parapet wall b) Long wall
c) Shear wall d) Partition wall
- Q.5 In 1893 was published in the year _____. (CO-3)
a) 1960 b) 1966
c) 2002 d) 2000

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- Q.6 _____ value of zone factor have been allotted to zone IV (CO-4)

a) 0.25 b) 0.24
c) 0.26 d) 0.27

- Q.7 Seismic retrofitting stands for increasing. (CO-5)

a) Strength b) Permissible height
c) Size of building d) All of the above

- Q.8 Zone V have _____ seismic intensity. (CO-4)

a) Server b) Very server
c) Low d) None of these

- Q.9 The waves which travel fastest and are first recorded (CO-1)

a) Rayleigh waves b) Primary waves
c) Secondary waves d) Love waves

- Q.10 Most important phase in disaster management is called as _____. (CO-7)

a) Pre-disaster b) Post-disaster
c) Both d) None

Section B

Note: Objective types Questions. All Questions are compulsory. (10x1=10)

- Q.11 The vertical distance between epicentre and hypocentre is _____. (CO-1)

- Q.12 Primary and secondary waves are also known as _____. (CO-1)

- Q.13 The seismic response of traditional built structure is _____. (CO-2)

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- Q.14 Too long and tool tall walls are _____ to ground shaking. (CO-2)
- Q.15 ASR Stands for _____. (CO-3)
- Q.16 ____ numbers of seismic codes are available. (CO-3)
- Q.17 Opening in diaphragm should be _____. (CO-4)
- Q.18 Most preferred shape for earthquake resistant building is _____. (CO-5)
- Q.19 Removal of people to safer place is called _____. (CO-7)
- Q.20 The after effect of disaster is knows as _____. (CO-7)

Section-C

Note: Short answer type Questions. Attempt any twelve Questions out of fifteen Questions. (12x5=60)

- Q.21 Explain Causes of Earthquake. (CO-1)
- Q.22 Enlist any five characteristics of primary waves. (CO-1)
- Q.23 Differentiae between earthquake magnitude and intensity. (CO-1)
- Q.24 Enlist the name of common mode of failure. What is diaphragm? (CO-2)
- Q.25 Write a short note on special construction methodologies. (CO-3)
- Q.26 What is the purpose of shear wall in building?(CO3)
- Q.27 Discuss different type of seismic codes used in ERBC as per bureau of IS? (CO-4)

- Q.28 Explain General Specification of IS 13920: 1993. (CO-5)
- Q.29 Explain how Retrofitting of traditionally built construction is done? (CO-5)
- Q.30 Define global retrofitting technique. (CO-5)
- Q.31 What are role of horizontal bends in masonry building. (CO-6)
- Q.32 Describe seismic strengthening arrangements of masonry construction. (CO-6)
- Q.33 Define rescue workers with their types? (CO-7)
- Q.34 What is the meaning of REPEAT in rescue by step? (CO-7)
- Q.35 Define Soft storey (CO-4)

Section-D

Note: Long answer Questions. Attempt any two Questions out of three Questions. (2x10=20)

- Q.36 Explain briefly out-ofplane failure and In-Plane failure with their causes? (CO-2)
- Q.37 What are the precaution to be taken while planning and designing of earthquake? Resistant building. (CO-3)
- Q.38 Explain disaster management with their objectives. (CO-7)

Note : Course Outcome (CO) mentioned in the question paper is for official purpose only.