

No. of Printed Pages : 4

Roll No.

120762

Civil, Brick Tech, Civil Mgnt, Civil (Highway)

**Subject : ERBC Earthquake Resistant
Building Construction**

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note:Objective type questions. All questions are compulsory (10x1=10)

Q.1 1S : 4326 refers to

Q.2 1S : 13920 refers to

Q.3 What is Rayleigh Wave.

Q.4 What is Body Wave.

Q.5 Is 1893 refers to

Q.6 Earthquake size is defined in terms of
and

Q.7 Record of an earthquake is called.....

Q.8 Wave can pass through solid only.

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Q.9 The Beam and Slabs aremembers as they resist bending.

Q.10 Delhi comes under zone.....

SECTION-B

Note:Very short answer type questions. Attempt any ten questions out of twelve questions. (10x2=20)

Q.11 Define Seismograph.

Q.12 What is yield load.

Q.13 Define Body wave.

Q.14 What is soft storey.

Q.15 What is Isoseismals.

Q.16 Define design basis earthquake.

Q.17 What is box action.

Q.18 What is Diaphragm failure.

Q.19 What is Ductility .

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Q.20 What is fundamental natural period.

Q.21 What is casualty management.

Q.22 What is Triage.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x5=40)

Q.23 Name the environments used in rescue operations.

Q.24 What are the types of a rescue workers.

Q.25 Enumerate some natural disasters.

Q.26 What is retrofitting? Why it is done?

Q.27 What is jacketing & How it is done.

Q.28 How the Epicentre of an earthquake located? Explain.

Q.29 Explain the methods of repair of cracks in masonry building.

Q.30 Explain terms flexural cracks & shear cracks.

Q.31 What is the special confining reinforcement where should we provide it.

Q.32 How me can reduce the effect of an earthquake.

SECTION-D

Note: Long answer type questions. Attempt any three questions out of four questions. (3x10=30)

Q.33 Explain different retrofitting techniques & materials used in retrofitting.

Q.34 Explain different types of failure in buildings due to an earthquake.

Q.35 Explain the various forces developed in a building during earthquake.

Q.36 What are the causes of an earthquake? Explain in detail.

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