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B.TECH.

THEORY EXAMINATION (SEM-VIII) 2016-17 COMPUTER AIDED DESIGN

Time: 3 Hours Max. Marks: 100

Note: Be precise in your answer. In case of numerical problem assume data wherever not provided.

SECTION-A

1 Explain the following:

 $(10 \times 2 = 20)$

- a) Use of cad in civil engg
- **b**) Use of environmental engg softwares
- c) 2D modelling softwares
- d) Concept of 3D and 4D modelling
- e) Soft computing
- f) Two structural design softwares
- g) Limitation of softwares
- **h**) Earthquake resistant design softwares
- i) High rise construction and computational tools
- **j**) Modular programming.

SECTION-B

2 Attempt any **five** of the following:

 $(10 \times 5 = 50)$

- a) What is neural networks and its application in civil engg
- **b**) Define Expert system, their development in geotechnical engg.
- c) How you will make plan and elevation of a 1500 sqft covering area.
- **d**) Is there any role of softwares in making plumbing requirement in an appartment.
- e) What are advantages of Computer Aided design over conventional design.
- f) Discuss concept of 2D/3D/4D modeling of building.
- g) How you will analyze a rcc beam in any structural engg softwares.
- h) Discuss concept of geotechnical softwares for deep foundations.

SECTION-C

Attempt any **two** of the following:

 $(15 \times 2 = 30)$

- 3. Discuss Use of software packages in the area of water logged areas.
- 4. Design rcc dome of intz water tank for 250 klitres.take staging height 22m.sbc 12kn/sqm. Assume other details.
- 5. a) Is there any role of Environmental fields software in drainage plan of a city?
 - b) How you will model a 2 story 2 bay rcc frame structure.