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Eighth Semester B.Arch. Degree Examination, Dec.2019/Jan.2020 Materials and Methods in Building Construction VIII

Time: 4 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. Assume suitable data wherever necessary, clearly mentioning it in the answer script.

Module-1

- 1 a. Enumerate in detail any four innovative ideas/concepts in the construction industry. (10 Marks)
- b. What are the important concerns for selection of form work in high rise buildings? Explain any two methods. (10 Marks)

OR

- 2 a. Explain in detail and with neat sketches any two types of underground construction methods. (10 Marks)
- b. Enumerate any four types of innovative concretes. (10 Marks)

Module-2

- 3 a. What are various types of equipment used in construction industry? Provide one example for each. (10 Marks)
- b. "Internet of Things is bringing about transformational changes in construction Industry" – Verify this statement with suitable examples. (10 Marks)

OR

- 4 a. What is the influence of BIG DATA in the construction industry? (10 Marks)
- b. Explain 3-D printing of Buildings. (10 Marks)

Module-3

- 5 a. What is the purpose of life cycle assessment of buildings? What are the aspects included in life cycle assessment? (10 Marks)
- b. What are some common repairs to Buildings? (10 Marks)

OR

- 6 a. What do you mean by Retrofit? Explain various methods of Retrofitting Buildings. (10 Marks)
- b. Enumerate five causes of damage to Buildings. (10 Marks)

Module-4

- 7 a. Enumerate rating system as given by any standard agency like GRIHA or IGBC. (05 Marks)
- b. In a plot of size 12m × 18m facing north on the shorter side, (shown over leaf) located in Bangalore, provide a three Bed Rom Residential Building (G + 1) using passive design strategies to satisfy green building concepts? Draw plan, section, elevation to suitable scale. Draw relevant schematics. (Refer Fig.Q.7(b)) (15 Marks)

