

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,
LONERE - RAIGAD - 402 103
Summer Semester Examination, MAY - 2018**

Branch: M. Arch. (General)

Semester: I

**Subject with Subject Code: Tall Building (Elective – I)
MAR10100005**

Marks: 80

Date: 07 / 05 / 2018

Time: 3 Hrs.

Instructions: 1] Questions No. 1 is compulsory and Attempt any FOUR from Question No. 2 to Question No. 6.
2] Figures / structures to the right indicate full marks.
3] Assume suitable data, if necessary.
4] Neat diagrams must be drawn wherever necessary.

Q. No. 1 Answer the following Questions:

[20]

- a] What are tuned mass dampers? How are they used in tall buildings?
- b] List out the loads that a tall building can be subjected to.
- c] List out the loads that the façade of a tall building can be subjected to.
- d] Why are refuge floors provided in tall buildings?

Attempt any FOUR of the following. (Long Questions)

Q. No. 2 Describe the various structural systems used to design tall buildings.

[15]

Q. No. 3 What criterion is used to decide the number of lifts and their location in tall buildings?

[15]

Q. No. 4 Describe the foundation systems on a tall building.

[15]

Q. No. 5 Describe the various materials used to create a façade and its supporting systems for tall buildings.

[15]

Q. No. 6 Describe the methods used to improve the fire resistance of tall buildings.

[15]

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