

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

Branch: B. Tech.

**Subject with Subject Code: Basic Civil Engineering
[CV105]**

Semester: I

Marks: 60

Date: 08 / 05 / 2018

Time: 3 Hrs.

Instructions to the Students

1. Each question carries 12 marks.
2. Attempt any five questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly.

Q. No. 1 Solve any three of the following:

- (a) State and discuss the basic role of Civil Engineer in any type of construction work. [4]
- (b) What are the various requirements of good building stone? [4]
- (c) Draw a neat sketch of conventional brick and label it. [4]
- (d) What are the process of manufacturing of cement? Explain Wet process. [4]

Q. No. 2 Solve any three of the following:

- (a) Define Foundation and explain the functions of foundation. [4]
- (b) Define: i) Roof [4]
ii) Stairs
iii) Door
iv) Lintel
- (c) Define bearing capacity of soil. What are the measures to be taken for increasing bearing capacity of soil. [4]
- (d) Draw a cross section of a wall showing the components of the building. [4]

Q. No. 3 Solve any three of the following:

- (a) Define building. Explain site selection for residential building. [4]
- (b) State the necessity of building bye laws. [4]
- (c) Write use and properties of distemper. [4]
- (d) Enlist various types of plan and explain Building plan. [4]

Q. No. 4 Solve any three of the following:

- (a) Define Surveying. What are the application of surveying. [4]
- (b) Differentiate between Plane surveying and Geodetic surveying. [4]
- (c) Give any two practical application for each of the following [4]
 - i) G.I.S.
 - ii) G.P.S.
- (d) Define change point. Explain the necessity of change point. [4]

Q. No. 5 Solve any three of the following:

- (a) Draw the cross section of road in embankment. [4]
- (b) State the role of Indian railway in national development. [4]
- (c) Explain airways or aviation. [4]
- (d) Explain the classification of roads according to traffic and according to tonnage. [4]

Q. No. 6 Solve any three of the following:

- (a) Define dam. State its purposes. [4]
- (b) Explain the importance of rainwater harvesting. [4]
- (c) What are the different control measures of air pollution? [4]
- (d) Explain necessity of irrigation and benefits of irrigation. [4]

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