

Darshan Institute of Engineering & Technology

B.E. Semester – I • Pre GTU Examination – February 2021

Subject Code : 3110004**Date** : 15/02/2021**Subject Name** : Basic Civil Engineering**Time** : 11:30 am to 01:30 pm**Total Marks** : 56

Instructions :

1. Attempt any **FOUR** out of **SEVEN** questions.
2. Figure to the right indicate full marks.
3. Don't do any kind of rough work or calculation in Question Paper.

- Q. 1**
- (A) Explain pointing briefly. **03**
- (B) Enlist principles of building planning. And explain flexibility. **04**
- (C) Discuss scope of civil engineering. **07**

- Q. 2**
- (A) Enlist various types of civil engineering materials. **03**
- (B) Which are the operations in chain surveying? Explain chaining on level ground with figure. **04**
- (C) What are the qualities of a good timber? Write various uses of timber. **07**

- Q. 3**
- (A) Explain types of offsetting. **03**
- (B) Briefly explain road markings and traffic islands. **04**
- (C) Discuss types and properties of concrete. **07**

- Q. 4**
- (A) What are the various types of loads acting on building? Explain dead load. **03**
- (B) Enlist Traffic control devices? And explain traffic signs. **04**
- (C) The following bearing are observed while running a closed traverse PQRSTP. Find out included angles and correct them if necessary. **07**

SIDE	FB	BB
PQ	68 ⁰	248 ⁰
QR	138 ⁰	319 ⁰
RS	193 ⁰	13 ⁰
ST	302 ⁰ 30'	123 ⁰ 30'
TP	17 ⁰	194 ⁰ 30'

- Q. 5**
- (A) Briefly explain privacy and grouping. **03**
- (B) Describe with sketches the characteristics of contours. **04**

- Q. 5 (C)** The following consecutive readings were taken with a level and a 4m staff at a common interval of 30m, the first reading was taken at B.M. having R. L. = 100m. The instrument was shifted after the fourth and ninth readings. Rule out a page of a level book, enter the readings given and also calculate the reduced levels of the points by the height of instrument method. Also apply arithmetic checks. Consecutive readings are: 2.650, 1.745, 0.625, 0.260, 2.525, 2.160, 1.235, 0.870, 1.365, 0.625, 1.790 and 2.535. **07**
- Q. 6 (A)** What do you understand by direct ranging? Describe it in detail with neat sketch. **03**
- (B)** Enlist classification of aggregate. **04**
- (C)** What are the main reasons for the formation of slums? **07**
- Q. 7 (A)** What are the various types of land uses? **03**
- (B)** What are benefits of green buildings? **04**
- (C)** Discuss the general features of earthquake resistant buildings. **07**

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