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C09-C-305

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**BOARD DIPLOMA EXAMINATION, (C-09)
OCTOBER/NOVEMBER-2018
DCE – THIRD SEMESTER EXAMINATION**

SURVEYING – II

Time : 3 Hours]

[Total Marks: 80

PART-A

3X10=30

Instructions :

1. Answer **All** questions.
2. Each question carries **three** marks.
3. Answer should be brief and straight to the point and shall not exceed five simple sentences.

1. State any three personal errors in theodolite survey.
2. What is theodolite? When do you call it as transit theodolite?
3. What do you mean by omitted measurements in theodolite survey?
4. List out the different cases of trigonometric leveling?
5. When do you prefer tangential tacheometry?
6. What do you mean by stadia tacheometry?
7. Define the following (a) Point of commencement (b) Back tangent.
8. List the different angular methods of curve setting.
9. Define the term total station.
10. Write short notes on G.P.S.

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PART-B

10X5=50

- Instructions* : *
1. Answer any **Five** questions.
2. Each question carries **ten** marks.

11. Explain with help of sketch the fast needle method of traversing.
12. Explain measurement of horizontal angle by the method of repetition.
13. Write the procedure to find the distance and elevation of an object whose base is inaccessible and the two instrument stations being in the same vertical plane.
14. Draw a neat sketch and derive from the first principle an expression for the horizontal distance between a tachometer and a vertically held staff for a horizontal line of sight and R.L. of staff station.
15. If the tangents to a circular curve having 500m radius intersect an angle of 120° and the chainage of point intersection of 1520.5m. Calculate
 - a) Tangent distance
 - b) Degree of the curve
 - c) Length of long chord
 - d) Length of the curve.
16. Two straights intersect at chainage 2417m. The deflection angle is 11° . Calculate radius of the curve, chainage at first tangent point and second tangent point. Assume 2° curve.
17. (a) Define GIS along with its subsystems.
(b) List various types of data representation in GIS and list out categories of GIS.
18. (a) Write any five uses of GPS in civil engineering.
(b) List any five uses of Photogrammetry
