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C14-C-304

4228

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2021

DCE - THIRD SEMESTER EXAMINATION

SURVEYING - II

Time : 3 hours ]

[ Total Marks : 80

**PART—A**

4×5=20

- Instructions :** (1) Answer *any five* questions.  
(2) Each question carries **four** marks.  
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. List any four major parts of a dumpy level.
2. Define the following terms :
  - (a) Backsight
  - (b) Foresight
3. What are different types of levels used in levelling?
4. List any two types of benchmarks.
5. State any four errors while doing levelling with dumpy level.
6. Draw the contour map of pond and show the RL on it.

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7. List out the methods used to measure the horizontal angles by using a theodolite.
  8. Define the term 'latitude and departure' of a survey line.
  9. Define the following terms :
    - (a) Line of collimation
    - (b) Transiting
  10. What are different checks that can be applied in closed theodolite traverse?

### PART—B

15×4=60

**Instructions :** (1) Answer *any four* questions.  
(2) Each question carries **fifteen** marks.  
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. The following consecutive readings were taken with a dumpy level :  
1.850, 2.550, 2.400 and 3.115.

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The RL of first point was 100.000. Rule out the page of level book and determine the RLs of various points by height of instrument method.

12. Explain the common difficulties generally faced in levelling.
13. Explain operations involved in simple levelling.
14. Explain various uses of contour map.

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15. Explain, how dumpy level is useful while construction of cement concrete road.
16. List and explain the temporary adjustments of theodolite.
17. Draw the neat sketch of a theodolite and mention the parts.
18. Explain the procedure to measure the horizontal angle by repetition method.

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