| Reg. No.:    Question Paper Code: 31199   |  |    |
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| surveyor selects a point D which is 50.10 m from A along the bank and sets a perpendicular CD on the line BD. If the distance CA is 60.50 m, determine the distance AB.  Or  (6)  (a)  (b)  (i)  Brief the methods of dropping a perpendicular from a point to chain line.  (ii)  A chain was tested before starting the survey and was found to be found to be 20.12 m. Area of the plan of the field, surveyed and drawn to a scale of 1 cm = 6 m was 50.4 cm <sup>2</sup> . Find the true area of  | chain line CAP while opposite banks of a river clare                           | -1 |
| (i) A chain was tested before starting the survey and was found to be found to be 20.12 m. Area of the plan of the field, surveyed and the field.  (ii) A scale of 1 cm = 6 m was 50.4 cm <sup>2</sup> . Find the true area of  |  | 1  |
| (b) (i) Brief the methods of dropping a perpendicular from a point to chain line. (ii) A chain was tested before starting the survey and was found to be exactly 20 m. At the end of the survey it was tested again and was drawn to a scale of 1 cm = 6 m was 50.4 cm <sup>2</sup> . Find the true area of the field.  | and sets a perpendicular CD  | 1  |
| (n) A chain was tested before starting the survey and was found to be exactly 20 m. At the end of the survey it was tested again and was found to be 20.12 m. Area of the plan of the field, surveyed and the field.  (10)  (10)  | (6)  | ı  |
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| drawn to a scale of 1 cm = 6 m was 50.4 cm <sup>2</sup> . Find the true area of the field.  | (II) A chain was tested before   |    |
| drawn to a scale of 1 cm = 6 m was 50.4 cm <sup>2</sup> . Find the true area of   | exactly 20 m. At the end of the survey it was took to be                       |    |
| the held.   | Tourid to be 20 19 m Aman C 1 and tested again and was                         |    |
|   | the field. the field. Find the true area of                                    |    |
|   | (6)  |    |

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|     |         | 2 8 8                                      | DODE                   |          | 1.1 1 11                                 |                               |       |
|-----|---------|--|------------------------|----------|--|-------------------------------|-------|
|     | 12. (a) | A closed traverse A<br>were obtained as gi | BCDE was<br>ven below. | Correc   | nd the observed be<br>t the bearings for | local attraction.             |       |
|     |         |  | Line C                 |          | BB                                       |                               |       |
|     |         |  | AB 72°                 | 45' 2    | 52°00'                                   |                               |       |
|     |         |  | BC 349°                | 00' 1    | 67°15'                                   |                               |       |
|     |         |  | CD 298                 | 30'      | 18°30'                                   |                               |       |
|     |         |  | DE 229                 |          | 48°00'                                   |                               |       |
|     |         |  | EA 135                 | °30'     | 319°00'                                  |                               |       |
|     |         |  |                        | Or       |  |                               |       |
|     | (b)     | (i) Describe the                           | adjustme               |          | be done in plan                          | ne table and other            |       |
|     | (D)     | accessories to                             | have accu              | rate m   | easurement.                              | (10)                          |       |
|     |         |  | radiation              | metho    | d of plane table                         | surveying with an             | ¥ ,   |
|     | -       | illustration.                              | ga                     | observ   | and exponentially                        | with a levelling              |       |
|     | 13. (a) | instrument. The in                         | nstrument              | was sh   | ifted after 5th and                      | 11th readings.                |       |
|     |         | 0.585, 1.010, 1.73<br>1.745, 0.635 and 1   |                        | 775, 0.  | 350, 1.300, 1.795,                       | 2.575, 3.375, 3.895,          |       |
|     |         |  |                        | k and    | determine the RL                         | of various points, if         |       |
| 10  |         | RL of first point is                       | s 134.00 m.            |          |  |                               |       |
|     |         |  |                        | Or       | (a)                                      |                               |       |
|     | (b)     | (i) Explain the corrections.               | effects of c           | urvatu   | re and refraction i                      | n levelling and their<br>(10) |       |
|     |         | (ii) Discuss the                           | uses of cor            | tours    |  | (6)                           |       |
|     | 14. (a) |  |                        |          | or horizontal angl                       |                               |       |
|     | 14. (a) | Lampania vito in our                       |                        | Or       |  |                               |       |
|     | (b)     | The lengths and below. Determine           | bearings<br>the lengtl | of line  | s of closed traver<br>earing of line EA. | rse ABCDE is given            |       |
|     |         |  |                        |          | Bearing                                  |                               |       |
|     | 1 10    |  | AB 1                   | 94.1     | 85°30'                                   |                               |       |
|     |         |  | BC 2                   | 201.2    | 15°00'                                   |                               | . (2) |
|     |         |  | CD :                   | 65.4     | 285°30'                                  |                               |       |
|     |         |  |                        | 72.6     | 195°30'                                  |                               |       |
|     | 15. (a) | Explain the met What are the ad            | hod of sett            | ing out  |  | using two theodolites.        |       |
|     |         |  |                        | Or       |  |                               |       |
|     | (b      | ) What are the va                          | rious oper             | ations 1 | required in mine                         | surveying. Discuss in         |       |
|     |         | brief.                                     |                        |          |  |                               |       |
|     |         |  | -                      |          |  |                               |       |
|     |         | 10 10 17                                   |                        |          |  |                               |       |
|     |         |  |                        | 2        |  | 31199                         |       |
|     |         |  |                        | 2of      |  | 01100                         |       |
|     |         |  |                        |          |  | . E - 1                       |       |
|     |         |  |                        |          | 190                                      | 2                             |       |
| 100 |         |  |                        |          |  |                               |       |

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