FIRST GRADE SURVEYOR/HEAD SURVEYOR'S TEST - OCTOBER, 2022

FIRST GRADE SURVEYOR'S TEST - PART - A (PAPER - II)

[Executive Instructions issued for the Survey of Land in Kerala and the Maintenance of Land Records]

(Without Books)

[Books allowed : - 1. Chamber's Tables.

2. Boileau's Traverse Tables.

3. Scientific Calculator.]

[*Time* : 3 hours

(Maximum marks: 100)

Marks

| Ι | Explain with the help of a diagram how would you refix two missing consecutive travers points C and D, line BC is obstructed by a building. | 10 |
|-----|--|----|
| II | How would you classify the quality of work of a surveyor in field inspection ? What are the formalities of rectify a bad work ? | 10 |
| III | What is Pointing out of Boundary (PB) case ? What are the formalities for doing PB case in Taluk Office ? | 10 |
| IV | The perimeter of a triangle is 288.0 metres and of its two angles is 40° and 60° . Find the sides of triangle and third angle. | 10 |
| V | Differentiate closed and open traverse. Explain the different types of adjustment of a closed Traverse. | 10 |
| VI | A plot consists of a quadrilateral in shape forming two equilateral triangles having one side equal to 28.8 metres. Calculate the area of the plot in Ares ? | 10 |
| VII | In a triangle PQR, angle PQR = 90° , angle QPR = $48^{\circ}30'$ and side PQ is 480 metres. Find out the other three elements and the area of triangle PQR. | 10 |

VIII Set up the traverse given below and compute the area, Bearing of $BC = 82^{\circ}13' 20''$. All the linear measurements are in metres and angle shown degree minute and Second.

| D | G | | |
|------------|------------|-----------|----|
| (175.7) | (100.0) | | |
| 105°21'40″ | 159°59'40" | | |
| С | F | | |
| (201.0) | (169.6) | | |
| 165°50'00" | 175°45'20" | | |
| В | Е | А | |
| (62.9) | (38.7) | (206.2) | |
| 101°35′20″ | 94°39'00" | 96°48'00" | |
| А | D | G | 25 |

IX What is digital survey ?

X What are the abbreviations of the following in connection with digital survey ?

(a) CORS

(b) RTK

(c) ERTS

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