

20. Definition of logarithms.
21. Show that every number cannot be taken as the base of a logarithm.
22. Powers of logarithms.
23. System of logarithms most usually employed.
24. Characteristics ; — change produced by multiplying or dividing with a power of 10.
25. Negative characteristics.
26. Application of logarithms to a problem in compound interest.

PROGRAMME N° 6.

GEOMETRY AND TRIGONOMETRY.

I.

1. Definition of an ellipse ;—tracing the curve.
2. Axes, foci, and radius-vector of an ellipse.
3. Definition of a parabola ;—tracing the curve.
4. Axis, directrix and vertex of the diameter of a parabola.
5. Definition of a helicoid.

II.

6. Plane and spherical trigonometry.
7. Expression of the magnitude of an angle.
8. Relation between spherical lines of the same angle.
9. Relation between the sines and cosines of the angles and sides of a spherical triangle.

III.

10. Solution of rectangular triangles.
11. Solution of an oblique triangle, of which one side and two angles are given.
12. Solution of an oblique triangle of which two sides and the included angle are given.
13. Solution of an oblique triangle of which the three sides are given.

IV.

14. Surveying ; instruments required.
15. To find the distance from an accessible point to an inaccessible object.
16. To find the distance between two inaccessible points.
17. To prolong a right line beyond an obstacle.
18. Taking levels ; mode of operation.