Land Management Training Center
Syllabus for the Entrance Test
Senior Survey Course
(For departmental candidate)

Marks: 100

1. Elementary Mathematics  20
Percentage, area, volume, simple equations, Simultaneous equations, quadratic equations, height and distance, solution of triangles, properties of triangles, circle, probability, mean, standard deviation, variance, Law of indices.

2. Mathematics  20
Plane & polar Co-ordinates; equations of straight line, circle, parabola, hyperbola; concept of vector; direction cosines; matrices
Differentiation, Limit and continuity, differentiation of functions, Maxima and minima, Expansion of functions, different series expansion

3. Optics and Electronics  10
Light ray, mirror, Lens, Prism, Spectrum, frequency, wavelength, radiation, frequency modulation, Amplitude modulation.

4. Surveying and Mapping  30
4.1 Fundamental of Survey
Definition, Principle, Map Types, Map scale, Bearing, Distance, Coordinate system, Latitude & Longitude, Shape of Earth, Height, Surveying & Mapping Activity in Nepal.

4.2 Geoinformation Technology
• GNSS Positioning system: principles, components, applications.
• Geographic Information System: History, Components, Application, areas.
• Remote Sensing: History, Types, Principles and Application.

4.3 Cadastral Survey
History, Method, Types, Organization structure, Present Situation of Cadastral Survey, Cadastral vision 2014

5. General Knowledge  10
Geography of World and Nepal, Population, Contemporary Issues, Professional organizations: FIG, ISPRS, NESA, NRSPS etc.

6. Acts, Rules, Policy, Directives  10
- नेपालको संविधानमा भूमि सम्बन्धि व्यवस्थाहरू
- जर्मन नापजाँच ऐन २०१९/नियमावली २०५८
- भूमि सम्बन्धि ऐन २०२१
- भू उपयोग नीति २०७२
- मालपोत ऐन २०३४/नियमावली २०३६(नापजाँच संग सम्बन्धित)
- जर्मन नाप जाँच तथा नक्शा अध्यावधिक सम्बन्धि निदेशिका २०३३

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