## Government of Nepal

### Ministry of Agriculture, Land Management and Cooperatives

# **Land Management Training Centre**

Syllabus for the Entrance Test

#### **Junior Survey Course**

(For Fresh Candidate)

**Marks: 100** 

#### **1.Elementary Mathematics**

30

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 30

Plane & polar Co-ordinates; equations of straight line, circle, ellipse, parabola, hyperbola; concept of vector, matrices & determinants

Differentiation, Limit and continuity, differentiation of functions, Maxima and minima

#### **3.Optics and Electronics**

25

Light ray, mirror, Reflection, Refraction, Lens, Prism, Spectrum, frequency, wavelength, radiation, Dispersion, Human eye, Telescope, Lens distortion, Camera, frequency modulation, Amplitude modulation.

### 5. General Knowledge

**15** 

Geography of World and Nepal, Latitude & Longitude, time, Population, shape of earth, map scale and measurement, Current and past administrative division of Nepal

The End