DETAILED SYLLABUS FOR THE POST OF PLANNING SURVEYOR GRADE II IN KERALA STATE LAND USE BOARD AND OVERSEER GRADE III/DRAFTSMAN GRADE III IN LOCAL SELF GOVERNMENT DEPARTMENT

(Category Nos: 504/2019, 135/2021)

BASIC ENGINEERING DRAWING   (10 Marks)

Drawing instruments, equipment and materials

Lettering, dimensioning and scale

Plane geometrical construction

Conic section and projection

SURVEYING   (15 Marks)

Conventional surveying

Introduction and terms used in chain, compass, plane table and leveling survey

Principle of leveling, Type of leveling, Reduction of levels

Contouring ,Theodolite survey

Modern and advanced surveying instruments

BUILDING MATERIALS AND CONSTRUCTION   (25 Marks)

Stone, Brick, Tiles, Cement, Lime and filler materials

Plane cement Concrete, Reinforced cement concrete

Timber

Foundation, Masonry, Roofing, Flooring

Building finishes and services

Temporary structural treatment for building construction

BUILDING DRAWING AND ESTIMATING   (15 Marks)

Building rules and byelaws

Estimation, Rules and methods of measurements of work

Rate analysis and valuation

HYDRAULICS AND IRRIGATION   (15 Marks)

Terms used in Irrigation

Storage and diversion head works

Reservoir, dam, canals, Cross drainage work

Properties of fluid

Measurement of pressure

Type of Hydraulic energy

UNITS AND MENSURATION   **(6 Marks)**

Units of measurements

Measurement of Perimeter and Area of triangles Polygons and circles

Volume of Solids

APPLIED MECHANICS   **(6 Marks)**

Simple machines:-Load and effort, Mechanical advantage, Velocity ratio, efficiency

Work power and energy

Simple stress and strain

Friction, Shear force and bending moment

Speed and velocity

AUTOCAD   **(8 Marks)**

Introduction to AutoCAD

Basic commands

Drawing toolbar and modifying toolbar

Plotting and printing

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper