



पूर्वाञ्चल विश्वविद्यालय
सेवा आयोग
गोठगाउँ, मोरङ

खुल्ला प्रतियोगिता लिखित परीक्षाको पाठ्यक्रम

मुख्य सहायकस्तर
मुख्य सहायक (ओभरसियर)
प्रथम पत्र (वस्तुगत)

पूर्णाङ्क: $9 \times 900 = 900$
समय: ३:०० घण्टा

१. नेपालको भूगोल
२. नेपालको इतिहास, संस्कृति तथा सामाजिक व्यवस्था
३. क्षेत्रीय तथा अन्तर्राष्ट्रिय संघ संस्थाहरू
४. नेपालको संवैधानिक निकायहरू
५. नेपालको आर्थिक तथा राजनैतिक नवीनतम घटनाक्रमहरू
६. पूर्वाञ्चल विश्वविद्यालयको ऐन तथा नियमावलीहरू
७. कर्मचारी प्रशासन, शैक्षिक प्रशासन तथा अन्य प्रशासन सम्बन्धी ज्ञान
८. कार्यालय व्यवस्थापन, सार्वजनिक खरिद ऐन, लेखा जिन्सी सम्बन्धी ज्ञान
९. नेपालको शैक्षिक इतिहास
१०. नेपालमा विश्वविद्यालयहरूको स्थापना तथा विश्वविद्यालय अनुदान आयोग (UGC) सम्बन्धी ज्ञान

मुख्य सहायकस्तर
मुख्य सहायक (ओभरसियर)
द्वितीय पत्र (विषयगत)

पूर्णाङ्क: १००
समय: ३:०० घण्टा

1. Engineering Drawing/Construction Drawing

- a. Handle drawing instruments and materials;
- b. Identify Geometrical construction and shape;
- c. Describe the scale, its type and construction;
- d. Draw different types of engineering curves
- e. Draw and interpret the multi view of solids with scale and dimensioning.
- f. Analyze/ draw the different orthographic projections;
- g. Analyze/draw the different pictorial projections;
- h. Draw surface development
- i. Analyze/ draw intersection.
- j. Prepare setting out drawings for construction activities;
- k. Draw working drawings of different components of buildings;
- l. Prepare working drawing of engineering constructions;

- m. Use earthquake resistant building construction techniques
- n. Acquire knowledge and skills on retrofitting techniques for earthquake resistant.
- o. Identify material and structural elements of steel, timber and RCC structures;
- p. Understand concept of design and codal provisions
- q. Design simple structural elements.

2. Engineering Mathematics

- a. Explain the concepts of vectors in plain and vectors in space and apply them in the field of the related engineering area;
- b. Explain the concepts of the complex numbers, linear inequalities and programming and apply them in the field of the related engineering area;
- c. Explain the concepts of determinants and matrices and apply them in the field of the related engineering area; Explain the concepts of determinants and matrices and apply them in the field of the related engineering area;
- d. Explain the concepts of applications of derivatives and areas of curves and apply them in the field of the related engineering;

3. Engineering Physics

- a. Explain the basic concepts related to the electricity and apply it in the field of the related engineering area;
- b. Explain the basic concepts related to the waves and apply it in the field of the related engineering area;
Explain the basic concepts related to the properties of matter and apply it in the field of the related engineering area Explain the basic concepts related to the modern physics and apply it in the field of the related engineering area.

4. Carpentry/ Plumbing

- a. Apply operating systems of plumbing works;
- b. Identify the tools and equipment required to plumbing works;
- c. Perform simple pipe fittings works and
- d. Prepare the PVC fittings.
- e. Understand the principles of carpentry works
- f. Select and collect the hand tools required for conduction of carpentry works;
- g. Understand the concept on technology of wood and its conversion techniques
Perform shaving and joints making.

5. Engineering Materials

- a. Recognize various construction materials that are essential in construction;
- b. Select the quality materials for the use in construction;
- c. Test materials for quality, strength and durability Use available materials in their proper position and state.

6. Surveying

- a. Apply distance measurement techniques
- b. Use basic surveying techniques and plotting of plan and map.
- c. Understand the concept of different surveying techniques of civil engineering field;
- d. Apply modern survey techniques
- e. Use modern survey instruments for surveying, constructions and map making procedures.



- f. Apply different techniques of civil engineering survey;
- g. Perform traverse survey, detailing, heightening, curves design, and lay out techniques and
- h. Carryout building layout techniques.

7. Basic Hydraulics

- a. Understand the properties of fluid;
- b. Analyze the behaviour of fluid at rest;
- c. Analyze the behaviour of fluid in motion;
- d. Apply the measurement techniques for pressure and discharge;
- e. Understand the concept of head loss in pipe flow
- f. Understand the basic concept of open channel flow.

8. Building Construction

- a. Identify the different components of buildings;
- b. Follow the steps of construction systematically;
- c. Supervise and test on the workmanship and quality of materials to be used in construction and
- d. Acquire knowledge and skills on earthquake resistant building construction techniques.

9. Computer Aided Drafting/Sanitary Engineering

- a. Learn to use popular CAD software programs (Autodesk Auto CAD) to model construction projects
- b. Create basic Civil and Architectural drawings
- c. Understand the basic knowledge on sanitation and health, main diseases transmitted due to unsanitary excreta disposal;
- d. Understand the basic knowledge on wastewater collection, conveyance, treatment and disposal methods and design of sewers;
- e. Be familiar with the fundamental problems, issues related to wastewater and its management;
- f. Describe the onsite sanitation systems and explain the importance and methods of solid waste disposal.

10. Estimating and Costing

- a. Understand the estimated cost, actual cost and types of estimation;
- b. Understand the procedures methods of measuring and quantifying the building works and
- c. Prepare the estimating the cost of building works.
- d. Understand the procedures, methods of measuring and quantifying the road and restoration work;
- e. Calculate the quantities of earthwork of road in plan and hilly area;
- f. Analyze rate of road and water supply and sanitations works;
- g. Provide basic knowledge of the value of existing properly and role of computes in valuation
- h. Provide basic knowledge of specifications building and road works and
- i. Prepare estimate of road and restoration works.

11. पूर्वाञ्चल विश्वविद्यालय ऐन र नियमावली सम्बन्धी

