

प्रदेश लोक सेवा आयोग, प्रदेश नं.२
इन्जिनियरिङ्ग सेवा, सिभिल समूह, जनरल उपसमूह, अधिकृत नबौ तहको खुला र अन्तर सेवा
प्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम

द्वितीय पत्र - सेवा सम्बन्धी प्राविधिक विषय

पूर्णाङ्क:- १००

1. Building

- 1.1 Local and Modern building construction material in Nepal
- 1.2 Present status of govt. office building in Nepal and the need for standardization
- 1.3 Prospects and challenges for maintenance and rehabilitation of govt. building
- 1.4 Efforts in developing indigenous technology in building design and construction
- 1.5 Housing scenario in Nepal, opportunities and constraints
- 1.6 Private and public Partnership in housing
- 1.7 Role of Private sector in housing development
- 1.8 Prospects and challenges in housing construction as an industry and cost control strategies
- 1.9 Housing finance and legislation
- 1.10 National shelter policy and strategies in current plan

2. Transportation and Trail Bridges

- 2.1 Transport sector policies and strategies in current plan
- 2.2 Institutional background of the road transport sector
- 2.3 Concept and significance of highway planning and linkages with international standard.
- 2.4 Classification of Strategic & Rural Roads
- 2.5 Methods of construction technology
- 2.6 Contract Management
- 2.7 Private sector involvement
- 2.8 Labour intensive and capital intensive methods of road construction
- 2.9 Quality control and assurances
- 2.10 Maintenance management and challenges
- 2.11 Institutional Strengthening
- 2.12 Concept of roadside drainage and its management
- 2.13 Prevention of erosion in road corridor
- 2.14 Bio- engineering application
- 2.15 Policies and strategies in current plan regarding Trail Bridge
- 2.16 Local level and central level planning of Suspension and suspended bridge
- 2.17 Design standard of Suspension and suspended bridge
- 2.18 Quality control and monitoring of suspension and suspended bridges
- 2.19 Maintenance of Trail Bridges
- 2.20 District Transport Master Plans for planning and management of Rural roads, Tracks and trails
- 2.21 Labour based, Environment friendly and Participatory (LEP) Approach for rural road development
- 2.22 Basic design concepts of rural roads
- 2.23 Role of social mobilization in rural road development
- 2.24 Generations of maintenance fund & maintenance of rural roads in context of decentralization
- 2.25 Agricultural roads
- 2.26 Low-cost road construction
- 2.27 Integrated Rural Accessibility Planning
- 2.28 Transport-plus approach in rural road development

3. Water supply and sanitation.

- 3.1 Present Status of water supply and sanitation in Nepal
- 3.2 National Policies in water and sanitation in current plan
- 3.3 Current issues and problems of water supply and sanitation sector
- 3.4 National standard of rural and urban water supply
- 3.5 Rural and community based water supply system
- 3.6 Water Supply sources and their management
- 3.7 Water quality, water demand & supply, source protection
- 3.8 Intakes, Pipeline design, design of transmission and distribution system, reservoir design.
- 3.9 Pipe materials and jointing
- 3.10 Operation and maintenance of water supply systems
- 3.11 Legal and management aspects of water supply facilities
- 3.12 Financial aspects-system cost recovery, tariff structure, affordability
- 3.13 Education and training
- 3.14 Environmental Health engineering- epidemiology, pathogens (Bacteria, Virus, Helminthes, Protozoa), infection transmission routes, water related, excreta related, refuse related, housing related infection, on site sanitation system (pit latrine, VIP latrine, eco-san, pour flush, septic tank etc) off side sanitation system (waste stabilization pond, aerated lagoon, oxidation ditch, constructed wetland etc.)
- 3.15 Issues and problems of solid waste management in urban centers and townships

4. Irrigation and drainages

- 4.1 Status of irrigation development in Nepal
- 4.2 National policies and strategies in irrigation sector in current plan
- 4.3 Integrated water resources management
- 4.4 General irrigation system planning
- 4.5 Participatory approach in irrigation system management
- 4.6 Operation and maintenance of irrigation systems
- 4.7 Institutional aspects of irrigation system management
- 4.8 Preventive and remedial measures of water logging
- 4.9 Flood control and its necessity and control methods
- 4.10 Surface, subsurface, sprinkler and drip methods of irrigation, their suitability and problems of sprinklers
- 4.11 River training works
- 4.12 Farming system in Nepal
- 4.13 Specific considerations in design, O and M and management of hill irrigation systems in Nepal
- 4.14 Land drainage for agriculture, Excess water and relation to drainage, drainage methods
- 4.15 Management of Farmers managed irrigation system

5. Environmental impact assessment.

- 5.1 Concept of environmental assessment, IEE (Initial environmental examination) and EIA (Environmental impact assessment), role of EIA, EIA principles, types of impacts
- 5.2 Screening, scooping, initial impact identification, TOR preparation, EIA report writing
- 5.3 Management of IEE/EIA process: public participation, EIA review, mitigation measures, monitoring and Environmental Management Plan
- 5.4 Environmental auditing

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