

लोक सेवा आयोग
नेपाल इन्जिनियरिङ्ग सेवा, इलेक्ट्रोनिक्स एण्ड टेलिकम्युनिकेशन समूह, राजपत्रांकित प्रथम श्रेणी
(खुला प्रतियोगिता र अन्तरसेवा प्रतिस्पर्धा) परीक्षाको पाठ्यक्रम

द्वितीय पत्र : सेवा समूह सम्बन्धी

पूर्णाङ्क : १००

1. Introduction

- 1.1 National Telecommunication Planning (numbering, Transmission & Switching)
- 1.2 Social & Cultural aspects of Telecommunication
- 1.3 Role of Telecommunication in national development
- 1.4 Global information network
- 1.5 Information super Highway
- 1.6 Convergence technologies

2. Telecommunication Systems

- 2.1 Wireless systems
- 2.2 Wireline systems
- 2.3 Telecommunication system analysis and planning

3. Voice systems

- 3.1 Transmission and Switching systems
- 3.2 Multiplexing and Signalling techniques
- 3.3 VoIP

4. Data systems

- 4.1 Transmission systems
- 4.2 Broadband techniques-xDSL, ATM, SONET
- 4.3 ISDN
- 4.4 Internet

5. Internet systems

- 5.1 Internet and world wide web
- 5.2 Protocols used in network and Capabilities
- 5.3 Privacy and security issues

6. Digital Networks

- 6.1 Architecture and Network components
- 6.2 Digital voice and video
- 6.3 Packet and Switched services-ATM, xDSL, FrameRelay
- 6.4 Encryption and security issues

7. Video systems

- 7.1 NTSC,PAL,SECAM standards
- 7.2 Video compression and standards
- 7.3 HDTV

8. Electronic Aviation systems

- 8.1 Communication systems-voice, ATN
- 8.2 Navigation systems rho theta, hyperbolic, Satellite radio

- 8.3 Surveillance systems
- 8.4 Air Traffic Management
- 8.5 Electronic security surveillance system
- 8.6 New trend in Aviation Electronic System
- 8.7 Flight Check/ Tests for the standarization of Radio facilities
- 9. International Telecommunication Policy**
 - 9.1 International institutions-ITU,FCC, ISO
 - 9.2 Regulatory environment
 - 9.3 Economic aspects of Telecommunications
 - 9.4 Strategic Planning involving economic, political, technology and human factors
- 10. Telecommunication law and regulations**
 - 10.1 Regulation of Telecommunication
 - 10.2 Regulation of information and information providers
 - 10.3 Radio spectrum management
 - 10.4 Cyberlaw
- 11. Telecommunication Economics**
 - 11.1 Electronic Commerce
 - 11.2 Internet and economics of networking
 - 11.3 Tariff and market segmentation concepts
- 12. Electronic Media Management**
 - 12.1 Media management of TV, Cable, Radio
 - 12.2 Organization and Technology management
 - 12.3 Industry practices and financial management
 - 12.4 Regulation of Broadcasting –self, government
 - 12.5 Legal and technical aspects of Cable communications
- 13. Project Appraisal and Management**
 - 13.1 Project lifecycle costing, evaluation and selection
 - 13.2 Project objectives and organization
 - 13.3 Work Breakdown structures and optimizing project plans
 - 13.4 Project monitoring, control (cost & schedule) and reporting
 - 13.5 Project risk management and contingency planning
- 14. Government policy on Telecommunication**
- 15. Electronic plans & programmes in the current plan**