

लोक सेवा आयोग
नेपाल नागरिक उड्डयन प्राधिकरण, प्राविधिक, इ. एण्ड टेकम. ईन्जिनियरिङ्ग, पाँचौ, वरिष्ठ सहायक
पदको प्रतियोगितात्मक लिखित परीक्षा
२०७६।०८।२२

पत्र : द्वितीय

समय : २ घण्टा ३० मिनेट

पूर्णाङ्क : १००

विषय : सेवा सम्बन्धी

प्रत्येक Section को उत्तर छुट्टाछुट्टै उत्तरपुस्तिकामा लेख्नुपर्नेछ । अन्यथा उत्तरपुस्तिका रद्द हुनेछ ।

Section 'A'

50 Marks

1. Differentiate between input and output device of computer. If there is no display in monitor, what is the problem ?
3+2=5
2. Write short notes on:
(a) Internet (b) Modems
2.5+2.5=5
3. Explain the working principle of a frequency counter. 5
4. What is the main difference between an ammeter and voltmeter ? Explain. 5
5. Explain the lightning protection system design. 5
6. What is a solar cell ? Show the difference between the UPS & SMPS system. 1+4=5
7. How is video digitized ? Explain. 5
8. Briefly explain the difference between Digital Audio Tape Records and Optical Disc Players. 5
9. Write the single analysis in CE, CC and CB in a transistor with diagram. 10

Section 'B'

50 Marks

10. What is optical cable splicing ? Describe types of splicing in use. 5
11. What is multiplexing ? Explain TDM. 1+4=5
12. Explain the key features of yagi antenna and its working principle. 5
13. Explain the characteristics impedance of a transmission line ? How does the standing wave ratio represent the mis-match in a transmission line ? 5
14. Explain full adder with the help of truth table and logic diagram. 5
15. Write short notes on:
(a) ROM (b) PROM 2.5+2.5=5
16. Enlist the ideal characteristics of an op-amp. How is an op-amp used as an integrator circuit ? Explain. 2+3=5
17. Why is collector made larger than emitter & base ? Why is collector always reverse biased w.r.t. base? 2.5+2.5=5
18. What are the advantages & disadvantages of Digital Communication ? Explain PCM system required block diagram. 4+6=10