

लोक सेवा आयोग
नेपाल राष्ट्र बैंक, प्राविधिक, सूचना प्रविधि, सहायक द्वितीय, सहायक (सूचना प्रविधि) पदको खुला
प्रतियोगितात्मक लिखित परीक्षा
२०८१।०१।१९

पत्र : प्रथम
समय : २ घण्टा ३० मिनेट

पूर्णाङ्क : १००

विषय : **Information Technology - I**

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

Subjective

Time : 2 hours

75 Marks

Section "A"

30 Marks

1. Briefly explain the characteristics of computer that makes it a useful device for any organization. 5
2. What is Disaster Recovery? Briefly explain about different backup methods. 2+3=5
3. What is an IC? Why are ICs so cheap? Why are ICs widely used in modern electronic devices? Explain. 1+1+3=5
4. Explain about the working principle of Zener diode. 5
5. What are the common security threats in cyber space? Explain. What measures should be taken to mitigate these threats? Discuss. 5+5=10

Section "B"

45 Marks

6. What is an interrupt in computing? Explain how processor handles an interrupt. 1+4=5
7. List the syntax, purpose and examples of any ten DOS commands. 5
8. Discuss the concept and importance of IP addressing. What are the differences between IPv4 and IPv6 addresses? Write. 3+2=5
9. What is VPN? When would you use a VPN? How does it enhance network security? Explain. 1+2+2=5
10. What is data compression? Why is it necessary to compress files? Mention the digital picture and video compression techniques. 1+2+2=5
11. What is Memory Hierarchy? Explain in detail. Discuss the importance of RAID configuration of disks. 7+3=10
12. What is the OSI reference model? Explain the basic functions of each layer with example of device operating at different layers. Also, discuss how OSI reference model differs from TCP/IP protocol suite. 1+6+3=10

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