

लोक सेवा आयोग
नेपाल नागरिक उड्डयन प्राधिकरण, प्राविधिक, मेकानिकल इन्जिनियरिङ्ग, सातौं, वरिष्ठ अधिकृत पदको
खुला प्रतियोगितात्मक लिखित परीक्षा
२०८०।१०।२१

पत्र : द्वितीय
समय : ३ घण्टा

पूर्णाङ्क : १००

विषय : सेवा सम्बन्धी

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

Section "A"

50 Marks

1. Why error measurement is needed? List out the different types of accuracy and precision measuring devices. 3+2=5
2. What are the features needed in firefighting pumps compared to pumps used in irrigation? Suggest firefighting pump regular testing procedure and maintenance checklist. 3+2=5
3. What is the purpose of annealing treatment? Explain the process of annealing and hardening heat treatment. 5+5=10
4. Describe the First Law and Second Law of Thermodynamics for Control Mass and Control Volume formulation. 10
5. Define pictorial projection. Why is it necessary? Also, explain common types of pictorial projection. 1+2+7=10
6. Explain how baggage handling systems are classified. Explain the factors that should be considered during the selection of baggage handling systems. 5+5=10

Section "B"

50 Marks

7. Draw a neat sketch of the Air Handling Unit showing each component. Also, state functions of each component. 3+2=5
8. Describe the depreciation with their types and explain among one of them. 2+3=5
9. State and elaborate the vehicular emission standards and preventive measures and pollution control. 5+5=10
10. What is the difference between Airport and Heliport? Propose a sample for typical hanger plan (layout) and main dimensions including engineer's office and service rooms for new heliports. Suggest inventory management in a heliport for maintenance of helicopters. 3+4+3=10
11. Describe time value of money. List different project evaluation technique. Explain how projects are evaluated by using IRR method and NPV method. 2+3+5=10
12. List out the procedure to prepare standard bidding document. Also, explain about International Competitive Bidding (ICB) and National Competitive Bidding (NCB). 5+5=10