

लोक सेवा आयोग  
नेपाल नागरिक उड्डयन प्राधिकरण, प्राविधिक, एयरवर्दिनेश, सातौं, वरिष्ठ अधिकृत पदको खुला  
प्रतियोगितात्मक लिखित परीक्षा  
२०७९।०४।२९

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. What is lift augmentation of a wing? Describe 3 types of flaps. 5
2. What is fail safe structure? 5
3. How do you prepare for aircraft weighing and how is it done? 10
4. Explain about Flight Stability in terms of longitudinal, lateral and directional stability. 10
5. What is the purpose of fire detection and fire extinguishing system in an aircraft? Explain briefly the fire detection and fire extinguishing system along with its types? 3+7=10
6. How does the aircraft fuel system work? Describe the types of fuel tanks? 6+4=10

**Section "B"**

**50 Marks**

7. Write Kirchhoff's Voltage and Current laws. 5
8. What is static and dynamic balancing used in propeller system? 5
9. Briefly describe Engine Fuel System. Use simplified aircraft fuel system figure for describing. 10
10. How does propeller system work on the aircraft? Describe. 10
11. Describe in brief the different navigation systems and explain the working principle of weather radar system. 7+3=10
12. Explain the construction principle and operation of transformers. What is turn ratio? Explain the transformer losses and methods for overcoming the losses? 4+2+4=10

- The End -