

लोक सेवा आयोग
कृषि सामग्री कम्पनी लिमिटेड, प्राविधिक, सहायक द्वितीय, सहायक (प्लान्ट अपरेटर) पदको खुला
प्रतियोगितात्मक लिखित परीक्षा
२०८३।०५।२३

पत्र : द्वितीय

समय : २ घण्टा ३० मिनेट

पूर्णाङ्क : १००

विषय : संस्थागत ज्ञान र सेवा सम्बन्धी

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

Section : "A"

40 Marks

1. Explain the differences between ferrous and non-ferrous materials. Discuss any three important mechanical properties of engineering materials. 2+3=5
2. Describe the working principle of typical brakes in automotive equipment. 5
3. Explain the construction and working principle of a DC generator and a DC motor. 5
4. Sketch a layout of a seed processing plant and indicate five major units on it. 5
5. Clarify the working principles of four-stroke IC engines with suitable sketches. Mention their applications for different activities. 8+2=10
6. Explain the vapor-compression refrigeration cycle with proper diagram and describe the functions of the compressor, condenser, expansion device and evaporator. 6+4=10

Section : "B"

40 Marks

7. Differentiate between welding, soldering and brazing based on heat input, filler material, melting of base metal and typical applications. Why is proper surface preparation important in soldering and brazing? Write. 4+1=5
8. What is the importance of recordkeeping? Explain the key parts of a maintenance job card. 2+3=5
9. Explain the duties and essential qualities of a supervisor. 5
10. Elucidate the major quality parameters of seeds. 5
11. A seed-processing plant contains rotating machinery, conveyors, elevators, electrical equipment, seed dust and chemical-treatment facilities.

You are required to:

4+4+2=10

- a) Identify and classify the major personal, machine, tool and workplace safety hazards in such a plant.
 - b) Explain the hierarchy of safety controls and discuss the roles of machine guards, emergency-stop devices, lockout/tagout, ventilation, housekeeping and PPE in accident prevention.
 - c) Point out the specific precautions required when handling seed dust and chemically treated seeds, including appropriate protective equipment, storage and emergency measures.
12. What is maintenance? Write the importance of it. Also, compare preventive maintenance and breakdown maintenance with suitable examples. 2+3+5=10

Contd...

Section : "C"

20 Marks

13. नेपालको संविधानबमोजिम प्रत्येक नागरिकलाई प्राप्त हुने स्वतन्त्रताका हकहरू उल्लेख गर्नुहोस् । ५
14. कृषि सामग्री कम्पनी लिमिटेडको प्रबन्ध सञ्चालकका काम, कर्तव्य र अधिकारहरू बयान गर्नुहोस् । ५
15. बीउ बिजन व्यवसायमा निजी क्षेत्रको सहभागिता अभिवृद्धि गर्न राष्ट्रिय बीउ बिजन नीति, २०५६ ले के-कस्तो व्यवस्था गरेको छ? उल्लेख गर्नुहोस् । ५
16. कृषि सामग्री कम्पनी लिमिटेडको आर्थिक प्रशासन विनियमावली, २०५९ अनुसार कार्यालय प्रमुखको आर्थिक प्रशासनसम्बन्धी काम र कर्तव्यहरू के के हुन्? स्पष्ट गर्नुहोस् । ५

- The End -