

CBSE Class 12 Air-Conditioning and Refrigeration 2022 - Set 351

Question Paper

Conducted by the Central Board of Secondary Education (CBSE)



Time Allowed: 1.5 Hours

Maximum Marks: 30

General Instructions

- (i) Please read the instructions carefully.
- (ii) This question paper is divided into three sections: Section A, Section B and Section C.
- (iii) Section A carries 5 marks and has 6 questions on Employability Skills. Questions 1–4 carry 1 mark each; attempt any three. Questions 5 and 6 carry 2 marks each; attempt any one.
- (iv) Section B carries 17 marks and has 16 questions on Subject Specific Skills. Questions 7–13 carry 1 mark each; attempt any five. Questions 14–18 carry 2 marks each; attempt any three. Questions 19–22 carry 3 marks each; attempt any two.
- (v) Section C carries 8 marks and has 3 Competency-Based Questions. Questions 23–25 carry 4 marks each; attempt any two.
- (vi) Follow the instructions given in the respective sections.
- (vii) Marks allotted are mentioned against each section/question.

Section A

Answer any **03** questions out of the given **04** questions. $1 \times 3 = 3$

1. Write names of two Greenhouse gases.

2. Write any one characteristic of entrepreneurship.

3. Mention any two barriers to an entrepreneur.

4. Write full form of CNG.

Answer any **01** question out of the given **02** questions. $2 \times 1 = 2$

5. What are the common entrepreneurial competencies ? (any **four**)

6. What is the role of GREEN JOBS in the society ?

Section B

Answer any **05** questions out of the given **07** questions. $1 \times 5 = 5$

7. Write the name of the tank which is used to remove the ice from ice cane.

8. Write the name of pressure control which operates when the pressure of compressor becomes excessive.

9. Write the function of a filter in the air-conditioning system.

10. Write the name of pressure control which protects from the leak of air in the air-conditioning system.

11. Define Refrigerants.

12. Write the function of a blower in the air-conditioning system.

13. Write the name of the type of relay used in a domestic refrigerator.

Answer any **03** questions out of the given **05** questions. $2 \times 3 = 6$

14. Write the names of various commercial applications of refrigeration.

15. Explain the function of a capacitor in an electrical motor of compressor.

16. Write the chemical names of R-12 and R-22.

17. Give classification of fans used in air-conditioning system.

18. Write the names of safety devices used to protect the compressor motor.

Answer any **02** questions out of the given **04** questions. $3 \times 2 = 6$

19. Explain A.H.U. with the help of a neat sketch.

20. Write the properties of ammonia refrigerant.

21. Write the names of components used in a central A.C. plant.

22. Explain how the pasteurization of milk is carried out in a dairy plant.

Section C

Answer any **02** questions out of the given **03** questions. $4 \times 2 = 8$

23. Explain the different methods of leak detection in a refrigeration system.

24. What is brine ? Explain the uses of brine as a secondary refrigerant.

25. Draw the layout of a cold storage and label it.

- End of Question Paper -