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Question Paper

Duration: 30 Mins

Total Marks: 34

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Student Name: _____

Roll No: _____

1. What type of heat is absorbed by primary refrigerant?

- A) Total heat B) Latent heat
C) Specific heat D) Sensible heat

2. What is the name of process that changes the used refrigerant to new product?

- A) Reclaim B) Manufacture
C) Recycle D) Recover

3. Which international agency standardises the numbering system for identifying refrigerants?

- A) ISHRAE B) ISO
C) ASHRAE D) DW142

4. How numerical designations of inorganic refrigerants are assigned?

- A) Adding 700 to molecular mass of compound B) Divide 700 to molecular mass of compound
C) Multiply 700 to molecular mass of compound D) Subtracting 700 from molecular mass of compound

5. Which is the effective method for refrigerant recovery?

- A) Use of system's compressor B) Charge migration
C) Push pull recovery D) Condensing unit

6. Which is the inorganic refrigerant?

- A) R 170 B) R 717
C) R 630 D) R 500

7. Which gas is universally taken as the basic reference for GWP?

- A) NH_3 B) CO_2
C) AIR D) SO_2

8. Which insulating material is poured as liquid?

- A) Glass Wool B) Wood Shave
C) Poly Urethane Foam (PUF) D) Cork Board

9. What is the category of R 290 refrigerant?

- A) Organic compounds B) Azeotropes

C) Halocarbons

D) Hydrocarbons

10. Why HCFC 22 refrigerant is recycled?

- A) Increase the efficiency of RAC systems B) Decrease the cost of production
C) Reduce ODP and GWP of environment D) Make use of the same lubricant

11. What is the desirable property of POE lubricant?

- A) Hygroscopic B) Miscible with HFCs
C) Forms acid with moisture D) Toxic gas produced during brazing

12. Why universal numbering system is adopted for different refrigerants?

- A) Identifying the refrigerant's names B) Mixing the lubricant combination
C) Fixing the drier combination D) Identify the systems

13. Which is the green house gas?

- A) Helium of atmospheric air B) Chlorofluoro carbon in air
C) Oxygen of atmospheric air D) Neon of atmospheric air

14. What is the ozone depleting potential of R 134a Refrigerant?

- A) 3 B) 0
C) 2 D) 1

15. How the refrigerants are classified based on heat absorption by latent and sensible heat?

- A) Halocarbons and hydrocarbons B) Zeotropic and azeotropic
C) Organic and inorganic D) Primary and secondary

16. Which position is safe for storing refrigerant cylinder?

- A) Inclined B) Horizontal
C) Upside down D) Upright

17. What is the effect of releasing HFC refrigerants to the atmosphere?

- A) Improve water pollution B) Decrease green house effect

- C) Increase global warming potential D) Increase ozone depleting potential

18. Which property is desirable for an ideal refrigerant?

- A) High freezing point B) High boiling point
C) High specific volume D) High latent heat value

19. How to safely guard the hands while handling glass wool?

- A) Wearing gloves B) Using mask
C) Wearing goggles D) Using shoes

20. Which substance absorbs heat and directly changes its state from solid to vapour?

- A) Ice B) Secondary refrigerants
C) Primary refrigerants D) Dry ice

21. Which is the numerical designation of ammonia refrigerant?

- A) $700 + (\text{Molecular mass of NH}_3) = 719$ B) $700 + (\text{Molecular mass of NH}_3) = 718$
C) $700 + (\text{Molecular mass of NH}_3) = 717$ D) $700 + (\text{Molecular mass of NH}_3) = 720$

22. What is the advantage of universal colour coding of refrigerant cylinders?

- A) Prevent corrosion on cylinder B) Easy to identify
C) Provide extra strength to cylinder D) Make good appearance

23. How to prevent the small pieces of glass wool affecting the eyes?

- A) Wearing goggles B) Wearing gloves
C) Using mask D) Using shoes

24. Where does the ozone layer exist in atmosphere?

- A) Mesosphere B) Ionosphere
C) Exosphere D) Stratosphere

25. What is the category of R 407c refrigerant?

- A) Organic B) Zeotropes
C) Azeotropes D) Inorganic

26. What does the number 4 of R 134a indicate?

- A) Number of fluorine atoms B) Number of hydrogen atoms
C) Number of chlorine atoms D) Number of carbon atoms

27. What is the effect of releasing HCFC refrigerants to atmosphere?

- A) Decreases GWP and ODP B) Inactive to TEWI
C) Increases ODP and GWP D) Decreases TEWI

28. Which refrigerant is used in vapour compression cycle?

- A) Brine solution B) Secondary refrigerant
C) Primary refrigerant D) Water

29. How much is the maximum capacity of refrigerant to be filled in a returnable service cylinder?

- A) Up to 85% B) Up to 90%
C) Up to 80% D) Up to 95%

30. How many hydrogen atoms are present in R 134a?

- A) Four B) Two
C) One D) Three

31. What is the cylinder colour code of R 22 refrigerant?

- A) Orange B) Orchid
C) White D) Green

32. What is the category of R 502 refrigerant?

- A) Hydrocarbon B) Azeotropes
C) Organic compounds D) Halocarbon

33. Which type of insulating material is used for making ice box to cool beverages?

- A) Thermocole B) Tar felt
C) Glass wool D) Fibre glass

34. Which refrigerant is inactive to ozone layer?

- A) R 12 B) R 13
C) R 22 D) R 134a