**MCQ**

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| **S. NO** | **MCQ** | **Instructions** |  |
|  | Atmospheric pressure at mean sea level is 1.00 kg, Where this MSL located | | |
| a | Port Blair |  |
| b | Karachi | Yes |
| c | Miami |  |
| d | Sydney |  |
|  | Humidity is the status on amount of | | |
| a | Water vapour present per unit volume of air | Yes |
| b | Water vapour present per unit mass of air |  |
| c | Water particle per unit mass of air |  |
| d | Water particle per unit volume of air |  |
|  | Holding capacity of water vapour by air increases | | |
| a | With the increase in wind speed |  |
| b | With the decrease in wind speed |  |
| c | With the increase in air temperature | Yes |
| d | With the decrease in air temperature |  |
|  | Latent heat of condensation is defined as the heat released | | |
| a | when one g of the substance condenses |  |
| b | when one cc of the substance condenses |  |
| c | when one mole of the substance condenses | Yes |
| d | when one cm2 of the substance condenses |  |
|  | Absolute Humidity is the ratio of the | | |
| a | Volume of water vapour to the total volume of the moist air |  |
| b | Mass of water vapour to the total volume of the moist air | Yes |
| c | Volume of water vapour to the total mass of the moist air |  |
| d | Mass of water vapour to the total volume of the dry air |  |
| 6. | Relative humidity depends on | | |
| a | Status of both water vapour and air pressure |  |
| b | Status of water vapour and actual vapor pressure |  |
| c | Status of water vapour only |  |
| d | Status of both water vapour and temperature | Yes |
| 7. | If the dew point temperature is below freezing, | | |
| a | It is called the frost point | Yes |
| b | It is called ice dew point |  |
| c | It is called super cool point |  |
| d | It is called freezing point |  |
| 8. | The wet bulb temperature is the | | |
| a | Temperature of water vapour |  |
| b | Temperature of adiabatic saturation | Yes |
| c | Temperature of saturated air |  |
| d | Temperature of dry air and water vapour |  |
| 9. | Water loss in vapour form from water surface is called | | |
| a | Transpiration |  |
| b | Evapotranspiration |  |
| c | Evaporation | Yes |
| d | Diffusion of water |  |
| 10. | Term Precipitation is used for | | |
| a | Snow fall |  |
| b | Rainfall |  |
| c | Hailstorm |  |
| d | All of these | Yes |
| 11. | At the Earth's surface, wind blows | | |
| a | Vertically |  |
| b | Horizontally | Yes |
| c | Clock wise circulation motion |  |
| d | Anti clock wise circular motion |  |
| 12. | Wind turning clock wise direction is called | | |
| a | Veering wind | Yes |
| b | Backing wind |  |
| c | Rose wind |  |
| d | Trade wind |  |
| 13. | Monsoon occur because of seasonal changes in | | |
| a | The water vapour status of land and water |  |
| b | The temperature of land and water | Yes |
| c | The Specific humidity of land and water |  |
| d | The absolute humidity of land and water |  |
| 14. | Wind affects the plant growth directly by | | |
| a | Increasing transpiration | Yes |
| b | Decreasing transpiration |  |
| c | Increasing evaporation |  |
| d | Decreasing evaporation |  |
| 15. | Speed of sea breeze will be maximum at | | |
| a | 8 AM |  |
| b | 12 noon | Yes |
| c | 8 PM |  |
| d | 12 mid nights |  |
| 16. | Why grass surface gets more dew than soil | | |
| a | Due to smooth surface |  |
| b | Have higher thermal conductivity than soil | Yes |
| c | Green color helps in condensation process |  |
| d | Presence of stomata |  |
| 17. | Dew acts as a notable contributor to soil water source in | | |
| a | Humid climate |  |
| b | Arid climate | Yes |
| c | Marshy lands |  |
| d | Deep forests |  |
| 18. | Frost occurs when at low temperature | | |
| a | Liquid water condensed in to ice. |  |
| b | Water vapour converts into super cooled water. |  |
| c | Water vapour directly converts into ice. | Yes |
| d | Dew drops condensed to ice |  |
| 19. | Fog reduces visibility to | | |
| a | less than 1.0 km. | Yes |
| b | 1.0 to 1.5 km. |  |
| c | 1.5 to 2.0 km. |  |
| d | 2.0 to 2.25 km. |  |
| 20. | Maximum rainfall occurs from | | |
| a | Cirrocumulus |  |
| b | Stratocumulus |  |
| c | Altonimbus |  |
| d | Cumulonimbus | Yes |

|  |  |  |  |
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| **S. NO** | **MCQ** | **Instructions** |  |
| 21. | Cross sectional area of the column represents atmospheric pressure is | | |
|  | 0.5 cm2 |  |
|  | 1.0 cm2 | Yes |
|  | 2.0 cm2 |  |
|  | 5.0 cm2 |  |
| 22. | Relative humidity is governed by | | |
|  | Rate of transpiration |  |
|  | Rate of evaporation |  |
|  | Rate of evaporation and transpiration | Yes |
|  | Diffused solar radiation |  |
| 23. | Vapor pressure is | | |
|  | Partial pressure exerted by water vapor | Yes |
|  | Partial pressure exerted by ice crystal |  |
|  | Partial pressure exerted by liquid water |  |
|  | Pressure exerted by water vapor and water molecule |  |
| 24. | Latent heat released does not change the temperature of any substance goes | | |
|  | It goes directly into changing the mass of the substance. |  |
|  | It goes directly into changing the volume of the substance. |  |
|  | It goes directly into changing the state of the substance. | Yes |
|  | It goes directly into changing the density of the substance. |  |
| 25. | Absolute humidity depends on the | | |
|  | Temperature |  |
|  | Vapour pressure |  |
|  | Partial pressure of water vapour |  |
|  | Temperature and vapour pressure. | Yes |
| 26. | Relative humidity of air is the ratio of the | | |
|  | Partial vapour pressure of air to total vapor pressure. |  |
|  | Saturation vapor pressure per unit of actual vapour pressure of air |  |
|  | Actual vapour pressure of air to its saturation vapor pressure | Yes |
|  | Actual vapour pressure per unit volume of moist air. |  |
| 27. | Dew point temperature depends on | | |
|  | Both dry bulb and wet bulb temperature | Yes |
|  | Both dry bulb and Maximum temperature |  |
|  | Both maximum and minimum temperature |  |
|  | Both wet bulb and minimum temperature |  |
| 28. | At 100% relative humidity | | |
|  | The wet bulb temperature is lower than the dry bulb temperature |  |
|  | The wet bulb temperature is higher than the dry bulb temperature |  |
|  | The wet bulb temperature is equal to the dry bulb temperature | Yes |
|  | The dry bulb temperature is at lowest level |  |
| 29. | Water loss in vapour form from water surface is called | | |
|  | Transpiration | Yes |
|  | Evapotranspiration |  |
|  | Evaporation |  |
|  | Diffusion of water from leaf |  |
| 30. | Temperature of supercooled water is | | |
|  | -100C |  |
|  | -200C |  |
|  | -300C |  |
|  | -400C | Yes |
| 31. | Wind speed is determined by the | | |
|  | Gradient, of pressure between two areas | Yes |
|  | Gradient of temperature between two areas |  |
|  | Gradient of relative humidity between two areas |  |
|  | Gradient of altitude between two areas |  |
| 32. | Wind turning anti-clock wise direction is called | | |
|  | Veering wind |  |
|  | Backing wind | Yes |
|  | Rose wind |  |
|  | Trade wind |  |
| 33. | In India maximum cyclones occur during | | |
|  | The month of March-April |  |
|  | The month of May-June |  |
|  | The month of June-July |  |
|  | The month of August September | Yes |
| 34. | Hot dry winds frequently do much damage to vegetation | | |
|  | Increasing evaporation |  |
|  | Decreasing evaporation |  |
|  | Increasing transpiration | Yes |
|  | Decreasing transpiration |  |
| 35. | Speed of land breeze will be maximum at | | |
|  | 8 AM |  |
|  | 12 noon |  |
|  | 8 PM |  |
|  | 12 mid night | Yes |
| 36. | Why soil surface gets less dew than grass surface | | |
|  | Due to rough surface |  |
|  | Have lower thermal conductivity than grass | Yes |
|  | Gray color discourages in condensation process |  |
|  | Absence of stomata |  |
| 37. | Creation of moist environment due to dew | | |
|  | Reduce transpiration rate |  |
|  | Increases pest and disease attack | Yes |
|  | Control weed population |  |
|  | Reduce evaporation |  |
| 38. | Depending on formation place / surface ‘Hoar frost’ also termed as | | |
|  | Ice hoar |  |
|  | Water hoar |  |
|  | Vapour hoar |  |
|  | Air hoar | Yes |
| 39. | Fogs resulting from cooling termed as | | |
|  | Frontal fog |  |
|  | Steam fog |  |
|  | Radiation fog | Yes |
|  | Drizzle fog |  |
| 40. | Which cloud produce lowest precipitation | | |
|  | Cirrocumulus | Yes |
|  | Stratocumulus |  |
|  | Altonimbus |  |
|  | Cumulonimbus |  |

**Short Questions**

Q.1. How a principal meteorological observatory is superior over an ordinary meteorological observatory. Workout the IST value of Agartala (Longitude 910 25/ E) at 7.00 LMT. (3 + 2)

Q.2. Write down the specific characteristics of Stevenson Screen. How one can say the maximum thermometer is giving error free reading. (4 +1)

Q.3. What is the role of still well in a USWB Class A Pan Evaporimeter. Write down the name of two weather parameters that influence value of evaporation. (3 + 2)

Q.4. How a principal meteorological observatory is superior over an ordinary meteorological observatory. Workout the IST value of Agartala (Longitude 910 25/ E) at 7.00 LMT. (3 + 2)

Q.5. Write down the specific characteristics of Stevenson Screen. How one can say the maximum thermometer is giving error free reading. (4 +1)

Q.6. What is the role of still well in a USWB Class A Pan Evaporimeter. Write down the name of two weather parameters that influence value of evaporation. (3 + 2)

Q.7. How an ordinary meteorological observatory is superior over an auxiliary meteorological observatory. Workout the IST value of Ludhiana (Longitude 750 50/ E) at 7.00 LMT. (3 + 2)

Q. 8. On what principal wet bulb thermometer works? Under which condition the readings of both dry and wet bulb thermometers will be same? (4 + 1)

Q. 9. Why we paint the USWB Class A Pan Evaporimeter with white colour. What are the components of an ordinary rain gauge. (3 +2)

Q.10. How an ordinary meteorological observatory is superior over an auxiliary meteorological observatory. Workout the IST value of Ludhiana (Longitude 750 50/ E) at 7.00 LMT. (3 + 2)

Q. 11. On what principal wet bulb thermometer works? Under which condition the readings of both dry and wet bulb thermometers will be same? (4 + 1)

Q. 12. Why we paint the USWB Class A Pan Evaporimeter with white colour. What are the components of an ordinary rain gauge. (3 +2)