

CG PVPT 2023 Question Paper

Q.1 According to Ohms law-----

- A. the current increases with the increase in voltage
- B. the resistance increases with increase in current
- C. the resistance increases with increase in voltage
- D. the resistance and current both increases with increase in voltage

Q.2 Centrifugal pump is a -----

- A. Turbomachinery
- B. Flow regulation device
- C. Drafting device
- D. Intercooling device

Q.3 A heater coil is cut into two equal parts and only one part is now used in the heater. The heat generated will now be

- A. One fourth
- B. Halved
- C. Doubled
- D. Four times



Q.4 If the mass of the earth and radius suddenly become 2 times and $\frac{1}{4}$ th of the present value, the length of the day becomes

- A. 24 hr
- B. 6 hr
- C. $\frac{3}{2}$ hr
- D. 3 hr

Q.5 A force of 7 kgwt is sufficient to pull a block of 10 kgwt over a flat surface. What is the angle of friction?

- A. 34.99°
- B. 26.34°
- C. 39.24°
- D. 45°

Q.6 In the space above the mercury column in a barometer tube, the gauge pressure of the vapour is

- A. Positive, but more than one atmosphere
- B. Negative
- C. Zero
- D. Positive, but less than one atmosphere

Q.7 A simple machine

- A. Magnifies the momentum only
- B. Enables us to do more work by less efforts
- C. Changes the direction of the force in all circumstances
- D. None of the above

Q.8 The eye defect, astigmatism can be corrected by using

- A. Convex lens
- B. Concave lens
- C. Cylindrical lens
- D. It can never be corrected by a lens

Q.9 The velocity Ratio of a machine is more than 1. It

- A. Acts as a force multiplier
- B. Gives loss of speed
- C. A and B both
- D. Either A and B



Q.10 Which of the following statement is not correct?

- A. Conduction can occur easily in solids, less easily in liquids but hardly at all in gases
- B. Heat energy is carried by moving particles in a convection current
- C. Heat energy is carried by electromagnetic waves in radiation
- D. The temperature at which a solid change into a liquid is called the boiling point

Q.11 Which of the following aliphatic carboxylic acid is a solid at room temperature?

- A. Heptanoic acid
- B. Octanoic acid
- C. Nonanoic acid
- D. Decanoic acid

Q.12 "Gold number" is used for measurement of which property among the following?

- A. Emulsifying strength
- B. Protective power

- C. Coagulation power
- D. Peptization power

Q.13 . Fertilizer which supply only one major plant nutrient is

- A. Straight fertilizer
- B. Complex fertilizer
- C. Complete fertilizer
- D. Double fertilizer

Q.14 In an element the number of unpaired electron in 3p is maximum. Its atomic number will be

- A. 23
- B. 33
- C. 15
- D. 26

Q.15 With increase in temperature, which of these changes?

- A. Molality
- B. Fraction of solute present in water
- C. Weight fraction of solute
- D. Mole fraction

