Sample Questions with four alternative choices

1. An external gear with 60 teeth meshes with a pinion of 20 teeth, module being 6 mm. What is the centre distance in mm?

(a) 120 (b) 180 (c) 240 (d) 300

2. The measurement of temperature is based on which law of thermodynamics?

(a) Zeroth law of thermodynamics (b) First law of thermodynamics (c) Second law of thermodynamics (d) Third law of thermodynamics

3. CAD stands for

(a) Computer-aided Drawing (b) Computer-aided design (c) Computer aided drafting (d) All of these

4. Water at 42°C is sprayed into a stream of air at atmospheric pressure, dry bulb temperature of 40°C and a wet bulb temperature of 20°C. The air leaving the spray humidifier is not saturated. Which of the following statements is true?

(a) Air gets cooled and humidified (b) Air gets heated and humidified (c) Air gets heated and dehumidified (d) Air gets cooled & dehumidified

5. Environment friendly refrigerant R134a is used in the new generation domestic refrigerators. Its chemical formula is

(a) CH C1 F2 (b) C2 H2 F4 (c) C2 C12 F4 (d) C2 C13 F3

6. M06 is used for (a) Tool change (b) Program stop (c) Clamp (d) Spindle stop

7. In PERT analysis a critical activity has

(a) zero Float (b) maximum Float (c) minimum Cost (d) maximum Cost

8. When the temperature of a solid metal increases,

(a) strength of the metal decreases but ductility increases (b) both strength and ductility of the metal increase (c) both strength and ductility of the metal decrease (d) strength of the metal increases but ductility decreases

9. In a machining operation, doubling the cutting speed reduces the tool life to 1/8 of the original value. The exponent n in Taylor

(a) 1/2 (b) 1/3 (c) 1/4 (d) 1/8

10 Which one of the following mediums is used for the fastest cooling rate of steel quenching? (

a) Air (b) Oil (c) Water (d) Brine