No. of Printed Pages : 4
Roll No. .....

182512

1st year / Textile Design

Subject : Applied Science

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Objective type questions. All questions are compulsory (10x1=10)

Q.1 Write formula for Power. (CO3)

Q.2 Name two modulus of elasticity. (CO4)

Q.3 S.I. unit of temperature is _____ (CO5)

Q.4 Give one property of heat radiation. (CO6)

Q.5 Write formula for Molarity of any solution. (CO9)

Q.6 Give two examples of electrolytes. (CO10)

Q.7 S.I. units of energy is _____ (CO3)

Q.8 Write formula for surface tension. (CO4)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. 2x8=16

Q.26 State law of conservation of energy of a freely falling body and prove that total energy is always constant. (CO3)

Q.27 (a) Define Surface Tension. What is the effect of temperature on surface tension. (CO4)

(b) Define and give formula, units of gauge pressure, absolute pressure. (CO4)

Q.28 Explain any 2 Industrial applications of Electrolysis in detail. (CO10)

Q.9 Write formula for strength of solution. (CO9)

Q.10 Materials through which electricity can pass are called _____ (CO10)

SECTION-B

Note: Very short answer type questions. Attempt any five questions out of seven questions. 5x2=10

Q.11 Define Kinetic Energy. Give one example. (CO3)

Q.12 Define Visosity. (CO4)

Q.13 Give any two differences between Heat and Temperature. (CO5)

Q.14 Define convection method of transfer of heat. (CO6)

Q.15 Define acidity. Give formula. (CO9)

Q.16 Write two industrial applications of PH. (CO10)

Q.17 Define gauge pressure. Give Formula. (CO4)

SECTION-C

Note: Short answer type questions. Attempt any six questions out of eight questions. 6x4=24

Q.18 Write four examples of transformation of energy. (CO3)

Q.19 Define Bulk modulus of elasticity. Derive formula (CO4)

Q.20 Explain kelvin and farenheit scale of temperature measurement with diagram. (CO5)

Q.21 Write any four properties of heat radiations.(CO6)

Q.22 What is the strength of a solution having 0.36 gm of glucose dissolved in 250 ml of water. (CO9)

Q.23 State Faraday's two laws of Electrlysis. (CO10)

Q.24 Define Stress, Strain, modulus of elasticity, Viscosity with formula. (CO4)

Q.25 Define potential energy. Derive expression for it. (CO3)