DVOC
Trade (Ref & Aircond, Med Imaging)
Subject : Applied Physics

Time : 2 Hrs.   M.M. : 50

SECTION-A

Note: Very short questions. Attempt all ten questions.
(10x1=10)

Q.1   Give two examples of Derived units.   (CO1)

Q.2   Write dimensional formula of velocity and force.
(CO1)

Q.3   Define Cohesive force.   (CO2)

Q.4   Write formula of Surface Tension.   (CO2)

Q.5   Write condition of resonance.   (CO3)

Q.6   Write one scale for measurement of temperature.
(CO4)

Q.7   Frequency of ultrasonic waves is_____.

Q.8   Heat is _____ of all molecules of body.
(CO5)

Q.9   Ultrasonic waves are used of_____.(CO5)

Q.10 Light is a form of_____   (CO6)

SECTION-B

Note: short answer type questions. Attempt any six questions out of eight questions.   (6x5=30)

Q.11 Explain uses of Dimensional analysis.   (CO1)

Q.12 Convert 5 Newton into Dynes.   (CO1)

Q.13 Define viscosity. Derive formula for coefficient of viscosity.   (CO2)

Q.14 Explain free and forced vibrations with examples.   (CO3)

Q.15 Explain any two scales for measurement of temperature.   (CO4)

Q.16 Explain any one application of ultrasonic waves in industry.   (CO5)

Q.17 Define reflection explain laws of reflection.
(CO6)

Q.18 Explain magnetostriction effect for production of ultrasonic waves.   (CO5)

SECTION-C

Note: Long answer questions. Attempt any one questions out of two questions.   (1x10=10)

Q.19 Explain principle, construction and working of overhead projector.   (CO6)

Q.20 Explain principle, construction and working of visco meter.   (CO2)