

V.P & R .P.T.P. SCIENCE COLLEGE

F.Y.B.SC.SEM-II

FIRST INTERNAL TEST

PHYSICS USO2CPHY01

DATE-16/3/16

Time-1.30 pm to 2.30pm

WEDNESDAY

TOTAL MARK-25

Q=1 The multiple choice questions.

[3]

- (1).....believed in absolute time.
(a) Maxwell (b)Galileo (c)Einstein (d)Galileo and Newton
- (2)The density of ether is.....
(a)1 (b)1.5 (c)zero (d)infinite
- (3)The time period of simple pendulum having infinite length is.....
(a) infinite (b) 1 (c) zero (d) none of above



Q.2 Short questions.(any two)

[4]

- (1)Write drawbacks of a simple pendulum.
(2)State the condition for maximum and minimum time period of a compound pendulum.
(3)Define event and observer.
(4)State the fundamental postulates of special theory Of relativity.

Q.3 Draw diagram of a bar pendulum and explain how to determine 'g' using bar pendulum.

[9]

OR

Draw a diagram of kater's pendulum stating the meaning of each symbol write the equation for the 'g' using Kater's pendulum.

[9]

Q.4(a)Discuss Lorentz Fitz Gerald length contraction.

[5]

(b) Derive relation between energy and momentum.

[4]

OR

(a) Derive Galilean transformation Equation.

[5]

(b) Explain the experimental arrangement of MichelsonMorley experiment.

[4]