

Seat No.	01625
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**B.Sc. (Part - I) (Semester - I) (CBCS) Examination,  
November - 2018  
PHYSICS (Paper - II)  
Mechanics - II  
Sub. Code : 71604**

Day and Date : Friday, 16 - 11 - 2018

Total Marks : 50

Time : 12.00 noon to 02.00 p.m.

- Instructions :
- 1) All questions are compulsory.
  - 2) Figures to the right indicate full marks.
  - 3) Draw neat labeled diagrams wherever necessary.
  - 4) Use of scientific calculator is allowed.

Q1) Select the correct alternative from the following:

[10]

- i) Period of the satellite does not depend on \_\_\_\_\_.
  - a) radius of the earth
  - b) mass of the earth
  - c) height of the satellite
  - d) mass of the satellite
- ii) The fundamental force which holds the planets in their orbits around the sun is \_\_\_\_\_ force of attraction.
  - a) electromagnetic
  - b) nuclear
  - c) electrostatic
  - d) gravitational
- iii) SI unit of gravitational constant is \_\_\_\_\_.
  - a)  $\text{Nm}^2 \text{kg}^2$
  - b)  $\text{Nm}^2 \text{kg}^{-2}$
  - c)  $\text{Nm}^2 \text{s}^{-2}$
  - d)  $\text{Nm kg s}^{-2}$
- iv) The vibratory motion of the body is said to be heavily damped, if the damping force is \_\_\_\_\_ the restoring force.
  - a) much greater than
  - b) much less than
  - c) equal to
  - d) less than
- v) The oscillatory motion of the body about its mean position only under the action of restoring force developed is called \_\_\_\_\_ oscillatory motion.
  - a) damped
  - b) free
  - c) over damped
  - d) forced
- vi) A beam fixed horizontally at one end and loaded at the other is called as \_\_\_\_\_.
  - a) bent beam
  - b) loaded beam
  - c) cantilever
  - d) unloaded beam

