Course Code : 1BSC5
Course: PHYSICS –I
Credit: 4
Last Submission Date : April 30 (for January Session)
October 31, (for July session)

Max.Marks:-30
Min.Marks:-10

Note:-attempt all questions.

Que.1   Derive Newton's second and third laws.
U;wVu ds xfr l ca/kh f}rh; rFkk r`rh; fu;e dks fuxfer dhft,\

Que.2   Derive Gauss and poison's equations.
Xkkl vkSj ik;l u ds l ehdj.kka dks fuxfer dhft,\

Que.3   What is moment of inertia? Explain the difference between inertia and moment of inertia.
tMRo rFkk tMRo vk/kuukl es vrj crkb,A

Que.4   Define simple pendulum and prove that.
$$T = 2\pi \sqrt{l/g}$$

Que.5   Define quality factor and prove that-
$$Q = \frac{w}{2\Delta w}$$

Que.6   Explain lascivious figures with example.
mnkgj.k l fgr fyLl ktwfp= dh 0;k[;k djsA

Que.7   State Bernoulli's theorem and prove that:-
$$P + \frac{1}{2} pv^2 = \text{Costant} \; (fu; rkad)$$
Where symbols have usual meanings.
cjukSyh ies; dks fy[kar Fkk fl /n djs fd &

Que.8   What is Reynolds's number? Explain its significance.
jsukiYM la[;k D;k gS\ bl dh l kFkkdrk l e>kb,A

Que.9   Describe CRO with neat diagram.
CRO कैथोड किरण कंपन दर्शी का सचित्र वर्णन करें।

Que.10   What is diffraction of sound explain principle of sonar system.
/ofu dk foorlu D;k gS\ l ksukj iz.kkyh ds fl /nkar dh 0;k[;k djsA