UG 3rd Semester Examination 2020
PHYSICS
Course Code: PHY-H-GE-P-01
[PRACTICAL]
(Mechanics)

Full Marks : 20   Time : 2 Hours

The figure in the right-hand margin indicates marks

Answer any four questions: (5x4 = 20)

1. How least count is calculated? How can the radius of a solid sphere be measured with a vernier caliper?   2+3
2. What does Young's modulus depend on? Does stress depends on Young's modulus? Why Young's modulus is important?   2+1+2
3. What is a sextant? How can the height of a building be determined by it?   1+4
4. What is inertia? Describe an experimental setup to determine the moment of inertia of a flywheel.   1+4
5. How can the modulus of rigidity of a wire be determined by Maxwell's needle?   5
6. How can you determine the elastic constant of a wire by Searle's method?   5
7. What do you mean by a bar pendulum? How it can be used to determine 'g'?   1+4
8. How you can determine 'g' (acceleration due to gravity) by Kater's pendulum?   5
9. By studying the motion of a spring how you can calculate spring constant and 'g'?   5