

UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA

Internal Assessment – II
1st Semester – 2024(Winter)
TH2: Applied Physics- I (Common)

Full Mark: 20

Time: 1 hour

- 1) Answer any FIVE questions [2 × 5 =10]
- a) Write the dimension of torque and force.
 - b) Define momentum of a body .
 - c) Define power and mention its SI unit.
 - d) Write moment of inertia of a sphere.
 - e) Define angle of contact of a liquid surface.
 - f) Define hydrodynamics of a system.
 - g) Define specific heat capacity and mention its types.
- 2) Answer any TWO questions [5 × 2 =10]
- a) Define angular momentum of a rigid body and derive its mathematical expression.
 - b) Explain the working principle of Fortin's barometer.
 - c) Derive a relation between coefficient of linear and cubical expansion.
 - d) Explain working of pyrometer and mention its uses.