QUIZ NO: 561

TOPIC: ENGINEERING MECHANICS

DATE: 01/03/2022

1. **The moment of inertia for an area relative to a line or axis perpendicular to the plane of area is called**

   [A] Polar moment of force

   [B] Moment of force

   [C] Polar moment of inertia

   [D] Moment of inertia

   Answer: C

2. **The point in a plane figure at which whole area of the figure is assumed to act is called**

   [A] Centre of pressure

   [B] Centre of gravity

   [C] Centroid

   [D] Shear center

   Answer: C

3. **A right-angled triangle revolving about its perpendicular side forming a ___solid.**

   [A] Pyramid

   [B] Frustum

   [C] Prism

   [D] Cone

   Answer: D

4. **The distance of centre of gravity of semicircle of radius 3 cm, lies at a distance**

   [A] 3/π from the diameter

   [B] 4/π from the diameter

   [C] 4/3π from the diameter

   [D] 3/4π from the diameter

   Answer: B

5. **The distance from an axis of reference where the mass or area of body is assumed to be concentrated is called**

   [A] Radius of gyration

   [B] Centre of gravity

   [C] Moment of inertia

   [D] Centroid

   Answer: A

To PURCHASE Our COURSES

CLICK

LIVE CLASSES	
Assistant Engineer Standard 2022	
Overseer Standard 2022	
Assistant Engineer Courses	**Overseer Courses**
Assistant Engineer / Overseer Grade I	Overseer Grade I - Economical
Assistant Engineer – Kerala Pollution Control Board	Junior Instructor Surveyor
Assistant Engineer essential	Irrigation LSGD Overseer
Assistant Professor - Part A	
GATE 2022 Civil Prerecorded	
TEST SERIES (With detailed solution)	
Online Test Series Combo	PCB Test Series
AE Test Series	SSC JE Subjectwise
OVERSEER Test Series	GATE 2022 Test Series
ISRO Test Series	Full length tests – GATE
SSC JE CIVIL Test Series	Topicwise tests for GATE
SSC JE Full Length Tests	Subjectwise Test series – GATE
e - BOOKS	
HANDWRITTEN NOTES – e- book	
e – Book for Civil Engineering INTERVIEWS	
150 PYQ e - book	
Mechanical Engineering e - Book	
Assistant Engineer & Overseer Quick Reference e - Book	
GATE e-Book	
Civil Engineering MCQ – e Book	
Overseer PYQ detailed – e Book	

6. **The ratio of moment of inertia of a rectangle about its centroid axis to the moment of inertia about its base**

   [A] 1/4

   [B] 1/2

   [C] 3/4

   [D] 2

   Answer: A

7. **The moment of inertia of a rectangular section 3 cm wide and 4cm deep about x-x axis is**

   [A] $9cm^4$

   [B] $12cm^4$

   [C] $16cm^4$

   [D] $20cm^4$

   Answer: C

8. **The C.G of a solid circular cone, divides the axis in the ratio**

   [A] 4:1

   [B] 3:2

   [C] 2:1

   [D] 3:1

   Answer: A

9. The mass moment of inertia of a solid sphere of radius 'r' about any axis passing through its centre of mass 'm' is :

[A] mr^2

[B] $mr^2/2$

[C] $mr^2/5$

[D] $2mr^2/5$

Answer: D

10. The centre of gravity of hemisphere lies at a distance of _____ from its base measured along the vertical radius:

[A] 3/8r

[B] 3r/8

[C] 8r/3

[D] 8/3r

Answer: B