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Roll No. .....

E-883

B.E. First Semester (Re-Exam) Examination, December-2018

Engineering Drawing (ECE-103T)

BE (CSE, ECE)

Time : Three Hours] *[Maximum Marks : 75*

[Min Marks : 30

Note : Attempt **all** questions of **Section-A, four** from **Section-B** and **three** questions from **Section-C.**

Section-A

1. (a) The angle which we can't make using both teh set-squares is _____ :

   (a) 15°, (b) 105°

   (c) 165° (d) 125°

   (b) What is the standard length and width of the arrowhead of dimension lines?

   (a) 2mm and 2mm, (b) 3mm and 1mm

   (c) 4mm and 2 mm (d) 3mm and 2mm

   (c) A line AB is on the profile plane inclined such that ends of line are 10, 12 cm away from horizontal plane, which view from the following gives the actual length of the line AB?

   (a) Front view, (b) Top view

   (c) Side view (d) Isometric view

   (d) Which of the following is not the purpose of using cutting (section) plane?

   (a) Interpretation of object, (b) Visualizing of object

P.T.O.

(c) Cutting the objects, (d) Invisible features

(e) A section is perpendicular to both the reference planes the true shape and size is obtained by taking projection of section on to _____ plane.

(a) Horizontal (b) Vertical

(c) Profile (d) Auxiliary

(f) A pentagon pyramid is placed on V.P. with square as base on V.P. the cutting plane is parallel to H.P. and parallel to edge of base, the section will be _____:

(a) Triangle, (b) Rectangle

(c) Trapezium (d) Pentagon

(g) The development of the lateral surface of a cylinder is a rectangle having one side equal to the _____ of its base-circle and the other equal to its length.

(a) Circumference (b) Area

(c) Diameter (d) Radius

(h) The development of lateral surface of a pyramid consists of a number of equal _____ triangle in contact.

(a) Equilateral (b) Isosceles

(c) Scalene (d) Right angle

(i) The development of the surface of a cube consists of _____ equal squares, the length of the side of the squares being equal to the length of the edge of the cube.

(a) 4 (b) 6

(c) 12 (d) 8

(j) Which method is used to develop transition pieces?

(a) Parallel-line development, (b) Approximation method

(c) Triangulation development, (d) Radial-line development

Section-B

2. Differentiate between continuous or chain dimensioning and progressive or parallel dimensioning system strictly with the help of a suitable drawing.

3. A point A, is 25mm above HP and is in first quadrant. Its shortest distance from

the XY line is 50mm. Draw its plan and elevation.

4. A line AB is contained by a profile plane. Its end A is 44mm behind VP and 12mm below HP and end B is 8mm behind the VP and 52mm below the HP. Draw its projections and find out its TL, θ, ϕ, HT and VT.
5. A regular hexagonal lamina, of side 30mm has a central hole of ϕ34mm. Draw the front and top views when the lamina is resting on HP on one of its side such that the side is parallel to VP and the plane of the lamina is inclined to the HP at an angle of 40^0.
6. A cube of 40mm edge is resting on HP on one of its corers such that one of its body diagonal is parallel to HP and inclined at 45^0 to VP. Draw its projections.
7. Explain in brief :
   (a) Wireframe modelling; (b) Surface modelling
   (c) Solid modelling

Section-C

8. Draw the projections of a straight line AB, 100mm long inclined at 450 to the HP and 30^0 to the VP. A is in the HP and B is in the VP. Find the shortest distance between AB and the XY.
9. A 60^0 set square with its 200mm longest side lying in the HP has its surface inclined at 30^0 to the HP. The resting edge is inclined at 30^0 to the VP. Draw the projection of the set square.
10. A cube, edge of base 32mm, is cut by a section plane such that the true shape of the section is a regular hexagon. Draw the front and top views of the cube and find the length of sides of the hexagon in the true shape of the section.
11. A cone of 110mm base diameter and 50mm height is interpenetrated by a hexagonal prism of 30 mm side such that their axes coincide and are vertical. One of the faces of the prism is parallel to the VP. Obtain the elevation and side view of the prism and cone, showing the interpenetration curve.
12. Draw an isometric view of circular disc 75mm diameter and 20mm thick mounted centrally on a shaft 20mm diameter and 75mm long.

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E-181

B.E. I Semester (Main & Re) Examination, Dec. 2015

Workshop Concept

Branch : ME

Maximum Marks-75

Time: Three Hours]

Minimum Marks-30

Note : Attempt **all** the questions of Section-A. **Four** from Section-B and **three** questions from Section-C.

Section-A

(Objective Type Questions)

Note : This section will contain **ten** objective type questions. They may be fill in the blanks , **True/False** or Multiple Choice Type. 1.5×10=15

1. Name the materials used to make electrode for resistance welding.
2. Define the term ' Machining'.
3. Define the term 'Arc Blow'.
4. The swing diameter over the bed is ..... the height of centre measured from bed of lathe.
5. What are ' Chaplets'?
6. What do you mean by ' Core- Print'?
7. Define ' Angle of Bite'?
8. Define ' Slitting'.
9. What is Powder Mattallurgy?
10. Define Sintering Process.

P.T.O.

Section-B

(Short Answer Type)

Note : This section will contain **six** questions. Students will ask to attempt any **four** questions out of six questions. 6×4=24

1. Explain various part of a Shaper machine tool. With a neat & clean sketch.
2. Explain various operation performed on Drilling Machine.
3. Differentiate b/w Forward and Backward extrusion process.
4. Explain Basic Element of Gating System.
5. What is function of flux in welding? Explain the term ' Polarity'.
6. Write short note on .
   (1) Galvanising.
   (2) Electroplating.

Section-C

(Long Answer Type)

Note : This section will contain **four** questions. Students will ask to attempt any **three** questions out of four questions. 12×3=36

1. Explain principle parts of Lathe machine tool. Discuss three method of doing taper turning on Lathe machine.
2. With the help of neat sketch, explain process of resistance spot welding. How neat balance is obtained in spot welding process. Distinguish between gas welding and gas cutting.
3. Explain in detail main characteristics of metal powders upon which properties of finished product depend.
4. With the help of sketch, explain working principle of Cupola. Also write its limitations. Explain metallurgical defect in casting with reason and remedies.

...linear stress to linear strain is called Young's modulus.