Sample Questions ESE ATKT SEP2020 (CBCGS-H)

Subject: Engineering Graphics & Design (ESC102)

1. All the dimensions are aligned in such a way that an arrowhead of one dimension touches tip-to-tip the arrowhead of the adjacent dimension. (1) a) Parallel dimensioning
b) Chain dimensioning
c) Combined dimensioning
d) Consecutive dimensioning

2. If RF = (Length on drawing) / (Actual Length) then RF >1 represents (1)

a) Enlarging Scales
b) Reducing Scales
c) Natural Scale
d) True Scale

3. Curves generated by a fixed point on the circumference of a circle, which rolls without slipping along a fixed straight line or a circle is called as (1) a) Involute

b) Cycloidal Curves

c) Cylindrical Helix

d) Pitch

4. The helix on a cylinder is called the _____ curve (1)

a) Involute

b) Helical curve

c) Cylindrical Helix

d) Pitch

5. R50 for a circle represents (1)

a) Diameter of circle is 50 units

b) Radius of circle is 50 units

c) Pith of circle is 50 units

d) Circumference of circle is 50 units

6. VP is called as (1)

a) Horizontal Plane

b) Vertical Plane

c) Profile Plane

d) Apparent Plane

7. a'b' represents (1)

Front View (FV) of a line

Top View (TV) of a line

Side View (TV) of a line

True Length (TL) of a line

8. If A point B is 20 mm above HP and 30 mm behind VP, it is located in [2M] a)

1^{st} Quadrant

b) 2^{nd} Quadrant

c) 3^{rd} Quadrant

d) 4^{th} Quadrant

9. A line AB 70 mm long has its ends A 10 mm above the HP & 15 mm in front of VP. it's another end B is 45 mm above the HP and 60 mm in front of the VP. The FV inclination with XY is [2M] a) $\alpha = 40^0$

b) $\alpha = 30^0$

c) $\alpha = 50^0$

d) $\alpha = 60^0$

10. A line AB 70 mm long has its ends A 10 mm above the HP & 15 mm in front of VP. It's another end B is 45 mm above the HP and 60 mm in front of the VP. The TV inclination with XY is [2M] a) $\beta = 40^0$

b) $\beta = 60^0$

c) $\beta = 70^0$

d) $\beta = 50^0$

11. The solid which is bounded by plane surfaces is called _____.

(1) a) Polyhedron
b) Tetrahedron
c) equilateral triangular
d) rhombus

12. The unfolding of all _____ of the object on a plane is called development

(1) a) Line
b) Point
c) Surfaces
d) Volume

13. The development of a curved surface of a cylinder will be a (1)

(a) rectangle
(b) sector
(c) triangle
(d) circle

13. Section lines (hatching lines) are generally drawn at an angle of _____ to the axis of the section. (1)

a) 25^0
b) 15^0

c) 85^0

d) 45^0

15 . In isometric projection, dimension lines are drawn parallel to _____. (1)

a) Isometric axes

b) Non-Isometric axes

c) Horizontal line

d) Vertical line

16. Which tool can be used to draw a 90 degree angle. (1)

30/60 Triangle

Protractor

Drafter

All of the above

17. The top view of an object should typically be drawn _____ (1)

To right of FV

Directly below FV

Anywhere on the same page

On separate piece of paper

18. The type of solid which has two bases that are parallel with equal polygon____

(1) Pyramid

Prism

Cone

Torus

19. If a circle is inclined to VP at 30° then its FV will look like____ (2)

Circle

Rhombus

Ellipse

Square

20. lines are used to locate or represent the centers of _____ (1)

Arc

Circles

Hidden round features

All of the above

21. Line to be drawn, if overlapping of hidden line, continuous line and section line occurs (1)

Hidden Line

Continuous line

Section line

Centre line

22. The adjacent length made by the projection of front view true length is called as _____. (1)

True Length

Plan Length

Elevation Length

Front view

23. A curve traced by an end of a string or thread, when it is unwound from a circle or a polygon. (1)

Involute

Helix

Cycloid

Evolute

24. The hatching line representing the sectional part of object is inclined at an angle of ____ degree (1)

0

30

45

60

25. In projection of lines, as per the master diagram the elevation length is represented by ____ (1)

a'b'

a'b_2'

ab_1

ab

26. In orthographic Projection, the right side view will be placed _____ Front View

(1) Just below the

Just right hand side of

Just left hand side of

Diagonal to

27. When a line is situated in both HP and VP, it must lie on _____.

(1) Horizontal Plane

Reference Line

Vertical Plane

Profile Plane

28. In third angle projection method, object is assumed to be placed in _____

(1) 2nd Quadrant

3rd Quadrant

1st Quadrant

4th Quadrant

29. Eccentricity of _____ (1)

Parabola is equal to 1

Hyperbola is greater than 1

Ellipse is less than 1

All of the above

30. Circles are dimensioned by their ____ (1)

Radii

Diameter

Strictly Diameter only

Strictly Radii only

31. A line PQ is on the vertical plane inclined to a horizontal plane at 45 degrees, which view from the following gives the actual length of the line PQ (2)

Top view

Front view

Side view

Isometric view

32. A solid object having four triangular surfaces of equal area (1)

Triangular Pyramid

Triangular prism

Tetrahedron

All of the above

33. If a right angle triangle is made to revolute about one of its perpendicular sides the solid formed is ____ (1)

Cube

Triangular prism

Cone

Cylinder

34. If a line PQ lies on horizontal plane and vertical plane, then which of the following view gives a point? (1)

Side view

Front view

Top view

Isometric view

35. The external angle of regular pentagon is ___ degree. (2)

72

108

120

150