DR. SUBHASH
TECHNICAL CAMPUS

Subject: - Engineering Graphics and Design
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A
Multiple Choice Questions Bank
for
Online GTU Examination

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Introduction to Engineering Graphics	
1	A French curve is used to draw (a) Circles (b) Ellipses (c) Smooth freefrom curves (d) Polygon
2	Which one of the following is not a reduction scale ? (a) 1:1 (b) 1:200 (c) 5/320 (d) 5:6
3	To draw the leader line, which type of the following line is used? (a) Continuous thick line (c) Long chain thin line (b) Continuous thin wavy line (d) Continuous thin line
4	When the drawing are drawn smaller than the actual size of object then scale is known as (a) Reduced Scale (c) Enlarged Scale (b) Full Scale (d) None of Above
5	If the 10 m length is represented as 1 mm on the map then representative fraction is (a) 1/100 (b) 1/1000 (c) 1/10 (d) None of above
6	Enlarge scale are generally used for drawing of _____. (a) Very small object (b) large object (c) Heavy weight object (d) object of any size
7	The type of line used to draw hidden edges in orthographic projection is (a) Dashed (b) long dashed dotted (c) long dashed double dotted (d) Continuous thin
8	For scale, which one is not correct (a) 1:2 (b) 1:20 (c) 1:1/2 (d) 1/2
9	Representative fraction is ratio of a. Maximum length/Minimum length b. Actual length of object/Length of object in drawing c. Length of object in drawing/Actual length of object d. All of these
10	Dashed line is used to draw… a) Outer Edges b) Projections c) Center & Center axis d) Hidden faces

11	A short break line is used to indicate a (a) Broken part (b) part to be broken (c) long part of uniform cross section (d) short part of non-uniform cross section
12	The type of line used to indicate a cutting plane is (a) Dashed (b) long dashed dotted (c) long dashed double dotted (d) continuous freehand
13	The size of the drawing drawn to scale 2:1 will be _____ the actual size. (a) Same as (b) twice of (c) half of (d) none of a,b, and c
14	If an area of Y2 is represented by an area of X2 on a drawing, then the RF is equal to (a) X/Y (b) X^2/Y^2 (c) $\sqrt{X}$ / $\sqrt{Y}$ (d) $\sqrt{X^2}$ / $\sqrt{Y^2}$
15	Scale used when the lengths are required in three consecutive units is a. Plain b. Vertical c. Diagonal d. Vernier
16	**In aligned system of dimensioning, the dimensions may be read from _____.** **a. Bottom or right hand edges** b. Bottom or left hand edges c. Only from bottom d. Only from left side
17	**The Length:Width in case of an arrow head is _____.** **a.** 1:1 b. 2:1 c. **3:1 d.** 4:1
18	**The following line is used for visible outlines _____.** a. **Continuous thick b.** Continuous thin c. Chain thin line d. Short zigzag thin
19	**The internal angle of regular pentagon is ___ degree.** a. 72 b. **108 c.** 120 d. 150
20	**The following line is used for dimension line _____.** a. Continuous thick b. **Continuous thin c.** Chain thin line d. Short zigzag thin
21	**The internal angle of regular hexagon is ___ degree.** a. 72 b. 108 c. **120 d.** 150

22	**The dotted lines represents _____.** a. **Hidden edges b.** Projection line c. Centre line d. Hatching line
23	**Hatching lines are drawn at ___ degree to reference line.** a. 30 b. **45 c.** 60 d. 90
24	**A line of 1 meter is shown by 1cm on a scale. Its Representative fraction (RF) is ____.** a. 1 b. 100 c. **1/100 d.** 1/50
25	**The following is not included in title block of drawing sheet.** a. Sheet No b. Scale c. Method of Projection d. **Size of sheet**
Loci of Points	
1	The locus of a point P about another point O such that its distance from O is constant is _____ a) a line passing through O b) two parallel lines equidistant from O c) **a circle with center O** d) a curve with O in it
2	The locus of a point P such that its distance from a fixed line AB is constant is_____. a) a circle with AB as a largest chord (diameter) b) a line perpendicular to AB passing through the midpoint of AB c**) a line parallel to AB** d) a line perpendicular to AB cutting AB at centre
3	Locus of a point P equidistant from two fixed points A and B is _____ a) an ellipse **b) a line perpendicular to AB passing through the midpoint of AB** c) a circle with AB as largest chord d) a parallel line of AB
4	The locus of point which is equidistant from 2 non parallel lines is _____ **a) a straight line bisecting the angle between them** b) a line which cuts both lines at same distances from point of intersection of given lines c) a closed curve around them d) a line perpendicular to the 1st line

5	Locus of a point P equidistant from a fixed line and fixed point F is _____ a) a circle with centre F b) an ellipse with foci P and F **c) a parabola** d) a hyperbola
6	Locus of the point P such that the sum of distances from two fixed points is always constant is _____ **a) an ellipse** b) a hyperbola c) a parabola having those fixed point on its axis d) a line perpendicular to line joining those two points and passing through the midpoint of it
7	A sliding member AB has attached to a rocker BC, this BC is attached to crank CD. D is fixed end and as crank is rotating about D the slider slides parallel to it. What is the locus of point P on any point on the rocker? **a) Ellipse** b) Circle c) Line d) Semi-circle
8	A sliding member AB has attached to a rocker BC, this BC is attached to crank CD. D is fixed end and as crank is rotating about D the slider slides parallel to it. What is the locus of C? a) Ellipse **b) Circle** c) Line d) Semi-circle
9	Locus of the point P which is rotating about another point O with uniform angular velocity and the PO is increasing at a constant rate is _____ a) an ellipse **b) archimedean spiral** c) helix d) logarithmic spiral
10	The locus of point P whose perpendicular distance from a fixed line and distance from a point T is equal is _____ a) a circle b) an ellipse **c) a parabola** d) a hyperbola
11	The locus of point P moving such that the ratio of the lengths of consecutive distances from point O enclosing equal angles is always constant is_____ a) archimedean spiral **b) logarithmic spiral** c) a parabola d) a circle

Engineering Curves	
1	If the generating point is on the generating circle and the generating circle is outside the directing circle, the curve obtained is: (a) Inferior hypotrochoid **(b) epicycloids** (c) hypocycloid (d) superior trochoid
2	Name the solid formed by revolving right angle triangle with one of its perpendicular side fixed. **(a) Cone** (c) Cylinder (b) Tetrahedron (d) Octahedron
3	A curved traced out by a point which moves uniformly both about the centre and at the same time away or towards the centre is known as (a) Involute **(b) Archemedian spiral** (c) Cycloid (d) None of above
4	The eccentricity of which of the following curve is greater than one? (a) Ellipse (b) Parabola **(c) Hyperbola** (d) None of above
5	When a cone is cut by a plane perpendicular to base passing through the apex "the shape of section obtained is. (a) ellipse (b) parabola (c) hyperbola **(d) triangle**
6	When the diameter of the directing circle is twice the diameter of rolling circle the hypo cycloid obtained is a (a) Circle **(b)Straight line** (c) Parabola (d)Hyperbola
7	When a right regular cone is cut by a plane parallel to base the shape of section obtained is. a) Ellipse , b) Parabola, c) Triangle , **d) Circle**
8	The value of Eccentricity is less than 1, the curve will be_____. **(a) Ellipse** (b) Parabola (c) Hyperbola (d) cycloid
9	The locus of point on circumference of a circle which rolls, without slipping, outside of a fixed circle is called _____. (a) Hypocycloid **(b) Epicycloid** (c) Trochoid (d) Cycloid

10	When the plane cuts the cone parallel to the generator, the curve traced out is _____. (a) ellipse (b) parabola **(c) hyperbola** (d) triangle
11	In the game of cricket, a ball is thrown from the boundary and reaches the gloves of the wicket keeper, the curve traced out will be _____. (a) Hyperbola (b) Involute **(c) Parabola** (d) Cycloid
12	In isometric projection/drawing the ellipse is normally drawn by which method (a) Arc of circle method (b) Concentric circle method **(c) Four centre method** (d) Oblong method
13	Boyle's law, PV = constant generates a curve which is a (a) Hyperbola **(b) rectangular hyperbola** (c) parabola (d) rectangular parabola
14	The gear tooth profile is in the form of (a) parabola **(b) involute** (c) spiral (d) helix
15	The line joining any point on an Archimedean spiral with the pole is called the (a) shortest radius **(b) radius vector** (c) vectorial angle (d) convolution
16	The sections cut by a plane on a right circular cone are called as _____ a) Parabolic sections **b) Conic sections** c) Elliptical sections d) Hyperbolic sections
17	Which of the following is a conic section? **a) Circle** b) Rectangle c) Triangle d) Square
18	In conics, the _____ is revolving to form two anti-parallel cones joined at the apex. a) Ellipse b) Circle **c) Generator** d) Parabola
19	While cutting, if the plane is at an angle and it cuts all the generators, then the conic formed is called as _____ a) Circle **b) Ellipse** c) Parabola d) Hyperbola
20	If the plane cuts at an angle to the axis but does not cut all the generators then what is the name of the conics formed? a) Ellipse b) Hyperbola c) Circle **d) Parabola**
21	When the plane cuts the cone at angle parallel to the axis of the cone, then _____ is formed. **a) Hyperbola** b) Parabola c) Circle d) Ellipse

22	The locus of point moving in a plane such that the distance between a fixed point and a fixed straight line is constant is called as _____ **a) Conic** b) Rectangle c) Square d) Polygon
23	If the distance from the focus is 10 units and the distance from the directrix is 30 units, then what is the eccentricity? **a) 0.3333** b) 0.8333 c) 1.6667 d) 0.0333
24	If the distance from the focus is 2 mm and the distance from the directrix is 0.5 mm then what is the name of the conic section? a) Circle b) Ellipse c) Parabola **d) Hyperbola**
25	The curve which has eccentricity zero is _____ a) Parabola b) Ellipse c) Hyperbola **d) Circle**
Projections of Points and Lines	
1	If a line is inclined to the Vertical Plane and parallel to Horizontal Plane, then which of the following statements is always CORRECT ? **(a) True Length = Plan Length** (b) True Length ≠ Plan Length (c) True Length > Elevation Length (d) True Length = Elevation Length
2	When the front view of line having a length less than the original length then which of the following is correct? (a) Line is inclined to H.P. (c) Line is inclined to both H.P. and V.P. (b) Line is inclined to V.P. **(d) (b) and (c) both**
3	When a line is inclined to VP and parallel to HP, the front view will be _____ to xy. **(a) parallel** (b) perpendicular (c) inclined at angle φ (d) none of the above
4	A line having length of L is resting on HP on one end and other end is in VP and parallel to profile plan then summation of angle made by line with HP and VP is _____. a) 60^o **b) 90 º** c) 30^o d) 45^o

5	If a line is inclined by 40 ° to H.P. and 50 ° to V.P. than the line is _____to profile plane. (a) aligned (b) Perpendicular **(c) Inclined** (d) Parallel
6	If point C is below HP and behind VP then in which quadrant point C lies? a.First b. Second **c. Third** d. Fourth
7	If $\Theta + \emptyset = 90^0$, then which of the following statements is CORRECT? (a) $\alpha = \beta = 90^0$ (b) side view = TL (c) FV is perpendicular to XY **(d) All of the above**
8	A point 'P' is above Horizontal Plane (HP) and in front of Vertical Plane (VP). The point is in _____. a. **First quadrant** b. Second quadrant c. Third quadrant d. Fourth quadrant
9	When the line is parallel to both Horizontal Plane (HP) and Vertical Plane (VP), we can get its true length in _____. a. Front view b. Top view c. **Both 'a' and 'b'** d. Side view
10	When the line is parallel to VP and perpendicular to HP, we can get its true length in _____. a. Front view b. Side view c. **Both 'a' and 'b' d.** Top view
11	The following method(s) is used to find the true length and true inclination of a line when its front view and top view are given _____. a. Rotation method b. Trapezoidal method c. Auxiliary plane method **d. All of the above**
12	When a point is below HP & in Front of VP it is in (a) First quadrant (b) Second quadrant (c) Third quadrant **(d) Fourth quadrant**
13	Two points are placed in 1st quadrant of projection planes such that the line joining the points is perpendicular to profile plane the side view and top view will be _____ a) **single point, two points** b) two points, single point c) single point, single point d) two points, two points

14	A point is 5 units away from the vertical plane and 4 units away from profile plane and 3 units away from horizontal plane in 1st quadrant then the projections are drawn on paper the distance between the front view and top view of point is _____ a) 7 units b) **8 units** c) 9 units d) 5 units
15	A point is in 2nd quadrant 20 units away from the horizontal plane and 10 units away from the vertical plane. Orthographic projection is drawn. What is the distance from point of front view to reference line, top view point to reference line? a**) 20, 10** b) 10, 20 c) 0, 20 d) 10, 0
16	A point is in 2nd quadrant, 15 units away from the vertical plane, 10 units away from the horizontal plane and 8 units away from the profile plane. Orthographic projection is drawn. What is the distance from point of front view to point of top view? a) **5** b) 2 c) 7 d) 8
17	If a line AB parallel to both the horizontal plane and vertical plane then the line AB is _____ a) parallel to profile plane b) lies on profile plane c) **perpendicular to profile plane** d) inclined to profile plane
18	A line parallel to horizontal plane and at a distance of 10 units to it and both the end of line are 6 units away from the vertical plane. Which of the following statement is false? a) The line parallel to vertical plane b) The side view of line gives a point c) The length of line in front view is 10 units d) **The length of line in top view is 6 units**
19	A line AB is on the vertical plane of projection planes, 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
20	A line AB is on the horizontal plane inclined to a vertical plane at 45 degrees, 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

21	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
22	If a line RS lie on both vertical and horizontal plane then which of the following two views coincides to give a line again? **a) Front, Top** b) Top, Side c) Side, Isometric d) Isometric, Front
23	If a line AB lies on horizontal plane and vertical plane then which of the following view gives a point? a) **Side view** b) Top view c) Front view d) Isometric view
24	A line of length X cm lied on horizontal plane turned 60 degrees with respect to horizontal plane by keeping one of its ends fixed and attained length of Y cm top view. Which of the following statement is true? a) X =Y b) X=2 * Y **c) X= ½ * Y** d) X >Y
25	If a line is in profile plane making an angle of 30 degrees with vertical plane. In which angle the line makes with the horizontal plane? a) Can't say b) 90 degrees c) 0 degrees **d) 60 degrees**
26	The length of line placed in profile plane from front view is product of actual length and ____(angle with horizontal plane). a) cosine **b) sine** c) tangent d) secant
27	When a line is inclined to a plane, produced if necessary. The point in which the line meets the plane is called its _____ a) meeting point b) locus c) complete end **d) trace**
28	If a line meets horizontal plane the point of intersection is called _____ a) **horizontal trace** b) regular trace c) parallel trace d) general trace
29	If a line meets vertical plane the point of intersection is called _____ a) **vertical trace** b) straight trace c) perpendicular trace d) general trace
30	A line is perpendicular to horizontal plane. Its horizontal trace coincides with its _____ view. a) front **b) top** c) side d) isometric

31	A line is perpendicular to vertical plane. Its vertical trace coincides with its _____ view. **a) front** b) top c) side d) isometric
32	A line AB has its one say B end in horizontal plane and vertical plane then horizontal trace and vertical trace will coincide in _____line. a) **xy reference** b) vertical reference c) above xy reference d) below xy reference
Projections of Planes	
1	A square plate of negligible thickness is inclined to HP and perpendicular to V.P. The front view will appear as (a)rhombus (b) square **(c) line** (d) rectangle
2	A square plane is inclined to V.P. & perpendicular to H.P. its top view appears as (a) Rhombus (b) Square (**c) Straight line** (d) Rectangle
3	A plane perpendicular VP and inclined to HP is _____. (a) a plan perpendicular to P.P. (b) an A.V.P. (c) a plan parallel to P.P. **(d) an A.I.P**.
4	When a surface of an object is inclined to a plane of projection, it will appear _____ in the view. **a. foreshortened** b. in true size and shape c. as a line d. as a point
5	Which of the following position is not possible for a plane? a. Perpendicular to both HP and VP b. **Parallel to both HP and VP** c. Perpendicular to HP and parallel to VP d. Perpendicular to VP and parallel to HP
6	The side view of an object is drawn in a. Vertical plane b. Horizontal plane c. **Profile plane d.** Any of the above
7	Oblique planes come under _____ a) planes perpendicular to both reference planes b) planes perpendicular to one reference plane and inclined to other reference plane

	c) **planes inclined to both the reference planes** d) planes parallel to one reference plane and perpendicular to other reference plane
8	The planes which are perpendicular to both the reference plane (horizontal and vertical) are visible clearly only if we watched from _____ a) front view b) top view **c) side view** d) isometric view
9	A plane is held parallel to horizontal plane in which view we can watch drawing on that plane? **a) Top view** b) Front view c) Back view d) Side view
10	A circle is placed at 20 degrees with vertical the view from top view will be _____ a) line b) circle **c) ellipse** d) oval
11	A square is held 30 degrees with horizontal plane and turned 30 degrees with respect to vertical plane keeping earlier condition constant. The top view will be _____ a) line b) square **c) rectangle** d) parallelogram
12	A square is held 30 degrees with horizontal plane and turned 30 degrees with respect to vertical plane keeping earlier condition constant. The front view will be _____ a) line b) square c) rectangle **d) parallelogram**
13	A triangle is placed perpendicular to both the reference planes (horizontal and vertical plane) which of the following statement is true. a) Front view-line, top view- triangle b) Front view-triangle, top view- line **c) Front view –line, top view-line** d) Front view-triangle, side view- line
14	When a plane is perpendicular to both the reference planes, its traces are perpendicular to _____ a**) xy reference line**

	b) lines on horizontal plane c) lines on vertical plane d) lines on given plane
15	A hexagon is placed parallel to vertical plane which of the following projection is true? a) Front view-line, top view- hexagon **b) Front view- hexagon, top view- line** c) Front view –line, top view-line d) Top view- hexagon, side view- line
16	If a plane is inclined with both the reference plane then the plane come under _____ a) auxiliary plane **b) oblique plane** c) perpendicular plane d) cross planes
17	A square is placed in between the reference planes in such a way that one diagonal is inclined to H.P and another diagonal inclined to V.T. Projections are drawn. The front views in 1, 2 and 3 stages are _____ _____ and _____ respectively. **a) line, line, parallelogram** b) line, parallelogram, line c) square, line, parallelogram d) square, rhombus, rhombus
	Projections of Solids, Section of Solids and Development of Surfaces
1	To obtain the true shape of the section of solid, an auxiliary plane is set (a) Inclined at an angle of 45o to a cutting plane (b) parallel to XY (b) Parallel to a cutting plane **(d) perpendicular to a cutting plane**
2	When the cone, resting on base on V.P., is cut by section plane parallel to V.P. then the true shape is _____ and can be seen in _____ view. (**a) Circle, Front** (c) Ellipse, Front (b) Ellipse, Top (d) Circle, Top

3	If front view and side view of a solid is rectangle of equal size than its top view will be **(a) Rectangle** (b) Square (c) Triangle (d) Pentagon
4	A cone is cut by a plane inclined to HP and perpendicular to VP. The cutting plane line will appear in _____. **(a) Front view** (b) Top view (c) Side view (d) none of the view
5	Name the solid formed by four equilateral triangle (a) Square pyramid (b) Triangular pyramid **(c) Tetrahedron** (d) Square prism
6	A cylinder standing on the HP is cut by a vertical plane parallel to the axis and away from it. The shape of the section will be **(a) Rectangle** (b) Circle (c) Ellipse (d) Hyperbola
7	When the axis of the solid is parallel to both HP and VP the view which reveals the true shape of the base is (a) Front view (b) Top view **(c) Side view** (d) None of these
8	A sphere can be described in how many views? a. 4 b. 3 **c. 2** d. 1
9	A cone base diameter 40 mm and axis 60 mm is cut by a plane parallel to the base then the true shape will be a.Parabola **b. Circle** c. Isosceles Triangle d. Regular Triangle
10	A solid is said to be a right solid if- a. **Axis is perpendicular to its base** b. Parallel to its base c. Inclined to its base d. All of these
11	The height of the tetrahedron of 40 mm sides will be _____ 40 mm. **(a) equal to** (b) less than (c) greater than (d) half of
12	The following are the Polyhedron except _____. a. Prism b. Pyramid c. Cube d. **Cylinder**
13	The following are the Solids of revolution except a. **Prism** b. Sphere c. Cone d. Cylinder

14	If a solid is cut by a cutting plane parallel to the base of the solid and top part is removed, the remaining part is called _____. a. **Frustum of a solid** b. Truncated solid c. Oblique solid d. None of the above
15	A right regular hexagonal prism in resting on HP on its base, its top view is a a. Square b. Rectangle c**. Hexagon** d. Pentagon
16	Which of the following position is not possible for a right solid? a. Axis perpendicular to HP and parallel to VP b. Axis parallel to VP and perpendicular to HP c. Axis parallel to both VP and HP d. **Axis perpendicular to both VP and HP**
17	The top view of a right cylinder resting on HP on its base rim is _____. a. Ellipse b. **Circle** c. Rectangle d. Square
18	The following is the method for development of a right regular prism. a. **Parallel line method b.** Radial line method c. Triangulation method b. Approximate method
19	A tetrahedron has four equal ____ faces. a. Square b. Rectangular **c. Triangular** d. None of the above
20	The following is the method for development of a sphere. a. Parallel line method b. Radial line method c. Triangulation method b. **Approximate method**
21	The following is formed by revolving rectangle about one of its sides which remains fixed _____. a. **Cylinder** b. Sphere c. Hemi sphere d. Cone
22	Development of surfaces is used in the development of _____. a. Piping b. Air conditioning duct c. Buckets d. **All of the above**
23	The sectional plane are represented by_____. a. Continuous thick line b. Continuous thin line c. Chain thin line b. **Chain thin line having thick edges**
24	The development of cylinder is a _____.

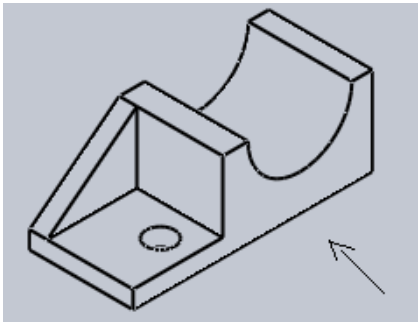
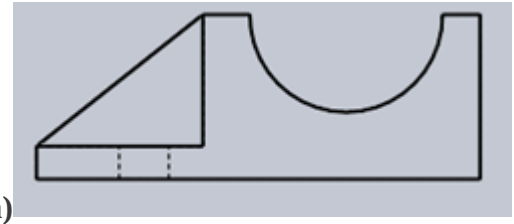
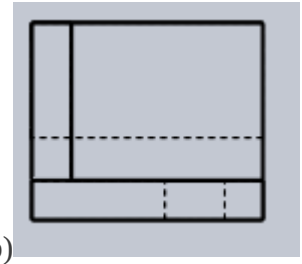
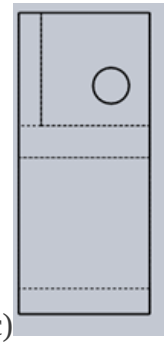
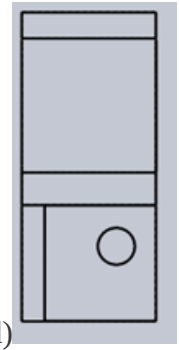
	a. **Rectangle** b. Circle c. Ellipse d. None of the above
25	A right circular cone resting on HP on its base is cut by a section plane parallel to HP, bisecting its axis. The true shape of the section is _____. a. Parabola b. Hyperbola c. Ellipse d. **Circle**
26	The development of lateral surfaces of a pentagonal pyramid is_____. a. Five squares b. Five Rectangles c. **Five triangles** d. None of the above
27	A right circular cylinder resting on HP on its base is cut by a section plane inclined to HP, bisecting its axis. The true shape of the section is a. Parabola b. Hyperbola c. **Ellipse** d. Circle
28	The minimum number of orthographic view required to represent a solid on flat surface is _____ a) 1 **b) 2** c) 3 d) 4
29	Straight lines drawn from the apex to the circumference of the base-circle are all equal and are called _____ a) edges b) connecting lines c) projectors **d) generators**
30	If a solid is positioned that its axis is perpendicular to one of the reference plane. Which of the following is false? a) Axis is parallel to other reference plane b) Base is parallel to reference plane c) Projection on that plane gives true shape of its base **d) Base is perpendicular to horizontal plane**
31	If a solid's axis is perpendicular to one of the reference planes then the projection of solid on to the same plane gives the true shape and size of its _____ a) lateral geometry **b) base** c) cross-section d) surface
32	When the axis of solid is parallel to H.P &V.P, then _____view should be drawn first and ____ and _____view then projected from it. a) front , top, side b) top, side, front **c) side, front, top** d) top, front, side
	Orthographic Projections

1	In the first angle projection method, the view seen from left is placed on (a) Above Front View **(b) Right of Front View** (b) Above Top View (d) Below Front View
2	If the object lies in the second quadrant, its position with respect to reference plane will be (a) In front of V.P. and above H.P. (c) In front of V.P. and below H.P. (b) Behind V.P. and below H.P. **(d) Behind V.P. and above H.P**
3	In a third angle projection method, right hand side view of an object is drawn _____ front view. (a) Left side of **(b) Right side of** (c) Rear side of (d) None of above
4	Fourth angle projection is not used because (a) Front view is above reference line and top view is below reference line (b) Top view is above reference line and front view is below reference line **(c) Front view and top view both overlap on each other and below reference line** (d) Front view and top view both overlap on each other and above the reference line
5	For the third angle projection method, Which of the following is correct? (a) Observer - Object – Plane (c) (a) and (b) both **(b) Observer – Plane – Object** (d) None of above
6	If the object lies in the fourth quadrant, its position with respect to reference plane will be a) In front of V.P. and above H.P. , b) Behind V.P. and below H.P. c**) In front of V.P. and below H.P**., d) Behind V.P. and above H.P
7	In the third angle projection method, the view seen from left is placed on **(a) Left of the Front View** (b) Right of Front View (c) Right of Top View (d) Below Front View
8	In first angle projection system the front view will be _____. (a) in right hand side of its LHSV **(b) above its top view** (c) in left hand side of its RHSV (d) below its top view
9	The orthographic axis are at _____ to each other. (a) 120^o (b) 180^o **(c) 90^o** (d) 0^o

10	In orthographic view the lines Perpendicular to arrow X are drawn as (1) Parallel to XY in Plan (2) Parallel to XY in elevation (3) Perpendicular to XY in Elevation (a) 1 (b) 2 **(c) 3** (d) 1&2
11	The top view of a rectangular shaped room will show (a) length and height **(b) length and width** (c) width and height (d) height only
12	The following is (are) the method(s) of projecting the pictorial views. a. Axonometric projection b. Oblique projection c. Perspective projection d. **All of the above**
13	The straight lines which are drawn from various points on the contour of an object to meet a plane are called as _____ a) connecting lines **b) projectors** c) perpendicular lines d) hidden lines.
14	When the projectors are parallel to each other and also perpendicular to the plane, the projection is called _____ a) Perspective projection b) Oblique projection c) Isometric projection **d) Orthographic projection**
15	In the Oblique projection an object is represented by how many views? **a) one view** b) two views c) three views d) four views
16	The object we see in our surrounding usually without drawing came under which projection? **a) Perspective projection** b) Oblique projection c) Isometric projection d) Orthographic projection
17	In orthographic projection, each projection view represents how many dimensions of an object? a) 1 **b) 2** c) 3 d) 0
18	In orthographic projection an object is represented by two or three views on different planes which _____ a) gives views from different angles from different directions **b) are mutually perpendicular projection planes** c) are parallel along one direction but at different cross-section

	d) are obtained by taking prints from 2 or 3 sides of object
19	To represent the object on paper by orthographic projection the horizontal plane (H.P) should be placed in which way? **a) The H.P is turned in a clockwise direction up to 90 degrees** b) The H.P is turned in anti-clockwise direction up to 90 degrees c) H.P plane is placed to left side of vertical plane parallel to it d) H.P plane is placed to right side of vertical plane parallel to it
20	What is additional 3rd view on orthographic projection in general for simple objects? a) Front view b) Top view **c) Side view** d) View at 45 degrees perpendicular to horizontal plane
21	The front view of an object is shown on which plane? a) Profile plane **b) Vertical plane** c) Horizontal plane d) Parallel plane
	Isometric Projections and Isometric View or Drawing
1	While drawing the isometric view of the sphere, its diameter is taken as (a) Equal to actual diameter (b) 11/9 times of the actual diameter (b) 21/9 times of the actual diameter (d) none of the above
2	The isometric view of a vertical line is represented at an angle of ____ in front view and having a length _____ the original length of line. (a) 30^o, Same as (b) 30^o, Less than (c) 90^o, Same as (d) 90^o, Less than
3	The isometric projection of 90 mm line is _____ mm. (a) 30*(6)(1/2) (b) 30*(3)(1/2) (c) 30*(2)(1/2) (d) None of above
4	Length of a line 'L' in isometric drawing or view will be (a)0.707 L **(b) 0.815 L** (c) 0.866 L (d) equal to length L
5	The angle between isometric axis is (a) 30^o (b) 90^o **(c) 120^o** (d) 180^o
6	An Isometric view is _____ view of an object. (a) 1D (b) 2D (c) 3D (d) 4D

7	Isometric length of an edge of an object will be _____. (a) longer than its true length (b) equal to its true length (c) shorter than its true length (d) a dashed line
8	Two lines inclined at 90º in the orthographic view appear in isometric view to be inclined at (a) 60º (b) 90º (c) 120º (d) 180º
9	The isometric length is ____ percent of actual length. a. 61.5 b. 71.5 **c. 81.5** d. 91.5
10	The following are the methods for drawing isometric views except a. Box method b. Offset method c. Centre lines method **d. Parallel line method**
11	Rectagular prism is an example of a. **Objects having isometric lines b.** Object having non-isometric lines b. Object having curved surfaces d. None of the above
12	The isometric projection of a sphere is a a. **Circle** b. Ellipse c. Hyperbola d. Parabola
13	The isometric projection of a circle is a a. Circle **b. Ellipse** c. Hyperbola d. Parabola
14	The length in isometric drawing of line is 20 cm. What is the true length of it? **a) 24.53 cm** b) 15.46 cm c) 19.31 cm d) 23.09 cm
15	The lines parallel to isometric axes are called _____ lines. a) parallel b) auxiliary **c) isometric** d) oblique
16	The planes parallel to any of the two isometric lines are called _____ planes. a) parallel b) auxiliary **c) isometric** d) oblique
17	Isometric view of cube is drawn the angle between the edge of cube and horizontal will be_____ a) 15 degrees b) 120 degrees c) 45 degrees **d) 30 degrees**
18	If isometric projection of an object is drawn with true lengths the shape would be same and size is how much larger than actual isometric projection? a) 25% b) 29.5% **c) 22.5%** d) 33.3%

19	If an isometric projection is drawn with true measurements but not with isometric scale then the drawings are called _____ a) Isometric projection **b) Isometric view** c) Isometric perception d) Orthographic view
20	If an isometric drawing is made use of isometric scale then the drawings are called _____ **a) Isometric projection** b) Isometric view c) Isometric perception d) Orthographic view
21	Identify the front view of the below isometric view.  **a)**  b)  c)  d) 
22	Isometric view of equilateral triangle will be _____ a) equilateral triangle **b) scalene triangle** c) isosceles triangle d) right angled triangle
23	Isometric view of rhombus will become _____ **a) parallelogram** b) rhombus c) rectangle d) square

24	Front view of circle is given and isometric view is to be drawn which of the following is correct procedure in drawing isometric view? a) turning the circle such that line on diameter is making 30 degrees with horizontal b) by increasing or decreasing angles between two perpendicular line on diameter at required proportions c) drawing line in diameter parallel to isometric axes **d) enclosing circle in a square and aligning square to isometric axes and pointing four points on circle touching the square and joining by smooth curve.**
	Computer Aided Drawing
1	The commands Erase, Copy, Mirror, Trim, Extend, Break etc belongs to which tool bar? a) Layer tool bar b) Style tool bar **c) Modify tool bar** d) Draw tool bar
2	The commands Donut, Block, Spline, Polygon, and Arc etc belong to which tool bar? a) Layer tool bar b) Style tool bar c) Modify tool bar **d) Draw tool bar**
3	The command which works on two lines or a single poly line to create a beveled edge is _____ **a) Chamfer** b) Fillet c) Stretch d) Extend
4	The command which is used to create a round corner between two lines is _____ a) Chamfer **b) Fillet** c) Stretch d) Extend
5	command 'Oops' is used to _____ a) create one or more copies of selected objects at another location b) creates mirror image of selected objects about specified line **c) retrieves all objects erased by the last erase** d) deletes the selected entities
6	The command 'pedit' is used for _____ a) erases a portion of line, arc, circle or a 2D poly line between two selected points b) reverses the effects of a series of previously used commands c) breaking a poly line into individual segments

	d) editing of poly line properties
7	The command 'break' is used for _____ **a) erases a portion of line, arc, circle or a 2D poly line between two selected points** b) reverses the effects of a series of previously used commands c) breaking a poly line into individual segments d) editing of poly line properties
8	The command 'U' is used for _____ a) erases a portion of line, arc, circle or a 2D poly line between two selected points **b) reverses the effects of a series of previously used commands** c) breaking a poly line into individual segments d) editing of poly line properties
9	The command 'Explode' is used for _____ a) erases a portion of line, arc, circle or a 2D poly line between two selected points b) reverses the effects of a series of previously used commands **c) breaking a poly line into individual segments** d) editing of poly line properties
10	The command which is used to set a new coordinate system by shifting the working XY plane to be the desired location is? a) 3DFACE b) VPOINT **c) UCS** d) ELEV
11	The command which is used for making planar unmeshed surfaces that have three or four sides is _____ **a) 3DFACE** b) VPOINT c) UCS d) ELEV
12	The command which is used to set the viewpoint in 3D space for viewing the 3D models is _____ **a) 3DFACE** b) VPOINT c) UCS d) ELEV
13	The command which is used to set elevation and thickness properties for 2D wireframe objects such as line, point, circle, polygon, arc is _____ a) 3DFACE b) VPOINT c) UCS **d) ELEV**
14	The command which identifies the points on drawing entities that are visible on screen is

	_____ and this option allows the user to pick-up the points very accurately with respect to drawing displayed. **a) OSNAP** b) TABSURF c) SNAP d) GRID