
KARNATAKA SECONDARY EDUCATION EXAMINATION BOARD, MALLESWARAM, BANGALORE - 560003

$$
\text { யీతి,ఫ - } 03 \text { / Paper - } 03
$$

ఎసో.ఎసో.ఎలో.సి. யృలరگ யురిఁష్ష - 2021
S.S.L.C. SUPPLEMENTARY EXAMINATION - 2021
 \& ఇంజినియరంగా గృ,భిక్సే - 2
Subjects : Elements of Mechanical \& Electrical Engineering - 2
\& Engineering Graphics - 2
(ఇంగ్లిజో 山ూధ్యము / English Medium)

KEY ANSWERS

Code No. : 72-E (RF / RR)

$$
\text { ఎిజ్జయ : ఇంజినియరింగా గల్భియ్స్ - } 2
$$

## Subject : ENGINEERING GRAPHICS - 2

ఒట్ట్టు ల్లులిశళ స్య

[ Total No. of Questions : 25
[ Max. Marks : 25
 ఆవుగళల్లి సెయియిద లుత్తరపన్ను ఆరిసి నిముగి నిలడలాగిరుబ ఓ.ఎం.ఆరా. ( OMR ) లుత్తర
 ఆయ్పియన్ను లెలడో మూడిరి :

Four choices are given for each of the following questions / incomplete statements. Choose the correct answer among them and shade the correct option in the OMR Sheet given to you with a black / blue ball point pen.

$$
25 \times 1=25
$$

51. Dimension lines are
(A) long-dashed dotted narrow lines
(B) dotted lines
(C) thick lines
(D) thin lines

Ans. : (D) thin lines
52. Set squares can draw lines with precision inclined with the horizontal at an angle in multiples of
(A) 5 degrees
(B) 15 degrees
(C) 10 degrees
(D) 20 degrees

Ans. : (B) 15 degrees
53. The dimension figure for diameter of a circle should be
(A) preceded by the symbol ' $\phi$ '
(B) suffixed by the symbol ' $\phi$ '
(C) preceded by the symbol ' D '
(D) suffixed by the symbol ' D '

Ans. : (A) preceded by the symbol ' $\phi$ '
54. A ten-sided polygon is referred as
(A) hexagon
(B) octagon
(C) decagon
(D) dodecagon
Ans. : (C) decagon
55. In orthographic projection the plan is obtained on a plane called
(A) vertical plane
(B) horizontal plane
(C) profile plane
(D) auxiliary plane

Ans. : (B) horizontal plane
56. In first angle projection system method the relative positions of the object plane and observers are
(A) Plane is placed in between
(B) Observer is placed in between
(C) May be placed in any order
(D) Object is placed in between

Ans. : (D) Object is placed in between
57. In third angle projection system method the right hand side view of an object is drawn
(A) below the elevation
(B) right of the elevation
(C) above the elevation
(D) left of the elevation

Ans. : (B) right of the elevation
58. The line joining the front and top views of a point is called
(A) reference line
(B) connector
(C) projector
(D) locus

Ans. : (C) projector
59. If the front view of a point is 50 mm above the $X Y$ line and the top view is 20 mm below the front view, the point lies in
(A) first quadrant
(B) third quadrant
(C) second quadrant
(D) fourth quadrant

Ans. : (C) second quadrant
60. An orthographic view of a hemisphere may appear as
(A) ellipse
(B) circle
(C) parabola
(D) hyperbola
Ans.: (B) circle
61. If a thin rectangular plate of $60 \mathrm{~mm} \times 30 \mathrm{~mm}$ is inclined at an angle of 60 degree to H.P., its top view may be
(A) square of 30 mm side
(B) rectangle of $60 \mathrm{~mm} \times 45 \mathrm{~mm}$
(C) square of 60 mm side
(D) rectangle of $45 \mathrm{~mm} \times 30 \mathrm{~mm}$

Ans. : (A) square of 30 mm side
62. A cube is resting on H.P. with a solid diagonal perpendicular to it. The top view will appear as
(A) square
(B) regular hexagon
(C) regular pentagon
(D) rectangle

Ans. : (B) regular hexagon
63. The number of stages that are necessary to get the orthographic views of a solid having its axis inclined to both the reference planes is
(A) two
(B) one
(C) four
(D) three

Ans. : (D) three
64. A tetrahedron is resting on its face on the H.P. with a side perpendicular to the V.P. Its front view will be a/an
(A) equilateral triangle
(B) scalene triangle
(C) isosceles triangle
(D) right-angled triangle

Ans. : (C) isosceles triangle
65. Number of faces in an icosahedron is
(A) 12
(B) 8
(C) 10
(D) 20

Ans. : (D) 20
66. A pyramid is cut by a plane parallel to its base removing the apex. The remaining part is known as
(A) truncated
(B) frustum
(C) sectioned
(D) prism

Ans. : (B) frustum
67. Isometric projections cannot be drawn by
(A) box method
(B) zone method
(C) offset method
(D) coordinate method

Ans. : (B) zone method
68. Second angle projection is not used because
(A) views overlap each other
(B) top view is above $X Y$
(C) front view is above $X Y$
(D) views are foreshortened

Ans. : (A) views overlap each other
69. A right circular cone is resting on a generator in the H.P. and axis inclined at $45^{\circ}$ to the V.P. The angle between the reference line and top view of the axis is
(A) less than $45^{\circ}$
(B) more than $45^{\circ}$
(C) $45^{\circ}$
(D) $90^{\circ}$

Ans. : (C) $45^{\circ}$
70. A sphere in isometric projection appears as a circle of diameter
(A) 0.816 time the diameter of sphere
(B) greater than diameter of sphere
(C) less than 0.816 time diameter of sphere
(D) equal to the diameter of sphere

Ans. : (D) equal to the diameter of sphere
71. The angle that isometric lines make with each other is
(A) 360 degrees
(B) 30 degrees
(C) 60 degrees
(D) 120 degrees

Ans. : (D) 120 degrees
72. While making isometric projections, the ellipse is preferably drawn by
(A) oblong method
(B) four-centre method
(C) concentric circles method
(D) parallelogram method

Ans. : (B) four-centre method
73. For the object shown in Figure No. 1 select the correct front view in the direction of arrow ' X ' :


Figure No. 1
(A)

(B)

(C)

(D)

Ans. : (C)

74. Select the correct isometric view corresponding to the orthographic view shown in Figure No. 2 :


Figure No. 2
(A)

(B)

(C)

(D)

Ans. : (C)

75. The projectors in isometric view are
(A) perpendicular to plane of projection
(B) diverging
(C) parallel to plane of projection
(D) converging

Ans. : (A) perpendicular to plane of projection

