



INDIAN SCHOOL AL WADI AL KABIR

<b>Class: XII</b>	<b>Department: SCIENCE</b>	<b>Date: 23/06/2020</b>
<b>MARKS: 30</b>	<b>UNIT TEST 1 – QP + MS</b> <b><u>ENGINEERING GRAPHICS (046)</u></b>	<b>DURATION :1 HOUR</b>

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1.The projection that extensively used in mechanical engineering is -----

- a. Oblique projection
- b. Axonometric projection
- c. Perspective projection
- d. Orthographic projection

2. Isometric, diametric, trimetric projections are classifications of which type of projections?

- a. Perspective
- b. Axonometric
- c. Orthographic
- d. None of the above

3. Which type of projection needs a single scale to measure along each of the three axes?

- a. Orthographic projection
- b. Isometric projection
- c. Oblique projection
- d. Perspective projection

4. In isometric projection all the three principal axes appear to be inclined to each other at an angle of -----

- a. 120 degree
- b. 30 degree
- c. 90 degree
- d. 45 degree

5. ----- is used to measure the foreshortened length of dimensions of any object to draw the isometric projection.

- a. True scale
- b. Vernier scale
- c. Isometric scale
- d. None of the above

6. The figure with true scale as per specified condition with respect to VP and HP as per the rules of orthographic projection (two-dimensional figure) is called as -----

- a. Helping figure
- b. Isometric view
- c. Diametric figure
- d. Trimetric figure

7. The true scale is measured in isometric scale with an angle of -----

- a. 30 degree
- b. 45 degree
- c. 90 degree
- d. 120 degree

8. The angle difference between true scale and isometric scale is -----

- a. 30 degree
- b. 45 degree
- c. 15 degree
- d. 90 degree

9. The solids with two bases and rectangular faces are called as -----

- a. Prisms
- b. Pyramids
- c. Triangles
- d. Circles

10. The faces of the pyramid will meet at a point, and that point is called as -----

- a. Apex of pyramid
- b. Side of pyramid
- c. Face of pyramid
- d. Base of pyramid

11. The truncated lower portion of the solid is called as -----

- a. Prism
- b. Pyramid
- c. Frustum
- d. Cylinder

12. How many helping figures are required to draw a frustum of pyramid?

a. 2

b. 4

c. 3

d. 1

13. In pyramids, if they are kept on their base are called as -----

a. Vertical/ upright pyramids

b. Horizontal pyramids

c. Inverted pyramids

d. None of the above

14. Which solid is having only one point of contact with the plane of rest?

a. Sphere

b. Hemisphere

c. Cone

d. Cylinder

15. Bolts and nuts are examples of which type of fastener?

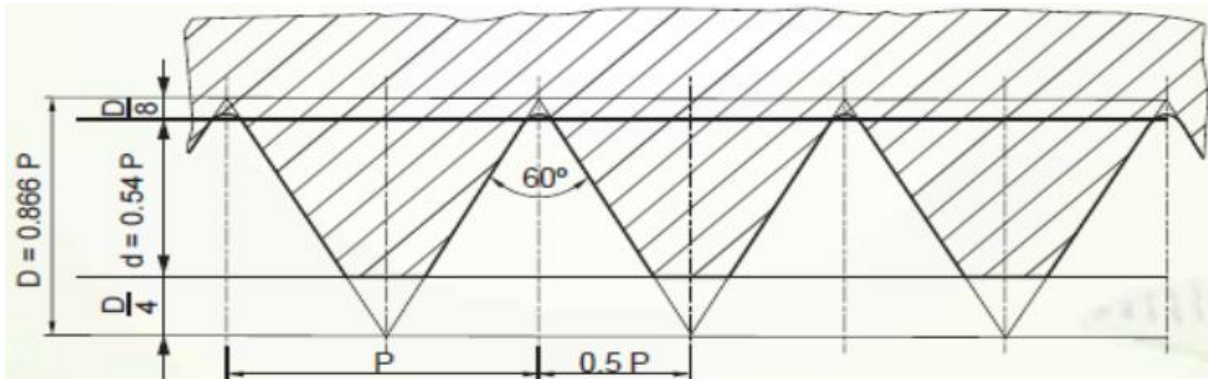
a. Permanent fastener

b. Temporary fastener

c. Unthreaded fastener

d. None of the above

16. Identify and name the thread represented in the given below figure?



- a. BSW thread
- b. Knuckle thread
- c. Metric thread internal
- d. Metric thread external

17. Screw threads are widely used for -----from one machine parts to another.

- a. Power transmission
- b. Transmitting load
- c. Transmitting light
- d. None of the above

18. Match the following and find the correct option:

	Column I		Column II
1	Bolt	A	Parallel thread
2	Nut	B	Taper thread
3	Threads formed on Cylinder	C	External thread
4	Threads formed on Cone	D	Internal thread

- a. 1-C, 2-D, 3-A, 4-B
- b. 1-D, 2- C, 3-B. 4-A
- c. 1-A, 2-B, 3-C, 4-D
- d. 1-B, 2-A, 3- D, 4-C

19.The surface connecting crest and root is called as -----

- a. Root
- b. Flank
- c. Crest
- d. Lead

20. Name the thread which is used in railway carriage coupling screws and on the neck of glass bottles?

- a. BSW thread
- b. Metric thread internal
- c. Metric thread external
- d. Knuckle thread

21. Mechanisms of machine tools, valves, spindles, vice screws etc are generally provided with -----threads.

- a. Square thread
- b. Knuckle thread
- c. BSW thread
- d. Metric thread

22. A square thread of nominal diameter of 40 mm and pitch of 4mm is designated as -----

- a. SQ 4 x 40
- b. SQ 40 x 4
- c. SQ 40
- d. SQ 4

23. Formula for calculating the minor diameter 'd' in metric thread internal is?

- a.  $d = 0.54P$
- b.  $d = 0.61P$
- c.  $d = 0.64P$
- d.  $d = 0.86P$

24. The angle between the flanks of BSW thread is -----

- a. 55 degree
- b. 60 degree
- c. 30 degree
- d. 45 degree

25. -----thread is also called as unified thread.

- a. Metric thread
- b. BSW thread
- c. Square thread
- d. Knuckle thread

26. Formula for calculating the major diameter 'D' in metric thread external is?

- a.  $D = 0.86P$
- b.  $D = 0.96P$

c.  $D = 0.64P$

d.  $D = 0.61P$

27. In knuckle thread the tangential semicircles should be drawn with a radius of -----

a.  $R = 0.5P$

b.  $R = 0.25P$

c.  $R = 0.15P$

d.  $R = 0.45P$

28. In which type of threads, the crests are flat and roots are round?

a. Metric thread external

b. Metric thread internal

c. BSW thread

d. Square thread

29. In which type of thread the clearance space is equally provided as  $D/6$  on both sides.

a. BSW thread

b. Metric thread external

c. Metric thread internal

d. Knuckle thread

30. ----- is the distance between the corresponding points on the adjacent threads, measured parallel to the axis.

a. Pitch

b. Lead

c. Crest

d. Root



**ANSWER KEY**

1	B	16	C
2	B	17	A
3	B	18	A
4	A	19	B
5	C	20	D
6	A	21	A
7	B	22	B
8	C	23	A
9	A	24	A
10	A	25	A
11	C	26	A
12	A	27	B
13	A	28	A
14	A	29	A
15	B	30	A