CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD
Technical and Vocational Education Examination

SHEET METAL CONSTRUCTION DRAWING 1
5400
JUNE XXXX **INTERMEDIATE LEVEL**

Subject Title	SHEET METAL CONSTRUCTION DRAWING
Subject code No	5400
Paper No	ONE

Mobile phones are **NOT** allowed in the examination room.

5400 SUBJECT NAME 1: MULTIPLE CHOICE QUESTION PAPER

1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you start answering the questions in this paper. Make sure you have a soft HB pencil and an eraser for this examination.

1. USE A SOFT HB PENCIL THROUGHOUT THE EXAMINATION.
2. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Before the examination begins:

3. Check that this question booklet is headed "Intermediate Level – 5400 SHEET METAL CONSTRUCTION DRAWING

1.

4. Insert the information required in the spaces above.
5. Insert the information required in the spaces provided on the answer sheet using your HB pencil:

   Candidate Name, Exam Session, Subject Code, Centre Number and Candidate Number.

   Take care that you do not erase or fold the answer sheet or make any marks on it other than those asked for in these instructions.

How to answer the questions in this examination:

6. Answer **ALL** the **50** questions in this Examination. All questions carry equal marks.
7. Each question has FOUR suggested answers: **A, B, C** and **D**. Decide which answer is correct. Find the number of the question on the Answer Sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen.

   For example, if **C** is your correct answer, mark **C** as shown below:

   [A] [B] [C] [D]

8. Mark only one answer for each question. If you mark more than one answer, you will score a zero for that question. If you change your mind about an answer, erase the first mark carefully, then mark your new answer.
9. Avoid spending too much time on any one question. If you find a question difficult, move on to the next question. You can come back to this question later.
10. Do all rough work in this booklet, using, where necessary, the blank spaces in the question booklet.
11. **You must not take this booklet and the answer sheet out of the examination room. All question booklets and answer sheets will be collected at the end of the examination.**

1.State the type of drawing having two or more pieces.

A	Assembly drawing
B	Sketch drawing
C	Definition drawing
D	Free hand drawing

2.Indicate the instruments to be used when drawing parallel lines

A	Compass
B	Ruler and compass
C	Protractor
D	divider

3. Indentify the type of line used to represent the parts of the drawing that can not be seen.

A	Visible lines
B	Center lines
C	Hidden line
D	Construction lines

4. Explain how non- isometric lines are located and sketched.

A	They are drawn parallel to the isometric axis
B	They are measured using the angle from the multi view
C	They are measured using a non-isometric template
D	**They are located by determining the endpoint of the non-isometric line**

5. Choose the size of A2 drawing sheet

A	210 x 297
B	594 x 840
C	297 x 420
D	420 x 594

6. The border line of an A3 drawing sheet is placed at:

A	1 mm
B	10 cm
C	1 cm
D	20 mm

7. Indicate the position of the title block on an A3 paper

A	**At the bottom right**
B	At the bottom left
C	In the middle
D	At the top left

8.The drawing scale **4:5** represents a/an :

A	Enlargement scale
B	Reduction scale
C	Full size scale
D	Normale scale

9. Calculate the dimension to be drawn for a length of 500 x 350 mm to scale 3/2.

A	750 x 525
B	250 x 175
C	1000 x 700
D	500 x350

10. Determine the value x of the space on the drawing in Figure 1 below.

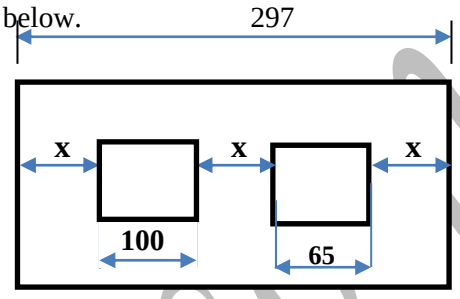


Figure 1

A	X =66.5
B	**X = 44**
C	X = 61
D	X = 55

11. Identify the position of views in the First angle of projection.

A	Top view is placed above the front view
B	Bottom view is placed below the front view
C	Left side view is placed at the right of front view
D	Right view is placed at the right of front view

12. A2 drawing paper is the multiplication of :

A	2x A4
B	6 x A4
C	8 xA4
D	4 x A4

13. The projection of a vertical line on the horizontal plan gives:

A	A vertical line
B	A point
C	A horizontal line
D	An oblique line

14. Identify the solids in figure 2 below.

Figure 2

A	Prism, cone and cube
B	Square, cylinder and rectangle
C	Parallelogram, square and rectangle
D	Cylinder, parallelogram and cube

15. State the solid which the sloping sides meet at a point.

A	Pyramid
B	Prism
C	Sphere
D	Torus

16. Identify the position of the line AB in figure 3 below

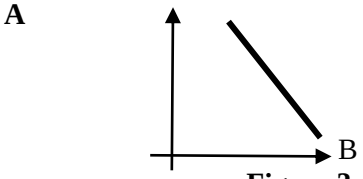


Figure 3

A	Vertical
B	Horizontal
C	Perpendicular
D	Oblique

17.Identify the instrument that can be used to draw an angle of 90°.

A	protractor
B	French curve
C	Ruler
D	Compass

18. Indicate a basic solid among the shapes in figure 4 below.

Cube triangle Circle Rectangle

Figure4

A	Triangle
B	Circle
C	Cube
D	Rectangle

19. State the sum of angles of a triangle.

A	60°
B	180°
C	90°
D	360°

20. Indicate the number of sides of a decagon .

A	7 sides
B	12 sides
C	10 sides
D	8 sides

21. Select the line used to indicate the cutting plane of an object.

A	Break line
B	Short dashes line
C	Extension line
D	Thick and long chain line

22. A square plate of negligeable thickness is inclined to Horizontal Plane (HP). The front view will appear as

A	Rhombus
B	Square
C	Line
D	Rectangle

23.Identify the three principle planes in an orthographic projection.

A	front, top, profile
B	back, top, profile
C	top, front, right
D	frontal, horizontal, profile

24. The right cylinder intersects a right cone; the axis are

A	Parallel
B	Secant
C	Oblique
D	Perpendicular

25. A customer is not a technician and having difficulty to understand a design, remove the type of drawing that would not be used.

A	Orthographic
B	Axonometric
C	Dimetric
D	Trimetric

26. Identify the front view of the object in figure 5 following the arrow.

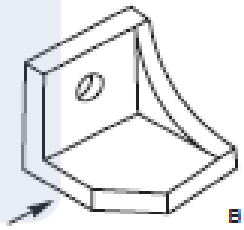
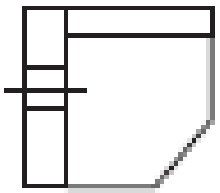
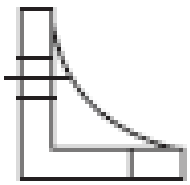
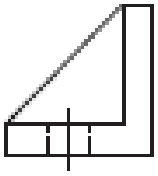
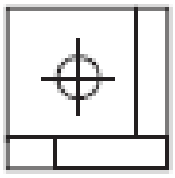


Figure 5

A	B
	

C	D
	

27. Name the orthogonal projection of a right cylinder on a horizontal plane of projection .

A	A cylinder
B	An ellipse
C	A circle
D	An oval

28. Calculate the bisection of an angle of 90° .

A	45°
B	30°
C	90°
D	60°

29. Recognize the type of circles in figure 6 below.

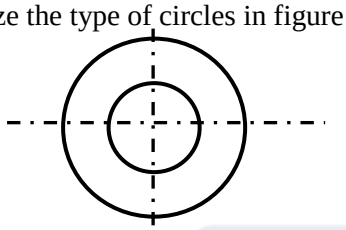


Figure 6

A	Tangent circles
B	Secant circles
C	Concentric circles
D	Axial circles

30. Designate the solid of circular base in which the generators are meeting at the apex .

A	Prism
B	Cylinder
C	Pyramid
D	Cone

31.Indicate the solid in which the generators are parallel .

A	A cylinder
B	A cone
C	A sphere
D	A troncuted cone

32. Identify the type of thread in figure 7 below.

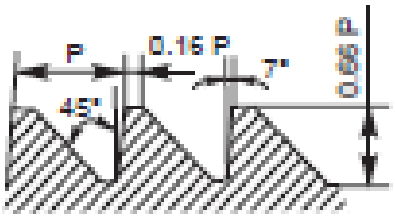


Figure 7

A	Metric thread
B	Square thread
C	Round thread
D	Buttress threat

33. Name the element used to assemble parts 1and 2 in figure 8 below.

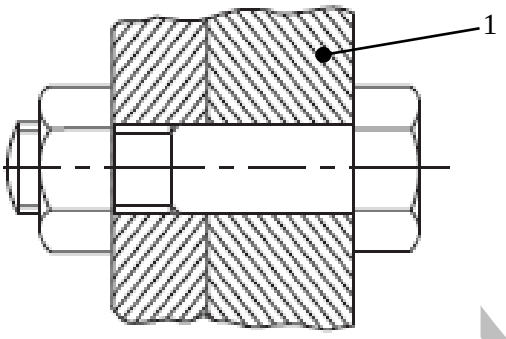


Figure 8

A	Stud
B	Bolt
C	Screw
D	Rivet

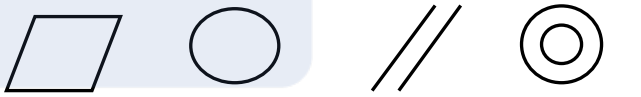
34. The complete dismountable link is realized by

A	Riveting
B	Welding
C	Soldering
D	Bolting

35. Specify the designation below Ø25H7g6.

A	Tolerance
B	Fit
C	Limit
D	Adjustment

36. Identify the geometric tolerance of orientation in figure 9 below.



Flatness Circularity parallelism Concentricity

Figure 9

A	Flatness
B	Circularity
C	parallelism
D	Concentricity

37. Identify the material section of figure 10

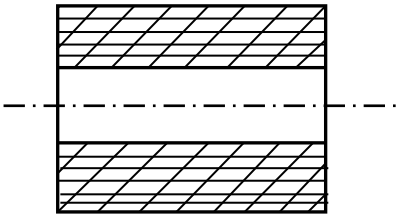


Figure 10

A	Aluminium
B	Steel
C	Rubber
D	Copper alloy

38. Identify the element of figure 11 below

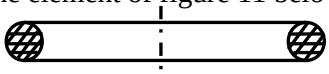


Figure 11

A	Torique seal
B	Paulstra seal
C	Flat seal
D	Felt seal

39. Name the element 1 on the figure 12

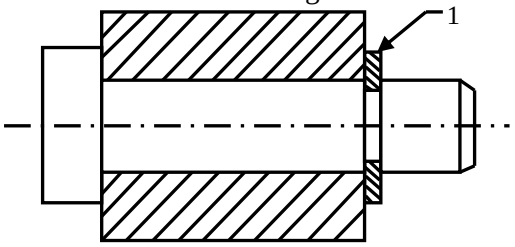


Figure 12

A	Washer
B	Circlips
C	Seal
D	Plate

40.Calculate the maximum clearance of the adjustment Ø25H7p6 where Ø25H7=$25^{0.021}_{0}$ and Ø25p6 = $25^{0.035}_{0.022}$

A	0.001
B	0.014
C	-0.001
D	-0.035

41.Choose the correct chain for Ja in figure 13 from the list below

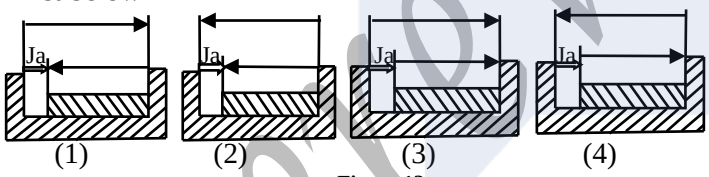


Figure 13

A	2
B	3
C	1
D	4

42. calculate the dimension B of the chain of dimension in figure 14 below.

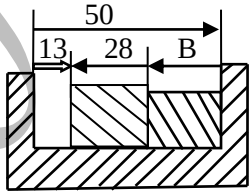


Figure 14

A	9
B	22
C	15
D	37

43.A point P is above the horizontal plane (HP) and in front of the vertical plane (VP); Name the quadrant of the point.

A	Second quadrant
B	First quadrant
C	Fourth quadrant
D	Third quadrant

44. Choose the internal angle α of the regular hexagon in the figure15 below.

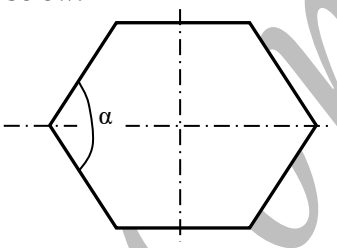


Figure 15

A	72°
B	108°
C	150°
D	120°

45.Name the method of developing solids in which the radial line is applied.

A	Sphere
B	Cylinder
C	Cone
D	Prism

46. State the number of sides of a pentagon.

A	Six
B	Five
C	Ten
D	Seven

47. Identify the geometric figure in which the generator lines are parallel

A	Cylinder
B	Cone
C	Torus
D	Pyramid

48.Interpret the nature of the line AB of figure 15 Below when viewed from F

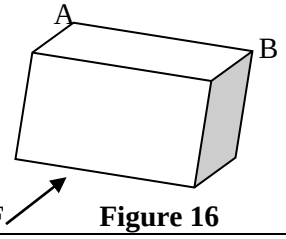


Figure 16

A	Frontal line
B	Horizontal line
C	Vertical line
D	Fronto-horizontal line

49. Indicate the formula for calculating the hypothenus of the triangle in figure 16 below.

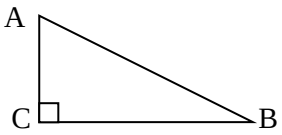


Figure 17

A	$AB = AC^2 + CB^2$
B	$AB^2 = AC^2 + BC^2$
C	$AB^2 = AC - BC$
D	$AB^2 = AC^2 - BC^2$

50. Identify the section formed when a cone is cut parallel to its base.

A	Circular section
B	Ellipse section
C	Parabolic section
D	Hyperbolic section