

CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD
Technical and Vocational Education Examination



DRAWING AND ARCHITECTURAL MODELING 1
7205

JUNE XXXX

ADVANCED LEVEL

Centre No. & Name	
Candidate No.	
Candidate Name	

Mobile phones are NOT allowed in the examination room.

7205 DRAWING AND ARCHITECTURAL MODELING 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 "Advanced Level –7205 DRAWING AND ARCHITECTURAL MODELING 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.

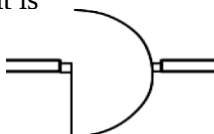
For example, if C is your correct answer, mark C as shown below:

[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.

Turn Over

1. The door symbol below found on a floor plan mean it is

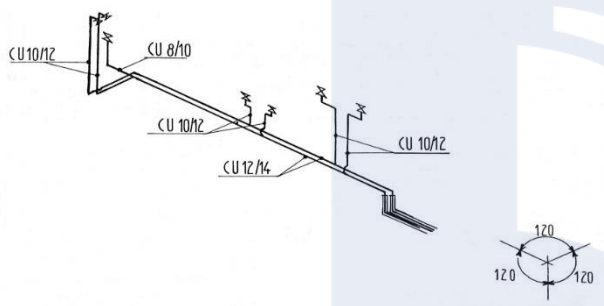


A	A sliding door
B	Double actin single door
C	A wooden door
D	A double door

2. In an application file for a building permit, the location plan is drawn to scale :

A	1:100
B	1:50
C	1:250 ; 1:500
D	1:10000 ; 1:5000

3. The perspective of canalization represented below is



A	A dimetric
B	A trimetric
C	Orthogonal
D	An isometric

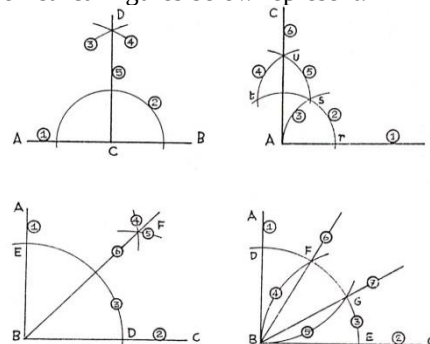
4. On an architectural plan, how many internal dimensions per direction do we need in each room?

A	1
B	2
C	3
D	4

5. The number of tread in a staircase is equal to :

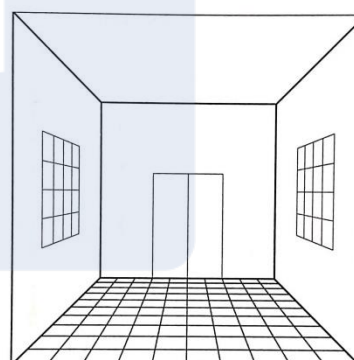
A	number of risers
B	number of risers -1
C	number of risers +1
D	number of risers +1

6. The geometrical figures below represent:



A	Perpendicular lines
B	Bisectric and angles
C	Arc of circles
D	Intersecting Lines

7. This central projection below is obtain with



A	one vanishing point
B	four vanishing points
C	Two vanishing points
D	Three vanishing points

8. The first plan during conception is usually the

A	Floor plan
B	Foundation
C	Excavation
D	drainage

9. The figure below shows a fashioned Reinforcement rod on a working drawing. On which view is the rod seen



A	Bottom.
---	---------

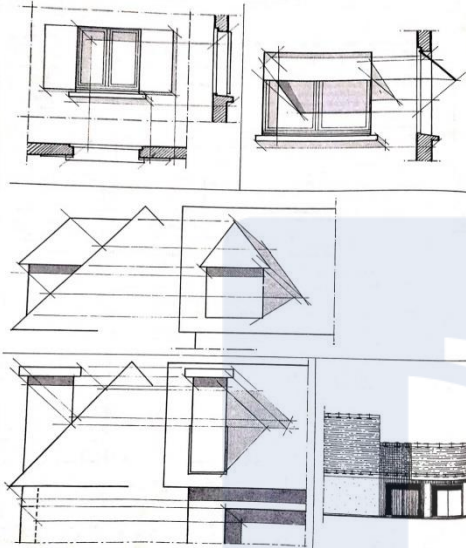
B	Front
C	Section
D	Top

D	Architectural rendering
---	-------------------------

10. If a client of yours is having difficulty visualizing a design, the type of drawing would be the easiest to understand is

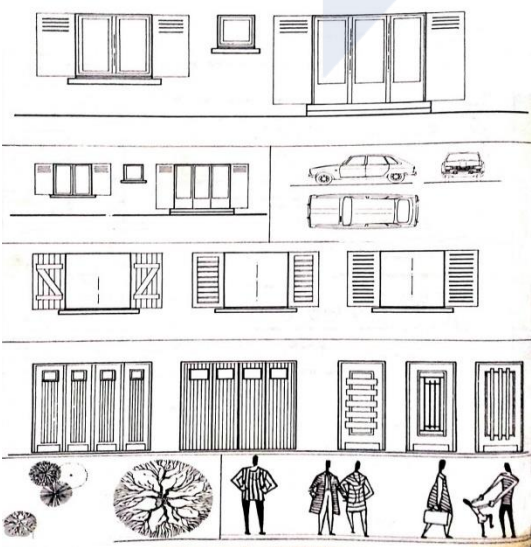
A	three-view orthographic
B	axonometric
C	one-view orthographic
D	Bimetric

11. The representation of shadows on elevations are done using which angle ?



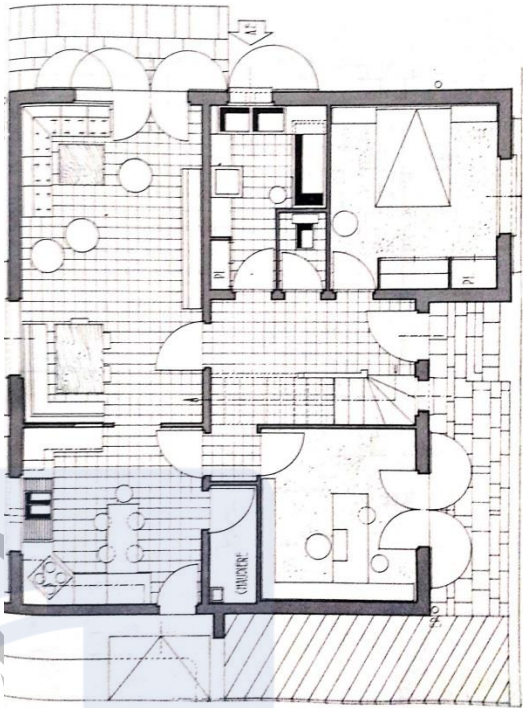
A	60°
B	45°
C	30°
D	75°

12. The drawings below that give a Natural and decorative aspect to the drawing are called



A	Finishing
B	Decoration
C	Beautiness

13. How is the plan below called?



A	Building plan
B	Rendering plan
C	Final plan
D	Detail plan

14. Which of the following dimension lines is most suitable during setting out?

A	Dimension line showing axis to axis of structural elements
B	Dimension line showing cumulated dimensions of the axis to axis of bearing elements
C	Dimension line showing all bearing elements and openings on the ground floor
D	Dimension line showing all the bearing elements

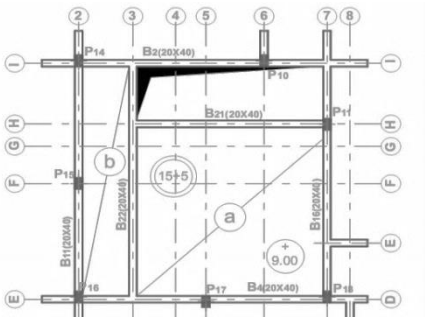
15. On the following extract of a formwork plan, the dimension (15+5) represents



A	The complete height of the floor from ground level
B	The complete height from the datum level
C	Thickness of hollow blocs and RC screed
D	The thickness of the topping

A	32cm
B	30cm
C	31cm
D	35 m

16. On the following extract of a formwork plan, the dimension (+ 9.00) represents



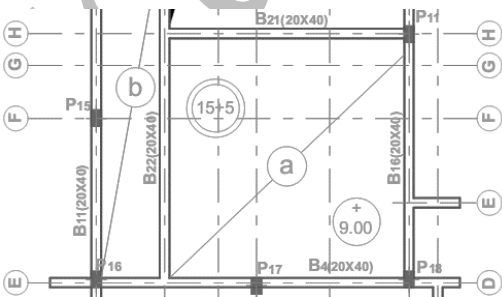
A	The level of the floor from the reference level ± 0.00
B	The level of the floor from ground level
C	The level of the floor from the floor below
D	The level of the floor from the datum level of the locality

17. The partially shaded portion of the extract of a formwork plan represents:



A	A lift
B	An opening on the floor
C	A stair case
D	A stair well

18. On the partial formwork plan below what 'a' stands for?



A	The diagonal of the floor slab
B	The identification of the slab
C	The reference of the slab
D	The kind of slab

19. Given that $G+2R= 64\text{cm}$ where G and R stand for the going and riser respectively of a stair, what is the value of the going G, when the riser R is 16cm?

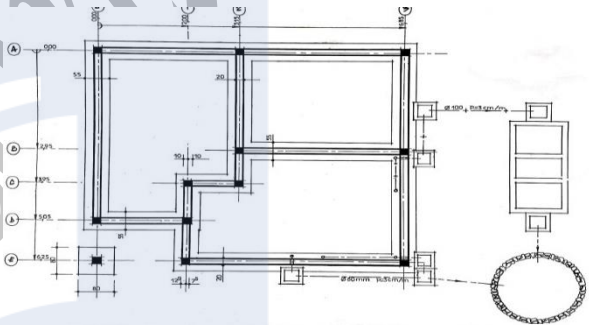
20. When are balanced stairs used during stair construction

A	When the space provided for staircase is not enough
B	When the lift is more than 3.00 meters
C	When the stair leads to a smaller floor
D	When landings are not necessary in the stair

21. What is the smallest acceptable value of a headroom during stair design ?

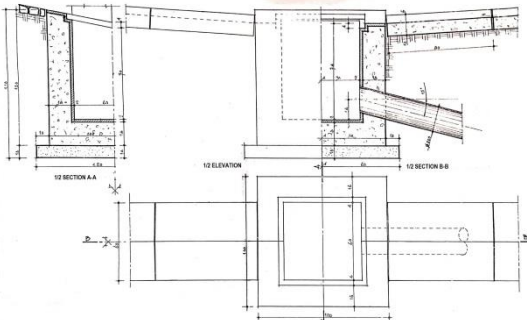
A	1.50 m
B	1.80 m
C	2.00 m
D	2.10 m

22. Give a title to the plan below



A	Foundation plan
B	Drainage plan
C	Foundation and drainage plan
D	Septic tank plan

23. The drawing below represents :



A	Drainage plan
B	Manhole plan
C	Drainage piping plan
D	Water supply plan

24. Why are beams on formwork plans shown elevation lines while columns and other vertical bearing elements are represented with object lines?

A	Because the cutting planes are usually considered to be viewed from under
---	---

B	Because formwork drawings are aimed at representing only the bearing elements
C	Because the cutting planes usually always passes below the slab
D	Because formwork drawings are done by the engineer

A	Conical perspective
B	Isometric perspective
C	Trimetric perspective
D	Orthogonal perspective

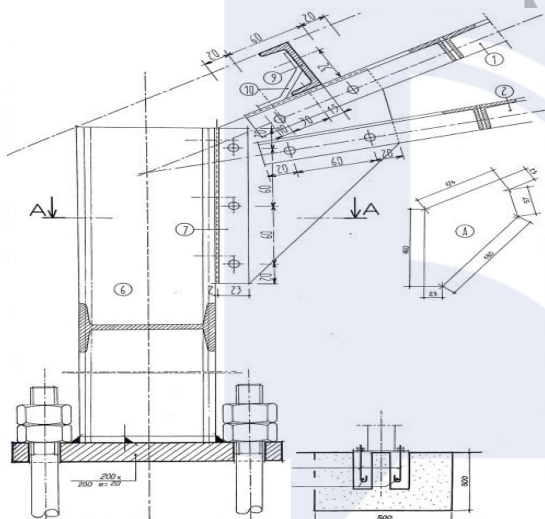
25. Name 3 types of dimension markers used on technical drawings

A	Arrows heads, extension lines and dimension lines
B	Arrows heads, architectural ticks and extension lines
C	Arrows heads, dots and architectural ticks
D	Arrow heads, dots and extension lines

26. The smallest acceptable width of a door opening is :

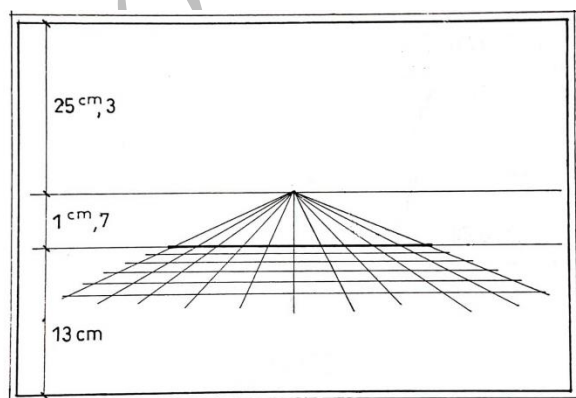
A	50cm
B	60cm
C	70cm
D	80cm

27. Give the title to the drawing below.



A	Detail connection drawing
B	Section of pillar
C	Beam to pillar connection
D	Footing connection

38. This drawing is related to the



39. The smallest acceptable width of a landing is :

A	0.80
B	0.90
C	1.00
D	1.10

30. The minimum width of a staircase in a public building:

A	1.20m
B	1.00m
C	1.60m
D	0.90m

31. The acceptable minimum width of a stairway in homes is

A	75cm
B	80cm
C	90cm
D	1.00

32. In metallic construction, IPE 400 stands for

A	A universal I steel section beam with a sectional height of 400mm
B	A universal section I beam with a sectional width of 400mm
C	A universal section I beam with a length of 4,00 meters
D	A universal section I beam with a sectional rib height of 400mm

33. The minimum size of a water closet is

A	1.00m
B	0.85m
C	1.10m
D	0.70m

34. Why are switches of the bathroom placed outside the room?

A	to easy operation while entering or coming out of the bath
B	For economy and to ease communication
C	To avoid electric shock because water conduct electricity
D	To preserve the switches

35. 4 examples of drawings found in a building project file are :

A	Foundation plan, floor plans, road plan, sections
B	Site plan, block plan, survey plans and details
C	Floor plans, roof plans, sections and road profile

Turn over

D	Foundation plan, formwork plans, reinforcement drawings and structural details
---	--

36. Three Examples of architectural drawings are

A	Floor plans, elevations and sections
B	Foundation plans, Floor plans and formwork plans
C	Foundation plans, floor plans and elevations
D	Floor plans, formwork plans and roof plans

37. The difference between a thick continues line and a faint continues line is that :

A	Thick continues lines are used for elevations while faint lines are used to represent objects that are cut through
B	Faint continues lines are used for elevations while thick lines are used to represent objects that are cut through
C	Thick continues lines are used to designate cutting planes while faint lines are used to represent objects that are cut through
D	Thick continues lines are used for elevations while faint continues lines are used for dimension lines

38. On a reinforcement drawing, the dimension 5 HA 12, l=5.00 signifies

A	5 diameter 12 bars of length 5 meters
B	5 high adherence bars of diameter 12 and length 5.00 meters
C	12 high adherence bars of diameter 5 and length 5 meters
D	5 high adherence bars of diameter 5 and length 12 meters

39. In Reinforcement drawings,

A	Concrete is drawn with object lines while reinforcements are drawn with elevation lines because concrete is cut through
B	Concrete is drawn with faint lines while reinforcements are drawn with thick lines, depending on their diameter
C	Concrete and reinforcements are drawn with faint lines whereas dimension lines are drawn with object

40. The difference between a block plan and a mass plan is that

A	A block plan is a site plan while a mass plan is a location plan
B	A block plan shows the site location in a neighbourhood from a popular point while a mass plan indicates site facilities
C	A block plan is drawn by the surveyor while a mass plan is drawn by the engineer
D	A block plan is drawn to scale 1:10000 while a mass plan is drawn to scale 1:300

41. Which ministry visas block plans in Cameroon ?

A	Ministry of town planning and housing
B	Ministry of state property and land tenure
C	Ministry of territorial administration
D	Ministry of agriculture

42. Apart from the necessary technical information, three very important information required on a block plan are :

A	Location, purpose of the plan and the name of applicant
B	Name of application, purpose of plan and nationality
C	Name of applicant, division of origin and address of applicant
D	Name of applicant, names of neighbours and boundary conditions

43. If the headroom of a building floor is 3.2m and the riser of the stairs is 16cm, the number of treads required is:

A	20
B	19
C	18
D	22

44. The minimum thickness of the waist of a stair flight is

A	8cm
B	10cm
C	12cm
D	14cm

45. Floors plans are usually drawn to scale

A	1:50
B	1:100
C	1:20
D	1:10

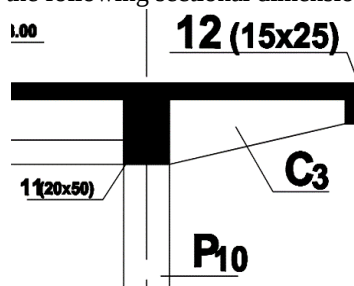
46. An A1 paper measures in mm:

A	594 x 840
B	420 x 594
C	295 x 420
D	840 x 1188

47. Number of treads in a staircase is equal to number of

A	Risers
B	Risers plus one
C	Risers minus one
D	Risers plus the landing

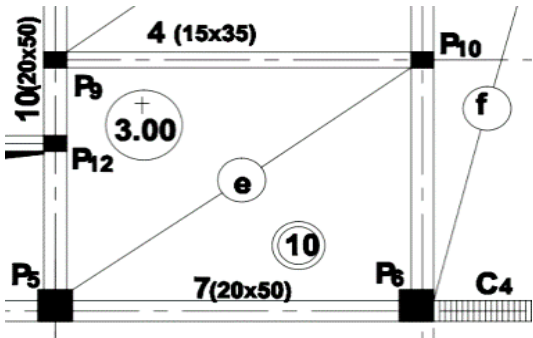
48. On the detail of the formwork plan below, beam 12 has the following sectional dimensions



A	Width = 25 and height =15
B	Width 15 and height 25

C	25 x 15
D	12 25

49. On the following extract of a formwork below, what is the thickness of slab is:



A	3.00cm
B	12 cm
C	20 cm
D	10 cm

50. The aim of a title block on a drawing page is

A	To describe the drawing
B	For identification of the drawing document
C	For introductory purposes
D	For classification purposes

STOP

GO BACK AND CHECK YOUR WORK

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

- 35. A
- 36. B
- 37. A
- 38. B
- 39. C
- 40. A
- 41. B
- 42. A
- 43. A
- 44. B
- 45. B
- 46. A
- 47. A
- 48. C
- 49. B
- 50. C
- 51. B

