CAMEROON GENERAL CERTIFICATE OF EDUCATION BOARD
Technical and Vocational Education Examination

7206 :BUILDING CONSTRUCTION DRAWING 1

JUNE 2020 **ADVANCED LEVEL**

Specialty Name / Specialty Code	**CIVIL ENGINEERING-BUILDING CONSTRUCTION:CE-BC (F4-BA)**
Centre No.	
Centre Name	
Candidate No.	
Candidate Name	

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

7206: BUILDING CONSTRUCTION DRAWING 1: MULTIPLE CHOICE QUESTION PAPER

01hour 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 – 7206 BUILDING 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 crease or fold the answer sheet or make any marks on it other than those asked for in these instructions.
6. **Answer ALL questions**
7. Each question has FOUR suggested answers: **A, B, C** and **D**. Decide on 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. Texts, notes and pre-prepared materials of any kind are also **NOT** allowed in the examination room.
12. **At the end of the examination, the invigilator shall collect the answer sheet first and then the question booklet after. DO NOT ATTEMPT TO LEAVE THE EXAMINATION HALL WITH IT.**

1. When one dimension is missing on a drawing drawn to scale, you as a technician can quickly find it by:

A Calling the architect
B Using a scale rule
C Guessing it by experience
D Going back home to think well

2. The dimensions written on drawings on a drawing are

A The scaled dimensions of the object
B The converted dimensions of the object
C The real dimensions of the object
D The drafted dimensions of the project

3. The symbol below represented by Figure 1 with real dimension, found on a formwork plan is:

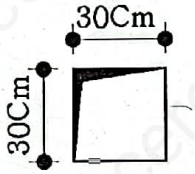

Figure 1

A A stair location
B A lift location
C An opening
D All the above

4. To make the estimate of a building, you need

A Only the architectural plans
B only the structural plans
C the distribution plans and the reinforcement plans
D the architectural plans, structural plans and technical specifications

5. To design a building means to

A Paint it in a nice way
B To decorate it
C To decide on its layout and construction materials
D To draw it very well

6. The figure 2 found on a floor plan is

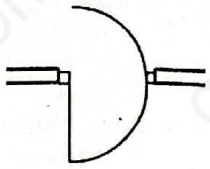

Figure 2

A A sliding door
B A wooden door
C A double acting single door
D A double door

7. When designing a building, the most important goal to achieve is

A The low cost of the building
B The strength of the building
C The functionality of the building
D The beauty of the building

8. The width of a toilet door should always be

A 70cm
B 75 cm
C 90 Cm
D 80cm

9. The symbols of furniture like bed, tables, wardrobes placed on a floor plan should be drawn

A Always to scale
B Always Not to scale
C Always To scale if they are not too big
D Always small scale only.

10. To dimension a floor plan manually, we have to:

A Write the rooms names before putting dimensions lines
B Make horizontal dimensions lines and write the names
C Put the dimensions lines before the rooms' names
D Write the names of the rooms and put horizontal dimensions lines

11. In a residential building, a room is
A Any enclosed space in it by a floor, walls and ceiling
B The area where the bed is placed
C The bedroom and living room
D Sitting room

12. The best method of drawing today is:
A Manual drawing
B Freehand sketching
C Computer Aided Drafting
D Computer drawing

13. The dimensions on paper of a house of 10mx20m will be
A 10 Cm x 20 Cm at scale 1/50
B 10 Cm x 20 Cm at scale 1/1
C 2cmx4c m at scale 1/50
D 50Cm x 50Cm at scale 1/50

14. The section of a building is
A A small part of it
B A vertical cut on it
C A floor plan only
D A floor plan or a vertical section

15. In an architectural firm , the drawings are done by
A The architect only
B The secretary of the office
C The draftsman only
D The draftsman or the architect

16. The floor dimensions can
A Only be known from views
B Be known from the floor plan
C Can be known from the detail drawings
D Be known from elevation

17. On a floor plan, we can have
A An infinite number of front elevations
B Only two front elevations
C Only three front elevations
D Only one front elevation

18. The main purpose of cumulative dimensioning on foundation plans is to
A Easily measure the beams length on the foundations
B Distinguish its dimensions from that of the floor plans
C Reduce measurement errors during setting out
D Reduce the number of dimensions lines

19. The most used scale for foundations drawing is
A 1/250
B 1/75
C 1/50
D 1/25

20. The roof plan represented by Figure 3 below is that of:

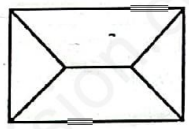

Figure 3
A Mansard roof
B Gable roof
C Pitched roof
D Hipped roof

21. The simplified roof plan of Figure 4 below shows that this roof has

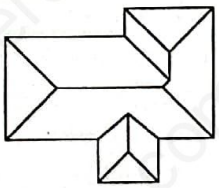

Figure 4
A 2 Valleys
B 5 valleys
C 3 valleys
D No valley

22. The purpose of a Reinforced Concrete drawing is to show:
A The dosage of reinforced concrete elements
B The type of formwork to use
C The shape, dimensions and position of each R.C element
D Nature of resistance of elements

23. Reinforced concrete drawings show each concrete element
A In plan only
B In plan and elevation
C In section and elevation only
D In plan, elevation and sections

24. The Figure 5 belowdescribes

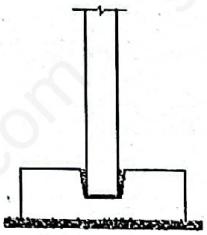

Figure 5
A A cast-in situ column in a footing
B A precast column in a footing
C The kicker level of the column
D A steel column on a concrete footing

25. The spacing of stirrups on a beam should
A Always be 20cm
B Be 25 cm
C Be between 20cm and 30 cm
D Depend on the structural engineer's calculations

26. The term rebar schedule means
A The timetable for doing rebar work on site
B The drawings showing how steel rods will be assembled
C The table showing all information needed to select, cut, assemble and place the rebar.
D The timetable for doing placing rebar

27. The mass of each element in a rebar schedule is indicated so that
A The technician can check it
B The total mass of a rebar frame can be calculated
C The bending bench should be made strong enough to carry it
D The total length can be known

28. When a beam is too long to fit on the drawing paper at the right scale,
A The scale must be increased to have the element fit
B The scale must be reduced to have the element fit on the paper
C The beam should be shorten using break lines
D The beam should be broken down into many portions that can fit well

29. In rebar drawings, the dimensions of the concrete elements should
A Not be indicated again since they are already on formwork drawings
B Still be indicated
C Partially be indicated because they are already on formwork drawings
D Be indicated below the line

30. The symbolin Figure 6 that follows, in rebar means

Figure 6
A A bundle of 3 bars
B A bundle of 6 bars
C Hooks are at the end of a main bar
D Joint lap

31. On Figure 7 below representing a column reinforcement detail, the number of main bars are

Figure 7
A 4
B 6
C 5
D 2

32. Hooks that will be used to lift a precast concrete element
A Should be represented in the rebar drawings
B Should not be represented in the rebar drawing
C Should just be placed in rebar when concreting
D Should be placed in the rebar after concreting

33. In the representation of an isolated footing mat,
A All the bars must be represented
B Only two symbolic bars can be sufficient for each layer.
C Each layer should be represented on a separate drawing
D Only one layer is sufficient

34. A chair in rebar drawings means
A The chair the technician sits on to bend rebar
B A prefabricated concrete cover
C Rods element used to keep a distance between rebar mats
D Chair for each mat

35. In which of the following cases in Figure 8 has the main bars of the beam been wrongly represented by the draftsman?

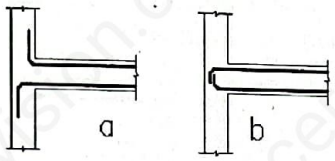

Figure 8
A In case b
B In case a
C In both cases
D In none of the cases

36. When developing the rebar drawing of a concrete element,
A Begin by drawing the rods section
B Begin by drawing the stirrup
C Begin by drawing the concrete element
D Begin by drawing the binding wire

37. On the reinforcement drawings, the binding wire used to tie bars should
A Be drawn
B Described in the specifications
C Not be mentioned
D Be shown

38. In metallic construction, the connection of a universal section column on a concrete footing is made using:
A Welding
B Nailing
C Rivets
D Screws and bolts

39. The difference between an I and H profiles profile is
A The flange in I is bigger than the flange in H
B The web for H is shorter than the web in I
C The web for I is shorter than the web in H
D The flange for H is shorter than the flange in I

40. Given that the gradient of a roof is 30%, if the span is 10.8, the minimum height of the king post is:
A 1.64m
B 6.56m
C 3.82m
D 3.28m

41. The steel elements used in constructions exist
A in limited standard sizes
B in the market
C for each type of building component
D Only on command

42. The floor plan of the steel structure in Figure 9 below shows that this structure has

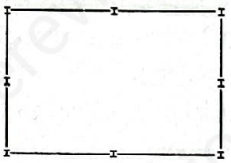

Figure 9
A One bay
B Two bays
C Eight bays
D Four bays

43. In order to properly execute steel drawings, the draftsman should
A Have the various dimensions of standard steel elements
B Have the standard dimensions and the engineer's prescriptions
C Only use his experience
D Make his own proposals

44. In the drawing of steel connections by knot and bolt, the
   A Drawings of the nuts and bolts should be given
   B Drawings of bolts and nuts aren't necessary
   C Size of the nuts should be given
   D Full name and characteristics of the nuts and bolts should be given

45. On a formwork plan Figure 10,2(15x40) means

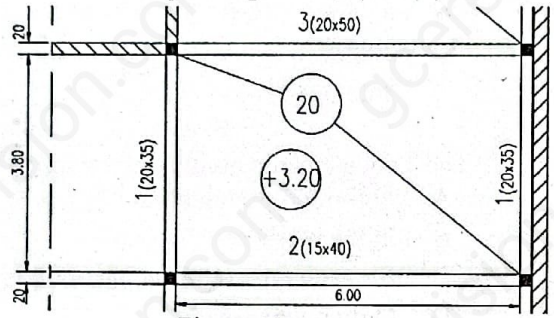

Figure 10

   A Beam 2 of cross sectional width 40cm and height 15cm.
   B Beam 2 of cross sectional width 15cm and height 40cm.
   C Beam 15 of cross sectional width 40cm and height 2cm.
   D Beam 15 of cross sectional width 2cm and height 15cm.

46. The drawing below Figure 11 refers to:

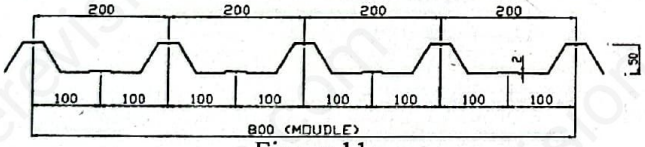

Figure 11

   A A sheet pile section 800mm
   B A steel beam cross section 800mm
   C A corrugated steel sheet of 800mm
   D A roofing sheet of 800cm

47. The formwork plan gives:
   A The dimensions of reinforced concrete elements and the thickness of timber.
   B The external dimensions of the reinforce concrete elements
   C Internal dimensions of the forms
   D The thickness of beams

48. The connection of a structural wood member to a concrete element can be done
   A Using nails
   B Using steel connectors
   C using wooden gussets
   D Using brackets

49. When you see any of the two shapes on Figure 12 below on a structural drawing of industrial constructions, it refers to:

Figure 12

   A A portal frame
   B A high roof truss
   C A roof truss without members
   D A large nice door for trucks

50. If the height of the first storey of a building is 3.2m and rise is 16cm, the number of treads required is
   A 12
   B 19
   C 20
   D 30

GO BACK AND CHECK YOUR WORK