## GENERAL CERTIFICATE OF EDUCATION BOARD

Technical and Vocational Education Examination

# .CONSTRUCTION PROCESSES 1 7495

**JUNE 2021** 

ADVANCED LEVEL

Specialty Name (Specialty Acronym)	WOOD CABINET-MAKING - WCM(MEB)				
Centre No.				80	
Centre Name	Co				
Candidate Identification No.					
Candidate Name					

Mobile phones are NOT allowed in the examination room 7495 CONSTRUCTION PROCESSES 1: MULTIPLE CHOICE QUESTION PAPER

## One and a half hours

## 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 7495 CONSTRUCTION PROCESSES 1
- 4. Fill in the information required in the spaces above.
- 5. Fill in the information required in the spaces provided on the answer sheet using your HB pencil:

  Candidate Name, Exam Session, Subject Code and Candidate Identification 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.

#### How to answer the questions in this Examination

- 6. Answer ALL 50 questions in this examination. All questions carry equal marks.
- 7. Non-programmable calculators are allowed.
- 8. 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] <del>[G]</del> [D]

- 9. 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.
- 10. 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.
- 11. 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.

· ·			Turn Over
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- Indicate the most important factor to be considered when selecting joints based on aesthetic.
  - A The strength
  - B The appearance
  - C Personal preference
  - D Possibility of realization
- 2. Which of the following safety equipment is recommended for personal safety?
  - A Gloves, respirator, guard, guide,
  - B Safety shoes, helmet, dust bag,
  - C Goggles, Gloves, Respirator, Safety cloth,
  - D Goggles and dust extractor.
- 3. Determine the number of tails required for the dovetail joint to be formed on the piece of width 180mm and thickness 30mm as shown on figure

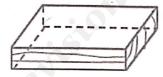


Figure 1

- A '
- B 6
- C = 3
- D 4
- 4. Select an example of non-positioned joint.
  - A Mitre joint
  - B Loose tongue and groove joint
  - C Box joint
  - D Finger joint
- 5. State with precision a factor which is not liable to cause accidents or increase visual fatigue in the work area.
  - A Poor ventilation
  - B Poor lighting
  - C Untidiness
  - D Good house keeping
- 6. In hygiene and safety, accidents and cases of ill health are generally less frequent and severe in offices. But to minimize risks, which of the following points should be observed?
  - A Clear up spillage
  - B Replace repair torn floor covering
  - C See the general advice on the workplace
  - D Good house keeping
- 7. Choose the appropriate category to which a butt joint supported with splines belongs.
  - A Positioned joint
  - B Non-positioned joint
  - C Angle joint
  - D Reinforced joint

8. Deduce the value of X from the sketch in figure 2.

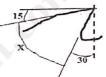


Figure 2

- A A.  $55^{\circ}$
- B B. 45°
- C C.  $35^{\circ}$
- D D. 75°
- Indicate the part of hardwood cross-cut saw teeth that prevent snatching when sawing pieces.
  - A Point
  - B Face
  - C Gullet
  - D Root
- 10. The symbol △ denoting the triangular wiring on some motors corresponds to
  - A 110V
  - B 380V
  - C 220V
  - D 400V
- 11. Pick-out a wood bending technique that uses gases.
  - A Dry bending
  - B Plain bending
  - C Kerf bending
  - D Wet bending
- 12. Choose a document that facilitates the calculation of the quantity of material required for a project.
  - A Estimate,
  - B Rough cutting list,
  - C Final cutting list
  - D Quantity list
- 13. Which of the following is not a factor of good workshop management?
  - A Equipment Maintenance
  - B General safety
  - C Inadequate spacing between machines
  - D Social cohesion
- 14. A piece that provides toe clearance on a cabinet is called
  - A Skirting
  - B Plinth
  - C Wood block
  - D Clearance

- Cite the correct appellation to a piece placed under the drawer to provide a surface on which the sides can slides.
  - A Runner
  - B Divider
  - C Dust panel
  - D Bottom shelf
- Tick carefully a non-shelf support from the list below.
  - A Cleat
  - B Horizontal batten
  - C Clip
  - D Standards
- 17. Identify the sketch in figure 3 below.

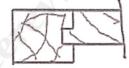


Figure 3

- A Square frame inset panel
- B Square frame flush panel
- C Square frame bead panel
- D Square frame raised panel
- 18. Cite a shutter design that obstructs a passage when opened.
  - A Sliding shutter
  - B Tambour shutter
  - C Folding shutter
  - D Swing shutter
- 19. Identify the joint shown in figure 4.



Figure 4

- A Single notched joint
- B Notched and cogged joint
- C Double notched joint
- D Halving joint
- 20. Screws are designated by
  - A The shape of the head
  - B The threads
  - C The shank
  - D The material from which it is made

- 21. Choose amongst the following, a metal mostly used for the fabrication of cutting edges for durability.
  - A Stellite
  - B Tungsten carbide
  - C High speed steel
  - D Cast iron
- 22. Select a factor not related to a well-organized work place (area).
  - A Adequate lighting
  - B Sufficient ventilation
  - C Good climatic condition
  - D Constant operative fatigue
- Cite the wood plane in which shrinkage is almost negligible.
  - A Radial
  - B Transversal
  - C Longitudinal
  - D Tangential
- 24. Indicate the colors that designate circulation areas or walkways in the plant.
  - A Black and white
  - B Black and yellow
  - C Green and black
  - D White and blue
- 25. State the recommended color for ceilings and walls in the work place.
  - A White and orange
  - B White and cream white
  - C White and violet
  - D Cream white and orange
- 26. Cite a document through which the needs, functions, services and constraint of a product are expressed:
  - A The method file,
  - B Exploitation document,
  - C The technical specification sheet,
  - D Research document.
- 27. Select the term that describes the process where much work is done effectively and efficiently through machine control operations with little or no frequent check
  - A Normalization,
  - B Automation,
  - C Productivity,
  - D Simplification

- 28. Indicate the term that designates the study of man in relation to his work.
  - A Human constraint
  - B Ergonomics
  - C Human nature
  - D Man power
- 29. The diagram in figure 5 below represents the mechanical transmission of power. Determine D.

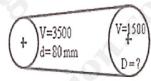


Figure 5

- A 188.6 mm
- B 187 mm
- C 34.2 mm
- D 34.3 mm
- When realizing templates, the final stage that enables us have the template ready for use is to
  - A Connect the points to a full size pattern
  - B Print in bold the template
  - C Cut out the template,
  - D Draw grids to a chosen scale
- Choose the type of template used to verify the exactness of the profile of shaped pieces.
  - A Control template,
  - B Calibrating template,
  - C Machining template,
  - D Tracing template
- 32. Indicate a term that describes the production of maximum variety of products from the minimum variety of materials, parts, tools and processes:
  - A Project rationalization
  - B Normalization
  - C Standardization
  - D Simplification
- Pick-out an aspect not related to Job specialization
  - A Simplification
  - B Improve worker skills
  - C Improves productivity
  - D Reduces task realization time
- 34. The proper care and measure taken to restore a system or machine to ensure its maximum useful life is termed
  - A Corrective maintenance
  - B Maintenance
  - C Preventive maintenance
  - D Periodic maintenance

- 35. Cite the expression that refers to the speed at which a work piece moves into the cutting head.
  - A Cutting speed
  - B Linear speed
  - C Feed speed
  - D Peripheral speed
- 36. Choose a factor which is **NOT** a complex operation of the Jigsaw?
  - A Deeping of intricate patterns
  - B Ripping of intricate patterns
  - C Cutting of intricate patterns
  - D Tenoning complex patterns
- 37. The sketch in figure 6 below designates



Figure 6

- A An inclined table
- B An inclined saw blade
- C An inclined fence
- D An inclined piece
- 38. Pick-out the exact word for this definition. It is a cylinder of soft dead tissues surrounded by layers of wood cells.
  - A Annual rings
  - B Heartwood
  - C Pith
  - D Cambium layer
- 39. Select a harder and denser wood species from the list below.
  - A Ebony
  - B Teak
  - C Sapele
  - D Mahogany
- 40. Which of the following factors favors most the rate of tree growth?
  - A Weather, climate and soil
  - B Weather, climate and location
  - C Soil, climate and location
  - D Oxygen, Nitrogen water
- 41. Indicate the inappropriate aspect in relation to lubricants.
  - A Fight against premature wear- out of mobile organs.
  - B Reduces friction between organs in movements
  - C Protect the machine against rust
  - D Increase speed and friction during movements

- 42. Select a term that designates an operation in the process of manufacturing of plywood.
  - A Grading
  - B Painting
  - C Polishing
  - D Nailing
- 43. Choose from below a list that comprises fixing devices.
  - A Hinges, locks, screws
  - B Security, mobility, fixing
  - C Screws, bolts, anchors
  - D Hinges, locks and nails
- 44. Pick out a factor that does not affect the strength of a joint.
  - A The direction of grains
  - B The level of moisture content
  - C The surface on which the joint is formed
  - D The appearance of the joint
- 45. Which of the assembly technique below renders the joint much stronger?
  - A Edge to face mating
  - B Face to end mating
  - C Edge to edge mating
  - D End to end mating
  - 46. Select a term that designates a graph constituting all construction and assembly stages of an object precising the number and reference of each element within the different phases of the work.
    - A Fabrication method.
    - B Fabrication processes,
    - C Fabrication study,
    - D Assembly Line

- 47. The main purpose of joining two pieces of the same size, edge to edge and in a horizontal plane is to increase
  - A The length
  - B The width
  - C The height
  - D The thickness
- 48. Cite one of the documents contained in the method file.
  - A Cutting list
  - B Assembly line
  - C Working drawing
  - D Material list
- 49. When constructing templates, the best material to be used which can enable it to last for a longer period in the shop is
  - A Paper
  - B Carton
  - C Plywood
  - D All the above
- 50. Select a term that describes the general acceptance of certain principles in construction as fundamental.
  - A Automation
  - B Rationalization
  - C normalization
  - D Simplification

### GO BACK AND CHECK YOUR WORK