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KENYA JUNIOR SCHOOL EDUCATION ASSESSMENT

MID-TERM II 2025 EXAM

GRADE 9

PRE-TECHNICAL STUDIES



Time: 1 hour 30 mins

NAME: _____
 SCHOOL: _____
 STREAM: _____ DATE: _____

INSTRUCTIONS

- a) Write your name, school, stream and date in the spaces provided above.
- b) This paper consists of two sections: A and B.
- c) Section A comprises Multiple Choice Questions numbered 1 to 30.
- d) Section B comprises short, structured questions number 31 to 35.
- e) Answer ALL the questions in section A in the table provided below.
- f) Answer ALL the questions in section B in the spaces provided in this QUESTION PAPER.
- g) Do NOT remove any page from this question paper. Answer ALL the questions in English

ANSWER SHEET – SECTION A

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.

21.	22.	23.	24.	25.	26.	27.	28.	29.	30.

LEARNER'S SCORE

SCORES		TOTAL
A (Out of 30)		
B (Out of 40)		

This paper consists of 7 printed pages. Candidates should check the question paper to confirm that all pages are printed as indicated and that no questions are missing

L'avenir commence ici

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SECTION A (30 marks)

Answer ALL the questions in this section. Write your answers in the spaces provided on the first page.

1. What is the main reason raised platforms are used in construction and maintenance work?
- A. They reduce the number of workers needed
 - B. They allow access to elevated and difficult-to-reach areas
 - C. They are cheaper than permanent structures
 - D. They can be used in place of ladders permanently

2. Identify the type of raised platform shown in the diagram below, commonly used in construction for temporary support at height.



- A. Ladder
- B. Elevated catwalk
- C. Cherry picker
- D. Scaffolding

3. Melissa wants to work on a mobile raised platform indoors. What is the best safety precaution she should take before starting the task?
- A. Wear bright-colored clothes
 - B. Use the nearest available ladder
 - C. Ask someone to hold the platform while you work
 - D. Ensure the platform is locked and stabilized
4. A worker needs to carry tools while climbing a ladder to a raised platform. What is the safest approach?
- A. Hold tools in one hand and climb with the other
 - B. Throw the tools up before climbing
 - C. Use a tool belt or hoist the tools after climbing
 - D. Climb quickly to minimize time on the ladder
5. While working on an aerial work platform, you notice strong winds starting to blow. What should you do?
- A. Stop working and lower the platform to a safe level
 - B. Use heavier tools to weigh down the platform
 - C. Secure yourself and continue working quickly
 - D. Move to the edge to assess the wind strength

6. The image shows a symbol that appears on a container of a lab acid.



What type of hazardous substance does it most likely indicate?

- A. Flammable
 - B. Poisonous
 - C. Corrosive
 - D. E-waste
7. A student is disposing of a broken phone and some electric wires at home. What is the safest method of disposal?
- A. Burn the items to reduce waste
 - B. Bury them in the backyard
 - C. Throw them in the regular household trash
 - D. Take them to an authorized e-waste recycling center
8. Why is it important to read the label before handling hazardous substances?
- A. To understand the hazards, precautions and necessary protective equipment
 - B. To know how much it costs
 - C. To check the expiry date only
 - D. To see if it's made locally
9. Jack Kadeere is transporting sealed containers of petrol. What safety measure should they definitely take?
- A. Lay the containers sideways for more space
 - B. Leave the trunk open to let fumes escape
 - C. Use paper bags to wrap the containers
 - D. Clearly mark the containers as flammable and secure them upright
10. Which of the following subjects falls under the STEM category in the proposed senior school curriculum?
- A. Metal Technology
 - B. Fine Arts
 - C. Kiswahili Mufti
 - D. Christian Religious Education

11. Marjorie who excels in carpentry and enjoys hands-on problem-solving. She wants to choose a suitable career. Which path would BEST suit their talent and ability?
- Data analysis
 - Business law
 - Construction management
 - Psychology
12. A person uses their talent in public speaking and social media to promote a new product but gives misleading details to attract buyers. Which unethical practice is this?
- Nepotism
 - Deceptive marketing practices
 - Conflict of interest
 - Privacy violation
13. A student interested in both cooking and entrepreneurship wants to align their passion with self-development. What is the BEST approach to achieve this?
- Focus only on hobbies and ignore learning
 - Wait for job offers before deciding on a direction
 - Attend culinary and business training while exploring startup opportunities
 - Avoid challenges to maintain balance
14. What is a key characteristic of oblique drawing in technical fields?
- It always shows objects from a bird's-eye view.
 - The front face is drawn in true shape and size.
 - It only uses horizontal lines for depth.
 - It exaggerates height more than width.
15. In military oblique projection, the receding lines are usually drawn at what angle?
- 60 degrees
 - 45 degrees
 - 30 degrees
 - 90 degrees
16. A student wants to draw a cube in oblique projection where all sides (including depth) are the same length and angle. Which method should they use?
- Cabinet projection
 - Cavalier projection
 - Military projection
 - Orthographic projection
17. An engineering student is following the steps to sketch an oblique projection. After drawing the front face and 45° lines for depth, what should they do next?
- Shade the front view
 - Draw the back view using dotted lines
 - Add dimensions and labels
 - Connect the ends of the depth lines with verticals to create height
18. What is the primary advantage of using visual programming?
- It requires specialized hardware to function
 - It replaces the need for algorithms
 - It is only used for creating animations
 - It simplifies programming by using graphical elements instead of text
19. Which of the following is not an example of visual programming software?
- Scratch
 - Blockly
 - Python
 - Code.org
20. Based on the image below, which type of Scratch component is being used to define a behavior when the green flag is clicked?



- Backdrop
- Script block
- Sound tab
- Costume

21. What is the function of sprites in a Scratch project?
- A. To act as characters or objects in the project
 - B. To write traditional code syntax
 - C. To control the background of the project
 - D. To represent mathematical formulas

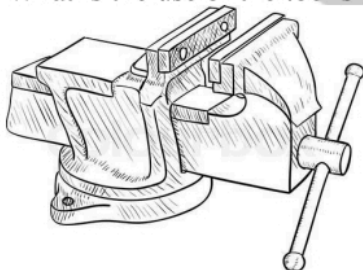
22. What does visual programming use instead of traditional code syntax?
- A. Mathematical formulas
 - B. Static variables
 - C. Keyboard shortcuts
 - D. Graphical blocks or elements

23. A teacher wants students to prototype an interactive story using characters, dialogue, and scenery. Which Scratch feature should they use first?
- A. Multiply button
 - B. Costumes tab
 - C. Sprites and backdrops
 - D. Sound effects

24. What is the main function of holding tools?
- A. To cut materials
 - B. To grip, clamp or secure objects during work
 - C. To hammer nails
 - D. To rotate screws and bolts

25. Which of the following is NOT an example of a holding tool?
- A. Bar clamp
 - B. Pipe wrench
 - C. Screwdriver
 - D. Locking pliers

26. What is the use of the tool shown below?



- A. To hold workpieces firmly while sawing, drilling or filing
- B. To cut wires and cables
- C. To tighten bolts and nuts
- D. To hammer nails

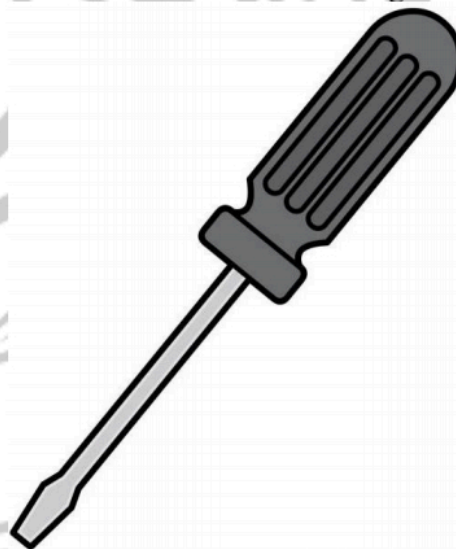
27. You are assembling a wooden panel and need to hold two large pieces together tightly while the glue dries. Which tool would be most suitable?

- A. Bar clamp
- B. Combination spanner
- C. Spring clamp
- D. Allen wrench

28. You need to loosen a stuck pipe fitting during plumbing work. Which tool is best suited for this task?

- A. Pipe wrench
- B. Combination spanner
- C. Chip clip
- D. Drill vice

29. *Examine the diagram of the tool.*
Which tool is shown in the diagram?



- A. Screwdriver
- B. Hammer
- C. Pliers
- D. Mallet

30. While working on electrical wiring, you need to cut and grip wires securely at the same time. Which tool should you use?

- A. Combination cutting pliers
- B. Hand vice
- C. Binder clip
- D. Spring clamp