071305T4EOP

Electrical Operator Level 5 (Power Option) ENG/OS/PO/CR/02/5 Apply workshop processes July/August 2023



TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)

WRITTEN ASSESSMENT

3 HOURS

INSTRUCTIONS TO CANDIDATE

This paper consists of sections A, B and C.

Answer **all** questions in section **A** & **B** and any **two** questions from section **C** in the answer booklet and drawing papers provided.

Do not write on the question paper.

Marks for each question are indicated in the brackets.

Only use CAD software for the specified questions.

This paper consists of seven (7) printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A: (20 Marks)

Answer all questions in this section

1.	Which of the following is true about faulty tools?	(1mark)
	A. safe to use	
	B. difficult to find	
	C. Save money	
	D. Can cause injuries	
2.	Which one of the following is not a benefit of using PPE?	(1mark)
	A. Reduced chances of electric shock	
	B. Prevents death	
	C. Restricts comfort and movement	
	D. Prevents respiratory infections	
3.	What is a fire escape?	(1mark)
	A. A way of running away from the fire	
	B. Designated window	
	B. Designated window C. Emergency exit D. A fire assembly point	
	D. A fire assembly point	
4.		(1mark)
	A. Tools Catalogue	
	B. Tools inventory	
	C. Tools black book	
	D. Tools master roll	
5.	Repairing of tools should take place	(1mark)
	A. After a long time	
	B. After using them	
	C. Immediately they develop problems	
	D. Once every year	

6.	What is the importance of a polarity test?	(1mark)
	A. To confirm proper insulation	
	B. To ensure that the sockets and lamps are connected in order	
	C. To ensure that each phase has continuity	
	D. To make sure that the three phases are not interconnected	
7.	Which of the following tools is used to carry out the continuity test?	(1mark)
	A. Multi-meter	
	B. Pliers	
	C. Screw driver	
	D. Ruler	
8.	The reason why we learn safety is to	(1mark)
	A. avoid being arrested	
	B. enable the trainer to pass examination	
	C. make everybody conscious D. make safety costly	
	D. make safety costly	
9.	Which of the following is true about a special waste?	(1mark)
	A. It can be dumped anywhere	
	B. It doesn't affect the people's health	
	C. It is considered hazardous	
	D. It requires specific handling for proper disposal	
10	. All equipment designed to be worn or held to protect against a risk to l	nealth and safety are
	referred to as	(1mark)
	A. Hazard	
	B. Risk	
	C. PPE	
	D. IEE.	

11. From the list below choose the potentially most dangerous work activity.		(1mark)
A.	Working on a live circuit	
B.	Working inside a grain silo	
C.	Fixing a socket outlet	
D.	Fixing a luminaire	
12. Which	of the following is the safest environment to work in?	(1mark)
A.	Working on a live circuit	
B.	Work in isolation	
C.	Work above ground level	
D.	Working in the dark	
13. What i	s the danger of storing electric tools in a moist environment?	(1mark)
A.	Corrosion of metal parts	
B.	Tools gets lost	
C.	Lack of locating tools on time	
D.	Tools disintegrate	
14. To avo	oid back injury when manually lifting heavy weights from ground level we	orkers
should	<u> </u>	(1mark)
A.	Bend both legs and back	
B.	Bend legs but keep back straight	
C.	Keep legs straight but bend back	
D.	Keep both legs and back straight	
15. Choos	e the three components that must be present for any fire to continue to but	n.
A.	Fuel, wood, cardboard	(1mark)
B.	Petrol, oxygen, bottled gas	
C.	Flames, fuel, heat	
D.	Fuel, oxygen, heat	
16. What i	s the initial assistance given to a casualty for any sudden injury called?	(1mark)
A.	Assembly point	
B.	Nominated person	
C.	First aider	
D.	First aid	

17. Record keeping in an electrical workshop helps to	
A. Arrange tools	
B. Predict equipment life	
C. Sell extra equipment	
D. Avoid budgeting for tools	
18. Which of the following is not an importance of proper storage of tools?	(1mark)
A. Tool durability	
B. Improved accessibility	
C. Reduced use of one tool	
D. Saves time	
19. Which of the following is not a type of waste disposal methods?	(1mark)
A. Recycling-	
B. Exporting	
C. Incineration	
D. Landfill/waste compaction	
20. Tools and equipment should be organized according to (1	mark)
A. Frequency of use	
B. Size of the tools	
C. Manufacturer	
D. Power or non-powered	

SECTION B: (40 Marks)

Answer all questions in this section

21. List any four factors to consider when deciding whether to repair or replace equipment in		
the workshop.	(4marks)	
22. State five advantages of keeping an equipment maintenance record.		
23. State five sources of accidents in an electrical workshop.		
24. Define Personal Protective Equipment.		
25. What is an accident?		
26. What is an electric shock?		
27. State two reasons why tools and Equipment are calibrated.		
28. State five importance of proper storage of tools and equipment.		
29. Outline the standard procedure for storing tools.		
30. State four reasons why it is important to keep a tools and equipment inventory.		
31. List any three activities carried out during preventive maintenance.		

SECTION C: (40 Marks)

Answer any two questions in this section

32. a) List down:

i.	Six applications of the pliers;	(6marks)
ii.	Two applications of an electrician's knife.	(2marks)
b) State six ways of maintaining:		
i.	Hack saws;	(6marks)
ii.	Pliers.	(6marks)
33. a) State five types of hazards caused by electricity.		(5marks)
b) Outline	the procedure of doing first aid on a victim who is not breathing.	(5marks)
c) Explain	five importance of tools and equipment maintenance record.	(10marks)
34. a) List any t	hree examples for each of the following classifications of tools:	(9marks)
	i. On the basis of shape;	
i	i. In the basis of grades;	
ii	i. On the basis of cut.	
b) State an	ny seven disadvantages of PPE.	(7marks)

c) State **four** repercussions of incorrectly handling an electrical instrument.

(4marks)

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