

EWM Test 2

SUBJECT: Electrical workman ship

LEVEL: 3

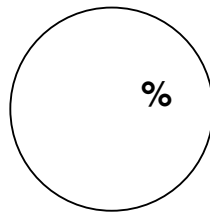
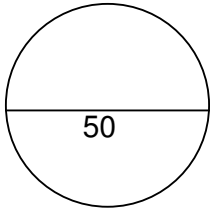
DATE: June 2017

EXAMINER: Raynier Deysel

NAME OF MODERATOR: B Allchin

Student Surname		Name	
ID. Number		Group	

Topic and outcomes covered	SO1, SO2, SO3
Duration	1 hour
Evidence Required	Answer sheet
Hand in date	JUNE 2017
Instrument	INTERNAL TEST 2



Rating Scale	Remark	Rating
4	Highly competent	80 - 100
3	Competent	50 - 79
2	Not yet Competent	40 - 49
1	Not achieved	0 - 39

SIGNATURES:

Student declaration: I declare that the provided is my own work.

evidence

STUDENT: _____ Date: _____

Revision Date: _____

Indicate which questions you found difficult (tick ✓)

1	2	3	4	5	6	7	8	Total
10	10	30						50

LECTURER: _____ Date: _____

COMMENT: _____

Post moderation _____

College moderation: _____ Date _____

External moderation _____ Date _____

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TEST 2 / June 2017

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Make use of the A 4/3 provided to write on.
4. The question numbers must be clearly indicated.
5. ALL the questions must be done in pen and sketches can be done in pencil .
6. A balanced layout is very important and candidates will be penalised for poor planning.
7. A calculator may be used.
8. Use your own discretion where dimensions are not given.

QUESTION 1

Topic 1: Trade practises

1.1 Define the following terms:

1.1.1 Safety.

(2)

- 1.1.2 Hazard. (2)
 - 1.2 A clean, uncluttered workplace is fundamental to any organizations safety programme.
 - 1.2.1 List three benefits of good housekeeping in the workplace. (3)
 - 1.2.2 List three signs of poor housekeeping. (3)
- (10)

QUESTION 2

Topic 2: Testing and measuring equipment

- 2.1 Testing and measuring instruments provide a visual indication of the quantity you are monitoring or measuring.
 - 2.1.1 What measuring instruments would you use to measure the following electrical quantities:
 - a) Amount of current drawn by a load (1)
 - b) The value of a motor winding (1)
 - c) Insulation value of a motor winding (1)
 - 2.2 Instrument transformers are used in conjunction with ammeters and voltmeters
 - 2.2.1 State the two types of instrument transformers. (2)
 - 2.2.2 Calculate the line voltage if the voltmeter shows 40 V. The VT transformer has 300 turns on the primary winding and 30 turns on the secondary windings. (5)
- (10)

QUESTION 3

Topic 3 and 4: Domestic appliances and maintenance

- 3.1 List THREE maintenance procedures that can be carried out on electric domestic appliances (3)
- 3.2 Explain the following terms:
 - 3.2.1 Visual inspection (2)
 - 3.2.2 Test run (2)
 - 3.2.3 Dismantle (2)
 - 3.2.4 Preventative maintenance (2)
 - 3.2.5 Manufacturer's manual (2)
- 3.3 A customer indicated that the drum of her tumble dryer does not turn, the air does not flow and that there is a burning smell coming out of the dryer.

- What do you think is faulty? (1)
- 3.4 During maintenance procedures, it is very important to isolate an electrical circuit successfully.
Name the THREE basic steps to follow when isolating an electric circuit.(3)
- 3.5 In your OWN words explain what maintenance means to you (2)
- 3.6 Make a neat labelled sketch of the wiring diagram of an electric iron (7)
- 3.7 All rotating motors have bearings that allow the motor to turn smoothly in its housing
Name TWO factors that will affect the life of a bearing (2)
- 3.8 When power tools fail, there are causes which affect them. In your OWN words explain what are the TWO common possible causes of power tool failure? (2)
- (30)
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TOTAL: [50]