

**CHRISTIAN SOCIAL SERVICES
COMMISSION (CSSC)
NORTHERN ZONE JOINT EXAMINATIONS
SYNDICATE (NZ-JES)**



FORM TWO PRE-NATIONAL ASSESSMENT AUG 2025

Electrical installation

MARKING SCHEME 1

1. 1@%

i	ii	iii	iv	V	vi	vii	viii	ix	x
D	C	B	C	A	D	B	C	A	D

2. 1@%

i	ii	Iii	iv	v
F	B	C	H	E

3.i series provide dim light while parallel it produce bright light 2@%

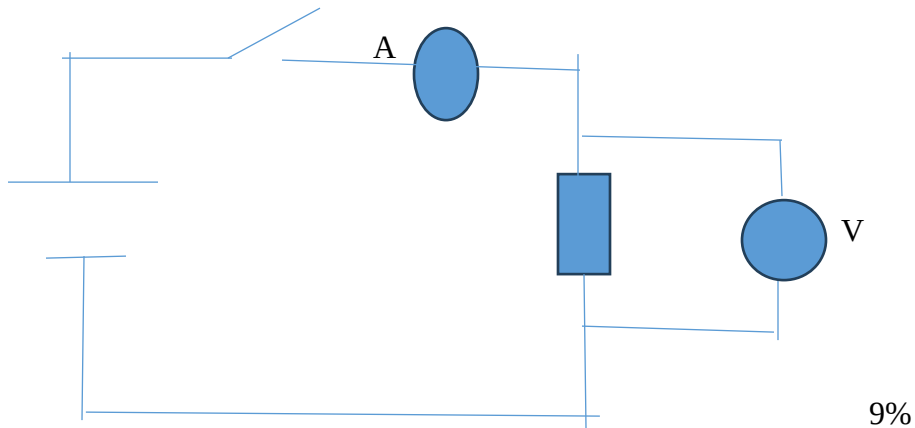
ii. series have high voltage while parallel it provide constant potential difference

iii. used to connect device in the only one path parallel it connect load from difference branches or way

iv make circuit operation dependently while parallel if operate load independently

v. $rt=r1 + r2$ while parallel $1/rt= 1/r1 + 1/r2$

4.



9%

5 .Safety gear

- i. Safety boot
Used to protect feet against sharp edge
- ii. Overall
Used to protect body in general
- iii. Muffle
Used to protect the ear against the noise
- iv. Mask
Used to protect face against face
- v. Goggles
Used to protect against eyes

2@%

6. five classes

Class A

Medium solid material

Class B

Medium liquid material

Class C

9%

Medium gases

Class D

Medium metal

Class f

Medium cooking oil

7. IEE regulation A2 3%

i. area floor is 50m^2

ii. size of conductor is 4mm^2

iii. rating of overcurrent 30A

IEE regulation A3 3%

i. Maximum area served is 20m^2

ii. Size of the conductor is 2.5mm^2

iii. Rating of overcurrent is 20A

B. reason

Were install thermostat in the oven circuit in order to regulate the heat in the device

8 (a).i. it done to extend life of the machine 3%

ii. it done to increase reliability

iii. It done to increase efficiency

iv. it done to improve occurrences

b) i. inspection ii. Testing iii. Repair 2%

c) testing

i. verification polarity 4%

ii. earth testing

iii. ring power circuit testing

iv insulation testing

v. continuity testing

9.

a

b.

5%

10%

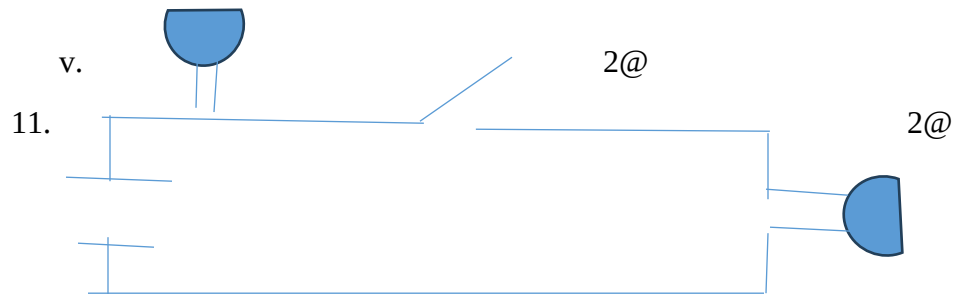
10. symbol

i.

ii

iii.

iv.



11 (b) uses of buzzer

- i. Uses household appliance
- ii. Used in siren 3%
- iii. Used in fire alarm
- iv. Used in timers operation