

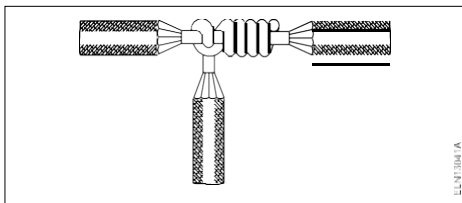
## Electrician - Block 1 - Module 3 : Wire joints - Soldering

### Questions: Level 1

1 What is the possible range to measure the size of the wire in a Standard Wire Gauge (SWG)?

- A 0-44
- B 0-42
- C 0-38
- D 0-36

2 What is the name of the wire joint?



- A Aerial tap joint
- B Knotted tap joint
- C Duplex cross tap joint
- D Double cross tap joint

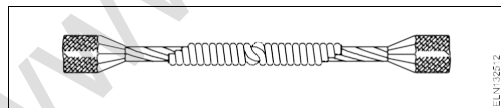
3 Which tool is used to measure the size of the wire?

- A Steel rule
- B Vernier caliper
- C Measuring steel tape
- D Standard wire gauge (SWG)

4 What is the unit of insulation resistance?

- A Ohm
- B Kilo ohm
- C Milli ohm
- D Mega ohm

5 What is the name of the joint?



- A Married joint
- B Scarfed joint
- C Western union joint
- D Britannia straight joint

6 What does the number 1.40 represent if a stranded conductor is designated as 10 sq.mm cable of size 7/1.40?

- A Area of cross section
- B Radius of one conductor
- C Diameter of all conductor
- D Diameter of each conductor

7 What is the value of electrical conductivity of aluminium conductor?

- A 61 mho/m
- B 56 mho/m
- C 35 mho/m
- D 28 mho/m

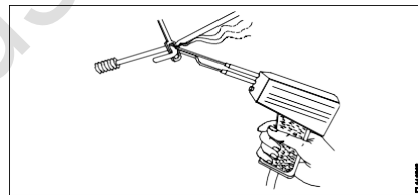
8 What is the rating factor of cable provided with coarse excess current protection?

- A 1.11
- B 1.23
- C 0.81
- D 0.707

9 What is the accuracy (or) least count of the outside micrometer?

- A 0.01 mm
- B 0.001 mm
- C 0.002 mm
- D 0.02 mm

10 What is the name of the soldering method?

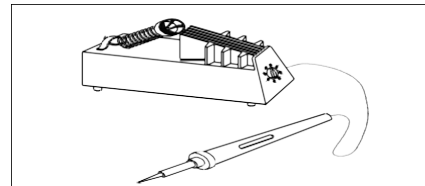


- A Dip soldering
- B Soldering iron
- C Soldering gun
- D Soldering with flame

11 Which size of conductor is bigger in diameter, when it is measured by SWG?

- A 14 SWG
- B 18 SWG
- C 21 SWG
- D 36 SWG

12 What is the name of the soldering method?



- A Dip soldering
- B Soldering with blow lamp
- C Soldering with soldering gun
- D Temperature controlled soldering

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**13** What is the expansion of AWG?

- A** American Wire Gauge
  - B** American Wire Grade
  - C** American Wire Group
  - D** American Wire Guard
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**Questions: Level 2**

1 What is the current carrying capacity of 32 amp rated cable, if it is protected by the rewirable fuse?

- A 13 Amp
- B 16 Amp
- C 26 Amp
- D 39 Amp

2 Which type of soldering flux is used for soldering galvanised iron?

- A Rosin
- B Zinc chloride
- C Sal ammonia
- D Hydrochloric acid

3 Which method of soldering is used for quantity production and for tinning work?

- A Dip soldering
- B Soldering with a flame
- C Soldering with soldering iron
- D Soldering with soldering gun

4 Which method of soldering is widely used for soft soldering?

- A Dip soldering
- B Soldering iron
- C Soldering gun
- D Soldering with a flame

5 Which electrical device is the coarse excess current protection?

- A Cartridge fuses
- B Rewirable fuses
- C Miniature Circuit Breaker (MCB)
- D High Rupturing Capacity (HRC) Fuses

6 Which type of joint is used for extending the length of conductor in over head lines?

- A Scarfed joint
- B Aerial tap joint
- C Britannia "T" joint
- D Western Union joint

7 Which type of soldering flux is used for soldering aluminum conductors?

- A Tallow
- B Ker-al-lite
- C Zinc chloride
- D Sal ammonia rosin

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8 What is the effect on molten solder due to repeated melting?

- A Tin content reduced
- B Lead content reduced
- C Prevent slug formation
- D Uneven flowing in joints

9 Why the soldering iron must be kept into a stand that not in use while soldering?

- A It prevents burns and fire
- B To control the excessive heat
- C To save the time of soldering process
- D To save the operator from electric shock

10 Which type of wire joint is found in the junction box?

- A Aerial tap joint
- B Plain tap joint
- C Rat tail joint
- D Married joint

11 What is the use of Britannia 'T' joint?

- A Extending the length of the lines
- B Inside and outside wiring installation
- C Mechanical stress not required on conductor
- D Tapping the service connection from overhead lines

12 Which type of soldering method is used for servicing and repairing work?

- A Dip soldering
- B Soldering with a flame
- C Soldering with soldering gun
- D Soldering with a soldering iron

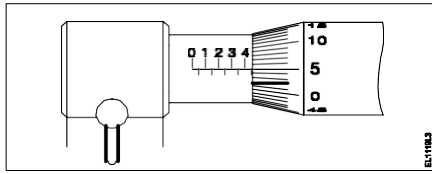
13 What is the use of dipsoldering method?

- A Soft soldering
- B Piping and cable soldering work
- C Soldering miniature components on PCB
- D Soldering sensitive electric components

14 Which type of joint is used in over head lines for high tensile strength?

- A Scarfed joint
  - B Britannia 'T' joint
  - C Western union joint
  - D Britannia straight joint
-

15 What is the reading of the micrometer?



- A 5.05 mm
- B 5.00 mm
- C 4.55 mm
- D 4.05 mm

16 Which method of soldering is used for repairing the vehicle body?

- A Dip soldering
- B Soldering with flame
- C Soldering with soldering iron
- D Soldering with soldering gun

17 What is the advantage of stranded conductor over solid conductor?

- A Cost is less
- B More flexible
- C Less voltage drop
- D More insulation resistance

18 What is the current capacity of the 16 Amp. Cable, if it is protected by coarse excess current protection?

- A 11 A
- B 13 A
- C 15 A
- D 18 A

19 What is the disadvantage of solid conductor compared to stranded conductor?

- A Less rigidity
- B Less flexibility
- C Low melting point
- D Low mechanical strength

20 Which type of wire joint is suitable for low current circuits only?

- A Knotted tap joint
- B Plain tap joint
- C Aerial tap joint
- D Double cross lap joint

21 What is the cause for cold solder defect in soldering?

- A Excessive heating
- B Insufficient heating
- C Incorrect use of solder
- D High wattage soldering iron

22 Which solder is used for soldering aluminium conductors?

- A Fire solder
- B Coarse solder
- C Timmer's solder
- D ALCAP solder

23 Which conductors are used for distribution lines?

- A Insulated conductors
- B Insulated solid conductors
- C Bare conductors
- D Two core cable

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**Questions: Level 3**

- 1 What will happen to PVC insulation in cable carries excess current continuously for long period?
- A Voltage drop increases
  - B Voltage drop decreases
  - C Insulation resistance increases
  - D Insulation resistance decreases
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- 2 Which is to be added to recondition the solder?
- A Tin
  - B Zinc
  - C Lead
  - D Rosin
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- 3 What happens If stranded cables are cut to insert to an under sized hole of wiring accessory, what will happen?
- A Loose connection
  - B Overheat on load
  - C Faulty circuit
  - D Overload
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- 4 What is the effect of accelerated cooling of soldering?
- A Tin content will be reduced
  - B Lowers mechanical strength
  - C Joint oxidises
  - D Splashing of solder
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### Module 3 : Wire joints - Soldering- Key paper

#### Questions: Level 1

SL.No	Key
1	D
2	B
3	D
4	D
5	A
6	D
7	C
8	B
9	A
10	C
11	A
12	D
13	A

#### Questions: Level 2

SL.No	Key
1	C
2	D
3	A
4	B
5	B
6	D
7	B
8	A
9	A
10	C
11	D
12	C
13	C
14	C
15	C
16	B
17	B
18	B
19	B
20	C
21	B
22	D
23	C

#### Question: Level 3

SL.No	Key
1	D
2	A
3	B
4	B