



CPRI EXAMINATION

Candidate User ID (as per Admit card):

Test Centre Name :

Exam Date : 19/12/2022

Exam Timing : 9:00 AM - 10:30 AM

Exam Name : TECHNICIAN GRADE 1

Note: Questions answered are highlighted with selection

- 1 Which is the wrong letter cluster in the following number series? ABC, DBF, GBI, KBL, MBO, PBR
- GBI
- KBL (Correct Answer)
- MBO
- DBF
- 2 Average marks of 5 students in a subject are 68. By how much will the average be increased, if marks of one student wrongly taken as 65 instead of 80?
- 4
- 1
- 3 (Correct Answer)
- 2
- 3 In the given sentence, identify the segment which contains a grammatical error. India export 12.01 million tonnes of rice and four million tonnes of sugar in the last five years.
- India export (Correct Answer)
- Sugar in
- Million tonnes
- And four
- 4 The difference between the squares of ages of Amar and Arif is 36 and the average of their ages after 2 years is 11. After how many years, will the ratio of their ages (Amar:Arif) be 8:7?
- 4 years
- 5 years
- 6 years (Correct Answer)
- 8 years
- 5 Which of the following is an example of Aerosol?
- Milk
- Paints
- Smoke (Correct Answer)
- Cheese
- 6 8 boxes A, B, C, D, E, F, G and H are stacked one above another. Four boxes are placed between C and G, which is placed 3rd from the bottom of the stack. Two boxes are placed between A and D, which is placed immediately above G. Only 1 box is placed between A and F, which is placed immediately below B. Which box is placed at the bottom of the stack if E is not placed at the bottom of the stack?
- F
- H (Correct Answer)
- A
- Either A or H
- 7 Two trains with different lengths cross a platform of length 400 m in 25 sec individually. In how much time will they cross each other when they are running in the same direction, if their respective speeds are 144 km/hr and 165.6 km/hr (in seconds)?

- 200
- 160
- 185
- 225 (Correct Answer)

8

In the question given, relations between different elements are shown in the statements. These statements are followed by two conclusions. Find out which of the given conclusions follow(s) the given statements. And select the correct alternative from the given choices.

Statements:

$U > H = G \geq N; E < N > W \geq O$

Conclusions:

I. $G > E$

II. $H > N$

- Only conclusion I is true (Correct Answer)
- Only conclusion II is true
- Either conclusion I or II is true
- Neither conclusion I nor II is true

9

Select the option that most closely resembles the mirror image of the given figure when the mirror is placed to its right side.

CAP47S233k96qbp

- I. dPq96k33S274PAC
- II. qPq96k33S274PAC
- III. C4P7S233k96qbp
- IV. qPq96k33S274PAC

- I
- II (Correct Answer)
- III
- IV

10

In each of the questions below are given some statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements:

No cap is a slap.

Some laps are slaps.

Conclusions:

I. No cap is a lap.



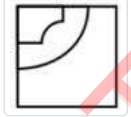


II. All laps are caps.

- if only conclusion I follows
- if only conclusion II follows
- if either conclusion I or II follows
- if neither conclusion I or II follows (Correct Answer)

11

Fill in the blank with the correct word.

No bomb was found on the airport premises as the caller informed on the phone. The call proved to be a _____.

- fox
 Hoax (Correct Answer)
 persuasion
 knot
- 12 Which of the following is not a tributary of Ganga?
- Ghaghra
 Kosi
 Manas (Correct Answer)
 Mahananda
- 13 A solid cone whose height is 24 cm and radius of the base is 14 cm is melted and recast into a regular pyramid of equilateral triangle. If the height of the pyramid is $7\sqrt{3}$ cm, then what is side of the base of triangular base of the pyramid?
- 14 cm
 15 cm
 16 cm (Correct Answer)
 12 cm
- 14 The Charminar monument is located in -
- Lucknow
 Belagavi
 Hyderabad (Correct Answer)
 Bengaluru
- 15 Which answer figure will complete the pattern in the question figure?
- 
-  (Correct Answer)
- 
- 
- 
- 16 In which year was the Brahmo Samaj was founded?
- 1825
 1828 (Correct Answer)
 1833
 1842
- 17 Kathakali is a dance-form of which of the following state-
- Karnataka
 Tamil Nadu

- Kerala (Correct Answer)
- Gujarat

18 In which year was the Jaisalmer Fort built?

- 1123
- 1156 (Correct Answer)
- 1178
- 1189

19 In the following question, a sentence has been given in Direct Speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect Speech.

"I love to play cricket," he said.

- He said that he loves to play cricket.
- He said that he will love to play cricket.
- He said that he would love to play cricket.
- He said that he loved to play cricket. (Correct Answer)

20 In the following passage, some words have been left out and replaced by a blank represented by a letter. First, read the passage and try to understand what it is about. Then fill in the blanks as per the questions given.

Actions, by themselves, have no power. They derive their _____ A _____ from our intentions. Why get up in the morning? Because we have a purpose. Why take medicines? To heal. If that is the case, should we _____ B _____ our actions _____ C _____ intentions? The answer is apparent; the intentions need to be _____ D _____. The intention is the purpose that _____ E _____ how we will plan or act in a particular manner.

Which of the following word will fill in the blank B?

- govern (Correct Answer)
- governs
- governing
- governed

21 Who out of the following was the successor of Chandragupta Maurya?

- Ashoka
- Samudragupta
- Bindusara (Correct Answer)
- Bimbisara

22 What should come in place of the question mark (?) in the following question? $\sqrt{(19 \times 650 \div 13 + 18.5 \times 4) \times 13} = ?$

- 418
- 415
- 413
- 416 (Correct Answer)

23

In the following passage, some words have been left out and replaced by a blank represented by a letter. First, read the passage and try to understand what it is about. Then fill in the blanks as per the questions given.

Actions, by themselves, have no power. They derive their _____ A _____ from our intentions. Why get up in the morning? Because we have a purpose. Why take medicines? To heal. If that is the case, should we _____ B _____ our actions _____ C _____ intentions? The answer is apparent; the intentions need to be _____ D _____. The intention is the purpose that _____ E _____ how we will plan or act in a particular manner.

Which of the following word will fill in the blank D?

- overseen (Correct Answer)
- oversaw
- oversee
- overseeing

24

Fill in the blank with the Correct option in the context.

The British government successfully _____ the revolt of 1857.

- repressed
- suppressed (Correct Answer)
- oppressed
- pressed

25

In which year did J. Chadwick discover a sub-atomic particle which was eventually named neutron?

- 1930
- 1932 (Correct Answer)
- 1934
- 1936

26

What is the full-form of IFSC in banking?

- Indian Financial System Code (Correct Answer)
- International Financial Systematic Coding
- Indian Fund Synchronization Code
- International Fund Synchronization Code

27

In a row of 15 children, when Ruksana was shifted three places towards right, she becomes 9th from the right end. What was his earlier position from the left end of the row?

- 4 (Correct Answer)
- 5
- 6
- 7

28

At a certain rate of compound interest, a certain sum amounts to Rs. 51840 in 4 years and Rs.74649.6 in 6 years. What is the compound interest earned in fifth year?

- Rs.10368 (Correct Answer)
- Rs.10240
- Rs.10400
- Rs.11425

29

In the following question, a sentence has been given in Passive Voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Active Voice.

The cake is being cut and distributed by Susie.

- Susie was cutting and distributing the cake.
- Susie cut and distributed the cake.
- Susie had been cutting and distributing the cake.
- Susie is cutting and distributing the cake. (Correct Answer)
- 30 From the given responses, find the missing letter cluster in the series. HANDWASH, KDNDWASH, ?, HANDZDSH, HANDWAVK
- HAQPVZSH
- HAQGWASH (Correct Answer)
- HAOPWASH
- KDQGWASH
- 31 In the given sentence, identify the segment which contains the grammatical error. Though many people think that heart issues are a "men's problem," heart disease affects more women than men.
- Many people
- Women then men (Correct Answer)
- Issues are
- Affects
- 32 Who is the author of the book 'The God of Small Things'?
- Arundhati Roy (Correct Answer)
- William Dalrymple
- Mulk Raj Anand
- Khushwant Singh
- 33 If ABJURATION is written as AJRTOBUAIN then how will ACCOMPLISH be written as?
- ACMLSCOPIH (Correct Answer)
- ACLMSCOIPH
- AMCLOSCPIH
- AMCLSCOPIH
- 34 Choose the word from the options that is most similar in meaning to the given word.
- Repellent**
- Autonomous
- Unpleasant (Correct Answer)
- Innocuous
- Incessant
- 35 What is the minimum age required for a person to qualify as a Presidential candidate in India?
- 25 years
- 30 years
- 35 years (Correct Answer)
- 40 years
- 36 Two parallel sides of a trapezium are in the ratio 3: 5 respectively and height is 4 cm more than the smaller parallel side. If area of trapezium is 896 cm^2 , then find the height of trapezium.
- 28 cm (Correct Answer)
- 24 cm
- 32 cm
- 20 cm
- 37 Which of the following state government has launched AMLAN (Anemia Mukta Lakhya Abhiyan) programme recently?
- Maharashtra

- Karnataka
- Odisha (Correct Answer)
- Himachal Pradesh

38 What should come in place of the question mark (?) in the following question?

$$(9^2 \times 27 + 3^3 \times 7 + ?)^{\frac{1}{2}} = 59$$

- 1090
- 1111
- 1105 (Correct Answer)
- 1087

39 If 12% of 75% of 80% of a = 18, then which of the following is true?

- I. 4% of 18% of a = 2.4
- II. 30% of a% of 1200 = 720
- III. 6% of a = 21

- Only I
- Only III
- Only II
- None of these (Correct Answer)

40 Select the option in which the words share the same relationship as that shared by the given pair of words.

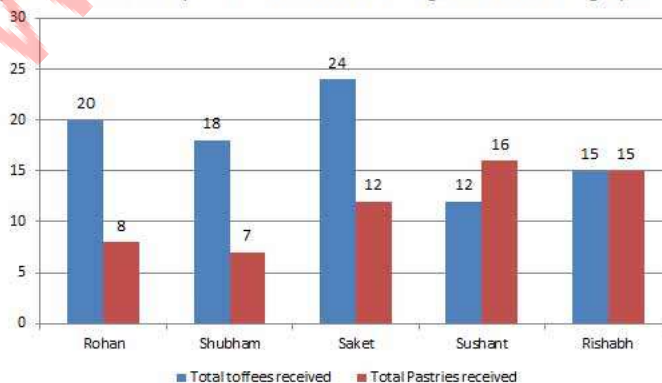
School : Study

- University : President
- Temple : Worship (Correct Answer)
- Golden Temple : Amritsar
- Zoo : Animals

41 Find the missing number in a series given below: 12, 6, __, 9, 18, 45, 135, 472.5

- 8
- 18
- 10
- 6 (Correct Answer)

42 Vishal distributed toffees and pastries to his friends on the occasion of his birthday. Information about the number of toffees received and number of pastries received by some of his friends are given in the line graph.



Total toffees received by Rohan, Shubham, Saket, Sushant, and Rishabh together is 17.8% of total toffees distributed by Vishal. Find the number of toffees distributed by Vishal.

- 600
- 500 (Correct Answer)
- 400
- 540

43 In the following question, select the related letters from the given alternatives. QNKH: GDAX :: WTQN: ?

- MKGD
- MJGD (Correct Answer)
- MJJD
- MJHD

44 If 'x' means 'addition', '-' means 'division', '/' means 'subtraction' and '+' means 'multiplication', then what will be the value of the expression ' $32 - 4 + 5/21 - 7 + 5/12$ '?

- 11
- 13 (Correct Answer)
- 17
- 21

45 In the following passage, some words have been left out and replaced by a blank represented by a letter. First, read the passage and try to understand what it is about. Then fill in the blanks as per the questions given.

Actions, by themselves, have no power. They derive their _____ A _____ from our intentions. Why get up in the morning? Because we have a purpose. Why take medicines? To heal. If that is the case, should we _____ B _____ our actions _____ C _____ intentions? The answer is apparent; the intentions need to be _____ D _____. The intention is the purpose that _____ E _____ how we will plan or act in a particular manner.

Which of the following word will fill in the blank C?

- and
- but
- or (Correct Answer)
- for

46 The Pushkar Fair, is an annual festival organized in which state of India?

- Kerala
- Karnataka
- Rajasthan (Correct Answer)
- Maharashtra

47 Veena sells all her shop's items at Rs. 45 each. The materials cost is Rs. 30 for each item and she has overhead expenses of Rs. 2800 per week in order to operate that manufacturing unit. What is the number of units she should produce and sell in order to make a profit of Rs. 1400 per week?

- 320
- 300
- 250
- 280 (Correct Answer)

48 Select the option that will improve the bracketed part of the sentence. In case no improvement is needed, select 'No improvement'. Peterkin readjusted his hat and was soon listening with (as much interest) as I was.

- so much interest
- as many interests
- so many interests
- No Improvement. (Correct Answer)

In the following passage, some words have been left out and replaced by a blank represented by a letter. First, read the passage and try to understand what it is about. Then fill in the blanks as per the questions given.

Actions, by themselves, have no power. They derive their _____ A _____ from our intentions. Why get up in the morning? Because we have a purpose. Why take medicines? To heal. If that is the case, should we _____ B _____ our actions _____ C _____ intentions? The answer is apparent; the intentions need to be _____ D _____. The intention is the purpose that _____ E _____ how we will plan or act in a particular manner.

Which of the following word will fill in the blank A?

- weakness
- strength (Correct Answer)
- core
- matter

50 Select the correctly spelt word.

- exilerate
- monotonous
- meticulous
- narrative (Correct Answer)

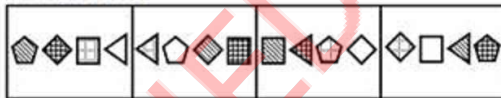
51 Which of the following soils is known as the 'Ultisols'?

- Red clay Soil (Correct Answer)
- Alluvial Soil
- Black Soil
- Laterite Soil

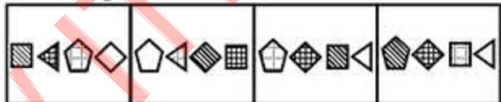
52

Select the figure that will come next in the following series:/ Select the figure that will come next in the following series:

Problem Figures



Answer Figures



- A (Correct Answer)
- B
- C
- D

53 A bag contains some sugar. 12 kg of sugar is replaced with white crystals. The process is repeated 1 more time. The amount of sugar in the bag now is $25/3$ kg. What was the amount of sugar in the bag initially (in kg)?

- 24
- 36
- 30
- 27 (Correct Answer)

54 If a seven-digit number $6124x78$ is divisible by 9, then what is the value of $(2x + 3)$?

- 15

- 19 (Correct Answer)
 17
 21

- 55 In the question below, there are two statements followed by four conclusions given in options. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusion logically follow(s) from the given statements.

Statements:

Some books are cards.

Some cards are pretty.

Conclusions:

(A) ALL books are pretty.

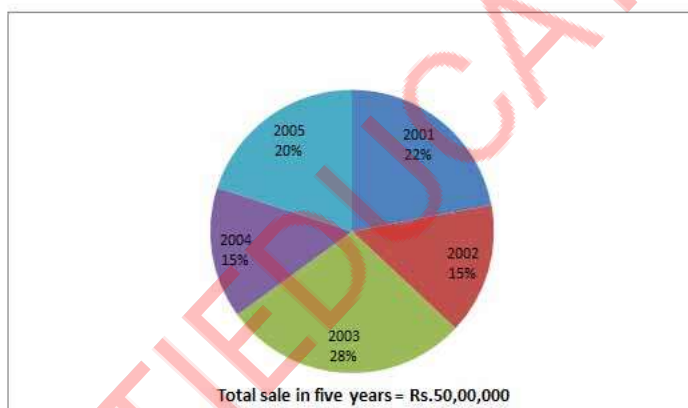
(B) All pretty are books.

(C) All cards are books.

(D) Some pretty are cards.

- A
 B
 C
 D (Correct Answer)

- 56 The given pie chart shows the sales of a company over five years.



Sale = expenditure + profit

Profit % = (profit/expenditure) x 100 %

If profit of the company in 2001 was 10%, in 2002 was 25% and in 2003 was 40%, then find the ratio of expenditure in 2001, 2002 and 2003 together to sale of the company in 2004 and 2005 together.

- 52 : 35 (Correct Answer)
 49 : 26
 3 : 2
 36 : 23
- 57 Two pipes A and B whose flow rates are in the ratio 3 : 2 when opened together can fill a tank in 6 hours. If pipe A along with draining pipe which can empty the tank in 20 hours is opened together then the tank will be filled in how much time?
- 15 hours
 60 hours
 30 hours
 20 hours (Correct Answer)

- 58 Who was elected as the new president of the International Hockey Federation (FIH)?

- Dato Fumio Ogura
- Mohammad Tayyab Ikram (Correct Answer)
- Thierry Weil
- Rajeev Shukla

59 Choose the word from the options that is opposite in meaning to the given word.

Inadvertent

- Unintentional
- Impious
- Deliberate (Correct Answer)
- Peevish

60 In the following passage, some words have been left out and replaced by a blank represented by a letter. First, read the passage and try to understand what it is about. Then fill in the blanks as per the questions given.

Actions, by themselves, have no power. They derive their ___A___ from our intentions. Why get up in the morning? Because we have a purpose. Why take medicines? To heal. If that is the case, should we ___B___ our actions ___C___ intentions? The answer is apparent; the intentions need to be ___D___. The intention is the purpose that ___E___ how we will plan or act in a particular manner.

Which of the following word will fill in the blank E?

- suggests
- negates
- makes
- defines (Correct Answer)

61 What type of maintenance schedule is to be done for transformers of capacities less than 1000 KVA, on an hourly basis?

- Checking of De-hydrating breather
- Checking of Oil level in transformer
- Checking of Load (Amperes) & Voltage (Correct Answer)
- Checking of Earth resistance

62 Name the device that does not rotate continuously, but rotates in the form of pulses.

- Stepper motor (Correct Answer)
- Repulsion motor
- Universal motor
- Shaded pole motor

63 Illumination is defined as –

- The energy radiated from a luminous body per second in the form of light waves.
- The amount of light emitted in a direction by a source of one candle power.
- Luminous flux emitted by a light source per unit solid angle.
- Luminous flux reaching a surface perpendicularly per unit area. (Correct Answer)

64 Which of the following specifications is not mandatory to be labelled on the underground cables?

- Type of cable
- Cable code
- Number of cores
- Type of insulator (Correct Answer)

65 Which are manufactured by using resistance wire wrapped around an insulating core like ceramic

porcelain etc.?

- Carbon film resistors
- Wire-wound resistors (Correct Answer)
- Carbon composition resistors
- PTC resistors

66 Which of the following is not a cause of the incorrect magnitude of fluxes error, caused by the driving system of an energy meter?

- Improper lag adjustment
- Unsymmetrical magnetic circuit (Correct Answer)
- Change in resistance with temperature
- Abnormal frequencies

67 The moving coil is connected in series with a _____ across the terminals of the incoming machine.

- Inductor
- Resistor
- Lamp
- Capacitor (Correct Answer)

68 Which one of the following is not the requirement for producing dynamically induced emf?

- Magnetic field
- Electric field (Correct Answer)
- Conductor
- Relative motion between the conductor and the magnetic field.

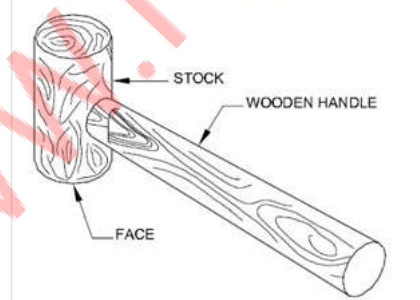
69 Aggressive behaviour of an employee can be categorised as a/an _____.

- Physiological hazard
- Psychological hazard (Correct Answer)
- Physical hazard
- Ergonomic hazard

70 Which one of the following is incorrect with respect to series wound DC generators?

- With the increase in load the terminal voltage of the machine increases.
- After reaching its maximum value it starts to decrease.
- The decrease in the value is due to the magnetizing effect of the armature. (Correct Answer)
- With the increase in load the field current increases.

71 Name this tool used by electricians.



- Hammer ball pein
- Gimlet
- Pincer
- Mallet (Correct Answer)

72 _____ refers to the imaginary line joining the two poles of a magnet.

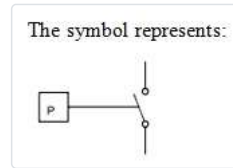
- Magnetic field
- Magnetic axis (Correct Answer)
- Magnetic lines

- Magnetic neutral axis
- 73 Name the process in which a metal is deposited on the surface of another metal by the method of electrolysis.
- Electroplating (Correct Answer)
- Nano plating
- Soldering
- Brazing
- 74 Which of the following statement mentioned below is correct?
- 1) The power factor can be one
- 2) The power factor can be less than one
- 3) The power factor can be greater than one
- 4) The power factor can be one or less than one
- 1,2 & 4 are correct and 3 is incorrect (Correct Answer)
- 4 is correct and 1,2, and 3 are incorrect
- 2 & 3 are correct and 1 & 4 are incorrect
- All are correct.
- 75 _____ acts as a rotor in an excitation alternator.
- Armature (Correct Answer)
- Winding
- Shaft
- Slot
- 76 _____ is a phenomenon in the alternator which is caused by continuous fluctuation in load.
- Hunting (Correct Answer)
- Booster
- Transient
- Excitation
- 77 The ratio of the mass of a given volume of liquid to the mass of the same volume of water at _____ is known as the specific gravity of the liquid.
- 10°C
- 5°C
- 4°C (Correct Answer)
- 20°C
- 78 What is a trickle charge?
- Charging of a battery at a very low rate for a long time. (Correct Answer)
- Charging of a battery at a very fast rate for a short time.
- First charging of a new uncharged battery
- Charging of a battery when it is put into service for the first time.
- 79 Which type of reflector is used in a damp and corrosive atmosphere?
- Dispersive type (Correct Answer)
- Mirror type
- Parabolic type
- Softlight
- 80 Which of the following describes the use of a cross-cut chisel?
- It is used for chipping excess metal off from castings.
- It is used for squaring materials at the corners.
- It is used for removing metal from large flat surfaces.
- It is used for cutting keyways. (Correct Answer)

81 What is the term given to the accidental connection of a live portion of an electrical system to the earth?

- Earth electrode
- Leakage current
- Step potential
- Earth fault (Correct Answer)

82



- Circuit breaker
- Thermostat
- Pressure switch (Correct Answer)
- Three pole switches

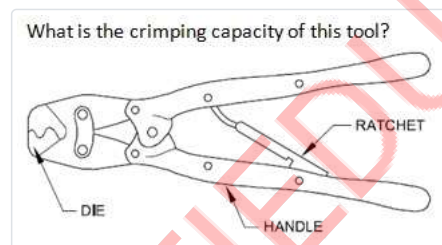
83 Which of the following is a valid technique to detect a short circuit in a series circuit?

- A huge current flow is indicated by the ammeter (Correct Answer)
- The full supply voltage is indicated in the voltmeter
- Infinite resistance is indicated in the ohmmeter
- No current is indicated in the ammeter

84 How can we compensate for the demagnetizing effect of reduced induced emf in large machines?

- Providing compensating windings in series with the armature (Correct Answer)
- Increasing the ampere-turns in field windings
- Providing compensating windings in parallel with the armature
- Decreasing the ampere-turns in field windings

85



- 0.46 mm to 3.25 mm (Correct Answer)
- 0.5 mm to 6 mm
- 7.01 mm to 10.92 mm
- 9.44 mm to 12.7 mm

86 _____ is also called as a constant voltage generator.

- DC series generator
- DC shunt generator (Correct Answer)
- Short shunt compound generator
- Long shunt compound generator

87 According to which law, the algebraic sum of all branch currents meeting at a point is zero?

- Kirchhoff's first law (Correct Answer)
- Ohm's law
- Coulomb's law
- Kirchhoff's second law

88 The constant losses in shunt and compound generators are equal to_____.

- Stray loss + windage loss
- Mechanical loss+ stray loss

- Mechanical loss + core loss
- Stray loss + shunt field copper loss (Correct Answer)

89

Match the following:

COLUMN A	COLUMN B
I) Diameter less than 0.071 mm	A. Measurement by resistance and diameter
II) Diameter over and including 0.071 mm up to 1.000 mm	B. Measurement only by the diameter
III) Diameter over 1.000 mm	C. Measurement only by resistance

- I-C, II-A & III-B (Correct Answer)
 - I-A, II-B & III-C
 - I-C, II-B & III-C
 - I-B, II-A & III-A
- 90 Why should there be an AC supply to the electrodes in case of an earth resistance tester?
- To avoid the effect of electrolytic emf with the instrument reading (Correct Answer)
 - To stop the vibration of the meter needle
 - To reduce the voltage drop inside the instrument
 - To decrease the handle rotating speed of the instrument
- 91 The Electrochemical equivalent (ECE) of Silver is _____ milligram/coulomb.
- 1.1200
 - 1.1300
 - 1.182
 - 1.1182 (Correct Answer)
- 92 According to the Flemings, right-hand rule the forefinger points to the _____.
- Motion of the conductor
 - Direction of the magnetic flux (Correct Answer)
 - Direction of the current
 - Direction of the Voltage
- 93 What is the name of the device which is used to measure the insulation resistance?
- A common tester
 - Megger (Correct Answer)
 - Multimeter
 - Simple meter
- 94 What will happen if one cell connection in a series group is reversed?
- It will cause a short circuit
 - It will produce a lower battery output voltage than expected (Correct Answer)
 - The cells will be permanently damaged
 - No change in the batter output voltage
- 95 Which of the following is NOT a desirable characteristic of an insulator?
- Low dielectric strength (Correct Answer)
 - Resistance to temperature
 - Mechanical strength
 - Flexibility
- 96 Unguarded machinery can be categorised as a _____.
- Physiological hazard
 - Mechanical hazard (Correct Answer)
 - Physical hazard

- Ergonomic hazard
- 97 Which of the following diagrams give an estimation of the actual physical position of the components used for the wiring installation work?
- Layout diagram
 - Installation plan
 - Wiring diagram (Correct Answer)
 - Circuit diagram
- 98 Which type of capacitor is used for starting AC capacitor-type motors?
- An electrolytic capacitor of polarized types
 - A ceramic capacitor of non-polarized types
 - An electrolytic capacitor of non-polarized types (Correct Answer)
 - A ceramic capacitor of polarized types
- 99 Which of the following demonstrates the work of conduit saddles?
- To join two or more conduits
 - To protect the cable insulation from damage
 - To fasten the conduit on the surface of a wall (Correct Answer)
 - To bend a conduit
- 100 If the current in an electric lamp is 7 amperes, find the quantity of electricity flowing towards the filament in 10 minutes.
- 70 Coulomb
 - 4200 Coulomb (Correct Answer)
 - 0.7 Coulomb
 - 85.71 Coulomb