Electrician Instructor under the Directorate of Employment & Craftsmen Training, Department of Labour Employment & Skill Develoment

Year of Advt: 2025 **Date of Exam: 17-June-2026**

Booklet Serial No. 11013

DO NOT BREAK THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

QUESTION BOOKLET

SERIES : I

Subjects : General English, General Knowledge & Current Affairs, Reasoning & Quantitative Aptitude, and Electrical Engineering

Full Marks : 300 **Time Allowed : 2½ Hours**

Read the following instructions carefully before you begin to answer the questions.

INSTRUCTIONS TO CANDIDATES

1. This Booklet contains 150 questions to be answered in a separate OMR Answer Sheet using Black Ballpoint Pen in the following four Parts :

Part—A : General English	:	**25 questions**
Part—B : General Knowledge & Current Affairs	:	**15 questions**
Part—C : Reasoning & Quantitative Aptitude	:	**10 questions**
Part—D : Electrical Engineering	:	**100 questions**

2. **All** questions are compulsory.
3. You will be supplied the Answer Sheet separately by the Invigilator. You must complete the details of particulars asked for.
4. Answer must be shown by completely blackening the corresponding circle in the Answer Sheet against the relevant question number by Black Ballpoint Pen. OMR Answer Sheet without marking Series shall not be evaluated.

   Example :

   Suppose the following question is asked :

   The Capital of Meghalaya is

   (A) Guwahati

   (B) Kohima

   (C) Shillong

   (D) Delhi

   You will have four alternatives in the Answer Sheet for your response corresponding to each question of the Question Booklet as below :

   Ⓐ Ⓑ Ⓒ Ⓓ

   In the above illustration, if your chosen response is alternative (C), i.e., Shillong, then the same should be marked on the Answer Sheet by blackening the relevant circle with a Black Ballpoint Pen only as below :

   Ⓐ Ⓑ ● Ⓓ

   The example shown above is the only correct method of answering.
5. Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any one question.
6. There will NOT be any negative marking for wrong answers.
7. The Answer Sheet must be handed over to the Invigilator before you leave the Examination Hall.
8. No Rough Work is to be done on the Answer Sheet. Space for Rough Work has been provided in the Question Booklet.

SEAL

PART—A : GENERAL ENGLISH

(*Marks* : 50)

Each question carries **2** marks

Directions **: Read the following passage and answer the questions by selecting the answer choice from the alternatives given. Mark the correct answer in your answer sheet.**

Once upon a time, a businessman named Ray Kroc discovered a restaurant owned by two brothers. The restaurant served just four things—hamburgers, french fries, milkshakes and Coca-Cola. But it was clean and inexpensive, and the service was quick. Mr. Kroc liked it so much that he paid the brothers so that he could use their idea and their name—McDonald's Beef. Big business and fast service were the ingredients when Mr. Kroc opened his first McDonald's in 1955. Four years later, there were 100 of them. Kroc knew Americans liked success. So, he put signs saying how many millions of McDonald's hamburgers people had bought. In just four years, the number was one hundred million. Now there are more than 13000 McDonald's restaurants from Dallas to Paris and from Moscow to Beijing.

Anyone who wants to open a McDonald's must first work in one for a week. Then, they do a nine-month training programmed in the restaurants and at 'McDonald's University' in Chicago. There they learn the McDonald's philosophy : quality control, service, cleanliness and cheap prices. McDonald's has strict rules, hamburgers must be served before they are ten minutes old and French fries, seven.

McDonald's has never stopped looking for new methods to attract customers, from drive-in windows to birthday parties. Chicken, fish, salad and, in some places, pizza are now on the menu. McDonald's in Holland even sells a vegetarian burger. Their international popularity shows they have found the recipe for success.

1. How did putting up signs of his success in America help Mr. Kroc?

(A) People could work in the outlets for a week

(B) Children would visit the outlets more

(C) People could apply for jobs

(D) Americans would be impressed with the success and buy more hamburgers

2. What made the restaurants more popular?

(A) The servers were kind

(B) It was clean and inexpensive

(C) It was owned by two brothers

(D) The ingredients used were genuine

3. What is McDonald's philosophy?

(A) Quality control, service, cleanliness and high prices

(B) Quality control, cleanliness and cheap prices

(C) Quality control, service, cleanliness and cheap prices

(D) Quality control, service and cheap prices

4. Who is McDonald's named after?

(A) Two brothers unrelated to Mr. Kroc

(B) Two brothers related to Mr. Kroc

(C) Mr. Kroc's two sons

(D) Mr. Kroc's two brothers

5. Which statement is false?

(A) McDonald's is not innovative in their methods.

(B) McDonald's is both a domestic and international food chain.

(C) McDonald's is a rapidly growing food chain.

(D) McDonald's is not a multi-cuisine restaurant.

***Directions* : From the given underlined idioms, choose the best alternative which expresses the closest meaning of the idiom. Mark the correct answer in your answer sheet.**

6. It is challenging to reply at the spur of moment when questioned in an interview.

(A) Difficult moment

(B) Without delay

(C) Great moment

(D) Very slow

7. In our staff meeting, Mr. Lyngdoh broke the ice and suggested few great ideas.

(A) To do something with courage

(B) To win a prize

(C) To speak first after long silence

(D) To win someone's heart

8. I want to win this match, by hook or by crook.

(A) By permission

(B) By any means

(C) By noble means

(D) By request

9. He has recovered from illness and now he is as fit as a fiddle.

(A) Very weak

(B) Recovering from illness

(C) Looks fit but not fit actually

(D) Strong and healthy

Directions **: In the following questions, substitute each sentence with a single word from among the given alternatives. Mark the correct answer in your answer sheet.**

10. One who eats too much

(A) Foodie

(B) Glutton

(C) Eater

(D) Cook

11. A vain boasting fellow

(A) Loud mouth

(B) Liar

(C) Rascal

(D) Braggart

12. A valued inherited possession

(A) Heirloom

(B) Antique

(C) Artifact

(D) Gift

Directions **: In the following questions, choose a word that is opposite in meaning to the given word from among the given alternatives. Mark the correct answer in your answer sheet.**

13. Entangle

(A) Twist

(B) Impede

(C) Hook

(D) Loosen

14. Permit

(A) Give

(B) Forbid

(C) Allow

(D) Preserve

15. Deform

(A) Contort

(B) Blemish

(C) Beautify

(D) Batter

Directions **: In the following questions, choose a word that is most similar in meaning to the given word from among the given alternatives. Mark the correct answer in your answer sheet.**

16. Abandon

(A) Try

(B) Forsake

(C) Keep with

(D) Join

17. Fragile

(A) Soft

(B) Like iron

(C) Tough

(D) Brittle

18. Conceal

(A) Harvest

(B) To explore

(C) Clear

(D) Hide

Directions **: In the following questions, some sentences have errors and some do not. The underlined words are the key words where you can identify whether the sentence is erroneous or not. From the set of choices given, choose the correct alternative for the identified errors. Where there is no error, choose the specified option (D). Mark the correct answer in your answer sheet.**

19. The government has allocated a lot of funds <u>in</u> various projects in the State.

(A) of

(B) for

(C) over

(D) No error

20. In order to write poetry, one has to be <u>both</u> sensitive and creative.

(A) over

(B) so

(C) almost

(D) No error

21. Bees produce sweet honey <u>as</u> its sting is deadly.

(A) but

(B) for

(C) and

(D) No error

Directions **: In the following cloze passage, there are blank spaces which are numbered. Against each number, choose the most appropriate choice in meaning from the set of given alternatives. Mark the correct answer in your answer sheet.**

Miss Anabel, the owner of a departmental store, was worried. Her money was missing. When she went to visit her sick friend this morning, she had **22** a sealed envelope with six thousand rupees inside her desk drawer in her office at the back of the store. When she **23** returned to her office, the envelope was gone. Miss Anabel always locks her office whenever she leaves, therefore no one could have **24** it. No one but for the cleaning lady, Rani, who also had the key to her office. Rani cleans her office every morning but Miss Anabel cannot prove that Rani actually **25** the money.

22. (A) rest
(B) left
(C) felt
(D) ordered

23. (A) later
(B) near
(C) now
(D) soon

24. (A) run
(B) placed
(C) entered
(D) broken

25. (A) gave
(B) took
(C) open
(D) hid

PART—B : GENERAL KNOWLEDGE & CURRENT AFFAIRS

(*Marks* : 30)

Each question carries **2** marks

26. Who is the author of the recently launched book, *The World After Gaza*?

(A) Arundhati Roy

(B) Pankaj Mishra

(C) Chetan Bhagat

(D) Shashi Tharoor

27. The National Song, 'Vande Mataram' is taken from which of the following books?

(A) *Gitanjali*

(B) *Anandamath*

(C) *Indian People*

(D) *Poverty and Un-British Rule in India*

28. Which of the following is the southernmost point of the Indian territory?

(A) Kanyakumari

(B) Rameswaram

(C) Dhanushkodi

(D) Indira Point

29. Which of the following is the religious text of the Jews?

(A) *Dhammapada*

(B) *Torah*

(C) *Granth Sahib*

(D) *Tripitaka*

30. The hardest natural substance is

(A) copper

(B) diamond

(C) iron

(D) graphite

31. Who is referred to as the 'Father of Indian Renaissance' due to his contribution in social reform, literary works and unwavering patriotism?

(A) Dayanand Saraswati

(B) Swami Vivekananda

(C) Raja Ram Mohan Roy

(D) Atmaram Pandurang

32. Which of the following persons is credited with the invention of the Sitar?

(A) Amir Khusrau

(B) Ravi Shankar

(C) Ustad Alauddin Khan

(D) Amjad Ali Khan

33. The Jallianwala Bagh Massacre took place on which date?

(A) April 13

(B) April 12

(C) April 11

(D) April 10

34. _____ fight against germs that may enter our body.

(A) Platelets

(B) White blood cells

(C) Red blood cells

(D) Haemoglobin

35. The old city of Constantinople of the Byzantine Empire is situated in which of the following present-day countries?

(A) Turkey

(B) Syria

(C) Romania

(D) Lebanon

36. Who was inducted into the ICC Cricket Hall of Fame in June 2025?

(A) Sachin Tendulkar

(B) Mahendra Singh Dhoni

(C) Virat Kohli

(D) Rahul Dravid

37. Who was appointed as the new Chief Election Commissioner of India in 2025?

(A) Sushil Chandra

(B) Gyanesh Kumar

(C) Sunil Arora

(D) Anup Chandra Pandey

38. What is the outermost solid layer of the Earth?

(A) Mantle

(B) Core

(C) Crust

(D) Asthenosphere

39. Which famous landmark was restored and reopened to the public in France in 2024?

(A) Eiffel Tower

(B) Notre-Dame Cathedral

(C) Louvre Museum

(D) Mont Saint-Michel

40. What is the theme of the World Environment Day, 2025?

(A) Ecosystem Restoration

(B) Beat Plastic Pollution

(C) Biodiversity Conservation

(D) Climate Action

PART—C : REASONING & QUANTITATIVE APTITUDE

(*Marks* : 20)

Each question carries **2** marks

41. A car travels 180 km in 3 hours. At the same speed, how far will it travel in $6\frac{1}{2}$ hours?

(A) 390 km

(B) 375 km

(C) 390·5 km

(D) 360 km

42. In a certain code, 'LONG' is written as '5123' and 'GEAR' is written as '3748'. How is 'LANE' written in that code?

(A) 5427

(B) 5247

(C) 5847

(D) 5237

43. The following question is based on the five three-digit numbers given below :

738 495 329 653 849

If '1' is subtracted from the last digit of each number and then the numbers are arranged in descending order, which number will be the first?

(A) 653

(B) 849

(C) 495

(D) 738

44. In a class of 500 students, 65% are boys. 20% of the girls and 40% of the boys failed the exam. Find the number of students in the class who have passed the examination.

(A) 335

(B) 270

(C) 400

(D) 362

45. In a college, all the students are made to stand in four rows. 4 rows contain 12, 8, 22, 30 students respectively. Find the least number of students in the college.

(A) 3360

(B) 3630

(C) 3960

(D) 3990

46. There are six students, *A*, *B*, *C*, *D*, *E* and *F* in the class. *C* got more marks than *D*, and *E* got fewer marks than *D*. *F* got more marks than at least two pupil. The average marks of *A* and *C* are more than the average marks of *C* and *D*. If *E* did not score the least marks, then who scored the least marks in the group?

(A) *C*

(B) *F*

(C) *B*

(D) *A*

47. A man who had no brother or sister pointed out a photo and said, "This boy is my father's son". Who was in the photo?

(A) The man's son

(B) The man's father

(C) The man himself

(D) The man's grandfather

48. Priya bought 10 tables at the rate of ₹600 each. She spends ₹1600 on transportation and ₹400 on packaging. At what price should Priya sell a table to make a profit of 20%?

(A) 860

(B) 920

(C) 960

(D) 1020

49. A vessel contains milk and water in the ratio of 4 : 3. If 14 litres of the mixture is drawn and filled with water, the ratio changes to 3 : 4. How much milk was there in the vessel initially?

(A) 24 litres

(B) 32 litres

(C) 40 litres

(D) 48 litres

50. Rearrange the jumbled-up letters to form a meaningful word and find the odd one out.

(A) CEKRTCI

(B) OHKCYE

(C) ESCSH

(D) OTOLABLF

PART—D : ELECTRICAL ENGINEERING

(*Marks* : 200)

Each question carries **2** marks

51. A mesh is defined as

(A) any loop

(B) smallest closed path

(C) open path

(D) parallel path

52. A diesel power plant is generally used as

(A) peak load station

(B) base load station

(C) Both (A) and (B)

(D) None of the above

53. In a series circuit, the quantity that remains the same is

(A) voltage

(B) power

(C) current

(D) resistance

54. An induction motor works on

(A) self-induction

(B) mutual induction

(C) electrostatic induction

(D) transformer action only

55. The commercial unit of electrical energy is

(A) joule

(B) watt

(C) kilowatt-hour

(D) ampere-hour

56. The equivalent resistance of resistors in parallel is always

(A) greater than the highest resistance

(B) equal to highest resistance

(C) equal to lowest resistance

(D) less than the lowest resistance

57. The RMS value of AC current represents

(A) peak current

(B) average current

(C) DC equivalent current

(D) instantaneous current

58. A capacitor stores energy in the form of

(A) heat

(B) magnetic field

(C) electric field

(D) mechanical energy

59. The resistance of a conductor depends on

(A) length only

(B) area only

(C) material only

(D) length, area and material

60. A linear circuit is one in which

(A) parameters change with voltage

(B) parameters change with current

(C) parameters remain constant

(D) output is always zero

61. The generated EMF of a DC generator depends on

(A) flux, speed and number of conductors

(B) resistance only

(C) load current only

(D) armature voltage only

62. The function of a commutator in a DC generator is to

(A) increase voltage

(B) reduce losses

(C) convert AC to DC

(D) increase speed

63. Back EMF in a DC motor

(A) opposes applied voltage

(B) aids applied voltage

(C) is zero

(D) increases losses

64. The speed of a DC shunt motor can be controlled by

(A) armature resistance control

(B) field control

(C) voltage control

(D) All of the above

65. An alternator converts

(A) electrical to mechanical energy

(B) mechanical to electrical energy

(C) AC to DC

(D) DC to AC

66. Synchronous speed of an AC machine depends on

(A) voltage

(B) frequency and number of poles

(C) load

(D) power factor

67. Plant capacity factor and load factor become identical when

(A) average load is same as peak load

(B) peak load is equal to the capacity of the plant

(C) average load is half the capacity of the plant

(D) group diversity factor is equal to peak diversity factor

68. The slip of an induction motor at synchronous speed is

(A) 1

(B) 0

(C) maximum

(D) negative

69. Rotor current frequency of an induction motor at standstill is

(A) zero

(B) half of supply frequency

(C) equal to supply frequency

(D) double of supply frequency

70. Induction motor power factor at no load is

(A) unity

(B) zero

(C) low

(D) high

71. The gas turbine principle is based on

(A) dual cycle

(B) Rankine cycle

(C) Carnot cycle

(D) Brayton cycle

72. The frequency of transformer secondary voltage is

(A) higher than primary

(B) lower than primary

(C) same as primary

(D) zero

73. The induced EMF of a transformer depends on

(A) resistance only

(B) load current

(C) frequency and maximum flux

(D) speed of rotation

74. Which of the following is independent of load in a transformer?

(A) Copper loss

(B) Core loss

(C) Stray loss

(D) Load loss

75. Maximum efficiency of a transformer occurs when

(A) copper loss = iron loss

(B) load current is maximum

(C) voltage is maximum

(D) frequency is maximum

76. Open-circuit test in a transformer is used to determine

(A) copper loss

(B) core loss

(C) full-load efficiency

(D) voltage regulation

77. Compared to two-winding transformer, an auto-transformer has

(A) lower efficiency

(B) higher losses

(C) less copper requirement

(D) poor voltage regulation

78. The flux in a transformer core is

(A) proportional to load current

(B) constant for given voltage and frequency

(C) zero at no load

(D) proportional to secondary current only

79. A Megger is classified as a/an

(A) hot-wire instrument

(B) electrostatic instrument

(C) moving-iron instrument

(D) moving-coil instrument

80. Leakage flux in a transformer causes

(A) increase in efficiency

(B) reduction in voltage regulation

(C) increase in voltage regulation

(D) No effect

81. SCR is turned OFF by

(A) removing gate signal

(B) reducing anode current below holding current

(C) increasing gate current

(D) increasing temperature

82. The efficiency of half-wave rectifier is approximately

(A) 20%

(B) 40%

(C) 60%

(D) 80%

83. Firing angle in an SCR is measured from

(A) zero crossing of current

(B) zero crossing of voltage

(C) peak voltage

(D) end of cycle

84. Commutation in SCR means

(A) turning ON SCR

(B) turning OFF SCR

(C) increasing load current

(D) reducing voltage

85. The input power factor of a controlled rectifier

(A) improves with increase in firing angle

(B) worsens with increase in firing angle

(C) is always unity

(D) is independent of firing angle

86. A freewheeling diode is connected

(A) in series with load

(B) across inductive load

(C) across supply

(D) across SCR gate

87. A buck converter is a

(A) step-up chopper

(B) step-down chopper

(C) step-up inverter

(D) step-down inverter

88. The output of an inverter is

(A) pure DC

(B) pulsating DC

(C) AC voltage

(D) DC with ripple

89. A power MOSFET is a

(A) current-controlled device

(B) voltage-controlled device

(C) frequency-controlled device

(D) temperature-controlled device

90. IGBT is a combination of

(A) BJT and SCR

(B) MOSFET and BJT

(C) MOSFET and diode

(D) SCR and diode

91. The basic elements of a measurement system are

(A) sensor, amplifier, display

(B) transducer, controller, actuator

(C) input, process, output

(D) source, load, meter

92. A transducer is a device that converts

(A) electrical to electrical

(B) mechanical to mechanical

(C) non-electrical to electrical

(D) AC to DC

93. Sensitivity of an instrument is defined as

(A) smallest input detected

(B) output per unit input

(C) range of measurement

(D) accuracy of the instrument

94. Thermocouple works on

(A) Hall effect

(B) Seebeck effect

(C) piezoelectric effect

(D) photoelectric effect

95. Which device is used to measure flow rate?

(A) Orifice meter

(B) Voltmeter

(C) Wattmeter

(D) Frequency meter

96. In open-loop control system

(A) feedback is present

(B) output is compared with input

(C) no feedback is used

(D) error signal is zero

97. Negative feedback improves

(A) gain

(B) stability

(C) noise

(D) distortion

98. Transfer function is defined only for

(A) linear time-varying systems

(B) non-linear systems

(C) linear time-invariant systems

(D) discrete systems

99. A system is stable if

(A) output increases continuously

(B) output oscillates with increasing amplitude

(C) output remains bounded for bounded input

(D) output becomes zero always

100. Rise time is the time taken by output to rise from

(A) 0% to 100%

(B) 10% to 90%

(C) 50% to 100%

(D) 0% to 90%

101. The 8085 microprocessor is a/an

(A) 4-bit processor

(B) 8-bit processor

(C) 16-bit processor

(D) 32-bit processor

102. The maximum memory that can be addressed by 8085 is

(A) 16 KB

(B) 32 KB

(C) 64 KB

(D) 128 KB

103. The program counter stores

(A) address of current instruction

(B) address of next instruction

(C) data to be processed

(D) stack address

104. ALE stands for

(A) Address Latch Enable

(B) Address Line Enable

(C) Accumulator Latch Enable

(D) Address Load Enable

105. Which of the following is a maskable interrupt?

(A) TRAP

(B) RST 7.5

(C) RESET

(D) HOLD

106. MVI is an example of

(A) register addressing

(B) direct addressing

(C) immediate addressing

(D) indirect addressing

107. The instruction used to stop program execution is

(A) STOP

(B) END

(C) HLT

(D) HALT

108. Zero flag is set when

(A) result is negative

(B) result is zero

(C) carry occurs

(D) overflow occurs

109. Which instruction is used to load stack pointer?

(A) SPHL

(B) LXI SP

(C) PUSH

(D) POP

110. POP instruction

(A) adds data to stack

(B) removes data from stack

(C) copies data to accumulator

(D) clears flags

111. Which of the following statements is correct for basic transistor amplifier configuration?

(A) CB amplifier has low input impedance and a low current gain.

(B) CC amplifier has low output impedance and a low current gain.

(C) CE amplifier has very poor voltage gain but very high input impedance.

(D) The current gain of CB amplifier is higher than the current gain of CC amplifier.

112. Electrical power is transmitted at high voltage to

(A) reduce current

(B) reduce losses

(C) improve power factor

(D) increase frequency

113. Bundled conductors are used to

(A) reduce conductor weight

(B) reduce corona loss

(C) increase resistance

(D) increase reactance

114. Corona loss increases with

(A) decrease in voltage

(B) increase in frequency

(C) increase in voltage

(D) increase in conductor size

115. Non-metallic conduits for wiring are generally made of

(A) rubber

(B) cork

(C) wood

(D) PVC

116. A substation is used to

(A) generate power

(B) transmit power

(C) step up or step down voltage

(D) consume power

117. The prime mover in a thermal power plant is

(A) alternator

(B) boiler

(C) steam turbine

(D) condenser

118. The earth wire should ***not*** be thinner than a/an

(A) 18 SWG wire

(B) 16 SWG wire

(C) 10 SWG wire

(D) 8 SWG wire

119. A transmission line longer than 250 km is called

(A) short line

(B) medium line

(C) long line

(D) extra long line

120. Sag in overhead transmission lines

(A) increases with decrease in span

(B) decreases with increase in temperature

(C) increases with increase in temperature

(D) is independent of temperature

121. The process taking place in a fluorescent tube is

(A) gaseous discharge

(B) secondary emission

(C) phosphorescence

(D) thermionic emission

122. The basic logic gates are

(A) AND, OR, XOR

(B) NAND, NOR, XOR

(C) AND, OR, NOT

(D) XOR, XNOR, NOT

123. A multiplexer is used to

(A) store data

(B) select one input from many

(C) convert analog to digital

(D) count pulses

124. A flip-flop is a/an

(A) combinational circuit

(B) memory device

(C) amplifier

(D) logic gate

125. JK flip-flop removes

(A) delay problem

(B) race-around condition

(C) invalid state of SR flip-flop

(D) memory loss

126. The site preferred for earthing is

(A) wet marshy ground

(B) clay soil

(C) loam mixed with small quantities of sand

(D) damp and wet sand pit

127. The unit of reluctance of a magnetic circuit is

(A) AT/m

(B) weber/m

(C) AT/weber

(D) H/m

128. The IC number of 7400 represents

(A) AND gate

(B) OR gate

(C) NAND gate

(D) NOR gate

129. 2's complement of the binary number 0110 is

(A) 1001

(B) 1010

(C) 1100

(D) 0101

130. XOR gate output is HIGH when

(A) all inputs are HIGH

(B) all inputs are LOW

(C) inputs are same

(D) inputs are different

131. Precision refers to

(A) closeness to true value

(B) reproducibility of measurements

(C) sensitivity

(D) least count

132. Resolution of an instrument is

(A) maximum measurable value

(B) minimum detectable change in input

(C) speed of response

(D) stability

133. Absolute error is

(A) difference between true and measured value

(B) ratio of error to true value

(C) percentage error

(D) instrument error

134. PMMC instruments are used for measuring

(A) AC only

(B) DC only

(C) AC and DC

(D) high voltage only

135. Domestic energy meter measures

(A) kW

(B) kVA

(C) kWh

(D) joules

136. Range of voltmeter is extended using

(A) shunt resistance

(B) parallel resistance

(C) series resistance

(D) low resistance

137. Wheatstone bridge is used to measure

(A) high resistance

(B) low resistance

(C) medium resistance

(D) inductance

138. Current transformer is used to

(A) measure high voltage

(B) measure high current

(C) measure frequency

(D) measure power factor

139. Which damping is commonly used in PMMC instruments?

(A) Air friction

(B) Fluid friction

(C) Eddy current

(D) Mechanical friction

140. An LCR meter measures

(A) voltage, current, power

(B) resistance, inductance, capacitance

(C) power factor only

(D) frequency only

141. The voltage that changes magnitude and direction periodically is called

(A) DC

(B) AC

(C) pulsating DC

(D) ripple

142. In a purely resistive AC circuit, current and voltage are

(A) 90° out of phase

(B) 180° out of phase

(C) in phase

(D) 45° out of phase

143. A fuse protects electrical circuits from

(A) over-voltage

(B) over-current

(C) low power factor

(D) high temperature

144. A circuit breaker is used to

(A) measure current

(B) protect from faults

(C) increase load

(D) improve power factor

145. The unit of electric charge is

(A) ampere

(B) volt

(C) coulomb

(D) ohm

146. Potential difference is defined as

(A) power per unit current

(B) work done per unit charge

(C) energy per unit time

(D) charge per unit time

147. KCL is based on the law of conservation of

(A) energy

(B) power

(C) charge

(D) mass

148. In a purely inductive circuit, current

(A) leads voltage by 90°

(B) lags voltage by 90°

(C) is in phase with voltage

(D) is zero

149. Reactive power is measured in

(A) watt

(B) VA

(C) VAR

(D) joule

150. An ammeter is connected

(A) in parallel

(B) in series

(C) across supply

(D) across load