Booklet Serial No. 26070

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

QUESTION BOOKLET

SERIES : II

Subjects : General English 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 two Parts :

Part—A : General English	:	**50 questions**
Part—B : 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* : 100)

Each question carries **2** marks

Section—I

Directions **(Q. Nos. 1–10) : Read the following passage and answer the questions given below, following the instructions.**

People write and publish autobiographies and autobiographical sketches for a number of reasons. One of these reasons is to put on record the events of a famous or influential career. But not all autobiographies, not even the autobiographies most frequently and widely read, are by famous or extraordinary men. Another reason is to hand on to others wisdom won through experience and hard labour. Yet many fine autobiographies seem to have little concern to teach or to persuade. A third reason is to distil from past experience events, persons and situations which hold a firm place in memory and to put true values on them. In this sense, autobiography is, as Somerset Maugham has said, a 'summing-up' and its first utility is to its author himself.

Whatever, its purpose or the fame of the man who writes it, autobiography is a thing created out of the recollections of life. It is not life itself. Whether it may be valuable or useless depends upon whether it is well or ill-made. Good autobiographies can be mined from inconspicuous lives. For autobiography is the inclusive and summary form of what we call 'themes of experience'.

It may contain reminiscences, descriptions of places, of animals, of people, the identification of characteristic preferences and prejudices, and other matters as well. It has the traits of all these minor forms. An autobiography is objectively true, but is not indiscriminately inclusive. It presents a selection of detailed episodes with sufficient fullness to preserve their essential qualities.

Choose the appropriate antonyms of the following :

1. Influential

(A) compelling

(B) weak

(C) approachable

(D) indifferent

2. Persuade

(A) discourage

(B) attract

(C) pervade

(D) inform

3. Distil

(A) extract

(B) melt

(C) prohibit

(D) instill

4. Values

(A) discourse

(B) clarity

(C) faults

(D) virtue

5. Inconspicuous

(A) discreet

(B) visible

(C) covert

(D) tender

Choose the appropriate meaning of the words given below in the specific context of the passage :

6. Autobiography

(A) stenography

(B) death

(C) fiction

(D) life story

7. Preferences

(A) partiality

(B) apathy

(C) beliefs

(D) dedication

8. Inclusive

(A) narrow

(B) embracive

(C) loyal

(D) unsophisticated

9. Reminiscences

(A) repression

(B) knowledge

(C) assumption

(D) memories

10. Prejudices

(A) reluctance

(B) dullness

(C) biasness

(D) glumness

Section—II

Directions **(Q. Nos. 11–30) : Choose the correct option to fill in the gaps.**

11. I take _____ egg every morning.

(A) the

(B) a

(C) an

(D) Zero article

12. This is _____ honorary job.

(A) the

(B) a

(C) an

(D) Zero article

13. I read a book about _____ great Caesar.

(A) the

(B) a

(C) an

(D) Zero article

14. _____ college is at the next crossing.

(A) The

(B) A

(C) An

(D) Zero article

15. She can play very well on _____ guitar.

(A) the

(B) a

(C) an

(D) Zero article

16. This matter is by far _____ important than the other.

(A) most

(B) more

(C) much

(D) not as

17. He has committed the _____ crime.

(A) worse

(B) worst

(C) most worse

(D) most worst

18. _____ of her toenails was a different colour.

(A) Each

(B) Every

(C) Either

(D) None of the above

19. I do not know what Brian does with _____ his money.

(A) any

(B) all

(C) some

(D) None of the above

20. He opened the door _____ breaking the lock.

(A) with

(B) by

(C) as

(D) along

21. This agreement is an important step _____ peace.

(A) for

(B) towards

(C) into

(D) along

22. My mother _____ as a teacher since 1999.

(A) works

(B) working

(C) is

(D) has been working

23. I have been waiting _____ an hour to speak to the doctor.

(A) since

(B) until

(C) for

(D) during

24. Sharon is fond of _____ novels.

(A) reads

(B) read

(C) is reading

(D) reading

25. From here we can watch _____ of the sun.

(A) the set

(B) the setting

(C) setting

(D) set

26. I have come to _____ your books.

(A) return

(B) returns

(C) returning

(D) returned

27. I had _____ to meet you at the party.

(A) supposed

(B) thought

(C) expected

(D) imagined

28. I will have _____ by the time you get here.

(A) goes

(B) going

(C) went

(D) gone

29. Peter had _____ to pass in the first division.

(A) hope

(B) hopes

(C) hoped

(D) hoping

30. He _____ many houses in Kolkata.

(A) own

(B) is owning

(C) was owning

(D) owned

Section—III

Directions **(Q. Nos. 31–45) : Choose the correct meaning for the words and phrases given below.**

31. One who takes up arms against the government is a/an

(A) patriot

(B) rebel

(C) pacifist

(D) arbiter

32. Goods sent from one country to another for trade is known as

(A) export

(B) import

(C) deport

(D) seaport

33. Undue favour shown to one's relatives or friends is known as

(A) egoism

(B) nepotism

(C) aphorism

(D) asceticism

34. A form of government in which power is held by the nobility

(A) Democracy

(B) Autocracy

(C) Theocracy

(D) Aristocracy

35. One who wishes to destroy all established governments, law and order

(A) Anarchist

(B) Fatalist

(C) Communist

(D) Leftist

36. A plane figure with five straight sides and five angles

(A) Hexagon

(B) Pentagon

(C) Octagon

(D) Heptagon

37. Repetition of a writing, word for word

(A) Verbatim

(B) Voluble

(C) Didactic

(D) Virtuoso

38. The science of Earth's history and rocks

(A) Zoology

(B) Geology

(C) Ecology

(D) Archaeology

39. A system of thought attaching prime importance to human rather than divine or supernatural matters

(A) Spiritualism

(B) Theism

(C) Altruism

(D) Humanism

40. The custom of having more than two wives at the same time

(A) Polyandry

(B) Bigamy

(C) Polygamy

(D) Alimony

41. Existing but not yet developed, apparent or active

(A) Latex

(B) Late

(C) Lassitude

(D) Latent

42. Prolonged painful or horrific experience

(A) Ordeal

(B) Ordain

(C) Ordinal

(D) Ordure

43. Treat in a cruel or unfair way over a long period

(A) Prosecute

(B) Perpetuate

(C) Persevere

(D) Persecute

44. Prestigious means

(A) extravagant

(B) acclaimed

(C) elementary

(D) elevated

45. To rule as a monarch is to

(A) rein

(B) reign

(C) regale

(D) relegate

Section—IV

Directions **(Q. Nos. 46–50) : Choose the correct sentences.**

46. 1. I am prepared to face the consequences of my actions.

2. I am prepared to face off the consequences of my actions.

3. I will be prepared to face the consequences of my actions.

(A) 1 and 2

(B) 1 and 3

(C) 2 and 3

(D) 1, 2 and 3

47. 1. His performance, earlier, was very disappointing.

2. His performance, earlier, is very disappointing.

3. His performance was a disappointment.

(A) 1 and 2

(B) 1 and 3

(C) 2 and 3

(D) 1, 2 and 3

48. 1. I a little expected that he would win the competition.

2. I little expected that he would win the competition.

3. I did not expect him to win the competition.

(A) 1 and 2

(B) 1 and 3

(C) 2 and 3

(D) 1, 2 and 3

49. 1. I do not have any money with me.

2. I do not have much money with me.

3. I do not have a lot of money with me.

(A) 1 and 2

(B) 1 and 3

(C) 2 and 3

(D) 1, 2 and 3

50. 1. He made the most unkindest remark.

2. He made the unkindest remark.

3. He made the most unkind remark.

(A) 1 and 2

(B) 1 and 3

(C) 2 and 3

(D) 1, 2 and 3

PART—B : ELECTRICAL ENGINEERING

(*Marks* : 200)

Each question carries **2** marks

51. Perfect reproducibility means the instrument has

(A) no drift

(B) high accuracy

(C) maximum drift

(D) minimum accuracy

52. A 3-phase balanced supply system is connected to a 3-phase unbalanced load. Power supplied to this load can be measured using

1. two wattmeters
2. one wattmeter
3. three wattmeters

Which of these statements is/are ***correct***?

(A) 1 and 2

(B) 1 and 3

(C) 2 and 3

(D) 3 alone

53. The failure % of electric motor is higher due to

(A) insulation failure

(B) overloading

(C) bearing failure

(D) None of the above

54. Which type of enclosure is provided for DC motors used in coal handling plants?

(A) Screen protected

(B) Open type

(C) Totally enclosed fan cooled

(D) Drip proof

55. What parameter(s) is/are checked using the commissioning tests?

(A) Turbine speed

(B) Condenser vacuum

(C) Turbine governor valve opening

(D) All of the above

56. Up to what temperature should the cable filling compound be warmed for connecting the circuit breaker to the main cable?

(A) 80 °C–90 °C

(B) 157 °C–168 °C

(C) 135 °C–148 °C

(D) 149 °C–152 °C

57. What is the use of belting?

(A) To hold the three cores and fillers in a tight assembly

(B) To hold the single core and fillers in a tight assembly

(C) It is used by only two cores assembly

(D) Both (A) and (B)

58. What is the cause for mechanical overloads in the induction motors?

(A) Stalling

(B) Blowing of fuse

(C) Under-voltage

(D) Open circuit

59. For a good weld

(A) cross-section of the added metal should be small and oxidation should be minimum

(B) cross-section of the added metal should be small and oxidation should be maximum

(C) cross-section of the added metal should be large and oxidation should be minimum

(D) cross-section of the added metal should be large and oxidation should be maximum

60. Pantograph collector is used in railways where the train runs at 100 kmph to 130 kmph. Which among the following is true about pantograph collectors?

(A) It is unidirectional.

(B) The erection of the overhead network is complicated.

(C) Its height cannot be varied.

(D) None of the above

61. During the train movement, the tractive effort produced at the pinion by the motor is transferred to the driving wheel

(A) directly

(B) through the gear wheel

(C) through the road wheel

(D) through the motor armature

62. The metal oxide rectifier used for electrolytic process is placed along with the transformer

(A) inside the oil

(B) outside the transformer but near to it

(C) outside the transformer but far from it

(D) half immersed in the oil

63. The power required for electro-deposition is

(A) DC and very low voltage

(B) DC and high voltage

(C) AC and very low voltage

(D) AC and high voltage

64. The temperature produced in indirect arc furnace is

(A) more than in a direct arc furnace

(B) less than in a direct arc furnace

(C) equal to direct arc furnace

(D) None of the above

65. The word processing feature that catches most random typographical errors and misspellings is known as

(A) grammar checker

(B) spell checker

(C) word checker

(D) None of the above

66. How many colour dots make up one colour pixel on a screen?

(A) 265

(B) 16

(C) 8

(D) 3

67. Which of the following programs enables you to calculate numbers related to rows and columns?

(A) Windows program

(B) Spreadsheet program

(C) Graphics program

(D) Word program

68. Which of the following is ***not*** considered hardware?

(A) Operating system

(B) CPU

(C) Keyboard

(D) Hard disc

69. How is an array initialised in C language?

(A) int a[3] = {1, 2, 3};

(B) int a = {1, 2, 3};

(C) int a[ ] = new int [3]

(D) int a(3) = [1, 2, 3];

70. How are strings represented in memory in C?

(A) An array of characters

(B) The object of some class

(C) Same as other primitive data types

(D) Linked-list of characters

71. In gases, the flow of current is due to

(A) electrons only

(B) positive ions only

(C) electrons and positive ions

(D) electrons, positive ions and negative ions

72. Electric pressure is also called

(A) resistance

(B) power

(C) voltage

(D) energy

73. Which of the following materials has a negative temperature coefficient of resistance?

(A) Copper

(B) Aluminium

(C) Carbon

(D) Brass

74. The resistance of human body is around

(A) 50 ohms

(B) 25 ohms

(C) 250 ohms

(D) 1000 ohms

75. Which of the following quantities remains the same in all parts of a series circuit?

(A) Voltage

(B) Current

(C) Power

(D) Resistance

76. If the efficiency of a machine is to be high, what should be low?

(A) Input power

(B) Losses

(C) Ratio of output to input

(D) All of the above

77. The power consumed in a circuit element will be least when the phase difference between the current and voltage is

(A) 180°

(B) 90°

(C) 60°

(D) 0°

78. Capacitive reactance is more when

(A) capacitance is less and frequency of supply is less

(B) capacitance is less and frequency of supply is more

(C) capacitance is more and frequency of supply is less

(D) capacitance is more and frequency of supply is more

79. Magnitude of current at resonance in *R-L-C* circuit

(A) depends upon the magnitude of *R*

(B) depends upon the magnitude of *L*

(C) depends upon the magnitude of *C*

(D) depends upon the magnitudes of *R*, *L* and *C*

80. Which of the following refers to a parallel circuit?

(A) The current through each element is same

(B) The voltage across element is in proportion to its resistance value

(C) The equivalent resistance is greater than any one of the resistors

(D) The current through any one element is less than the source current

81. The frequency of an alternating current is

(A) the speed with which the alternator runs

(B) the number of cycles generated in one minute

(C) the number of waves passing through a point in one second

(D) the number of electrons passing through a point in one second

82. On which of the following factors does the resistivity of a material depend?

(A) Resistance of the conductor

(B) Area of the conductor section

(C) Length of the conductor

(D) All of the above

83. Spark plug makes use of which of the following materials for insulation?

(A) Porcelain

(B) Slate

(C) Asbestos

(D) Glass

84. Which of the following materials is used for making coils of standard resistances?

(A) Copper

(B) Nichrome

(C) Platinum

(D) Manganin

85. The conduction of electricity in semiconductors takes place due to the movement of

(A) positive ions only

(B) negative ions only

(C) positive and negative ions

(D) electrons and holes

86. Due to overdamping, the instrument will become

(A) slow

(B) lethargic

(C) fast

(D) Both (A) and (B)

87. Strain gauge is a/an

(A) active device and converts mechanical displacement into a change of resistance

(B) passive device and converts electrical displacement into a change of resistance

(C) passive device and converts mechanical displacement into a change of resistance

(D) active device and converts electrical displacement into a change of resistance

88. The electrical power to a megger is provided by

(A) battery

(B) permanent magnet DC generator

(C) AC generator

(D) Any of the above

89. Two holes in the disc of energy meter are drilled at the opposite sides of the spindle to

(A) improve its ventilation

(B) eliminate creeping at no-load

(C) increase its deflecting torque

(D) increase its braking torque

90. The desirable static characteristic(s) of a measuring system is/are

(A) accuracy and reproducibility

(B) accuracy, sensitivity and reproducibility

(C) drift and dead zone

(D) static error

91. The power factor of a single-phase load can be calculated if the instruments available are

(A) one voltmeter and one ammeter

(B) one voltmeter, one ammeter, one wattmeter

(C) one voltmeter, one ammeter and one energy meter

(D) Any of the above

92. No-load speed of which of the following motors is the highest?

(A) Differentially compound motor

(B) Cumulative compound motor

(C) Series motor

(D) Shunt motor

93. Which of the following loads normally need starting torque more than the rated torque?

(A) Conveyors

(B) Blowers

(C) Centrifugal pumps

(D) Air compressors

94. Which of the following is used to determine the direction of rotation of a DC motor?

(A) Coulomb's law

(B) Lenz's law

(C) Fleming's right-hand rule

(D) Fleming's left-hand rule

95. Which part of a DC motor can sustain maximum temperature rise?

(A) Slip ring

(B) Commutator

(C) Armature winding

(D) Field winding

96. A three-point starter is suitable for

(A) shunt motor

(B) series motor

(C) shunt and compound motor

(D) shunt, series and compound motor

97. When the speed of DC motor is increased

(A) back e.m.f. increases and current drawn decreases

(B) back e.m.f. decreases and current drawn increases

(C) back e.m.f. and current drawn both increases

(D) back e.m.f. and current drawn both decreases

98. If the supply frequency of a transformer increases, the secondary output voltage of the transformer

(A) increases

(B) decreases

(C) remains the same

(D) Any of the above

99. The open-circuit test in a transformer is used to measure

(A) copper loss

(B) winding loss

(C) total loss

(D) core loss

100. The large number of slots in induction motor

(A) reduces overload capacity

(B) provides better overload capacity

(C) provides bigger size of motor

(D) reduces the size of motor

101. The large number of narrow slots in stator of an AC motor is preferred, because

(A) it is easier to make narrow slots than wide open slots

(B) large number of narrow slots reduces motor noise

(C) large number of narrow slots reduces noise and tooth pulsation losses

(D) it helps in uniform distribution of flux

102. Two generators are running in parallel. One of the generators may run as a motor for which of the following reasons?

(A) The speed of that generator is increased

(B) The direction of that generator is reversed

(C) The generator takes large share of loads

(D) The field of that generator is weakened

103. Which of the following statements is ***correct*** ?

(A) A single-phase induction motor has very high starting torque.

(B) A single-phase induction motor has zero starting torque.

(C) A single-phase starting torque is as good as that of a 3-phase induction motor.

(D) A single-phase motor has very small torque but greater than zero.

104. The synchronous motor can be made self-starting by providing

(A) damper winding on rotor poles

(B) damper winding on stator

(C) Either (A) or (B)

(D) None of the above

105. How many stages does power system comprise?

(A) 2

(B) 3

(C) 4

(D) 5

106. Which of the following components in a power system is responsible for sending power from one circuit to another electric circuit?

(A) Power plant

(B) Transformer

(C) Inverter

(D) Battery

107. Which of the following is the voltage range for sub-transmission type voltage level?

(A) 90 kV to 138 kV

(B) 70 kV to 100 kV

(C) 60 kV to 100 kV

(D) All of the above

108. What should be the minimum depth (in metre) of cable trench to dig for laying of 1·1 kV?

(A) 0·75

(B) 0·90

(C) 1·05

(D) 1·20

109. Ferranti effect will ***not*** occur in which of the following transmission lines?

(A) Long transmission lines

(B) Short transmission lines

(C) Medium transmission lines

(D) All of the above

110. Name the cable or conductor which connects the distributor to the consumer terminals.

(A) Service mains

(B) Feeders

(C) Distributor

(D) None of the above

111. The usual spans between RCC poles is

(A) 40 m–50 m

(B) 60 m–100 m

(C) 80 m–150 m

(D) 200 m–300 m

112. Which among the following tests is/are to be conducted on wiring installations?

(A) Testing of earth resistance

(B) Testing of earth continuity path

(C) Testing of polarity of non-linked single-pole switches

(D) All of the above

113. What are the amounts of charcoal and salt needed for GI pipe earthing?

(A) Charcoal 5 kg, salt 5 kg

(B) Charcoal 10 kg, salt 10 kg

(C) Charcoal 10 kg, salt 8 kg

(D) Charcoal 5 kg, salt 8 kg

114. What is the specification of a GI earth plate?

(A) 60 cm × 60 cm × 3 mm

(B) 60 cm × 60 cm × 5 mm

(C) 60 cm × 60 cm × 6 mm

(D) None of the above

115. A semiconductor has _____ temperature coefficient of resistance.

(A) positive

(B) zero

(C) negative

(D) None of the above

116. The forward voltage drop across a silicon diode is about

(A) 2·5 V

(B) 3 V

(C) 10 V

(D) 0·7 V

117. The element that has the biggest size in transistor is the

(A) collector

(B) base

(C) emitter

(D) collector-base junction

118. Transistor biasing represents _____ conditions.

(A) AC

(B) DC

(C) both AC and DC

(D) None of the above

119. If a transistor amplifier draws 2mA when input voltage is 10 V, then its input impedance is

(A) 20 kΩ

(B) 2 kΩ

(C) 10 kΩ

(D) 5 kΩ

120. In an unregulated power supply, if load current increases, the output voltage

(A) remains the same

(B) decreases

(C) increases

(D) None of the above

121. The binary number 10101 is equivalent to decimal number

(A) 19

(B) 12

(C) 27

(D) 21

122. The inverter is a/an

(A) NOT gate

(B) OR gate

(C) AND gate

(D) None of the above

123. The NOR gate is OR gate followed by

(A) AND gate

(B) NAND gate

(C) NOT gate

(D) None of the above

124. 2's complement of binary number 0101 is

(A) 1011

(B) 1111

(C) 1101

(D) 1110

125. The greatest negative number which can be stored in 8-bit computer using 2's complement arithmetic is

(A) 256

(B) 128

(C) 255

(D) 127

126. The cheap and temporary system of internal wiring is

(A) conduit wiring

(B) cleat wiring

(C) CTS or TRS wiring

(D) casing-capping wiring

127. If the wiring in a building has a 2·4 kW load, what will be the permissible insulation resistance to earth for a 240 V system of supply?

(A) 0·08 MΩ

(B) 0·05 MΩ

(C) 0·02 MΩ

(D) 0·12 MΩ

128. The total impedance of the earth continuity conduction (ECC) should be

(A) 0 ohm

(B) 1 ohm

(C) 10 ohms

(D) infinity

129. According to the IS code, the colour of earth wire is usually

(A) red

(B) green

(C) yellow

(D) black

130. For rewirable fuse, employing copper wire as the fusing element, the fusing factor is

(A) 0·7 to 0·8

(B) 1·0 to 1·2

(C) 1·4 to 1·5

(D) 1·9 to 2·0

131. The radiant efficiency of the luminous source depends on

(A) the shape of the source

(B) the temperature of the source

(C) the wavelength of the light rays

(D) All of the above

132. Carbon arc lamps are commonly used in

(A) domestic lighting

(B) street lighting

(C) cinema projector

(D) photography

133. The unit of solid angle is

(A) degree

(B) radian

(C) steradian

(D) candela

134. The illumination is directly proportional to the cosine of the angle made by the normal to the illuminated surface with the direction of the incident flux. The above statement is associated with

(A) Planck's law

(B) Macbeth's law of illumination

(C) Bunsen's law of illumination

(D) Lambert's cosine law

135. Which of the following will need the highest level of illumination?

(A) Proofreading

(B) Bedroom

(C) Hospital wards

(D) Railway platforms

136. Semi-indirect lighting scheme is used in

(A) high ceiling

(B) workshop

(C) street light

(D) decoration purpose

137. A silicon controlled rectifier (SCR) is a

(A) unijunction device

(B) device with three junctions

(C) device with four junctions

(D) None of the above

138. A triac is a

(A) 2-terminal switch

(B) 2-terminal bilateral switch

(C) 3-terminal bilateral switch

(D) 3-terminal bidirectional switch

139. In a three-phase half-wave rectifier, each diode conducts for a duration of

(A) 180°

(B) 120°

(C) 90°

(D) 60°

140. Which of the following finds applications in speed control of a DC motor?

(A) FET

(B) *N-P-N* transistor

(C) SCR

(D) None of the above

141. In which of the following both frequency and voltage can be controlled?

(A) Inverter, cyclo-converter and AC voltage controller

(B) Cyclo-converter and AC voltage controller

(C) Inverter and cyclo-controller

(D) Inverter and AC voltage controller

142. On which of the following routine tests are conducted?

(A) Oil circuit breakers

(B) Air blast circuit breakers

(C) Minimum-oil circuit breakers

(D) All of the above

143. The arcing contacts in a circuit breaker are made of

(A) copper tungsten alloy

(B) porcelain

(C) electrolytic copper

(D) aluminium alloy

144. With which of the following, a circuit breaker must be equipped for remote operation?

(A) Inverse time trip

(B) Time-delay trip

(C) Shunt trip

(D) None of the above

145. Fault diverters are basically

(A) fuses

(B) relays

(C) fast switches

(D) circuit breakers

146. Thermal overload relays are used to protect the motor against over current due to

(A) short circuits

(B) heavy loads

(C) grounds

(D) All of the above

147. DC shunt relays are made of

(A) few turns of thin wire

(B) few turns of thick wire

(C) many turns of thin wire

(D) many turns of thick wire

148. The resistance in the circuit of the moving coil of a dynamometer wattmeter should be

(A) almost zero

(B) low

(C) high

(D) None of the above

149. Which of the following devices may be used for extending the range of instruments?

(A) Shunts

(B) Multipliers

(C) Current transformers

(D) All of the above

150. The difference between the indicated value and the true value of a quantity is

(A) gross error

(B) absolute error

(C) dynamic error

(D) relative error