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Prep By: R.K.RAMAN

<p style="text-align: center;">THDCIL JUNIOR ENGINEER(ELECTRICAL) SAMPLE PAPER-I</p>

1. Condition for maximum power output for a d.c. motor is

$$E_b = V \qquad E_b = V / 2$$

- a) $E_b = I_a R_a$ b) $E_b = 0.5 I_a R_a$
c) d)

2. A simple method of increasing the voltage of an d.c. generator is

- a) to decrease the air gap flux density
b) to increase the speed of rotation
c) to decrease the speed of rotation
d) to increase the length of armature

3. The speed of a d.c. generator is increased, the generated emf

- a) increases
b) decreases
c) remains constant
d) decreases and then increases

4. A 4-pole lap-wound armature has 480 conductors and a flux per pole of 25 m Wb. The emf generated, when running at 600 rpm, will be

- a) 240 V b) 120 V c) 60 V d) 30 V

5. The field flux of a d.c. motor can be controlled to achieve

- a) The speeds lowers than rated speed
b) The speeds higher than rated speed
c) The speeds at rated speed
d) None of these

6. A series motor is started without load. The effect is that

- a) the torque increases rapidly
b) the speed increases rapidly
c) current drawn increases rapidly
d) the back emf decreases

7. The motor used for intermittent, high torque loads is

- a) d.c. shunt motor
b) d.c. series motor
c) differential compound motor
d) cumulative compound motor

8. If the field of a d.c. shunt motor is open

- a) it will continue to run at its rated speed
b) the speed of the motor will become very high
c) the motor will stop
d) the speed of motor will decrease

9. Armature reaction is attributed to

- a) the effect of magnetic field setup by armature current
b) the effect of magnetic field setup by field current
c) copper loss in armature
d) the effect of magnetic field setup by back emf

10. When the electric train is moving down a hill the d.c. motor acts as

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- a) d.c. series motor
 - b) d.c. shunt motor
 - c) d.c. series generator
 - d) d.c. shunt generator
11. Inter-poles are meant for
- a) increasing the speed of the motor
 - b) decreasing counter emf
 - c) reducing sparking at the commutator
 - d) converting armature current to d.c.
12. As the load is increased, the speed of a shunt motor
- a) remains constant
 - b) increases slightly
 - c) reduces slightly
 - d) none of these
13. The function of compensating windings placed in slots in the pole shoes is
- a) to neutralise cross magnetising effect
 - b) to neutralise the demagnetising effect
 - c) to neutralise both the effects
 - d) to avoid flash over around the commutator
14. In a d.c. machine the armature m.m.f. is always directed along the:
- a) polar axis
 - b) brush axis
 - c) interpolar axis
 - d) none of these
15. Under-commutation gives rise to
- a) sparking at the leading edge of the brush
 - b) sparking at the trailing edge of the brush
 - c) no sparking at all
 - d) sparking at the middle of the brush
16. In d.c. machines, the polarity of the interpole is
- a) same as that of the main pole behind for the generators and that of the main pole ahead for the motors
 - b) same as that of the main pole ahead for both the generators and the motors
 - c) same as that of the main pole ahead for the generators and that of the main pole behind for the motor
 - d) same as that of the main pole behind for both the generators and the motors
17. The resistance of shunt winding is
- a) more than series winding
 - b) more than armature
 - c) less than series and armature
 - d) more than series and armature
18. The function of the starter is
- a) to limit the armature current at the time of starting
 - b) to protect the motor from over loading
 - c) to protect the motor from low voltage
 - d) all of these
19. Maximum efficiency of the motor will occur when
- a) Copper losses > Iron losses
 - b) Copper losses < Iron losses
 - c) Copper losses = Friction losses
 - d) Copper losses = Constant losses
20. The direction of rotation of a d.c. shunt motor can be reversed by interchanging
- a) the supply terminals
 - b) the field terminals only

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- c) the armature terminals only
- d) either field or the armature terminals
21. In d.c. generators, the polarity of interpoles is
 - a) same as that of main pole behind
 - b) same as that of main pole ahead
 - c) opposite to that of the main pole
 - d) none of these
22. The most economics method of electrical braking is
 - a) regenerative braking
 - b) dynamic braking with self excitation
 - c) dynamic braking with separate excitation
 - d) plugging
23. Plugging of d.c. motors is normally executed by
 - a) reversing the field polarity
 - b) reversing the armature polarity
 - c) reversing the armature polarity and field polarity
 - d) connecting a resistance across the armature
24. For d.c. shunt motor, speed control by armature resistance variations is best suited for
 - a) Constant power drive
 - b) Variable power drive
 - c) Constant torque drive
 - d) Variable torque drive
25. For d.c. shunt motor, speed control by the variation of field flux is best suited for
 - a) Constant power drive
 - b) Variable power drive
 - c) Constant torque drive
 - d) Variable torque drive
26. The efficiency of a d.c. machine is maximum when the variable losses is equal to
 - a) the constant losses
 - b) the square of the constant losses
 - c) the square root of the constant losses
 - d) zero
27. The core losses in a d.c. machine occur due to
 - a) hysteresis only
 - b) eddy current only
 - c) armature current
 - d) both hysteresis and eddy currents
28. If the thickness of laminations is increased, then
 - a) the eddy current loss decreases
 - b) the eddy current loss increases
 - c) the hysteresis loss decreases
 - d) the hysteresis loss increases
29. Transformer is used to change the values of
 - a) voltage
 - b) frequency
 - c) power
 - d) power factor
30. Rating of transformer is given in
 - a) KVA
 - b) kVAR
 - c) kW
 - d) Watts
31. Class-B insulation can withstand a maximum temperature of
 - a) 120 °C
 - b) 130 °C

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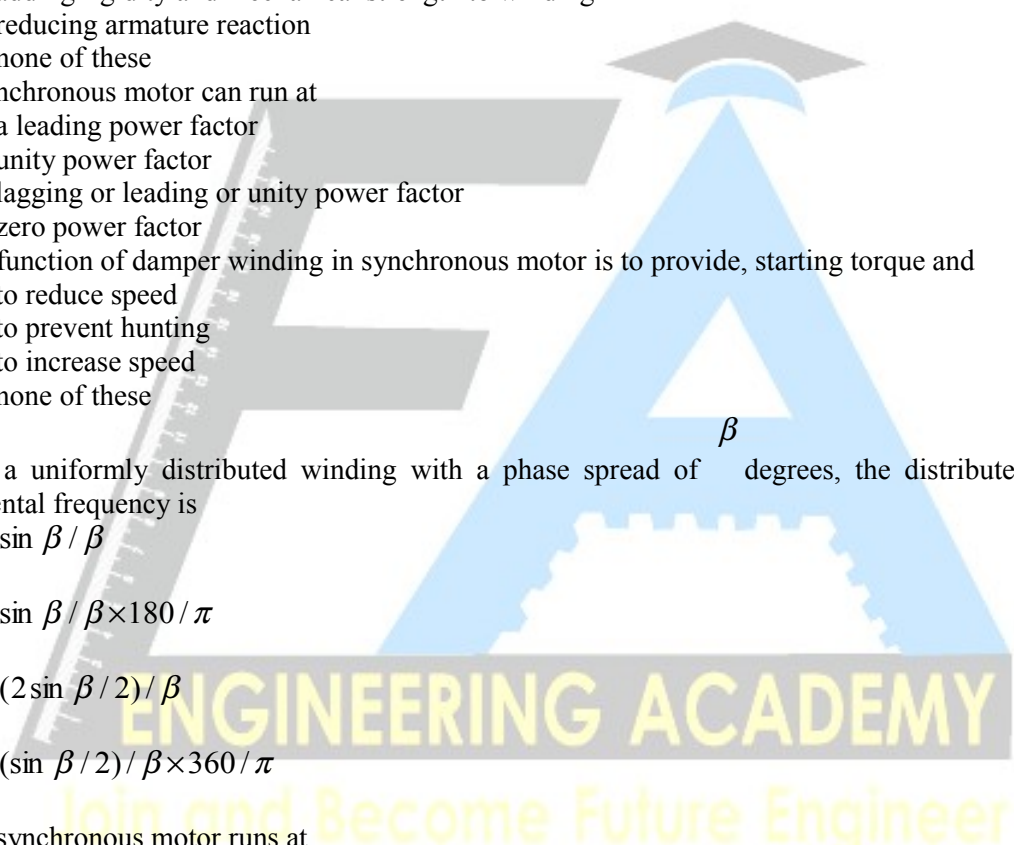
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- c) 105 °C d) 135 °C
32. Two transformers are operating in parallel. They will share the load depending upon their
- efficiency
 - ratings
 - leakage reactance
 - per-unit impedance
33. A sinusoidal emf
- lags the flux inducing it by 180°
 - lags the flux inducing it by 90°
 - leads the flux inducing it by 90°
 - leads the flux inducing it by 180°
34. The no-load current of a transformer in terms of full load current is usually
- 1 to 3% b) 3 to 15%
 - 9 to 12% d) 12 to 20%
35. What type of the core is used for a high frequency transformer?
- Open iron core
 - Air core
 - Closed iron core
 - None of these
36. The transformer oil used in transformers provides.
- insulation and cooling
 - cooling and lubrication
 - insulation and lubrication
 - insulation, cooling and lubrication
37. The full load copper-loss in a transformer is 400 W. At half load, the copper-loss will be
- 400 W b) 200 W
 - 100 W d) 50 W
38. Distribution transformers are designed to have maximum efficiency nearly
- at full load b) at 50% of F.L.
 - at no load d) none of these
39. The purpose of conservator in transformers is
- to cool the windings
 - to prevent moisture in the transformers
 - to take up contraction and expansion of oil
 - none of these
40. The maximum temperature permitted for class A insulation is
- 180°C b) 165°C
 - 120°C d) 105°C
41. Which of the following transformers is smallest?
- 1 kVA, 50 Hz
 - 1 kVA, 200 Hz
 - 1 kVA, 400 Hz
 - 1 kVA, 600 Hz
42. Salient pole type rotor are generally used with prime movers of
- high speed b) low speed
 - medium speed d) low and high speed
43. The frequency of a 4-pole alternator running at 1500 r.p.m. will be
- 150 Hz b) 100 Hz
 - 50 Hz d) 25 Hz
44. Different methods of synchronizing the alternators generally used are

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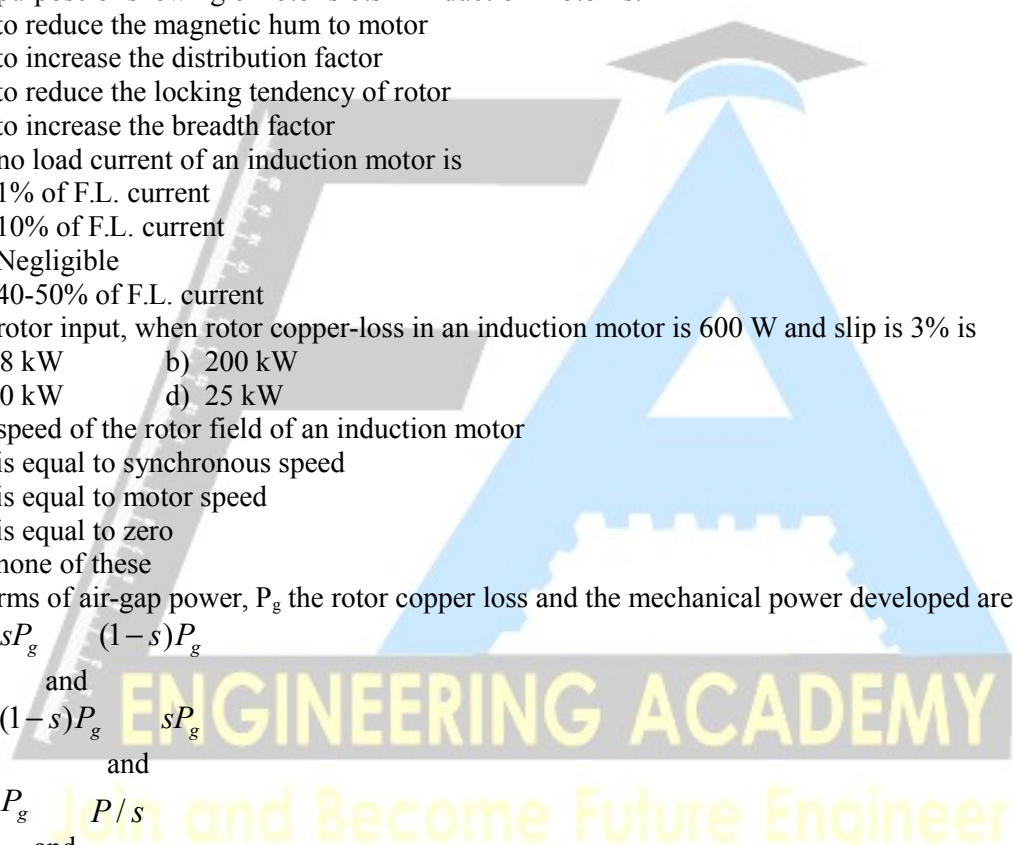
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- a) Dark and bright lamp method
b) Stroboscopic method
c) Dark lamp method only
d) Both a) and b) are correct
45. For a full pitch winding, the generated voltages in both coil sides are
a) exactly in phase
b) in quadrature
c) exactly 180° out of phase
d) approximately 180° out of phase
46. Distributed winding instead of concentrated winding has the effect of improving the shape of voltage as a sine wave and
a) increasing the speed of machine
b) adding rigidity and mechanical strength to winding
c) reducing armature reaction
d) none of these
47. A synchronous motor can run at
a) a leading power factor
b) unity power factor
c) lagging or leading or unity power factor
d) zero power factor
48. The function of damper winding in synchronous motor is to provide, starting torque and
a) to reduce speed
b) to prevent hunting
c) to increase speed
d) none of these
49. For a uniformly distributed winding with a phase spread of β degrees, the distributed factor at fundamental frequency is
a) $\sin \beta / \beta$
b) $\sin \beta / \beta \times 180 / \pi$
c) $(2 \sin \beta / 2) / \beta$
d) $(\sin \beta / 2) / \beta \times 360 / \pi$
50. The synchronous motor runs at
a) less than synchronous speed
b) synchronous speed
c) more than synchronous speed
d) none of the above
51. The construction of synchronous motor is similar to
a) d.c. compound motor
b) slip ring induction motor
c) d.c. shunt generator
d) alternator
52. The synchronous motor runs on
a) 3-phase a.c. supply
b) 3-phase a.c. and d.c. supply
- 

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- c) d.c. supply only
d) 3-phase a.c. and single phase a.c.
53. An unexcited single phase synchronous motor is
a) reluctance motor
b) universal motor
c) repulsion motor
d) a.c. series motor
54. The shape of torque/slip curve of an induction motor is
a) hyperbola
b) parabola
c) straight line
d) rectangular parabola
55. The purpose of skewing of rotor slots in induction motor is:
a) to reduce the magnetic hum to motor
b) to increase the distribution factor
c) to reduce the locking tendency of rotor
d) to increase the breadth factor
56. The no load current of an induction motor is
a) 1% of F.L. current
b) 10% of F.L. current
c) Negligible
d) 40-50% of F.L. current
57. The rotor input, when rotor copper-loss in an induction motor is 600 W and slip is 3% is
a) 18 kW b) 200 kW
c) 20 kW d) 25 kW
58. The speed of the rotor field of an induction motor
a) is equal to synchronous speed
b) is equal to motor speed
c) is equal to zero
d) none of these
59. In terms of air-gap power, P_g the rotor copper loss and the mechanical power developed are given by
a) sP_g and $(1-s)P_g$
b) $(1-s)P_g$ and sP_g
c) $\frac{P_g}{s}$ and $\frac{P_g}{s}$
d) $\frac{P_g}{s}$ and $P_g(1-s)$
60. The direction of rotation of 3-phase revolving field can be changed by interchanging
a) R and Y phases only
b) B and Y phases only
c) R and B phases only
d) any two phases
61. At a slip of 4%, the maximum possible speed of a 3-phase squirrel-cage induction motor is
a) 2880 r.p.m. b) 3000 r.p.m.
c) 1500 r.p.m. d) 1440 r.p.m.
62. The relationship between rotor frequency f_2 slip s , and stator frequency f_1 is given by
a) $f_2 = f_1/s$ b) $f_2 = sf_1$
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- c) $f_2 = (1-s)f_1$ d) none of these
63. In three-phase power measurement by Two Wattmeter method the power factor angle of load will be
- a) $\tan^{-1} \frac{\sqrt{3}(W_1 - W_2)}{W_1 + W_2}$ b) $\tan^{-1} \frac{W_1 + W_2}{W_1 W_2}$
- c) $\tan^{-1} \frac{W_1 - W_2}{W_1 + W_2}$ d) $\tan^{-1} \frac{W_1 W_2}{\sqrt{W_1 + W_2}}$
64. Low resistance is measured by
- a) De sauty's bridge
b) Maxwell's bridge
c) Kelvin's double bridge
d) Wien bridge
65. Siemens is a unit for measuring
- a) Conductance b) Resistance
c) Flux density d) Electric field
66. Manganin is
- a) an insulator material.
b) a semiconductor material
c) used for making inductor
d) an alloy used to make standard resistors
67. A CRO can signals
- a) a.c. signals
b) d.c. signals
c) both a.c. and d.c signals
d) time-invariant signals
68. Schering bridges is used to measure
- a) dielectric loss
b) the inductance
c) low resistance
d) mutual inductance
69. Which bridge is used to determine frequency?
- a) Anderson bridge
b) De Sauty's bridge
c) Wien bridge
d) None of these
70. A CRO uses
- a) electromagnetic focussing
b) electro-static focussing
c) both focussing techniques
d) no focussing technique
71. Inductance is measured by
- a) Wien bridge
b) Schering bridge
c) Maxwell's bridge
d) Hay bridge
72. Hot-wire instruments give
- a) The average value
b) The rms value calculated from the average value

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- c) The rms value from the peak value and the crest factor
 - d) The true rms value based on head produced
73. Wattmeter measures
- a) apparent power
 - b) true power
 - c) volt ampere
 - d) volt ampere reactive
74. The speed of energy meter can be controlled by
- a) series magnet
 - b) braking magnet
 - c) shunt magnet
 - d) shading band
75. The creeping error in single phase Energy meter can be minimized by
- a) adjusting braking magnet
 - b) use of short circuited loops on the outer limbs of the shunt magnet
 - c) drilling two holes in the disc on the opposite side of the spindle
 - d) adjusting the shaded band
76. Megger is used for measuring
- a) low resistance
 - b) high resistance
 - c) medium resistance
 - d) very low resistance
77. Megger can be used for testing
- a) open circuit only
 - b) short circuit only
 - c) open and short circuit both
 - d) high resistance circuit only
78. Speed of the megger is kept at
- a) 100 r.p.m.
 - b) 120 r.p.m.
 - c) 140 r.p.m.
 - d) 160 r.p.m.
79. The meter constant of energy meter is given by
- a) rev./kW
 - b) rev./kWh
 - c) rev./watt
 - d) rev./kWh
80. The pressure coil consists of
- a) more number of turns of fine wire
 - b) less number of turns of fine wire
 - c) less number of turns of thick wire
 - d) more number of turns of thick wire
81. In dynamometer type of wattmeter, which of the coil is split up into two parts
- a) pressure coil
 - b) current coil
 - c) pressure coil and current coil both
 - d) none of the above
82. The most commonly used type of single phase energy meter is
- a) dynamometer type
 - b) electrostatic type
 - c) induction type
 - d) moving coil type
83. Moving Iron instruments are
- a) attraction type

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- b) repulsion type
 - c) attraction and repulsion type
 - d) dynamometer type
84. Moving coil instruments are
- a) permanent magnet type
 - b) dynamometer type
 - c) induction type
 - d) permanent magnet and dynamometer type
85. Moving Iron instruments can be used on
- a) a.c. and d.c. both
 - b) a.c. only
 - c) d.c. only
 - d) half wave rectified a.c.
86. Moving coil permanent magnet instruments can be used on
- a) a.c. and d.c.
 - b) a.c. only
 - c) d.c. only
 - d) half wave rectified a.c.
87. The scale of moving iron (M.I.) instruments is
- a) uniform
 - b) cramped
 - c) first uniform then constricted
 - d) none of the above
88. The cost of M.L. instruments as compared to M.C. instruments is
- a) high b) low
 - c) same d) very high
89. The meter used for measuring electrical quantities are
- a) Tachometer
 - b) Micrometer
 - c) Measuring Instruments
 - d) Spherometer
90. The meter used for measuring electrical energy of consumer is called
- a) wattmeter
 - b) ampere hour meter
 - c) kWh meter
 - d) avometer
91. Electrostatic effect for producing deflecting torque is used in
- a) ammeters
 - b) voltmeters
 - c) watt-meters
 - d) energy meters
92. A thermocouple motor can be used to measure
- a) d.c. current only
 - b) a.c. current only
 - c) both a.c. as well as d.c. currents
 - d) rms values only
93. Inductance is measured in terms of capacitance and resistance by
- a) Schering bridge
 - b) Anderson bridge
 - c) Maxwell-wein bridge

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- d) Wein bridge
94. Lissajous patterns are used to measure
- voltage and frequency
 - frequency and phase shift
 - frequency and amplitude distortion
 - amplitude and flux
95. The MHD system generates:
- a.c. only
 - d.c. only
 - a.c. and d.c. only
 - either a.c. or d.c.
96. A Kaplan turbine is
- inward flow, impulse turbine
 - outward flow, reaction turbine
 - a high head mixed flow turbine
 - low head axial flow turbine
97. The efficiency of electrostatic precipitator is as high as
- 99.6 percent
 - 90 percent
 - 85 percent
 - 80 percent
98. Hydrogen when used for cooling in a large alternator, it
- increases the life of insulation
 - decreases the life of insulation
 - it does not effect insulation either way
 - none of these
99. An over-excited synchronous motor on no load is known as
- synchronous induction generator
 - synchronous condenser
 - alternator
 - none of these
100. KVAR is equal to
- $kW \tan \phi$
 - $kW \sin \phi$
 - $kVA \cos \phi$
 - None of these
101. Industrial heating furnaces such as are and induction furnaces operate on
- very low lagging p.f.
 - very low leading p.f.
 - very high leading p.f.
 - none of these
102. The economic size of conductor is determined by
- Current carrying capacity
 - Transmission voltage
 - Kelvin's law
 - None of these
103. The main reason for low power factor of supply system is due to the use of
- Resistive load
 - Induction motor
 - Synchronous motor
 - All are correct
104. The value of demand factor is

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- a) less than one
 - b) greater than one
 - c) equal to one
 - d) none of these
105. The value of diversity factor is
- a) less than one
 - b) more than one
 - c) equal to one
 - d) none of these
106. Which lightning stroke is most dangerous?
- a) Direct stroke on tower top
 - b) Direct stroke on ground wire
 - c) Direct stroke on line conductor
 - d) Indirect stroke on conductor
107. Death is almost certain when the current through human body is
- a) 10 mA b) 20 mA
 - c) 40 mA d) 100 mA
108. HRC fuses provide best protection against
- a) short circuits b) lightning
 - c) sparking d) fire
109. Zero sequence component always flows through
- a) phase wires b) neutral wire
 - c) earth wire d) any of the above
110. Depreciation cost of a plant is calculated by
- a) Straight line Method
 - b) Diminishing value Method
 - c) Sinking fund Method
 - d) Any of the above
111. The life of underground cables is taken as
- a) 10 years b) 20 years
 - c) 25 years d) 40 years
112. For the hydro-electric plant, the life of a RCC dam is taken as
- a) 5 years b) 10 years
 - c) 40 years d) 100 years
113. The minimum permissible size of the aluminum cable for power circuits is
- a) 1.5 sq. mm b) 2.0 sq. mm
 - c) 2.5 sq. mm d) 3 sq. mm
114. The resistance of human body of about
- a) 100 ohms b) 500 ohms
 - c) 1000 ohms d) 10 ohms
115. Identify the incorrect relation:
- power factor = $\frac{kW}{kVA}$
- a) $kW = kVA \times \text{power factor}$
 - b) $kVA \times kW = \text{power factor}$
 - c)

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$$kVA = \frac{kW}{\text{power factor}}$$

- d)
116. The simple subtraction of kilowatts from total kVA equals the kVAR when the power factor is
a) unity b) 0.707
c) lagging d) zero
117. The distribution transformers is generally connected in
a) Delta/Delta b) Star/Delta
c) Delta/Star d) Star/Star
118. The power factor of industrial loads is generally
a) unity b) lagging
c) leading d) zero
119. Transmission line insulators are made of
a) glass b) porcelain
c) iron d) PVC
120. The distributors for residential areas are
a) Single phase
b) Three phase three wire
c) Three phase four wire
d) None of these
121. 8 hours. Machine Q can print the same number of books in 10 hours while machine R can print the same in 12 hours. All the machines started printing at 9 A.M. Machine P is stopped at 11 A.M. and the remaining two machines complete work. Approximately at what time will the printing of one lakh books be completed?
A. 3 pm
B. 2 pm
C. 1 pm
D. 11 am
122. The average age of a husband and wife was 23 years when they were married 5 years ago. The average age of the husband, the wife and a child who was born during the interval, is 20 years now. How old is the child now?
(a) 9 months
(b) 1 year
(c) 3 years
(d) 4 years
123. A path of uniform width runs round the inside of a rectangular field 38 m long and 32 m wide. If the path occupies 600 m^2 , then the width of the path is?
(a) 30 m
(b) 5 m
(c) 18.75 m
(d) 10 m
124. P is 30% more efficient than Q. P can complete a work in 23 days. If P and Q work together, how much time will it take to complete the same work?
A. 9
B. 11
C. 13
D. 15

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125. A can do a piece of work in 4 hours; B and C together can do it in 3 hours, while A and C together can do it in 2 hours. How long will B alone take to do it?

- A. 8 hours
- B. 10 hours
- C. 12 hours
- D. 24 hours
- (d) None of these

126. The age of the father 8 years ago was 5 times the age of his son. At present the father's age is 3 times that of his son. Find the present age of father.

- (a) 48 years
- (b) 36 years
- (c) 46 years
- (d) 58 years

127. A can do a work in 12 days and B can do it in 24 days, A works for 3 days and then leaves, In how many days will the work be completed?

- A. 18
- B. 10
- C. 12
- D. 24

128. Shani has some birds and dogs. If the ratio of number of heads and numbers of feet is 5:16, find out the ratio of numbers of dogs and number of birds, if the number of heads alone is 30.

- (a) 3:2
- (b) 2:3
- (c) 4:5
- (d) 5:4

129. A boy can fill a bucket in $\frac{3}{4}$ min. and a girl can fill bucket $\frac{4}{3}$ min. In how many hour will they fill the tank whose capacity is 225 buckets. If they works only $\frac{3}{5}$ hour in every 1 hour?

- (a) 3
- (b) 12
- (c) 8
- (d) 5

130. Weight of two persons A and B are in the ratio of 3:5. A's weight increase by 20% and the total weight of A and B together becomes 80 kg, with an increase of 25%. By what percent did the weight of B increase?

- (a) 28%
- (b) 22%
- (c) 58%
- (d) 18%

131. A boat covers 24kms upstream and 36km downstream in 6 hours. While the boat covers 36km upstream and 24 km downstream in 6.5 hours. Speed of the boats is:

- (a) 5km/h
- (b) 6km/h
- (c) 10km/h
- (d) 12km/h

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132. What least value must be given to K, so that number 72 K 517 is divisible by 11?

- (a) 1
- (b) 6
- (c) 9
- (d) 4

133. A number is of two digits. The position of digits is interchanged and new number is added to the original number. The resultant number is always divisible by

- (a) 8
- (b) 9
- (c) 7
- (d) 11

134. Ram arrives at a Bank 15 minutes earlier than scheduled time if he drives his car at 42 km/h. If he drives car at 35 km/h he arrives 5 minutes late. The distance of the Bank, from his starting point is

- (a) 70 km
- (b) 210 km
- (c) 72 km
- (d) 60 km

135. A car and a jeep were sold for Rs. 121000 each. The car was sold at a loss of 20% while the jeep at a gain of 20%. The entire transaction resulted in

- (a) neither loss nor gain
- (b) gain of Rs. 1000
- (c) loss of Rs. 1000
- (d) gain of Rs. 500

136. By selling 144 hens Mahesh suffered a loss equal to the selling price of 6 hens. His loss per cent is

- (a) 4
- (b) 3
- (c) 9
- (d) 41/2

137. A train starts from A at 7 a.m. towards B with speed 50 km/h. Another train from B starts at 8 a.m. with speed 60 km/h towards A. Both of them meet at 10 a.m. at C. The ratio of the distance AC to BC is

- (a) 5 : 6
- (b) 5 : 4
- (c) 6 : 5
- (d) 4 : 5

138. The length and breadth of a rectangle are increased by 30% and 20% respectively. The area of the rectangle so formed exceeds the area of the rectangle by :

- (a) 46%
- (b) 66%
- (c) 42%
- (d) 56%

139. The length of a train and that of a platform are equal. If with a speed of 90 km/hr the train crosses the platform in one minute, then the length of the train (in metres) is :

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- (a)500
- (b)600
- (c)750
- (d) 900

140.The average age of a class of 35 students is 15 years. If the age of a teacher is also included, the average age increases by 1. What is the teacher's age?

- (a) 36 years
- (b) 41 year
- (c) 51 year
- (d)56 year

141.If the difference between the S.I. and C.I. on a certain amount at 10% per annum for 2 years is Rs. 20, then the sum is :

- (a) Rs. 4000
- (b) Rs 2000
- (c) Rs. 1500
- (d) Rs. 3000

142. The diameter of a toy wheel is 14 cm. What is the distance travelled by it in 15 revolutions?

- (a) 880 cm
- (b) 660 cm
- (c) 600 cm
- (d) 560 cm

143.) Which Indian bank has won the 2017 Golden Peacock Innovative Product / Service Award (GPIPSA)?

- [a] Yes Bank
- [b] ICICI Bank
- [c] State Bank of India (SBI)
- [d] Reserve Bank of India (RBI)

144.) The National Panchayati Raj Diwas is celebrated on which date in India?

- [a] April 23 [b] April 24
- [c] April 22 [d] April 25

145.) India's first-ever "village of books" will open in which state to promote tourism?

- [a] Punjab
- [b] Himachal Pradesh
- [c] Maharashtra
- [d] Tamil Nadu

146.) Which country to host 2017 BRICS Film Festival?

- [a] Russia [b] South Africa
- [c] China [d] India

147.) The Civil Services Day (CSD) is celebrated on which day in India?

- [a] April 18
- [b] April 21
- [c] April 19
- [d] April 20

148.) Gayatri Pullela is associated with which sports?

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- [a] Badminton
- [b] Tennis
- [c] Hockey
- [d] Football

149.) Which of the following is the lightest metal ?

- (a) Mercury (b) Silver
- (c) Lithium (d) Lead

150.) The chemical name of Urea is–

- (a) Aneurin (b) Chloroetane
- (c) Carbamide (d) None of these

151.) Which of the following is in liquid form at room temperature ?

- (a) Cerium (b) Sodium
- (c) Francium (d) Lithium

152.) The power of a lens is measured in :

- [a] diopters [b] Jacon
- [c] lumen [d] candela

153.) Which of the following substances undergo ‘sublimation’ on heating?

1. Iodine
2. Napthalene
3. Camphor

- [a] 1 and 2 [b] 1 and 3
- [c] 2 and 3 [d] All of them

154. Lightening cause rainfall because–

- (a) It cause combination of oxygen and nitrogen
- (b) Some of the gas molecules become bigger
- (c) It activate H₂O molecule
- (d) Photo-electricity reaction starts

155. Brass gets discoloured in air due to the presence of which gas in air–

- (a) Carbon dioxide (b) Oxygen
- (c) Hydrogen Sulphide (d) Nitrogen

156. What is the maximum limit of sound intensity in decibel units beyond which a human being cannot hear?

- (a) 80 decibel
- (b) 85 decibel
- (c) 90 decibel
- (d) 95 decibel

157. Tripping is associated with

- (a) Snooker
- (b) Football
- (c) Cricket
- (d) Lawn Tennis

158. Average weight of A, B, C is 84 kg., when D is included average weight becomes 80 kg. If E replaces A, then the average weight of B, C, D and E becomes 79 kgs. If E’s weight is 3 kg more than that of D. What is A’s weight?

- (a) 70 kg
- (b) 72 kg
- (c) 75 kg

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(d) 80 kg

159. The ratio of A's and B's ages is 4 : 5. If the difference between the present age of B and the age of A, 5 years hence is 3, then what is the total of present ages of A and B?

(a) 68 years

(b) 72 years

(c) 50 years

(d) 90 years

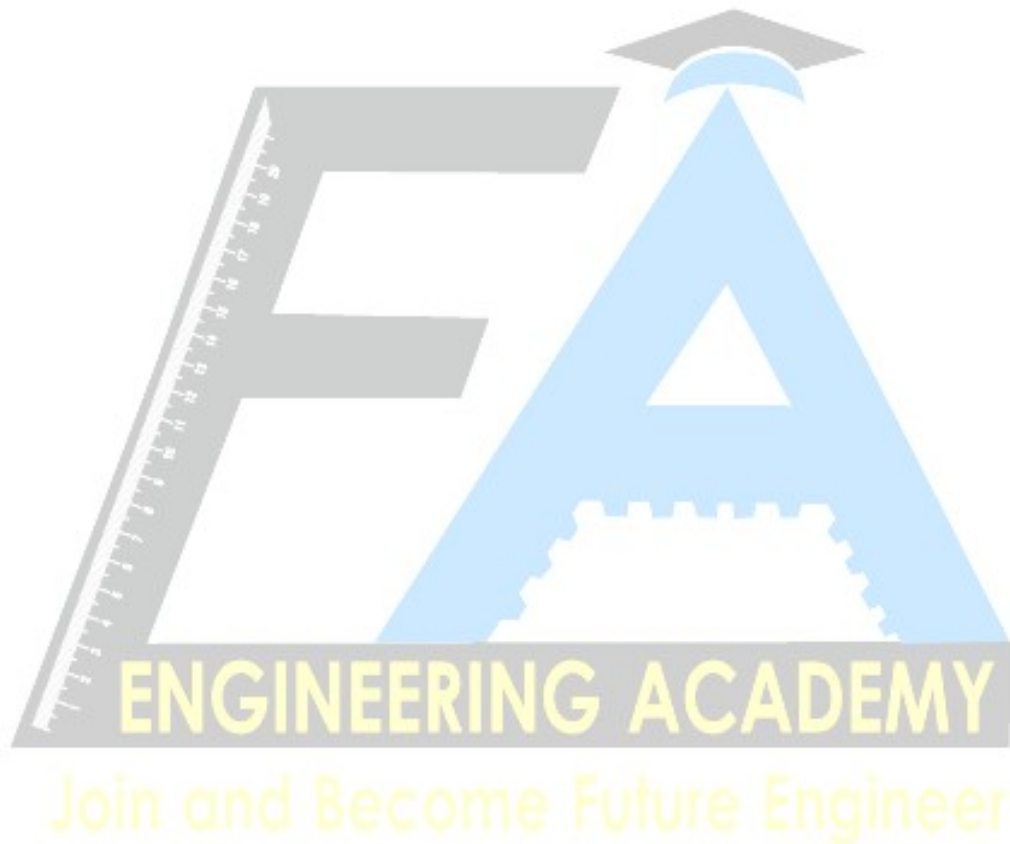
160. Profit on selling the watch at Rs. 850 is equal to loss on selling it at Rs. 650. What is the cost-price of the watch?

(a) Rs. 720

(b) Rs. 750

(c) Rs. 800

(d) Rs. 735



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1. b	51. d	101. a	151. c
2. b	52. b	102. c	152. a
3. a	53. a	103. b	153. d
4. b	54. d	104. a	
5. b	55. c	105. b	154. c
6. b	56. d	106. c	155. c
7. d	57. c	107. d	156. b
8. b	58. a	108. a	
9. a	59. a	109. b	157. b
10. c	60. d	110. d	
11. c	61. a	111. d	158. c
12. c	62. b	112. d	159. d
13. d	63. a	113. c	
14. b	64. c	114. c	
15. b	65. a	115. c	160. d
16. c	66. d	116. a	
17. d	67. c	117. c	
18. d	68. a	118. b	
19. d	69. c	119. b	
20. d	70. b	120. c	
21. b	71. c	121. c	
22. a	72. d	122. d	
23. b	73. b	123. b	
24. c	74. b	124. c	
25. a	75. c	125. c	
26. a	76. b	126. a	
27. d	77. c	127. a	
28. b	78. d	128. a	
29. a	79. b	129. a	
30. a	80. a	130. a	
31. b	81. b	131. c	
32. d	82. c	132. b	
33. b	83. c	133. d	
34. a	84. d	134. a	
35. b	85. a	135. c	
36. a	86. c	136. a	
37. c	87. b	137. b	
38. b	88. a	138. d	
39. c	89. c	139. c	
40. d	90. c	140. c	
41. d	91. b	141. b	
42. b	92. c	142. b	
43. c	93. b	143. a	
44. d	94. b	144. b	
45. a	95. c	145. c	
46. b	96. d	146. c	
47. c	97. a	147. b	
48. b	98. a	148. a	
49. d	99. b	149. c	
50. b	100. a	150. c	

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