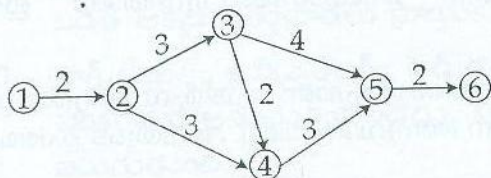


## SECTION - I ENGLISH

1. A ring gauge is used to :  
 (A) Check the clearance between two mating surfaces  
 (B) Test the accuracy of holes  
 (C) Check the diameter of shafts or studs  
 (D) All of the above
2. Which of these memories will be used to store variable data ?  
 (A) RAM (B) ROM (C) EPROM (D) PROM
3. One metre is equal to :  
 (A)  $10^{-6}$  micron (B)  $10^6$  micron (C)  $10^{-3}$  micron (D)  $10^3$  micron
4. Modulus of rigidity is defined as the ratio of :  
 (A) Longitudinal stress to longitudinal strain  
 (B) Shear stress to shear strain  
 (C) Stress to strain  
 (D) Stress to volumetric strain
5. Which gate has the output low, only when both the inputs are high ?  
 (A) NOR (B) OR (C) NAND (D) AND
6. In TIG welding, the welding zone is shielded by an atmosphere of :  
 (A) Hydrogen gas (B) Oxygen gas (C) Either (A) or (B) (D) Helium gas
7. Chromosomes are concerned with :  
 (A) Respiration  
 (B) Assimilation  
 (C) Transmission of hereditary characteristics  
 (D) Nutrition
8. In the network shown below, the critical path is :



(The number on the arrow shows the duration of the activity)

- |                           |                           |
|---------------------------|---------------------------|
| (A) 1 - 2 - 3 - 4 - 5 - 6 | (B) 1 - 2 - 4 - 5 - 6     |
| (C) 1 - 2 - 3 - 5 - 6     | (D) 1 - 2 - 4 - 3 - 5 - 6 |

9. The electrical switches are put in the :  
 (A) Live wire (B) Earth wire (C) Neutral wire (D) Any one of these
10. What is 'Agni-II' ?  
 (A) An intermediate range ballistic missile  
 (B) A battle tank  
 (C) A satellite  
 (D) A satellite launching vehicle
11. At the back of domestic refrigerator, the bank of tubes is called :  
 (A) Evaporator tubes (B) Condenser tubes  
 (C) Refrigerant cooling tubes (D) Capillary tubes
12. Deforestation generally decreases :  
 (A) Rainfall (B) Soil erosion (C) Drought (D) Global Warming
13. The EPROM stands for :  
 (A) Erasable Programmable Read Only Memory  
 (B) Extended Parasitic Read Only Memory  
 (C) Extended Polar Read Only Memory  
 (D) None of the above
14. The density of water is :  
 (A)  $10^{-3} \text{ kg/m}^3$  (B)  $1 \text{ kg/m}^3$  (C)  $10^2 \text{ kg/m}^3$  (D)  $10^3 \text{ kg/m}^3$
15. A sum of ₹ 41 was divided among 50 children. Each boy gets 90 paise and each girl gets 65 paise. Find the number of boys and girls.  
 (A) 34, 16 (B) 30, 20 (C) 36, 14 (D) None of these
16. The torque developed by a single phase induction motor at starting is :  
 (A) Pulsating (B) Uniform (C) Zero (D) None of these
17. With which field is Dada Saheb Phalke Award associated ?  
 (A) Literature (B) Cinema (C) Journalism (D) Volley Ball
18. Which is a primary consumer ?  
 (A) Scavenger (B) Saprophyte (C) Carnivore (D) Herbivore
19. The representative fraction of  $\frac{1}{1,00,000}$  signifies a scale of :  
 (A)  $1 \text{ cm} = 1,00,000 \text{ m}$  (B)  $1 \text{ cm} = 10 \text{ km}$   
 (C)  $1 \text{ cm} = 1 \text{ km}$  (D) None of these

20. Cores of electric motors are generally made from laminations of :  
 (A) Carbon (B) Silicon steel (C) Cast iron (D) None of these
21. Which of the following elements is **not** present in stainless steel ?  
 (A) Iron (B) Tungsten (C) Chromium (D) Nickel
22. Monetary Policy of India is formulated and announced by :  
 (A) State Bank of India (B) Reserve Bank of India  
 (C) National Development Council (D) None of these
23. A train 100 m long passes a bridge at a speed of 72 kmph in 25 seconds. The length of the bridge is :  
 (A) 400 m (B) 150 m (C) 300 m (D) 200 m
24. The distance between the two rails in Broad Gauge in India is :  
 (A) 1676 mm (B) 1000 mm (C) 762 cm (D) 1676 cm
25. Time constant of a series R-L circuit is :  
 (A) LR seconds (B)  $\frac{L}{R}$  seconds (C)  $L^2R$  seconds (D)  $LR^2$  seconds
26.  $\alpha=3, \beta=5, \gamma=-8$ , then the value of  $\alpha^3+\beta^3+\gamma^3$  is :  
 (A) -240 (B) 240 (C) -360 (D) Zero
27. The dynamic resistance of a diode is defined as :  
 (A) The ratio of small change in voltage to small change in current  
 (B) The ratio of small change in voltage to square of small change in current  
 (C) The ratio of applied voltage to current  
 (D) None of the above
28. In digital computer programming, subroutines are used :  
 (A) to reduce programme execution time at the expense of more memory  
 (B) to reduce storage requirements  
 (C) to increase programming ease and reduce storage requirements  
 (D) because most of the functions are same
29. In a certain code ROAD is written as URDG. In that code how will SWAN be written ?  
 (A) VXDQ (B) VZDQ (C) UXDQ (D) VZCO
30. A micro-processor with a clock frequency of 100 MHz will have a clock period of :  
 (A) 1 ns (B) 10 ns (C) 100 ns (D) 1000 ns

31. Which of the following is an active component of a circuit ?  
 (A) Transistor (B) Resistor (C) Capacitor (D) Inductor
32. The tropic of Cancer is :  
 (A)  $66\frac{1}{2}^{\circ}$  N latitude (B)  $66\frac{1}{2}^{\circ}$  S latitude  
 (C)  $23\frac{1}{2}^{\circ}$  N latitude (D)  $23\frac{1}{2}^{\circ}$  S latitude
33. In a P - N - P transistor , majority charge carriers are :  
 (A) Holes (B) Electrons  
 (C) Both (A) and (B) (D) None of these
34. Sodium is related to salt in the same way as oxygen is related to :  
 (A) Water (B) Carbon (C) Hydrogen (D) Chemistry
35. Centre lines :  
 (A) are drawn to indicate axes of cylindrical, conical, spherical objects  
 (B) are thin, long, chain lines  
 (C) generally extend beyond the outlines to which they refer  
 (D) have all the above properties
36. Seema invested a sum of ₹ 16,000 for two years at compound interest and received an amount of ₹ 17,640 on maturity. What is the rate of interest ?  
 (A) 8% (B) 5% (C) 4% (D) 3%
37. Creeping occurs in :  
 (A) Ammeter (B) Energy meter (C) Voltmeter (D) None of these
38. If the first and 2<sup>nd</sup> digit of the sequence 5981327438 are interchanged and then third and fourth digits, fifth and sixth digits and so on, which digit would be seventh counting towards left ?  
 (A) 8 (B) 2 (C) 1 (D) 4
39. Cod liver oil derived from fish is a rich source of :  
 (A) Vitamin C (B) Vitamin B<sub>12</sub> (C) Vitamin D (D) Vitamin B<sub>1</sub>
40. For which of the following applications, a d.c. motor is preferred over an a.c motor ?  
 (A) Variable speed operation (B) High speed operation  
 (C) Low speed operation (D) Fixed speed operation

41. The main burden of indirect taxes falls on the :  
 (A) Manufacturers (B) Traders (C) Consumers (D) Tax payers
42. The primary host of Malaria parasite is :  
 (A) Male Culex (B) Male Anopheles  
 (C) Female Anopheles (D) Female Culex
43. If a beam is constrained to move and heated, it will develop \_\_\_\_\_ stress.  
 (A) shear (B) tensile (C) principal (D) compressive
44. With the addition of impurities, the resistance of a semiconductor :  
 (A) Increases (B) Decreases  
 (C) First decreases then increases (D) First increases then decreases
45. Who was the founder of slave dynasty ?  
 (A) Iltutmish (B) Balban  
 (C) Raziya (D) Qutub-ud-Din Aibak
46. Name of the Chinese President who recently visited India is :  
 (A) Hu Jintao (B) Xi Jinping (C) Shinzo Abe (D) Wen Jiabao
47. For complete combustion of 1 kg of carbon, \_\_\_\_\_ oxygen is required.  
 (A) 8 kg (B)  $\frac{8}{3}$  kg (C)  $\frac{3}{8}$  kg (D) 1 kg
48. As per the census 2011, what is the Sex Ratio (i.e. the number of women per thousand men) of India ?  
 (A) 880 (B) 970 (C) 940 (D) 910
49. A transformer has 1000 primary turns. It is connected to 250 V A.C. supply. Find the number of secondary turns to get secondary voltage of 400 volts.  
 (A) 625 (B) 1600 (C) 400 (D) 1250
50. The LCM of numbers 12, 18 and 24 is how much more than their HCF ?  
 (A) 66 (B) 69 (C) 70 (D) 72
51. Suraj went to the movie 9 days ago. He goes to the movies only on Thursday. What day of the week is today ?  
 (A) Saturday (B) Sunday (C) Friday (D) Thursday

52. Twelve years hence a man will be four times as he was 12 years ago. His present age is :  
 (A) 25 years (B) 20 years (C) 28 years (D) 30 years
53. A rectangular field of 60 m length and 40 m width is surrounded by a 5 m wide road. If the cost of making 1 sq.m. of road is ₹ 1,000, what shall be the cost of making the entire road ?  
 (A) ₹ 5,50,000 (B) ₹ 11,00,000  
 (C) ₹ 2,25,000 (D) Can't be calculated
54. A fan produces a feeling of comfort during hot weather because :  
 (A) Our perspiration evaporates quickly  
 (B) Our body radiates more heat when air is flowing  
 (C) Fan supplies cool air  
 (D) Conductivity of air increases
55. If  $x < -1$ , then  $x^2$  is :  
 (A) 1 (B) Less than 1 (C) More than 1 (D) None of these
56. The decimal equivalent of  $\frac{5}{16}$  is :  
 (A) 0.3005 (B) 0.3180 (C) 0.3135 (D) 0.3125
57. The path of magnetic flux in a transformer should have :  
 (A) High resistance (B) High reluctance  
 (C) Low resistance (D) Low reluctance
58. A car travels from P to Q at a speed of  $V_1$  km/hr and travels back from Q to P at the speed of  $V_2$  km/hr. The average speed of the car for the entire journey is :  
 (A)  $\frac{V_1 + V_2}{2V_1V_2}$  (B)  $\frac{V_1 + V_2}{2}$  (C)  $\frac{2V_1 V_2}{V_1 + V_2}$  (D)  $\frac{V_1 + V_2}{\sqrt{V_1 V_2}}$
59. In S.I engine, to obtain the required firing order :  
 (A) battery is installed (B) distributor is installed  
 (C) Carburettor is installed (D) ignition coil is installed
60. Carbondioxide in atmospheric air amounts to about :  
 (A) 0.03% (B) 0.003% (C) 0.3% (D) 3%
61. The capacity of the battery is given in terms of :  
 (A) Ampere-hour (B) Voltage  
 (C) Weight of the battery (D) Volume of the electrolyte

62. Flow in a pipe is laminar, if the Reynold's number is :  
(A) Less than 2000 (B) Between 2000 and 4000  
(C) Between 4000 and 6000 (D) Above 6000
63. An isentropic process is always :  
(A) Irreversible and adiabatic (B) Reversible and isothermal  
(C) Frictionless (D) Reversible and adiabatic
64. A grocer has 50 kg of rice. He sells a part of it at 8% profit and rest at 18% profit. He gains 15% on the whole. Find the quantity sold at 18% profit.  
(A) 20 kg (B) 30 kg (C) 15 kg (D) 35 kg
65. The equipments attached to CPU which computer can access are called :  
(A) Control units (B) Computer components  
(C) Hardware (D) Peripherals
66. Size of a theodolite is specified by :  
(A) the length of the telescope (B) the diameter of the vertical circle  
(C) the diameter of lower plate (D) the diameter of upper plate
67. Who is the present Chief Justice of India ?  
(A) Mr. V.S. Sampath (B) R.M. Lodha  
(C) H.L. Dattu (D) Altamas Kabir
68. Food : Hungry :: ? : ?  
(A) Thought : Politics (B) Water : River  
(C) Rest : tired (D) Wine : Intoxication
69. A wound watch spring has \_\_\_\_\_ energy.  
(A) mechanical (B) kinetic  
(C) potential (D) kinetic and potential
70. Pointing to a man, Deepak said, "His only brother is the father of my daughter's father". How is the man related to Deepak ?  
(A) Grandfather (B) Father (C) Uncle (D) Brother-in-law
71. A cyclotron is a :  
(A) bunch of gamma rays (B) high frequency oscillator  
(C) particle accelerator (D) none of these
72. Which of the following is a trivalent element ?  
(A) Boron (B) Indium (C) Aluminium (D) All of these

73. A bullet of mass 0.01 kg is fired from a gun weighing 5.0 kg. If the initial speed of the bullet is 250 m/sec, calculate the speed with which the gun recoils.  
 (A)  $-0.50$  m/sec (B)  $+0.05$  m/sec (C)  $-0.25$  m/sec (D)  $+0.25$  m/sec
74. A girl ate sweets while fanning the flies away. Due to this she suffered from a disease diagnosed as :  
 (A) Cancer (B) Cholera (C) Diphtheria (D) Tuberculosis
75. Where were the Asian Games 2014 held ?  
 (A) Beijing, China (B) Tokyo, Japan (C) Incheon, Korea (D) Tehran, Iran
76. Find the wrong number in the series :  
 8, 13, 21, 32, 47, 63, 83  
 (A) 13 (B) 21 (C) 47 (D) 83
77. The area of the largest triangle that can be inscribed inside a semicircle of radius  $R$  cm is :  
 (A)  $2R$  cm<sup>2</sup> (B)  $0.25R^2$  cm<sup>2</sup> (C)  $2R^2$  cm<sup>2</sup> (D)  $R^2$  cm<sup>2</sup>
78. The first serving Chief Minister of an Indian state who lost his/her post after being convicted in a disproportionate assets case :  
 (A) Lalu Prasad (B) Jagannath Mishra  
 (C) J. Jayalalitha (D) B.S. Yeddyurappa
79. Thorium Breeder Reactors are most suitable for India because :  
 (A) These develop more power  
 (B) Its technology is simple  
 (C) Abundance of thorium deposits are there in India  
 (D) None of these
80.  $20 + 5\frac{1}{3} + 1\frac{1}{2} - 9\frac{3}{5} + \frac{2}{5} = ?$   
 (A)  $4\frac{1}{2}$  (B)  $3\frac{1}{2}$  (C)  $2\frac{1}{3}$  (D) None of these
81. Under the Member of Parliament Local Area Development Scheme (MPLADS), the annual allocation is :  
 (A) ₹ 5 crore (B) ₹ 10 crore (C) ₹ 2 crore (D) ₹ 1 crore
82. In India, which of the following is adopted as the standard recording rain gauge ?  
 (A) Symon's rain gauge (B) Tipping bucket type  
 (C) Natural siphon type (D) Weighing bucket type

83. From his house, Ram walks 20 metres in North direction. Then he turns right and walks 30 metres. Then he again turns right and walks 35 metres. Then he turns left and walks 15 metres. Again he turns left and walks 15 metres. In which direction and how many metres away is he from his house ?  
 (A) 45 metres East (B) 30 metres East (C) 15 metres West (D) 30 metres North
84. How many medals did India win in the recently held Asian Games ?  
 (A) 50 (B) 60 (C) 54 (D) 57
85. The site of respiration in bacteria is :  
 (A) Episome (B) Microsome (C) Mesosome (D) Ribosome
86. Power loss in a resistor is given by :  
 (A)  $P = V^2 R$  (B)  $P = \frac{V^2}{R}$  (C)  $P = \frac{I^2}{R}$  (D)  $P = \frac{V}{I}$
87. Find the value of  $\left\{ \sqrt{\frac{4}{3}} - \sqrt{\frac{3}{4}} \right\}$ .  
 (A) 1 (B)  $\frac{5\sqrt{3}}{2}$  (C)  $\frac{1}{2\sqrt{3}}$  (D)  $\frac{7}{12}$
- ✓ 88. With which of the following is the term 'Golden Handshake' associated ?  
 (A) Share Market (B) Smuggling  
 (C) Voluntary Retirement Benefits (D) Theft
89. The area of a square field is  $5000 \text{ m}^2$ . The length of the diagonal of this square will be :  
 (A)  $100\sqrt{2} \text{ m}$  (B)  $50\sqrt{2} \text{ m}$  (C) 100 m (D) 50 m
90. Mohan and Ramesh were ranked seventh and eleventh respectively from the top of their class of 41 students. What will be their respective ranks from the bottom of the class ?  
 (A) 30<sup>th</sup> and 34<sup>th</sup> (B) 34<sup>th</sup> and 30<sup>th</sup>  
 (C) 35<sup>th</sup> and 31<sup>st</sup> (D) 36<sup>th</sup> and 32<sup>nd</sup>
91. One eighth of a half kg pack of icecream has been eaten. The remainder is divided equally among three people. Approximately what percentage of the pack does each person get ?  
 (A) 14.6% (B) 29.2% (C) 11.3% (D) 18.1%
92. A block of wood floats in water with  $\frac{2}{3}$ rd of its volume submerged. Its relative density is :  
 (A)  $\frac{1}{3}$  (B)  $\frac{2}{3}$  (C)  $\frac{4}{3}$  (D)  $\frac{1}{9}$

93. Burning of fossil fuels is the main cause of :  
 (A) nitrogen oxide pollution (B) nitrous oxide pollution  
 (C) sulphur dioxide pollution (D) nitric oxide pollution
94. Which of the following is a viral disease ?  
 (A) Tetanus (B) Tuberculosis (C) Typhoid (D) AIDS
95. Mechanical efficiency of a gas turbine as compared to internal combustion reciprocating engine is :  
 (A) Higher (B) Lower (C) Same (D) None of these
96. By selling a shirt for ₹ 450 a man loses 25%. At what price will he sell the shirt in order to gain 50% ?  
 (A) ₹ 600 (B) ₹ 750 (C) ₹ 900 (D) ₹ 1,000
97. 140 litres of acid contains 90% acid and rest water. The amount of water added to make the water 12.5% of the resulting mixture is :  
 (A) 5 litres (B) 4 litres (C) 3 litres (D) 10 litres
98. The equilibrium super elevation required to counteract the centrifugal force fully is given by :  
 (A)  $\frac{V^2}{27.5 R}$  (B)  $\frac{V^2}{75 R}$  (C)  $\frac{(0.75 V)^2}{127 R}$  (D)  $\frac{V^2}{127 R}$
99. For thyristors pulse triggering is preferred to dc triggering because :  
 (A) Gate dissipation is low  
 (B) Pulse system is simpler  
 (C) Triggering signal is required for short duration  
 (D) All the above
100. Hard copy means :  
 (A) Output on tape (B) Output on Hard Disk  
 (C) Output on printer (D) Details of Hardware
101. The atomic number of an element is determined by :  
 (A) The number of electrons in one atom  
 (B) The number of neutrons in one atom  
 (C) The valency of the element  
 (D) The number of protons in one atom

102. A semi conductor Read Only Memory basically is :  
(A) a set of flip flop memory elements  
(B) a combinational logic circuit  
(C) a sequential circuit with flip flops and gates  
(D) none of these
103. A satellite that revolves around the equator 36,000 km from earth's centre is called :  
(A) Polar (B) Geostationary (C) Equatorial (D) Elliptical
104. Gypsum is a :  
(A) Mechanically formed sedimentary rock  
(B) Igneous rock  
(C) Chemically precipitated sedimentary rock  
(D) Metamorphic rock
105. If the volume of voids is equal to the volume of solids in a soil mass, then the values of porosity and voids ratio respectively are :  
(A) 1.0 and 0.0 (B) 0.0 and 1.0 (C) 0.5 and 1.0 (D) 1.0 and 0.5
106. In a safety fuse, the temperature to which the wire gets heated is directly proportional to the :  
(A) Square of the current (B) Fourth power of the current  
(C) Cube of the current (D) None of these
107. A transistor has an emitter current of 8 mA and  $\alpha$  of 0.99. Which of the following could be the collector current ?  
(A) 7.92 mA (B) 5.00 mA (C) 8.1 mA (D) 7.84 mA
108. Compression ratio of diesel engines normally have the range :  
(A) 8 to 10 (B) 10 to 15 (C) 16 to 20 (D) 80 to 90
109. If M men can complete a job in H hours, then in how many hours will 5 men complete this job ?  
(A)  $\frac{MH}{5}$  (B)  $\frac{5H}{M}$  (C)  $\frac{M}{5H}$  (D)  $\frac{H}{5}$
110. The term RADAR stands for :  
(A) Radio direction and reflection  
(B) Radio detection and ranging  
(C) Radio waves dispatching and receiving  
(D) Random dispatching and receiving

111. Which set of two rivers form the world's largest delta before their water flows into the respective seas ?  
 (A) Ganga - Brahmaputra (B) Rhine - Seine  
 (C) Nile - Euphrates (D) Danube - Thames
112. Centre of buoyancy always :  
 (A) Coincides with the centre of gravity  
 (B) Coincides with the centroid of the volume of the fluid displaced  
 (C) Remains above the centre of gravity  
 (D) Remains below the centre of gravity
113. If  $l$  and  $\delta l$  are the length and change in length respectively, the strain is equal to :  
 (A)  $\frac{\delta l}{l}$  (B)  $\frac{l}{\delta l}$  (C)  $l \times \delta l$  (D)  $l + \delta l$
114. A body is thrown up with an initial velocity  $u$  and covers a maximum height of  $h$ , then  $h$  is equal to :  
 (A)  $\frac{u^2}{2g}$  (B)  $\frac{u}{2g}$  (C)  $2ug$  (D) None of these
115. In a perfectly elastic collision :  
 (A) Linear momentum and K.E. both are conserved  
 (B) Only momentum is conserved  
 (C) Only K.E. is conserved  
 (D) None of them is conserved
116. The temperature at which the volume of a gas becomes zero is called :  
 (A) Absolute scale temperature (B) Absolute zero temperature  
 (C) Absolute temperature (D) None of these
117. Find the last term in the given series :  
 1, 8, 27, 64, 125, 216, 343, ?  
 (A) 420 (B) 476 (C) 496 (D) 512
118. Functional activities of a cell are controlled by :  
 (A) Protoplasm (B) Nucleolus (C) Mitochondria (D) Nucleus
119. In human body, which of the following is the largest in size ?  
 (A) Thyroid (B) Liver (C) Spleen (D) Pancreas

120. Which number is similar to the numbers 13, 7, and 11 ?  
 (A) 9 (B) 17 (C) 12 (D) 15
121. Processing time is least in a \_\_\_\_\_ computer.  
 (A) 16 bit (B) 32 bit (C) 8 bit (D) 64 bit
122. The instrument used to measure external and internal diameter of shafts, thickness of parts and depth of holes is :  
 (A) Inside micrometer (B) Outside micrometer  
 (C) Vernier callipers (D) Slip gauge
123. The turbine suitable for low heads and high flow rates is :  
 (A) Pelton wheel (B) Francis (C) Kaplan (D) All of these
124. The value of binary 1111 is :  
 (A)  $2^3 - 1$  (B)  $2^3$  (C)  $2^4 - 1$  (D)  $2^4$
125. In a four stroke engine, the camshaft rotates at \_\_\_\_\_ the crankshaft speed.  
 (A) Half (B) Three fourth (C) Equal (D) Double
126. Which country is the largest producer of coffee in the world ?  
 (A) Sri Lanka (B) Brazil (C) India (D) China
127. What do you obtain on simplification :  

$$\frac{2.3 \times 2.3 - 1.7 \times 1.7}{2.3 \times 2.3 + 1.7 \times 1.7}$$
  
 (A) 0.29 (B) 1.5 (C) 15 (D) 0.6
128. A car travels at 80 km/hr and a plane travels at 16000 m/min. How far will the car have travelled when the plane travels 800 km ?  
 (A) 80.6 km (B) 66.7 km (C) 60.0 km (D) 63.5 km
129. The elements with atomic numbers 2, 10, 18, 36 and 54 are all :  
 (A) Light metals (B) Halogens (C) Rare earths (D) Noble gases
130. Bacteria in sewage are mostly :  
 (A) Anaerobic (B) Pathogenic (C) Saprophytic (D) Parasitic
131. The resistance can be measured most accurately by :  
 (A) Bridge method (B) Meggar  
 (C) Multimeter (D) Voltmeter-Ammeter method

132. Angioplasty is the treatment for :  
(A) Cancer (B) Heart Disease (C) Leprosy (D) Diabetes
133. Ravi travels at the rate of 3 km/hr and reaches 15 minutes late and if he travels at 4 km/hr he reaches 15 minutes earlier. What is the distance he has to travel ?  
(A) 2 km (B) 6 km (C) 7 km (D) 10 km
134. Which of the following weighs the most ?  
(A)  $10^{23}$  molecules of  $H_2$  (B) 1 mole of  $H_2O$   
(C) 1 mole of  $N_2$  (D) 1 mole of  $O_2$
135. When animals feed on other dead animals which had died naturally or had been killed by another animals, the relationship is termed as :  
(A) Predation (B) Competition (C) Scavenging (D) Symbiosis
136. Gas leaked during Bhopal Tragedy was :  
(A) Sodium isothiocyanate (B) Potassium isothiocyanate  
(C) Ethyl isocyanate (D) Methyl isocyanate
137. Which of the following transistor configurations gives useful current gain ?  
(A) CE alone (B) CB alone (C) CC alone (D) Both CE and CC
138. The organic acid present in vinegar is :  
(A) Methanoic acid (B) Ethanoic acid  
(C) Propanoic acid (D) None of these
139. For a Broad Gauge route with M+7 sleeper density, the number of sleepers per rail length is :  
(A) 18 (B) 19 (C) 20 (D) 21
140. A body of mass 20 kg is dropped from a height of 2 m. If g is taken as  $10 \text{ m/sec}^2$ , the kinetic energy of the body, just before striking the ground, will be :  
(A) 400 J (B) 4 J (C) 40 J (D) 10 J
141. An accurate ammeter must have a resistance of :  
(A) High value (B) Low value (C) Very low value (D) Very high value
142. A shopkeeper says he sells his goods at cost price, but he uses a weight of 800 gms instead of 1 kg. Thus he makes a gain of :  
(A) 10% (B) 15% (C) 20% (D) 25%
143. Delhi became the capital of India in the year :  
(A) 1910 (B) 1911 (C) 1916 (D) 1923

144. Lissajous pattern obtained in a CRO depend upon which of the following properties of the two sine waves fed to it ?  
(A) Frequency (B) Amplitude  
(C) Phase relationship (D) All of these
145. Mars Orbiter of India entered the Orbit of Mars after completing its journey of about 68 crore kilometres on :  
(A) Sep 24, 2014 (B) Sep 30, 2014 (C) Sep 21, 2014 (D) Sep 20, 2014
146. The Headquarters of the East coast Railway is located at :  
(A) Guwahati (B) Bhubaneswar (C) Chennai (D) Secunderabad
147. The average salary of 30 employees in a company is ₹ 4000. If the manager's salary is added the average salary increases to ₹ 4,300. What is the salary of the manager ?  
(A) ₹ 10,000 (B) ₹ 13,000 (C) ₹ 12,000 (D) ₹ 13,300
148. The impact strength of a material is an index of its :  
(A) Resistance to corrosion (B) Hardness  
(C) Toughness (D) None of these
149. \_\_\_\_\_ gears are used in a differential of an automobile.  
(A) Double helical (B) Mitre (C) Straight Bevel (D) None of these
150. 'Indica' was written by :  
(A) Chanakya (B) Magasthenes (C) Seleucus (D) Darius

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