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RRB JE 2014 Question Paper with Official Answer key

(INSTRUCTIONS)

(Please read carefully and comply)

1. Kindly read the complete set of instructions carefully and also see the instructions on the back side of the OMR Answer Sheet and fill the details in the OMR Answer Sheet and Question Booklet. rajhindinews.com
2. One paragraph each in Hindi and English is given in page 1. Copying of the paragraph in the space provided in the OMR Answer Sheet (in the language as filled in the application form either in Hindi or English) in your running hand is **compulsory**. DO NOT USE **BLOCK LETTERS**.
3. (a) Question Booklet Serial No. must clearly be written and marked in the bubbles in the space provided in the OMR Answer Sheet.
(b) OMR Sheet No. should be written in the space provided in the Question Booklet.
4. After being instructed to open the Booklet, the candidates will open the seals. It is the responsibility of the candidate to check and ensure that the booklet contains 150 questions and start the paper from page no. 14.
5. The question paper comprises 150 questions and are available in congruent versions of English, Hindi, Urdu, Gujarati, Punjabi, Kannada, Konkani, Marathi, Tamil, Telugu and Malayalam languages. **In case of any doubt or confusion, English version shall prevail.**
6. All questions are of Objective type. There is only one correct answer to each question carrying one mark. There will be negative marking for wrong answers. **For every wrong answer, 1/3 mark will be deducted.**
7. In the event of any mistake in any question/s, candidates will not be penalized. However no corrections will be made in question/s during the examination.
8. You must use **Blue or Black** ball-point pen only for answering. Altering of answers once entered is not permissible. Enter the answers in the Answer Sheet carefully.
9. Rough work, if any may be done in the Question Booklet only in the space provided at the end of the Booklet. No additional paper shall be provided.
10. Use of Log tables, Calculator, Slide rule, Mobile phone, Pager, Digital diary or any other electronic item/instrument, etc. is not allowed. Their use will result in disqualification.
11. No candidate should leave the examination hall before the final bell. The Answer Sheet as well as the Top Sheet of the Question Booklet should be handed over together to the invigilator before leaving the Examination Hall. www.exammix.com

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SECTION - I
ENGLISH

1. The Prime Minister of India, Narendra Modi, represents which seat in Lok Sabha ?
(A) Vadodara (B) Ahmedabad (C) Varanasi (D) Maninagar
2. Which comet appears every 76 years ?
(A) Hailey's (B) Holme's (C) Donati's (D) Alpha Centauri
3. A tap can fill a tank in 16 minutes and another can empty it in 8 minutes. If the tank is already half full and both the taps are opened together, the tank will be :
(A) filled in 12 minutes (B) emptied in 12 minutes
(C) filled in 8 minutes (D) emptied in 8 minutes
4. In a pre-stressed concrete member, it is advisable to use :
(A) low strength concrete only
(B) high strength concrete only
(C) low strength concrete but high tensile steel
(D) high strength concrete and high tensile steel
5. Falling drops of water become spheres due to the property of :
(A) surface tension of water (B) compressibility of water
(C) capillarity of water (D) viscosity of water
6. Swimming is possible on account of :
(A) Newton's First Law of Motion (B) Newton's Second Law of Motion
(C) Newton's Third Law of Motion (D) Newton's Law of Gravitation
7. Hydrophobia is a feature of which disease ?
(A) Polio (B) Measles (C) Rabies (D) Hepatitis
8. The ratio between the stress produced by gradually applied and suddenly applied load is :
(A) 1 (B) 2 (C) $\frac{1}{2}$ (D) None of these
9. Soil erosion can be prevented by :
(A) Grazing (B) Deep ploughing
(C) Planting trees (D) Increasing bird population

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10. Dry density of soil is equal to the :
 (A) Mass of solids to the volume of solids
 (B) Mass of solids to the total volume of soil
 (C) Density of soil in the dried condition
 (D) None of the above
11. Name the boxer who was banned by International Boxing Association for refusing to accept the medal during Asian Games 2014 ?
 (A) M. C. Mary Kom
 (B) Sarita Devi
 (C) Sarjubala Devi
 (D) None of the above
12. A car covers three successive 4 km distances at speed of 10 kmph, 20 kmph and 60 kmph respectively. Its average speed over total distance is :
 (A) 10 kmph
 (B) 20 kmph
 (C) 25 kmph
 (D) 30 kmph
13. In a thermocouple, thermo EMF is produced when its :
 (A) One junction is at 0°C and the other at 100°C
 (B) Both junctions are at 0°C
 (C) Both junctions are at 100°C
 (D) Both junctions are at different temperatures
14. A megger is used for the measurement of :
 (A) Low valued resistance
 (B) Medium valued resistance
 (C) High valued resistance
 (D) High valued resistance, particularly insulated resistance
15. Effect of a force on a body depends upon its :
 (A) direction
 (B) magnitude
 (C) position
 (D) all the above
16. In a group of 6 boys and 4 girls, four children are to be selected. In how many different ways can they be selected such that at least one boy should be there ?
 (A) 159
 (B) 209
 (C) 318
 (D) None of these
17. One of the following doesn't constitute a basic structure of the constitution :
 (A) Republic form of Government
 (B) Supremacy of the Constitution
 (C) Law making procedure in the Parliament
 (D) Federal character of the Indian Polity

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18. The price of a table and chair is in the ratio 25 : 6. If the table costs ₹ 950 more than the chair, then cost of two chairs is :
 (A) ₹ 250 (B) ₹ 300 (C) ₹ 500 (D) ₹ 600
19. Thermal conductivity of solid metals with rise in temperature normally :
 (A) increases
 (B) decreases
 (C) remains constant
 (D) may increase or decrease depending on temperature
20. Diabetes in general, is the result of :
 (A) under-secretion of insulin (B) under-secretion of thyroxine
 (C) under-secretion of oestrogen (D) none of these
21. The simple interest is equal to compound interest for a certain sum when :
 (A) rate is same
 (B) time is same
 (C) interest is computed annually and time is one year
 (D) none of the above
22. Who among the following stood for total revolution in the country ?
 (A) Jayaprakash Narayan (B) Jyotiba Phule
 (C) V. P. Singh (D) Mahatma Gandhi
23. Leaf springs are subjected to :
 (A) shear stress (B) direct stress
 (C) bending stress (D) none of the above
24. The air - fuel ratio of the petrol engine is controlled by :
 (A) fuel pump (B) governor (C) injector (D) carburettor
25. In each of the following questions the two words given on one side of double colon i.e., :: bear a certain relationship. The other side shows an incomplete pair marked by a missing word which bears a similar relationship with the given word. Find the missing word out of the options (A) (B) (C) (D).
 Raipur : Chhattisgarh :: ? : Uttaranchal
 (A) Nainital (B) Ranchi (C) Dehradun (D) Bhopal
26. Which of the following motors is **not** self-starting ?
 (A) Squirrel Cage Induction Motor (B) Wound Rotor Induction Motor
 (C) Synchronous Motor (D) DC Series Motor

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27. What is the function of a feeler gauge ?
 (A) To measure pitch of screw
 (C) To check thickness of clearance
 (B) To measure surface roughness
 (D) To measure radius of circular rod
28. Which one of the following is the largest single source of the Government's earning from tax revenue ?
 (A) Central Excise (B) Income Tax (C) Customs Duty (D) Corporation Tax
29. A transformer transforms :
 (A) frequency (B) voltage
 (C) current (D) both current and voltage
30. The most widely used universal gates are :
 (A) OR and AND gates (B) NOR and NAND gates
 (C) NOR and AND gates (D) NAND and OR gates
31. The movement that came to abrupt end due to the Chauri-Chaura incident was :
 (A) Quit India Movement (B) Home Rule Movement
 (C) Non-Cooperation Movement (D) Civil Disobedience Movement
32. Which country has won the Gold medal in Men's Hockey in recently concluded Asian Games ?
 (A) Pakistan (B) India (C) South Korea (D) Malaysia
33. A computer program that converts assembly language to machine language is :
 (A) Compiler (B) Interpreter (C) Assembler (D) Comparator
34. The property of a material by which it can be rolled into sheets is called :
 (A) Elasticity (B) Plasticity (C) Ductility (D) Malleability
35. The weight of the body at the center of the earth is :
 (A) Zero
 (B) Infinite
 (C) Same as that on the surface of the earth
 (D) None of the above
36. The eleventh part of $990 \times \frac{990}{990}$ is :
 (A) 99.0 (B) 99.99 (C) 90 (D) 90.9

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37. In a capacitor, the electric charge is stored in :
 (A) metal plates
 (C) both (A) and (B)
 (B) dielectric
 (D) none of the above
38. The base of a rectangular solid is a square, and its height is twice its length. If its volume is 1024 cm^3 , then surface area of its surface is :
 (A) 560 cm^2
 (B) 640 cm^2
 (C) 680 cm^2
 (D) 720 cm^2
39. Lettering on a drawing sheet should have :
 (A) all alphabets in capital letters
 (B) all alphabets in small letters
 (C) in a sentence only first alphabet in capital letter
 (D) in a sentence only abbreviations in capital letter
40. A watch shows time as 3.25 when seen through a mirror, time appeared will be :
 (A) 8.35
 (B) 9.35
 (C) 7.35
 (D) 8.25
41. A number consists of two digits whose sum is 11. If 27 is added to the number, then the digits change their places. What is the number ?
 (A) 47
 (B) 65
 (C) 83
 (D) 92
42. A zener diode :
 (A) has a high forward voltage rating
 (B) has a sharp break-down at low reverse voltage
 (C) is useful as an amplifier
 (D) has negative resistance
43. Which of the following objects gives a circular section, when it is cut completely by a section plane (irrespective of the angle of the section plane) ?
 (A) Cylinder
 (B) Sphere
 (C) Cone
 (D) Circular lamina
44. Who is the present Chief Minister of Gujarat ?
 (A) Anandiben Patel
 (B) Keshubhai Patel
 (C) Amit Shah
 (D) None of the above
45. Who acted as the Chairman of the Drafting Committee of the Constituent Assembly ?
 (A) Dr. B. R. Ambedkar
 (B) C. Rajagopalachari
 (C) Dr. Rajendra Prasad
 (D) Jawahar Lal Nehru
46. If volume and surface area of a sphere are numerically the same, then its radius is :
 (A) 1
 (B) 2
 (C) 3
 (D) 4

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47. Which country is the current winner of the ICC World Twenty 20 Cricket Championship ?
 (A) Sri Lanka (B) India (C) Australia (D) Pakistan
48. If TAP is coded as SZO, then how is FREEZE coded ?
 (A) EQDFYG (B) ESDFYF (C) GQFDYF (D) EQDDYD
49. A merchant buys tea A @ ₹ 8 per kg and tea B @ ₹ 14 per kg. The two brands of tea, he mixed and sells the mixture @ ₹ 12 per kg. If profit realized is 20%, then ratio of two brands of tea in the mixture is :
 (A) 15 : 2 (B) 1 : 16 (C) 2 : 1 (D) none of these
50. Who was the first Indian born citizen to have won the Noble Prize for Peace ?
 (A) Rabindranath Tagore (B) Mother Teresa
 (C) Kailash Satyarthi (D) Amartya Sen
51. Which film has won the National award for the best feature film this year ?
 (A) Bhag Milkha Bhag (B) Shahid
 (C) Jolly LLB (D) Gulab Gang
52. The power consumption of an LCD as compared to an LED is :
 (A) Same (B) More (C) Less (D) Can't be defined
53. Why Sun looks elliptical in shape during sun-rise and sun-set ?
 (A) Refraction (B) Reflection (C) Scattering (D) Dispersion
54. Stainless steel resists corrosion due to :
 (A) Carbon (B) Sulphur (C) Vanadium (D) Chromium
55. According to kinetic theory of gases, the absolute zero temperature is attained when :
 (A) volume of the gas is zero
 (B) pressure of the gas is zero
 (C) kinetic energy of the molecules is zero
 (D) specific heat of gas is zero
56. Cells are connected in series in order to increase the :
 (A) current capacity (B) life of the cells
 (C) voltage rating (D) terminal voltage
57. An ammeter :
 (A) is connected in series in a circuit
 (B) should have low electrical resistance
 (C) absorbs small power
 (D) all of the above

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58. The main cause of acid rain (acid precipitation) is :
 (A) SO_2 (B) NO_2 (C) CH_4 (D) All of these
59. All radiations in a black body are :
 (A) reflected (B) refracted (C) transmitted (D) absorbed
60. Blood pressure of a healthy person is :
 (A) 90/60 (B) 200/110 (C) 120/80 (D) 140/60
61. What is the product of all the numbers in the dial of a telephone ?
 (A) 1,58,480 (B) 1,59,450 (C) 1,59,480 (D) None of these
62. The term biodiversity refers to :
 (A) totality of species of a region (B) totality of ecosystem of a region
 (C) totality of genes of a region (D) all of the above
63. In a class A amplifier with sinusoidal input signal, the output current flows for :
 (A) half the cycle (B) full cycle
 (C) less than half cycle (D) more than half cycle
64. In Bourdon tube :
 (A) The deflection is proportional to pressure difference
 (B) The deflection is inversely proportional to pressure difference
 (C) The deflection is independent of pressure difference
 (D) The deflection depends on the air temperature
65. The frequency of emf generated by a generator depends upon its :
 (A) speed (B) no. of poles
 (C) both (A) and (B) (D) none of the above
66. Ratio of the voltage and the DC current in a closed circuit :
 (A) remains constant (B) varies
 (C) increases (D) decreases
67. DPT is used to prevent :
 (A) Tuberculosis (B) Diphtheria (C) Polio (D) All of these
68. Who was the ruler of India when the East India Company was set up ?
 (A) Aurangzeb (B) Akbar (C) Jahangir (D) Shahjahan

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69. Which of the following places does **not** have a Rail Coach Factory ?
 (A) Kapurthala (B) Kolkata (C) Perambur (D) Rai Bareilly
70. Which of the following codes needs 7 bits to represent a character ?
 (A) ASCII (B) BCD (C) EBCDIC (D) GRAY
71. Nowadays, to reduce air pollution, the buses of Delhi are running on :
 (A) Liquified Petroleum Gas (LPG) (B) Compressed Natural Gas (CNG)
 (C) Compressed Lead Gas (CLG) (D) High Speed Lead free Diesel
72. A car can finish a certain journey in 10 hours at a speed of 48 km/hr. In order to cover the same distance in 8 hours, the speed of the car must be increased by :
 (A) 6 km/hr (B) 7.5 km/hr (C) 12 km/hr (D) 15 km/hr
73. National Securities Depository limited (NSDL) deals with :
 (A) Bearer Bonds (B) GDRs
 (C) Shares in electronic format (D) None of the above
74. Reaming is one of the operations that needs to be done on a job. Which of the following operations can't be done on this job prior to reaming operation ?
 (A) drilling (B) tapping (C) boring (D) counter boring
75. Indicate, which one of the following best describes the term Software ?
 (A) Application programme only (B) Operating System programme only
 (C) Control system (D) Both (A) and (B)
76. Find the missing number :
 2, 10, 30, 68,
 (A) 130 (B) 140 (C) 142 (D) 138
77. The Saka era began in the year :
 (A) 58 BC (B) 78 BC (C) 58 AD (D) 78 AD
78. A pile foundation is used when :
 (A) the loads are heavy (B) the soil stratum near ground surface is weak
 (C) both (A) and (B) (D) neither (A) nor (B)
79. A man rows 750 m in 675 seconds against the stream and returns in 450 seconds. His rowing speed in still water is :
 (A) 3 km/hr (B) 4 km/hr (C) 5 km/hr (D) 6 km/hr

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80. RAM is used as a short memory because it :
(A) is volatile (B) is very expensive
(C) has small capacity (D) is programmable
81. Find the probability of getting a head in a throw of a coin.
(A) $\frac{1}{2}$ (B) 1 (C) 2 (D) none of these
82. Who is the present Foreign Minister of India ?
(A) Rajnath Singh (B) Arun Jaitley (C) Narendra Modi (D) Sushma Swaraj
83. The ratio between inertia force and viscous force is called :
(A) Reynold's number (B) Froude's number
(C) Weber's number (D) Euler's number
84. 25 buses are plying from Nagpur to Pune and back. In how many ways can a passenger travel from Nagpur, in any one bus, to Pune but return to Nagpur by a different bus.
(A) 50 (B) 49
(C) 600 (D) None of the above
85. An electro-magnet has :
(A) Soft Iron core (B) Steel core (C) Nickel core (D) Copper core
86. What is the chemical name of "Caustic Soda" ?
(A) Sodium Chloride (B) Sodium Hydroxide
(C) Sodium Carbonate (D) Sodium Peroxide
87. Who gave the title of "Sardar" to Vallabhbhai Patel ?
(A) C. Rajagopalachari (B) Mahatma Gandhi
(C) Jawahar Lal Nehru (D) Dr. Rajendra Prasad
88. The cutting speed of a tool refers to :
(A) revolutions made by the tool in a specified time
(B) revolutions turned by the job in a specified time
(C) distance travelled by the tool in one revolution of the job
(D) rate at which cutting edge of the tool passes over the surface of work piece
89. The ability of a material to deform without breaking is called :
(A) resilience (B) creep (C) plasticity (D) elasticity

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90. Metal, which is present in liquid state above 35°C temperature, is :
 (A) Mercury (B) Gallium
 (C) Both (A) and (B) (D) None of these
91. If $99x + 101y = 299$ and $101x + 99y = 301$, then the correct solution is :
 (A) $x = 1, y = 2$ (B) $x = 3, y = 1$ (C) $x = 1, y = 3$ (D) $x = 2, y = 1$
92. The maximum strength of Lok Sabha is :
 (A) 552 (B) 544
 (C) 642 (D) None of the above
93. Find the odd one from the given words :
 (A) Kidney (B) Heart (C) Eye (D) Lung
94. By selling a towel for ₹ 126.90, a draper loses 6%. For how much should he sell the towel to gain 4% ?
 (A) ₹ 130 (B) ₹ 140.40 (C) ₹ 145.05 (D) ₹ 160
95. The missing figure in the question $\frac{3}{9} \times \frac{?}{6} \times \frac{3}{15} = \frac{1}{18}$ is :
 (A) 6 (B) 5 (C) 4 (D) 3
96. Which of the following is the main factor of water pollution ?
 (A) Smoke (B) Industrial waste (C) Ammonia (D) Detergents
97. Who didn't participate in the revolt of 1857 ?
 (A) Rani Lakshmibai (B) Bhagat Singh
 (C) Nana Saheb (D) Tanya Tope
98. Comparative scale is a pair of scale having a common :
 (A) unit (B) representative fraction
 (C) length of scale (D) least count
99. DC Series motors are considered most suitable for the application in :
 (A) Fans (B) Water Pumps (C) Traction (D) Flour-mills
100. Half-wave Rectifier has theoretical maximum efficiency of :
 (A) 40.6% (B) 81.2% (C) 78.5% (D) 50%
101. An ideal diode can be considered as an :
 (A) Amplifier (B) Bi-stable switch (C) Oscillator (D) Fuse

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102. Which of the following is **not** a DBMS software ?
 (A) ORACLE (B) SYBASE (C) COBOL (D) SQL Server
103. If diameter of a circle increases by 30%, by what percent will the area of the circle increase ?
 (A) 30% (B) 69% (C) 90% (D) 138%
104. In orthographic projections, the rays are assumed to :
 (A) diverge from station point (B) converge from station point
 (C) be parallel (D) none of these
105. A and B together can do a piece of work in 10 days. B and C together can do it in 12 days, while A and C together can do it in 15 days. C alone can complete it in :
 (A) 50 days (B) 40 days (C) 30 days (D) 20 days
106. If $\frac{\log 16}{\log 2} = x$, then value of x is :
 (A) 4 (B) $\frac{1}{3}$ (C) 2 (D) 5
107. Fluoride pollution mainly affects:
 (A) teeth (B) kidney (C) brain (D) heart
108. Writing pencil contains :
 (A) Solid ink (B) Lead (C) Lead Sulphate (D) Graphite
109. In semi-conductor terminology, the Doping is a process of :
 (A) Purifying semiconductor material
 (B) Increasing impurity percentage
 (C) Removal of foreign atoms
 (D) Increasing the bias potential
110. The heating element of electric heater is made from :
 (A) Copper (B) Nichrome (C) Chromium (D) Tungsten
111. The variety of coal having the lowest carbon content is :
 (A) Anthracite (B) Bituminous (C) Lignite (D) Peat
112. Who is the present Chief Minister of Haryana ?
 (A) Bhupinder Singh Hooda (B) Captain Abhimanyu
 (C) Manohar Lal Khattar (D) None of the above

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113. The longest tape which can measure exactly the length of 8 m 25 cm, 6 m 75 cm and 4 m 50 cm is :
 (A) 35 cm (B) 75 cm (C) 1 m 50 cm (D) 45 cm
114. An ordinary transformer works on :
 (A) A.C. (B) D.C.
 (C) Both A.C. and D.C. (D) Pulsating D.C.
115. For transistor action :
 (A) the collector must be heavily doped than the emitter region
 (B) the collector base junction must be forward biased
 (C) the base region must be narrow
 (D) the base region must be N-type material
116. A perfect gas at 27°C is heated at constant pressure till its volume is doubled. The final temperature is :
 (A) 54°C (B) 327°C (C) 108°C (D) 654°C
117. Two trains travel in opposite direction at 36 km/hr and 45 km/hr and a man sitting in slower train passes the faster train in 8 seconds. The length of the faster train is :
 (A) 80 m (B) 100 m (C) 120 m (D) 180 m
118. Internet, initially started as -
 (A) TCP/IP experiment
 (B) Network for the defence forces of America
 (C) Group of research scientists of Bell Lab
 (D) Contribution was done by all the above institutions
119. Three partners A, B and C invest ₹ 600, ₹ 900 and ₹ 1200 respectively in a business. If they have a profit of ₹ 549, then C's share of profit is :
 (A) ₹ 122 (B) ₹ 183 (C) ₹ 244 (D) ₹ 256
120. Select the smallest memory size :
 (A) Terabyte (B) Gigabyte (C) Kilobyte (D) Megabyte
121. In Binary Algebra, $A+B$ can be implemented by :
 (A) NAND gates alone (B) NOR gates alone
 (C) AND gates alone (D) Both (A) and (B)
122. Which strength of concrete is maximum ?
 (A) Compressive (B) Torsional (C) Fatigue (D) Flexural

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123. 300 grams of sugar solution has 40% sugar in it. How much sugar should be added to make it 50% in the solution ?
 (A) 10 gm (B) 40 gm (C) 60 gm (D) 80 gm
124. Carbon brushes are used in DC electric motors to :
 (A) prevent sparking during commutation
 (B) provide a path for flow of current
 (C) brush-off carbon deposits on the commutator
 (D) none of the above
125. Which acid causes cramps in our muscles ?
 (A) Lactic Acid (B) Sulphuric Acid
 (C) Hydrochloric Acid (D) Acetic Acid
126. Time and progress chart of a construction, is also known as :
 (A) Bar chart (B) Gantt chart
 (C) Modified Milestone chart (D) All of the above
127. Which is the most widely used metal for castings ?
 (A) Aluminium (B) Brass
 (C) Magnesium alloys (D) Cast Iron
128. Which country is the winner of FIFA World Cup 2014 for Men ?
 (A) Germany (B) Spain (C) Argentina (D) Brazil
129. Anaemia is caused in man due to deficiency of :
 (A) Folic Acid (B) Vitamin B₁₂ (C) Iron (D) All of the above
130. Spot welding is used for welding both ferrous and non-ferrous metal sheets having thickness up to :
 (A) 10 mm (B) 20 mm (C) 30 mm (D) 50 mm
131. In arc welding, eyes need to be protected against :
 (A) sparks (B) ultraviolet rays
 (C) infrared rays (D) ultraviolet as well as infrared rays
132. If $B = 2$, $H = 8$ and $CAB = 6$, then what is the number value of RACE ?
 (A) 31 (B) 30 (C) 28 (D) 27
133. Which of the following is **not** a chemical change ?
 (A) Combustion of fuel (B) Electrolysis of acidified water
 (C) Oxidation/Rusting of Iron (D) Glowing of a platinum wire

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134. An enterprising businessman earns an income of ₹ 1 on the first day of his business. On every subsequent day, he earns an income which is just double of that made on the previous day. On the 10th day of business, his income is :
 (A) ₹ 2⁹ (B) ₹ 2¹⁰ (C) ₹ 10 (D) ₹ 10²
135. A metal when left exposed to atmosphere for some time becomes coated with green basic carbonate, the metal in question is :
 (A) Nickle (B) Zinc (C) Silver (D) Copper
136. The dance form "Garaba" is from which of the following states ?
 (A) Rajasthan (B) Maharashtra (C) Kashmir (D) Gujarat
137. The curve generated by a point on the circumference of a circle, which rolls without slipping along outside of another circle is known as :
 (A) Hypocycloid (B) Epicycloid (C) Cycloid (D) Trochoid
138. Which of the following is **not** an operating system ?
 (A) DOS (B) Oracle (C) Linux (D) Windows
139. The Central Processing Unit (CPU) consists of :
 (A) input, output and processing
 (B) control unit, primary storage and secondary storage
 (C) control unit, arithmetic-logic unit and primary storage
 (D) control unit, processing and primary storage
140. The product of three consecutive numbers is always divisible by :
 (A) 4 (B) 6 (C) 8 (D) 5
141. In a diesel engine, the fuel is ignited by :
 (A) spark
 (B) injected fuel
 (C) heat resulting from compressing air that is supplied for combustion
 (D) ignitor
142. Find the missing letters.
 AZ, BY, CX, DW,
 (A) EU (B) EV (C) EW (D) FW
143. The purpose of an amplifier is :
 (A) to increase voltage, current or power of an input signal
 (B) to attenuate the signal fed to its input
 (C) to introduce distortion in the signal fed to it
 (D) Both (B) and (C)

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144. The ratio of Meena's age to the age of her mother is 3 : 8. The difference of their age is 35 years. The ratio of their age after 5 years will be :
 (A) 7 : 12 (B) 5 : 12 (C) 38 : 43 (D) 42 : 47
145. The line joining the points having the same elevation above the datum surface, is called a :
 (A) contour interval (B) contour surface
 (C) contour line (D) contour gradient
146. A tree 6 m tall casts a 4 m long shadow. At the same time, a flag pole casts a 50 m long shadow. How long is the flag pole ?
 (A) 75 m (B) 100 m (C) 150 m (D) 50 m
147. River flowing towards the West is :
 (A) Godavari (B) Krishna (C) Kaveri (D) Narmada
148. Heat transfer by radiation mainly depends upon :
 (A) its temperature (B) nature of the body
 (C) kind and extent of its surface (D) all of the above
149. You can delete text in MS Word by :
 (A) selecting the text and pressing the CTRL key
 (B) selecting the text and pressing the DELETE key
 (C) selecting the text and pressing the ALT + PAGEUP key
 (D) selecting the text and pressing the ESC key
150. Lamps in street lighting are all connected in :
 (A) series (B) parallel (C) series - parallel (D) end - to - end

- o o o -

$$\begin{array}{r} 57 \\ \overline{)180} \\ 114 \\ \hline 66 \\ 60 \\ \hline 6 \end{array}$$