ATOMIC ENERGY CENTRAL SCHOOL NO. 2, MUMBAI

MULTIPLE CHOICE QUESTION EXAMINATION - 5 ( 30.11.2023)

Time Allowed : 3 hours CLASS : IX Maximum Marks : 120

| | **Attempt all questions** | |
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| 1 | The rationalising factor of $\frac{1}{2\sqrt{3}-\sqrt{5}}$ is<br>a) $(\sqrt{3}+\sqrt{5})$ b) $\sqrt{12}+\sqrt{5}$ c) $\sqrt{5}-2\sqrt{3}$ d) $\sqrt{3}+2\sqrt{5}$ | 1 |
| 2 | Two rational numbers between $\frac{2}{3}$ $and$ $\frac{5}{3}$ are<br>a) $\frac{1}{6}$ $and$ $\frac{2}{6}$ b) $\frac{5}{6}$ $and$ $\frac{7}{6}$ c) $\frac{2}{3}$ $and$ $\frac{4}{3}$ d) $\frac{1}{2}$ $and$ $\frac{2}{1}$ | 1 |
| 3 | The value of $\frac{a+\sqrt{a^2-b^2}}{a-\sqrt{a^2-b^2}}+\frac{a-\sqrt{a^2-b^2}}{a+\sqrt{a^2-b^2}}$ is _____.<br>a) $\frac{a^2}{b^2}$ b) $\frac{2(2a^2-b^2)}{b^2}$ c) $\frac{a}{b}$ d) $\frac{b^2}{a^2}$ | 1 |
| 4 | If $x^4+\frac{1}{x^4}=194$ , then $x^3+\frac{1}{x^3}$ =<br>a) 52 b) 64 c) 76 d) none of these | 1 |
| 5 | If the polynomial $x^3 - 6x^2 + ax + 3$ leaves a remainder 7 when divided by (x - 1), then the value of **a** is<br>a) 7 b) 9 c) 0 d) 8 | 1 |
| 6 | If p(x) = x + 4 then p(x) + p( - x) = ?<br>a) 2x b) 8 c) 4 d) 0 | 1 |
| 7 | Abscissa of a point is positive in:<br>a) quadrant I and IV b) quadrant II and III<br>c) quadrant I only d) quadrant IV only | 1 |
| 8 | The name of the vertical line drawn to determine the position of any point in the Cartesian plane is<br>a) Cartesian line b) x - axis c) y - axis d) none of these | 1 |

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| 9 | The signs of abscissa and ordinate of a point in quadrant III are<br>a) $(-, -)$ b) $(-, +)$ c) $(+, +)$ d) $(+, -)$ | 1 |
| 10 | Write the linear equation such that each point on its graph has an ordinate 5 times its abscissa.<br>a) y = 5x b) x = 5y c) 5x + y = 2 d) none of these | 1 |
| 11 | Which of the following pair is a solution of the equation 3x – 2y = 7?<br>a) ( - 2, 1) b) (1, - 2) c) (5, 1) d) (1, 5) | 1 |
| 12 | The graph of the linear equation y = x passes through the point<br>a) $\left(\frac{3}{2}, \frac{-3}{2}\right)$ b) $\left(0, \frac{3}{2}\right)$ c) $\left(\frac{-1}{2}, \frac{1}{2}\right)$ d) (1 ,1) | 1 |
| 13 | If$\overline{AB} = \overline{PQ}$ and $\overline{PQ} = \overline{XY}$ , then<br>a) $\overline{AB} < \overline{XY}$ b) $\overline{AB} = \overline{XY}$ c) $\overline{AB} > \overline{XY}$ d) none of these | 1 |
| 14 | The number of end points a line segment has:<br>a) 1 b) 0 c) 2 d) None of these | 1 |
| 15 | Euclid's which axiom illustrates the statement that when x + y = 15, then x + y + z = 15 + z?<br>a) Third b) Second c) Fourth d) First | 1 |
| 16 | If$\angle$ A = 4 $\angle$ B = 6 $\angle$ C, then A : B : C ?<br>a) 3 : 4 : 6 b) 2 : 3 : 4 c) 6 : 4 : 3 d) 12: 3 : 2 | 1 |
| 17 | If two angles are supplementary and the larger is $20^o$ less then three times the smaller, then the angles are<br>a) $72\frac{1^o}{2}$ , $17\frac{1^o}{2}$<br>b) $140^o$ , $40^o$<br>c) $130^o$ , $50^o$<br>d) $62\frac{1^o}{2}$ , $27\frac{1^o}{2}$ | 1 |
| 18 | Two complementary angles are such that two times the measure of one is equal to three times the measure of the other. The measure of the smaller | 1 |

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| | angle is<br>a) 30° b) 45° c) 36° d) None of these | |
| 19 | The angles of a triangle are in the ratio 5 : 3 : 7, the triangle is<br>a) An isosceles triangle.<br>b) An obtuse angled triangle<br>c) A right triangle<br>d) An acute angled triangle | 1 |
| 20 | In△ ABC, if ∠ A = 100°, AD bisects ∠ A and AD ⊥ BC. Then, ∠ B =<br>a) 50° b) 40° c) 100° d) 90° | 1 |
| 21 | If the bisector of the angle A of a△ ABC is perpendicular to the base BC of the triangle then the triangle ABC is:<br>a) Isosceles b) Obtuse Angled c) Equilateral d) Scalene | 1 |
| 22 | D, E, F are the mid - point of the sides BC, CA and AB respectively of△ ABC. Then △ DEF is congruent to triangle<br>a) ABC b) AEF c) AFE, FBD, EDC d) BFD, DCE | 1 |
| 23 | In△ PQR, ∠ R = ∠ P and QR = 4 cm and PR = 5 cm. Then the length of PQ is<br>a) 2.5 cm b) 4 cm c) 5 cm d) 2 cm | 1 |
| 24 | The angle between two altitudes of a Parallelogram through the vertex of an obtuse angle of the Parallelogram of $60^o$ . Find the angles of the Parallelogram<br>a) $200^o$ , $100^o$ , $30^o$ , $30^o$<br>b) $110^o$ , $50^o$ , $105^o$ , $105^o$<br>c) $150^o$ , $150^o$ , $30^o$ , $30^o$<br>d) $120^o$ , $60^o$ , $120^o$ , $60^o$ | 1 |
| 25 | If the diagonals of a rhombus are 18 cm and 24 cm respectively, then its side is equal to | 1 |

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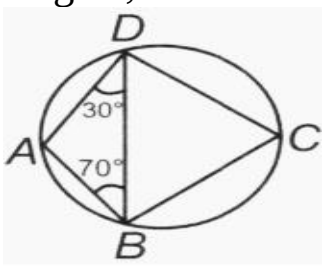
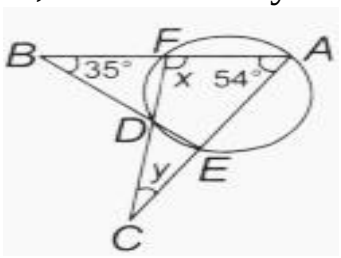
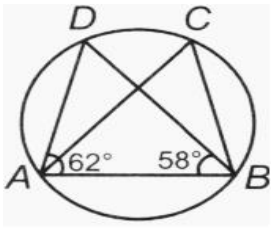
| | a) 20 cm b) 15 cm c) 16 cm d) 17 cm | |
| 26 | The diagonals AC and BD of a parallelogram ABCD intersect each other at the point O. If$\angle DAC = 32°$ and $\angle AOB = 70°$ then, $\angle DBC$ is equal to<br>a) $24°$ b) $38°$ c) $40°$ d) $86°$ | 1 |
| 27 | In Parallelogram ABCD, bisectors of angles A and B intersect each other at O. The measure of$\angle AOB$ is<br>a) $90^o$ b) $30^o$ c) $60^o$ d) $120^o$ | 1 |
| 28 | AB and CD are two parallel chords of a circle with centre O such that AB = 6 cm and CD = 12 cm. The chords are on the same side of the centre and the distance between them is 3 cm. The radius of the circle, is<br>a) $5\sqrt{2}$ cm b) 6 cm c) 7 cm d) $3\sqrt{5}$ cm | 1 |
| 29 | In the given figure,∠ ABD = 70°, ∠ ADB = 30°. Then, ∠ BCD is<br>  <br>_____.<br>a) 100° b) 90° c) 120° d) 80° | 1 |
| 30 | In the given figure, AEDF is a cyclic quadrilateral. The values of x and y respectively are<br>  <br>a) 79°, 37° b) 79°, 47° c) 89°, 47° d) 89°, 37° | 1 |
| 31 | In the given figure, if∠ DAB = 62° and ∠ ABD=58°, then ∠ ACB is equal to_____ .<br>  | 1 |

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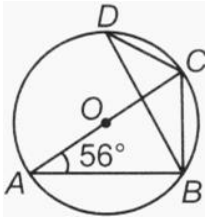
| | a) 60° b) 58° c) 60° d) None of these | |
| 32 | In the given figure, O is the centre of the circle and∠ BAC = 56°. The measure of ∠ BDC is _____.   a) 50° b) 46° c) 40° d) 56° | 1 |
| 33 | Area of an isosceles triangle ABC with AB = a = AC and BC = b is a) $\frac{1}{4}b\sqrt{4a^2-b^2}$ b) $\frac{1}{4}b\sqrt{a^2-b^2}$ c) $\frac{1}{2}b\sqrt{4a^2-b^2}$ d) $\frac{1}{2}b\sqrt{a^2-b^2}$ | 1 |
| 34 | Length of perpendicular drawn on longest side of a scale△ is a) largest b) smallest c) No relation d) Equal | 1 |
| 35 | The difference between the semi - perimeter and the sides of△ ABC are 7 cm, 5 cm and 3 cm respectively. The perimeter of the triangle is _____. a) 30 cm b) 25 cm c) 15 cm d) 10 cm | 1 |
| 36 | Each side of an equilateral triangle measures 10 cm. Then the area of the triangle is a) 43.2 $cm^2$ b) 43.4 $cm^2$ c) 43.1 $cm^2$ d) 43.3 $cm^2$ | 1 |
| 37 | The diameters of two cones are equal. If their slant heights are in the ratio 5 : 4, the ratio of their curved surface areas, is a) 5 : 4 b) 4 : 5 c) 16 : 25 d) 25 : 16 | 1 |
| 38 | If the surface area of a sphere is$100\pi$ sq.cm, then its radius is a) 10cm b) 5cm c) 25cm d) 100cm | 1 |
| 39 | The total surface area of a cone having base radius 35 cm and height12 cm is a) $4070cm^2$ b) $7920cm^2$ c) $8400cm^2$ d) $3740cm^2$ | 1 |
| 40 | If a spherical balloon grows to twice its radius when inflated, then the | 1 |

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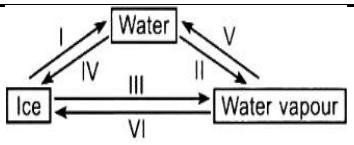
| | ratio of the volume of the inflated balloon to the original balloon is<br>a) 6 : 1 b) 8 : 1 c) 5 : 1 d) 4 : 1 | |
| 41 | A gas can be best liquefied:<br>a) By increasing the temperature.<br>b) By increasing the temperature and reducing the pressure.<br>c) By increasing the pressure and reducing the temperature.<br>d) By lowering the pressure. | 1 |
| 42 | A form of matter that has no fixed shape but has a definite volume. An example of this form of matter is<br>a) Carbon di oxide b) ice ( c) water vapour (d) kerosene | 1 |
| 43 | Name the phenomenon which causes one crystal of potassium permanganate to turn a beaker of water purple.<br>a) centrifugation b) filtration c) diffusion d) sedimentation | 1 |
| 44 | Observe the given figure carefully.  <br>Which of the following statements is incorrect?<br>a) Latent heat for process I is $3.34\times 10^{5}$ J/kg.<br>b) Processes I, II and III are endothermic while processes IV, V and VI are exothermic.<br>c) None of these<br>d) Water vapours formed during process II when come in contact with skin give out $22.5\times 10^{5}$ J/kg more heat than the boiling water. | 1 |
| 45 | To prepare a colloidal solution of starch, we should:<br>a) add the thin paste of starch to hot water with stirring<br>b) add starch powder to cold water and boil<br>c) add the starch powder to boiling water and cool | 1 |

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| | d) heat starch, add it to cold water and then bring it to boil | |
| 46 | A change is said to be a physical change when1<br>a) No energy change occurs<br>b) All statements are correct<br>c) The change can be easily reversed<br>d) No new substances are formed | 1 |
| 47 | Fermentation of grapes is an example of<br>a) Redox reaction b) Reversible change<br>c) Chemical change d) Physical change | 1 |
| 48 | Arun has prepared 0.01% (by mass) solution of sodium chloride in water. Which of the following correctly represents the composition of the solutions?<br>a) 1.00g of NaCl + 100g of water<br>b) 0.10 g of NaCl + 99.90g of water<br>c) 0.01g of NaCl + 99.99g of water<br>d) 0.11g of NaCl + 100g of water | 1 |
| 49 | Atomicity of Chlorine and Argon is:<br>a) Monoatomic and diatomicrespectively<br>b) Diatomic and diatomicrespectively.<br>c) Diatomic and monoatomic respectively.<br>d) Monoatomic and monoatomicrespectively. | 1 |
| 50 | The sample of water from a well is analysed. What will be the ratio of hydrogen and oxygen in it by mass?<br>a) 16:1 b) 8 : 1 c) 1 : 16 d) 1 : 8 or 2 : 16 | 1 |
| 51 | What information do we get from the molecular formula?<br>1. It represents one molecule of the substance.<br>2. It does not tell the name of the substance. | 1 |

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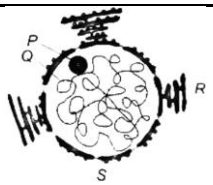
| | 3. It tells about the type of atoms.<br>4. It represents the formula mass unit of the substance.<br>a) (2) and (3) are correct<br>b) All of these<br>c) (1) and (2) are correct<br>d) (1), (3) and (4) are correct | |
| 52 | The chemical symbol for nitrogen gas is<br>a) Ni b) N c) $N_2$ d) $N^+$ | 1 |
| 53 | The formula for Ammonium Sulphate is<br>a) $NH_4SO_4$ b) $(NH_4)_2SO_4$ c) $NH_4SO_2$ d) $NH_2SO_2$ | 1 |
| 54 |  <br>_____ is called the energy currency of the cell<br>a) endoplasmic reticulum b) Oxygen (c ) ATP (d) Mitochondria | 1 |
| 55 | Cell arises from the pre - existing cell was stated by<br>a) Virchow b) Purkin c) Robert Hook d) Robert Brown | 1 |
| 56 | Take a clean glass slide and put few drops of water on it. Now place a complete Rheo leaf on water droplets and examine the cells of leaf under the high power of compound microscope. Put a few drops of concentrated salt/sugar solution on the mounted Rheo leaf on the glass slide. Wait for few minutes and again observe the leaf under the high power of microscope.What will be your observation after few minutes?<br>a) Cytoplasm along with plasma membrane has come to lie on one side of cell wall.<br>b) All of these<br>c) Cell contents are separated from the cell wall.<br>d) A clear space is seen between the cell wall and protoplast of the cell. | 1 |
| 57 | Kitchen of the cells | 1 |

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| | a) Golgi apparatus<br>b) Endoplasmic reticulum<br>c) Chloroplast<br>d) Mitochondria | |
| 58 | Smooth muscle fibres are:<br>a) cylindrical, striated unbranched, multinucleate and voluntary<br>b) cylindrical, unbranched, unstriated uninucleate and involuntary<br>c) cylindrical, striated unbranched, non - striated, multinucleate and involuntary<br>d) spindle shaped, unbranched, non - striated, uni nucleate and involuntary | 1 |
| 59 | Cambium is an example of<br>a) simple permanent tissue<br>b) internally meristem<br>c) lateral meristem<br>d) apical meristem | 1 |
| 60 | Most of the metabolic functions of plants are carried out by<br>a) sclerenchyma b) collenchyma c) meristems d) parenchyma | 1 |
| 61 | _____ smoothens the bone surfaces at the joints<br>a)Cartilage b) adipose tissues c) ligament d) Areolar tissues | 1 |
| 62 | A long tree has several branches. The tissue that helps in the side ways conduction of water in the branches is<br>a) collenchyma b) xylem vessels<br>c) xylem parenchyma d) parenchyma | 1 |
| 63 | A ball is gently dropped from a height of 20 m. If its velocity increases uniformly at the rate of 10 $m/s^2$, after what time it will strike the ground?<br>a) 0.1 s b) 1.0 s c) 0.2 s d) 2.0 s | 1 |

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| 64 | The linear momentum of an object is 250 g cm/s. If the velocity of the object is 5 m/s, then the mass of the object is<br>a) 0.5 g b) 5 kg c) 0.5 mg d) 5mg | 1 |
| 65 | A car travels 10 m in 5 seconds, 20 m in the next 10 seconds, and 30 m in the last 10 seconds. The average speed of the motion is:<br>a) 30 $ms^{-1}$ b) 2.2 $ms^{-1}$ c) 2.4 $ms^{-1}$ d) 2.0 $ms^{-1}$ | 1 |
| 66 | The velocity of a body moving at an initial velocity of 20 m/s and having an acceleration of 4m/$s^2$ after 2s will be<br>a)24 m/s b) 28 m/s c) 32 m/s d) 40 m/s | 1 |
| 67 | If the mass of the body is doubled and its velocity becomes half, then the linear momentum of the body will<br>a)become double b)remain the same<br>c)become half d)become four times | 1 |
| 68 | Which law is also known as the law of inertia?<br>a)Newton's first law of motion<br>b)Newton's second law of motion<br>c)Newton's third law of motion<br>d)Law of conservation of momentum | 1 |
| 69 | A player caught a cricket ball of mass 200 g moving at a rate 60 m/s. If the catching process completes in 0.4 s, the force of the blow exerted by the ball on the hand of the player is equal to<br>a) 300 N b) 30 N c) 150 N d) 3 N | 1 |
| 70 | Law of gravitation gives the gravitational force between<br>a) Any two bodies having some mass b) Two charged bodies only<br>c) The earth and Sun only d) The earth and a point mass only | 1 |
| 71 | If a stone dropped from the roof of a building takes 4s to reach the ground then the height of the building is<br>a) 39.2 m b) 102.6 m c) 98.8 m d) 78.4 m | 1 |

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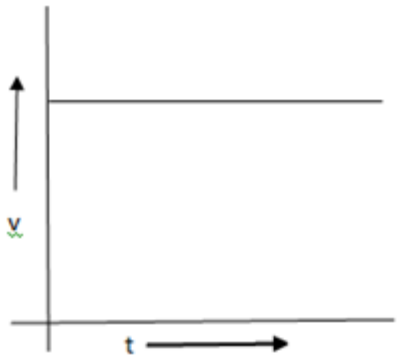
| 72 | Which of the following factors does the acceleration due to gravity on the Earth depend upon?<br>a)Mass of the Body b)Mass of the Earth<br>c) The volume of the Body d)Shape and Size of the Body | 1 |
| 73 | From the given v-t graph, it can be inferred that the object is satellite,<br>  <br><br>a)At rest b) in uniform motion<br>c) in non uniform motion d) moving with uniform acceleration | 1 |
| 74 | A truck of mass 800 kg generates a power of 20000 W. How much time does the truck need to accelerate from a speed of 20 m $s^{-1}$ to 30 m $s^{-1}$ ?<br>a) 10 s b) 7.5 s c) 5 s d) 6.3 s | 1 |
| 75 | The form of energy possessed by a flying bird is<br>a)kinetic energy b)potential energy<br>c) both kinetic and potential energy d)none of these | 1 |
| 76 | A man of mass 50 kg jumps to a height of 1m. His potential energy at the highest point is<br>a) 50 J b) 500J c) 5 J d) 5000 J | 1 |
| 77 | A 1 kg mass has a kinetic energy of 1 joule when its speed is:<br>a) 4.4 $ms^{-1}$ b) 0.45 $ms^{-1}$ c) 1.4 $ms^{-1}$ d) 1 $ms^{-1}$ | 1 |
| 78 | Which of the following is natural insecticide?<br>a) All of these b) Neem c) Nicotine d) Pyrethrum | 1 |

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| 79 | The science of growing vegetables, fruits and ornamental plants is called -<br>a) Horticulture b) Animal Husbandry c) Floriculture d) Agriculture | 1 |
| 80 | Which one is an oil yielding plant among the following ?<br>a) Sunflower b) Hibiscus c) Cauliflower d) Lentil | 1 |
| 81 | What slogan was shouted in Russia during the February Revolution?<br>a) Equality, fraternity, and liberty b) Pride and peace<br>c) Remove poverty d) Bread and peace | 1 |
| 82 | How many people practised agriculture in Russia before the Revolution?<br>a) 70% b) 85% c) 50% d) 30% | 1 |
| 83 | Who was the king of Russia in 1914?<br>a) Rasputin b) Karl Marx c) Tsar Nicholas - I d) Tsar Nicholas - II | 1 |
| 84 | Name the Committee organized by Leon Trotskii during February Revolution.<br>a) Russian Military Committee b) Red committee<br>c) Russian socialist Committee d) Military Revolutionary Committee | 1 |
| 85 | Who nationalised the banks and industries in Russia?<br>a) Lenin b) Trotsky c) Kerensky d) Stalin | 1 |
| 86 | What was the collectivefarm called in Russia?<br>a) Perestroika b) Kolkhoz c) Soviets d) Kulaks | 1 |
| 87 | What was the secret police of Russia called?<br>a) Comintern b) Soviet c) Cheka d) Duma | 1 |
| 88 | What was the other name ofthe October Revolution?<br>a) Black October b) Red October c) Blue October d) Green October | 1 |
| 89 | Who from the following were not November Criminals? | 1 |

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| | a) Democrats b) Socialists c) Catholics d) Spartacists | |
| 90 | Which of the following was the State Secret Police?<br>a) Gestapo b) Strom Troopers c) Criminal Police d) Security Services | 1 |
| 91 | Which act established the dictatorship in Germany?<br>a) The Enabling Act b) The Disabling Act<br>c) The UnendingAct d) The Dictators Act | 1 |
| 92 | The most infamous film made on Jews was:<br>a) Schindler's List b) The Eternal Jew<br>c) Where Eagles Dare d) Jews the Undesirable | 1 |
| 93 | A war veterans organisation was called:<br>a) German Ruhr b) Gestapo<br>c) Free Corps d) Berlin Soldiers | 1 |
| 94 | Hitler's world view was based on the principals of:<br>a) Lebensraum<br>b) One nation, One Empire, One Leader<br>c) Charles Darwin<br>d) Herbert Spence | 1 |
| 95 | When did Hitler try to seize control of Bavaria and capture Berlin?<br>a) 1932 b) 1923 c) 1920 d) 1919 | 1 |
| 96 | Where was Adolf Hitler born?<br>a) America b) Australia c) Austria d) Armenia | 1 |
| 97 | In which of the following country poverty has decreased substantially?<br>a) Bangladesh b) China c) Russia d) India | 1 |
| 98 | In which of the following countries did poverty actually rise from 1981 to 2001? | 1 |

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| | a) India b) Sub Saharan Africa c) Australia d) Latin America | |
| 99 | In which of the following state land reform measures have helped in reducing poverty?<br>a) Haryana b) Tamil Nadu c) West Bengal d) Punjab | 1 |
| 100 | In which of the following state Public Distribution System has helped in reducing the poverty?<br>a) West Bengal b) Haryana c) Tamil Nadu d) Punjab | 1 |
| 101 | Which of the following scheme is to create self - employment opportunities for educated unemployed youth in rural areas and small towns?<br>a) NFWP b) WRTC c) AAY d) PMRY | 1 |
| 102 | When was MNREGA passed?<br>a) September 2005 b) October 2005<br>c) November 2005 d) August 2005 | 1 |
| 103 | Which of the following programme of the government provide self - employment opportunities for educated unemployed youth in rural areas?<br>a) NREGA b) SGSY c) AAY d) PMRY | 1 |
| 104 | Which of the following Indian state has a maximum number of people living below the poverty line?<br>a) Uttar Pradesh b) Bihar<br>c) Madhya Pradesh d) Odisha | 1 |
| 105 | Tropical cyclones are often very destructive and arrive on the coasts of<br>a) Kerala and Maharashtra b) Karnataka and Goa<br>c) Maharashtra and Gujarat d) Odisha and West Bengal | 1 |
| 106 | Which winds prevail in India during cold weather season?<br>a) North – East trade winds b) Permanent winds<br>c) North – West trade winds d) North – South trade winds | 1 |

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| 107 | Which of the following is responsible for the bulk of rainfall in the Coromandal coast ?<br>a) South west monsoon b) Depressions and cyclones<br>c) North east monsoon d) Western disturbance | 1 |
| 108 | Why most parts of India remains dry during cold weather season?<br>a) Due to low pressure b) The winds blow from land to land<br>c) Due to low temperature d) The winds blow from land to sea | 1 |
| 109 | Which of the following are two coldest months in the northern part of India?<br>a) December, January b) March, April<br>c) January, March d) April, May | 1 |
| 110 | In which of the following hills Mawsynram located?<br>a) Anai Malai hills b) Aravali hills<br>c) Nilgiri hills d) Khasi hills | 1 |
| 111 | Which of the following state is associated with Kaal Baisakhi?<br>a) Tamil Nadu b) Karnataka c) Haryana d) West Bengal | 1 |
| 112 | Which winds prevail in India during the rainy season?<br>a) East - West monsoon<br>b) South - West monsoon<br>c) Permanent winds<br>d) North - West monsoon | 1 |
| 113 | Judges of the Supreme Court and High court are appointed by the _____<br>a) Prime Minister b) President c) Vice President d) Law Minister | 1 |
| 114 | When there is a threat to the State by war or external aggression or any internal rebellion, then a state called **emergency** is declared. Who has the power to declare this emergency on the advice of the Union Cabinet?<br>a) Prime Minister b) Speaker c) Vice President d) President | 1 |

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| 115 | Which is the highest forum of discussion and debate?<br>a) Lok Sabha b) Cabinet c) Parliament d) Rajya Sabha | 1 |
| 116 | What is an office memorandum?<br>a) Important Defense Documents<br>b) Memorandum given by an office.<br>c) Order issued by the Government of India.<br>d). None of these | 1 |
| 117 | For how many days the Rajya Sabha can delay a money bill?<br>a) 14 Days b) 12 Days c) 10 Days d) 16 Days | 1 |
| 118 | Which is the highest court of appeal?<br>a) High Court b) Parliament<br>c) The Supreme Court of India d) District Court | 1 |
| 119 | Which of the following organization have the power to settle disputes arising out of governmental decisions?<br>a) The Cabinet and the Parliament.<br>b) High Court and District Courts.<br>c) Indian Courts and the President.<br>d) The supreme Court and the High Courts. | 1 |
| 120 | Who holds the important portfolios like defense, finance, home affairs, etc, and are generally the senior - most ministers?<br>a) Speaker b) Minsters of State<br>c) Deputy Ministers d) Cabinet Ministers | 1 |

ATOMIC ENERGY CENTRAL SCHOOL NO. 2, MUMBAI

MULTIPLE CHOICE QUESTION EXAMINATION - 5 ( 30.11.2023)

Time Allowed : 3 hours CLASS : X Maximum Marks : 120

| | **Attempt all questions** | |
|---|---|---|
| 1 | The LCM and HCF of two rational numbers are equal, then the numbers must be<br>a) equal b) prime c) co - prime d) composite | 1 |
| 2 | If $p_1$ and $p_2$ are two odd prime numbers such that $p_1 > p_2$ , then $p_1^2 - p_2^2$ is<br>a) an even number b) an odd prime number<br>c) an odd number d) a prime number | 1 |
| 3 | If the zeroes of a quadratic polynomial $ax^2 + bx + c$, $c \neq 0$ are equal, then<br>a) c and a have opposite sign b) b and c have opposite sign<br>c) c and a have the same sign d) b and c have the same sign | 1 |
| 4 | If $\alpha$ and $\beta$ are the zeroes of the polynomial $3x^2 + 11x - 4$, then the value of $\alpha^2 + \beta^2$ is<br>a) $\frac{150}{9}$ b) $\frac{145}{9}$ c) $\frac{152}{9}$ d) $\frac{144}{9}$ | 1 |
| 5 | Value of x in pair of linear equations 36x + 24y = 702 and 24x + 36y = 558 is _____.<br>a) $\frac{33}{2}$ b) 17 c) 16 d) $\frac{145}{7}$ | 1 |
| 6 | If am = bl and bn≠ cm, then the system of equations ax + by = c Ix + my = n<br>a) Has a unique solution. b) Has infinitely many solutions.<br>c) Has no solution. d) May or may not have a solution. | 1 |
| 7 | If x = - y and y > 0, which of the following is wrong? | 1 |