# ATOMIC ENERGY CENTRAL SCHOOL NO. 2, MUMBAI <br> Academic Session - 2023-24 <br> MULTIPLE CHOICE QUESTIONS EXAMINATION-3(MCQ-3) 

Class :-VII
Date : 31.08.2023
Time Allowed: $\mathbf{3} \mathbf{~ h r s}$
Maximum Marks: 120

## Section - A (Mathematics)

1 The temperature at 12 noon was $10^{\circ} \mathrm{C}$ above zero. If it decreases at the rate of $2^{\circ} \mathrm{C}$ per hour until midnight, at what time would the temperature be $8{ }^{\circ} \mathrm{C}$ below zero?
a) $9: 00 \mathrm{PM}$
b) $9: 30 \mathrm{PM}$
c) $10: 00 \mathrm{PM}$
d) 11:00 PM

2 Find a number that is 100 more than -90 .
a) - 10
b) 6
c) 5
d) 10

3 If a and b are two integers, then which of the following may not be an integer?
a) $a-b$
b) $a \times b$
c) $a+b$
d) $a \div b$

4 For a non - zero integer $\boldsymbol{a}$, which of the following is not defined?
a) $0 \div$ a
b) $1 \div \mathrm{a}$
c) $a \div 0$
d) $a \div 1$

5 Find: (-136) $\div 4$
a) - 32
b) 32
c) 34
d) - 34

6 Savita is dividing $1 \frac{3}{4} \mathrm{~kg}$ of sweets equally among her seven friends. How much does each friend receive?
a) $\frac{1}{4} \mathrm{~kg}$
b) $\frac{3}{4} \mathrm{~kg}$
c) $\frac{3}{28} \mathrm{~kg}$
d) $\frac{1}{2} \mathrm{~kg}$
$7 \quad$ Brajesh studied a total of 24.4 hours over a period of four days. On average, how many hours did Brajesh study each day?
a) None of these
b) 5 hours
c) 7 hours
d) 6.1 hours
$8 \quad 2 \times \frac{1}{7}=$ $\qquad$
a) $\frac{3}{7}$
b) $\frac{2}{7}$
c) $\frac{13}{7}$
d) $\frac{15}{7}$

9 Find: $1.32 \div 0.11$
a) 13
b) 14
c) 12
d) 11

10 Sushma reads $\frac{1}{8}$ the path of a book in 1 hour. How many parts of the book will she read in $3 \frac{2}{3}$ hours?
a) $\frac{1}{2}$
b) $\frac{1}{4}$
c) $\frac{11}{24}$
d) None of these

11 A ribbon of length $5 \frac{1}{4} \mathrm{~m}$ is cut into small pieces each of length $\frac{3}{4} \mathrm{~m}$. Number of pieces will be:
a) 7
b) 8
c) 6
d) 5

12 Khilona earned scores of 97,73 , and 88 respectively in her first three examinations. If she scored 80 in the fourth examination, then her average score will be
a) decreased by 1
b) decreased by 1.5
c) increased by 1.5
d) increased by 1
a) $\frac{x+y+z}{3}$
b) $\frac{x \times y \times z}{3}$
c) $\frac{x \times y+z}{3}$
d) $\frac{x-y-z}{3}$

14 The range of the data $14,6,12,17,21,10,4,3$ is
a) 17
b) 18
c) 21
d) 11

15 The bar chart shows the number of cell phones sold by a shop on 5 days of a certain week. The difference between the highest number and the lowest number of cell phones sold is 15 .


Find the number of cell phones sold on Thursday.
a) 18
b) 12
c) 6
d) 24

16 The mean of first 10 natural numbers is
a) $\frac{13}{2}$
b) $\frac{5}{2}$
c) $\frac{11}{2}$
d) 5

17 Irfan says that he has 7 marbles more than five times the marbles Parmit has. Irfan has 37 marbles. (Take $m$ to be the number of Parmit's marbles.) Set up an equation.
a) $5 \mathrm{~m}+7=37$
b) $\mathrm{m}+5=37$
c) $5 \mathrm{~m}=37$
d) $m+7=37$

18 Write the statements one third of a number plus 5 is 8 in the form of equations:
a) $\frac{1}{3} m+8=5$
b) $\frac{1}{3} m+5=8$
c) $3 m+5=8$
d) $3 \mathrm{~m}+8=5$

19 The value of $y$ for which the expressions $(y-15)$ and $(2 y+1)$ become equal is
a) - 16
b) 16
c) 8
d) 0

20 Solve: - $4(2-x)=9$
a) $x=\frac{17}{4}$
b) $x=-17$
c) $x=17$
d) $x=4$

21 If $\frac{x}{2}=3$, then the value of $3 x+2$ is
a) 20
b) $\frac{13}{2}$
c) 8
d) 11

22 The teacher tells the class that the highest marks obtained by a student in her class is twice the lowest marks plus 7 . The highest score is 87 . What is the lowest score?
a) 40
b) 42
c) 47
d) 44

23 In the given figure, AB and CD are two parallel lines. A line XY meets the lines AB and CD at E
and F respectively. If $\angle \mathrm{XEA}=110^{\circ}$, then $\angle \mathrm{EFD}$ is

a) $80^{\circ}$
b) $45^{\circ}$
c) $70^{\circ}$
d) $110^{\circ}$

24 Find the angle, which is equal to its complement.
a) $30^{\circ}$
b) $25^{\circ}$
c) $45^{\circ}$
d) $35^{\circ}$

25 The complement of angle $64^{\circ}$ is $\qquad$ .
a) $26^{\circ}$
b) $56^{\circ}$
c) $46^{\circ}$
d) $36^{\circ}$

26 Which pair of the following angles are complementary?
a) $48^{\circ}, 52^{\circ}$
b) $50^{\circ}, 40^{\circ}$
c) $45^{\circ}, 55^{\circ}$
d) $40^{\circ}, 40^{\circ}$

27 Which one of the following pairs of angles is complementary pair of angles?
a) $23^{\circ}$ and $67^{\circ}$
b) $22^{\circ}$ and $67^{\circ}$
c) $62^{\circ}$ and $27^{\circ}$
d) $21^{\circ}$ and $27^{\circ}$

28 The angles $\mathrm{x}-10^{\circ}$ and $190^{\circ}-\mathrm{x}$ can be
a). a linear pair of angles
b) supplementary angles
c) interior angles on the same side of the transversal if two parallel lines are intersected by a transversal line
d) all of these

29 Two complementary angles are in the ratio $3: 6$. Find the angles.
a) $30^{\circ}, 60^{\circ}$
b) $20^{\circ}, 70^{\circ}$
c) $10^{\circ}, 80^{\circ}$
d) $50^{\circ}, 70^{\circ}$

30 The angles between North and West and South and East are:
a) complementary
b) supplementary
c) both are obtuse
d) both are acute

31 If angle $P$ and angle $Q$ are supplementary and the measure of angle $P$ is $60^{\circ}$, then the measure of angle Q is
a) $120^{\circ}$
b) $60^{\circ}$
c) $20^{\circ}$
d) $30^{\circ}$

32 Two angles of a triangle are $37^{\circ}$ and $57^{\circ}$. Find the third angle of the triangle.
a) $88^{\circ}$
b) $86^{\circ}$
c) $76^{\circ}$
d) $96^{\circ}$

33 If the exterior angle of a triangle is $130^{\circ}$ and its interior opposite angles are equal, then measure of each interior opposite angle is
a) $60^{\circ}$
b) $50^{\circ}$
c) $55^{\circ}$
d) $65^{\circ}$

34 The two interior opposite angles of an exterior angle of a triangle are $40^{\circ}$ and $80^{\circ}$. Find the measure of the exterior angle.
a) $100^{\circ}$
b) $120^{\circ}$
c) $110^{\circ}$
d) $130^{\circ}$

35 The ratio of angles of a triangle is $10: 13: 7$. Find the measurement of all angles of the triangle.
a) $38^{\circ}, 60^{\circ}, 42^{\circ}$
b) $78^{\circ}, 60^{\circ}, 42^{\circ}$
c) $38^{\circ}, 60^{\circ}, 32^{\circ}$
d) $78^{\circ}, 80^{\circ}, 52^{\circ}$

36 In a $\triangle \mathrm{PQR}, \angle \mathrm{R}=105^{\circ}$ and $\angle \mathrm{Q}=40^{\circ}$, then the measure of $\angle \mathrm{P}$ is:
a) $35^{\circ}$
b) $46^{\circ}$
c) $65^{\circ}$
d) $55^{\circ}$

37 In a $\triangle \mathrm{PQR}$, which of the given conditions does not hold?
a) $P Q+Q R>P R$
b) $R Q+P R>P Q$
c) $\mathrm{PQ}-\mathrm{QR}>\mathrm{PR}$
d) $P Q-P R<Q R$

38 What is the maximum number of obtuse angles in a triangle ?
a) Zero
b) Three
c) Two
d) One

39 Find the perimeter of the rectangle whose length is 40 cm and a diagonal is 41 cm .
a) 98 cm
b) 88 cm
c) 44 cm
d) 50 cm

40 Which of the following cannot be the sides of a triangle?
a) $2.5 \mathrm{~cm}, 3.5 \mathrm{~cm}, 4.5 \mathrm{~cm}$
b) $2 \mathrm{~cm}, 4 \mathrm{~cm}, 6 \mathrm{~cm}$
c) $2.3 \mathrm{~cm}, 6.4 \mathrm{~cm}, 5.2 \mathrm{~cm}$
d) $3 \mathrm{~cm}, 4 \mathrm{~cm}, 5 \mathrm{~cm}$

## Section - B (Science)

41. It is essential for both photosynthesis and respiration -
a) Phytochrome
b) Water
c) Sun light
d) Oxygen

42 Which of the following is a nutrient?
a) All of these
b) Vitamins
c) Fat
d) Proteins

43 When we observe the lower surface of a leaf through a magnifying lens we see numerous small openings. Which of the following is the term given to such openings?
a) Lamina
b) Veins
c) Stomata
d) Midrib

44 Which one is a symbiotic association between two organisms?
a) Amar bel
b) Mucor
c) Nostoc
d) Lichens

45 Green plants are called $\qquad$ .
a) Saprotrophs
b) Autotrophs
c) Parasite
d) Heterotrophs

46 The human alimentary canal is about 9 m long but the human body is less than 3 m long. How the alimentary canal is adjusted inside the body?
a) It is elongated during digestion only.
b) It contracts during rest.
c) As it is highly coiled
d) It runs throughout the body.

47 The saliva breaks down $\qquad$
(a) Starch
(b) proteins
(c) fats
(d) vitamins.

48 The part of digestive system that contain taste buds is $\qquad$ _.
a) Teeth
b) Upper jaw
c) Lower jaw
d) Tongue

49 Utilization of digested food to obtain energy is called $\qquad$ .
a) Ingestion
b) Assimilation
c) Digestion
d) Absorption

50 What is the mode of nutrition in animals?
a) All of these.
b) Autotrophic
c) Symbiotic
d) Heterotrophic

51 Glass, plastic, wood are examples of:
a) Convector
b) Radiators
c) Insulator
d) Conductor

52 An iron ball at $40^{\circ} \mathrm{C}$ is dropped in a mug containing water at $40^{\circ} \mathrm{C}$. The heat will
a) increase the temperature of both
b) flow from iron ball to water
c) not flow from iron ball to water or from water to iron ball
d) flow from water to iron ball

53 Mercury is a highly toxic element although it is used in thermometer because it:
a) It has a dark colour and melts at low temperature
b) It is easily visible and found in a liquid state
c) Can be easily disposed
d) Has shining surface and expand uniformly

54 The clinical thermometer has to mark from $35^{\circ} \mathrm{C}$ to:
a) $32^{\circ} \mathrm{C}$
b) $62^{\circ} \mathrm{C}$
c) $42^{\circ} \mathrm{C}$
d) $52^{\circ} \mathrm{C}$

55 Method of heat transfer in steel rod is $\qquad$ .
a) Radiation
b) Conduction
c) All of these
d) Convection

56 The windows of the house in coastal areas are made to face the sea to:
a) To receive the cooler sea breeze
b) To get the warm sea breeze
c) All of these
d) To see the beauty of the sea

57 In the weather report, the daily temperature is measured with:
a) Daily thermometer
b) Weather thermometer
c) Maximum - minimum temperature
d) Day - night thermometer

58 Which of the following is an acid - base indicator?
a) Lime water
b) Baking soda
c) Vinegar
d) Turmeric

59 All acids can not be tasted to know its taste because it may be:
a) Corrosive and cause harm
b) Bitter and soapy
c) Salty and harmful
d) Sour and make mouth bitter

60 Which of the following is a natural indicator?
a) Methyl orange
b) Oxalic acid.
c) Phenolphthalein
d) Turmeric

61 A common substance that contains acetic acid is $\qquad$ -.
a) Turmeric
b) Vinegar
c) Milk
d) Lemon

62 The reaction between acid and base to form salt and water is an example of:
a) Addition reaction
b) Neutralization reaction
c) Endothermic reaction
d) Substitution reaction

63 Milk of magnesia contains:
b) Magnesium hydroxide
a) Magnesium chloride
c) Sodium hydroxide
d) Calcium hydroxide

64 Phenolphthalein is a synthetic indicator and its colours in acidic and basic solutions, respectively are
a) red and blue
b) colourless and pink
c) blue and red
d) pink and colourless

Tooth decay is caused due to:
a) Overeating and indigestion
b) Eating an excess of acidic food
c) Decomposition of food particle to produce base
d) Decomposition of food particle to produce acid

66 Photosynthesis is carried out by green plants, it is a $\qquad$ -
a) Chemical change
b) Physical change
c) Temporary change
d) Undesirable change

67 Magnesium ribbon burns with:
a) Red bright light
b) Brilliant white light
c) Dull white light
d) Black fume

68 Paheli's mother made a concentrated sugar syrup by dissolving sugar in hot water. On cooling, crystals of sugar got separated. This indicates a
a) Physical change that cannot be reversed.
b) Physical change that can be reversed.
c) Chemical change that cannot be reversed.
d) Chemical change that can be reversed.

69 A chemical change may involve -
a) All of these
b) change in temperature only
c) evolution of gas only
d) change in colour only

70 Pinki added a spoon of salt in a glass of water and stirred it, the salt disappears. Which type of change is this?
a) Biological change
b) Physical change
c) No any change
d) Chemical change

71 In cockroaches, air enters the body through
a) lungs
b) spiracles
c) skin
d) gills

72 The chemical used to test the carbon dioxide gas in exhaled air is $\qquad$ .
a) Lime water
b) Lime stone
c) Lime juice
d) Quick lime

73 Inhalation is the process of:
a) Taking in Oxygen - rich air
b) Taking in $\mathrm{CO}_{2}$ rich air
c) Releasing of $\mathrm{CO}_{2}$ rich air
d) Release of Oxygen rich air

74 Respiration is essential for the survival of the organism because it:
a) Release oxygen for photosynthesis
b) Release energy from food
c) Increase carbon dioxide gas in the air
d) Release water for absorption

75 What are the end products of aerobic respiration?
a) Carbon dioxide, water, and energy
b) Lactic acid and oxygen
c) Alcohol, carbon dioxide, and energy
d) Lactic acid and energy

76 Earthworms and frogs breathe through their skin because of which the skin of both the organisms is
a) moist and rough
b) dry and slimy
c) moist and slimy
d) dry and rough

77 From nasal cavity, air reaches to lungs through:
a) Veins
b) Arteries
c) Wind pipe
d) Food pipe

78 Fish breathe with the help of gills which are richly supplied with blood vessels. The gills help the fist to
a) absorb nutrients present in water.
b) release waste substances in water.
c) take in oxygen dissolved in water.
d) take in oxygen from air.

79 Yeast is used in wine and beer industries because it repries
a) anaerobically producing alcohol
.b) anaerobically producing $\mathrm{CO}_{2}$.
c) aerobically producing alcohol
.d) aerobically producing oxygen.

80 Skeletal structure surrounding the chest cavity is called $\qquad$ .
a) Chest cover
b) Chest bone
c) Rib cage
d) Lung cover

## Section-C (Social Science)

81 Delhi Sultan GhiyasuddinBalban birth and death year is:
a) 1268 to 85
b) 1262 to 85
c) 1266 to 87
d) 1264 to 86

82 Two schools of Islam are:
a) Hanafi and Shafi
b) Hanafi and Sunni
c) Hanafi and Shia
d) Hanafi and Ulama

83 Learned theologians and jurists were:
a) Allah
b) Ualaha
c) Ulama
d) Umea

84 Mahmud of Ghazni ruled from
a) 997 to 1030
b) 697 to 1030
c) 797 to 1030
d) 897 to 2030

85 Who were subordinate to the Chalukyas of Karnataka?
a) Cholas
b) Palas
c) Chahamanas
d) Rashtrakutas

86 Kings rewarded Brahmanas by grants of land and were recorded on
a) Golden plates
b) Zinc plates
c) Copper plates
d) Silver plates
$\qquad$ , a fourteenth - century chronicler reported the appointments as a sign of the sultan's loss of judgment and his incapacity to rule.
a) FirujHajjam
b) Aziz Khummar
c) Ladhs
d) ZiauddinBarani

88 Suri dynasty ruled for only $\qquad$ -.
a) 25 years
b) 15 years
c) 20 years
d) 10 years

89 The idea of the Three Orders was first formulated in -
a) China
b) Japan
c) France
d) India

90 A poet named Edmund Spenser wrote a long epic poem called:
a) The BraveeQueene
b) The PowerfuleQueene
c) The ElizabetheQueene
d) The Faerie Queene

91 Who was the revenue minister in the court of Emperor Akbar?
a) AbulFazal
b) Mir Zafar
c) Todar Mal
d) Tansen

92 Who among the following is not the son of Shah Jahan?
a) Adil Khan
b) Murad Baksh
c) Shah Shauja
d) Dara Shukoh

93 Industrial revolution enabled:
a) decrease production at small scale
b) decrease production at large scale
c) increase production at large scale
d) increase production at small scale

94 The lithosphere is an irregular surface with various landforms such as:
a) Mountains, Plateaus, Plains, Valleys
b) Deccan, plateaus, plains, Himalayas
c) Plateaus, Plains, Valleys, Himalayas
d) Deccan, Himalayas, Valleys, Soil

95 Who interacts with the environment and modify it according to their needs?
a) Rivers
b) Animals
c) Plants
d) Human beings

96 When the molten lava comes on the earth's surface, it rapidly cools down and becomes solid. Rocks formed in such a way on the crust are called:
a) Intrusive igneous rocks
b) Extrusive sedimentary rocks
c) Metamorphic rocks
d) Extrusive igneous rocks

97 Rocks which contains fossils are
a) Metamorphic
b) Igneous
c) Sial
d) Sedimentary

98 Why igneous rocks are called basic rocks?
a) These are first to be formed in the rock cycle
b) They have basic minerals compositions
c) These are found on the base of the earth
d) They have basic property

99 As the river approaches the sea, the speed of the flowing water decreases and the river begins to break up into a number of streams called $\qquad$ _.
a) tributaries
b) flood plains
c) meanders
d) distributaries

100 The material carried by the glacier such as rocks big and small, sand and silt gets deposited. These deposits form $\qquad$ _.
a) Glacial meanders
b) Glacial moraines
c) Glacial caves
d) Glacial stacks

101 When the grains of sand isvery fine and light, the wind can carry it over very long distances. When such sand is deposited in large areas, it is called $\qquad$ .
a) Meanders
b) Loess
c) Sand dunes
d) Mushroom rocks

102 In which layer the temperature rises very rapidly with increasing height?
a) Troposphere
b) Mesosphere
c) Stratosphere
d) Thermosphere

103 The standard unit of measuring temperature is degree Celsius. It was invented by $\qquad$ .
a) John Celsius
b) Anders Celsius
c) William Celsius
d) Robert Celsius

104 The cyclone hit Odisha in $\qquad$ .
a) 1999
b) 2001
c) 1998
d) 2000

105 This refers to the programme introduced in all government elementary schools to provide children with cooked lunch.
a) Mid night meal scheme
b) Mid day meal scheme
c) Full meal scheme
d) Exclusive meal scheme

106 Who was an African - American women who was an essential part of Civil Rights?
a) Rose Perks
b) ResaPorks
c) Rosa Parks
d) Rasa Paroks

107 $\qquad$ is a key feature of democracy and influences all aspects of its functioning.
a) Equality
b) Fraternity
c) Justice
d) Liberty

108 A disease that attacks a large number of people in an area at the same time is called an
a) Non communicable
b) Germs disease
c) Epidemic
d) Communicable

109 PBKMS work in which state
a) West Bengal
b) Tamil Nadu
c) Kerala
d) Andhra Pradesh

110 Which of the following is false regarding the Policy of Kerala government towards health services
a) $50 \%$ of the entire state budget was given to the panchayats
b) The working of school and anganwadi was checked
c) Water supply scheme were checked to ensure good health
d) Health care centre were improved
$\qquad$ refers to the provision of health facilities from door to door by health workers in rural areas
a) Transfer clinic
b) Door clinic
c) Moving clinic
d) Mobile clinic

112 How many MLAs are required to form the government in a state
a) All MLAs are required
b) Less than half of the MLAs
c) More than half of MLAS
d) Half of the total MLAs

113 $\qquad$ elected by the people. They then become members of the legislative assembly and also form the government.
a) Governor
b) President
c) Chief ministers
d) Members of the Legislative Assembly (MLAs)
a) Chief Minister
b) Governor
c) Vice - President
d) President

115 Who is an independent candidate
a) Can take decision with other party
b) Have strong support of people
c) Does not belong to any party
d) Candidate affiliated to many party

116 What was the purpose ofsetting up Anganwadis in several villages?
a) Health centres
b) Child care centres
c) Yoga centres
d) Adult education centres

117 Most domestic workers are .
a) Women
b) Girls
c) Men
d) Boys

118 What can you say about the work of men and women?
a) The work of women should be valued more than that of men
b) Men's work should be valued more than women's
c) It should be equally valued
d) Both of their works should not be valued at all

119 Following points show the preference is given to boys as compared to girls except
a) Boys are given more opportunities as given to girls.
b) The boys are considered to be bread earnings
c) The birth of a girl is considered more important and is regarded as auspicious
d) The female child is considered liability of the family

120 What were the main responsibilities that lie with women in 1920s?
a) Looking after the family
b) Looking after the house
c) All of these
d) Cooking food for the family

