

ATOMIC ENERGY CENTRAL SCHOOL – 2, MUMBAI

Academic Session 2023 – 24

Multiple Choice Questions Examination – 2 (31.07.2023)

Time: 180 minutes

Class 8

Marks:-120.

Choose the correct alternatives for the following questions.

SECTION A – MATHEMATICS

1. Addition of rational numbers satisfy the property?

- a) associative b) closure c) commutative d) all of these

2. The value of x for which the expressions $3x - 4$ and $2x + 1$ become equal is

- a) 5 b) -3 c) 0 d) 1.

3. Solve: $3(t - 3) = 5(2t + 1)$

- a) 2 b) -2 c) 3 d) None of these.

4. Solve: $5x + 9 = 5 + 3x$

- a) -1 b) 2 c) -2 d) 1.

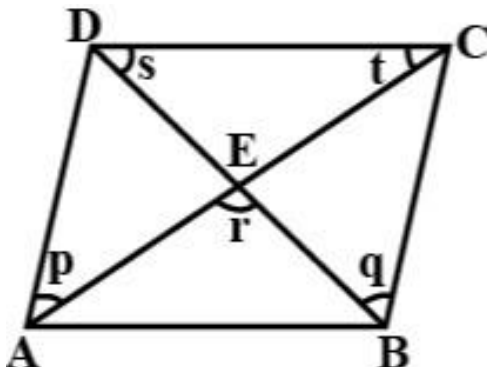
5. Solve the following: $0.25(4x - 5) = 0.75x + 8$

- a) -29 b) 37 c) -37 d) 39.

6. How many diagonals does a convex quadrilateral have?

- (a) 2 b) 4 c) 3 d) None of these.

7. In the diagram, ABCD is a rhombus. AEC and BED are straight lines.

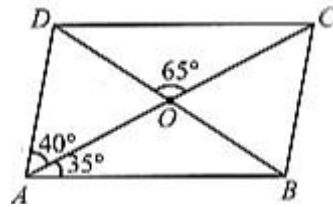


$p + q + r + s + t = ?$

- (a) 200° (b) 540° (c) 270° (d) 360°

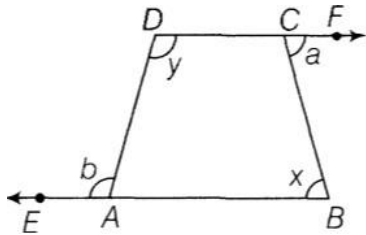
8. ABCD is a parallelogram in which $\angle DAO = 40^\circ$, $\angle BAO = 35^\circ$ and $\angle COD = 65^\circ$ Find

$\angle ODC$.



- (a) 90° b) 80° c) 30° d) 45° .

9. The sides BA and DC of quadrilateral ABCD are produced as shown in figure. Then, which of the following statement is correct?



- a) $x + y = a + b$ b) $x + a = y + b$
 c) $2x + y = a + b$ d) $x + y/2 = a + b$.

10. Find the number of sides of a regular polygon whose each exterior angle has a measure of 40° .

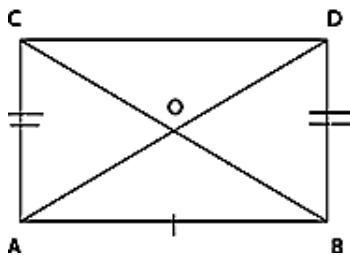
- a) 6 b) 7 c) 8 d) 9.

11. The ratio of exterior angle to interior angle of a regular polygon is 1 : 4. find the number of sides of the polygon.

- a) 30 b) 10 c) 20 d) 15.

12. In a given rectangle ABCD, diagonals AC and BD intersect at O. If $\angle COD = 120^\circ$. What is the value of $\angle OBA$?

[1]



- (a) 90° (b) 60°
 (c) 45° d) None of these

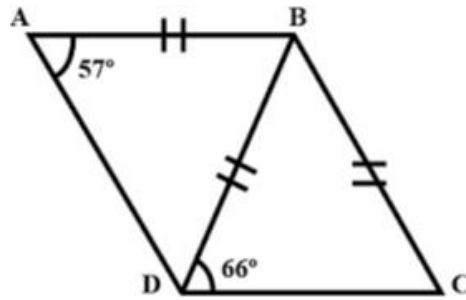
13. The sum of all exterior angles of a triangle is

- a) 720° b) 180° c) 360° d) 540° .

14. Find the measure of each exterior angle of a regular polygon of 8 sides.

- (a) 36° b) 45°
 (c) 30° d) none of these

15. In the diagram, ABD and BCD are isosceles triangles, where $AB = BC = BD$. The special name that is given to quadrilateral ABCD is:



- (a) parallelogram
- (b) trapezium
- (c) rectangle
- (d) Kite.

16. PQRS is a trapezium in which $PQ \parallel SR$ and $\angle P = 130^\circ$, $\angle Q = 110^\circ$. Then $\angle R$ is equal to

17. Consider the following statement:

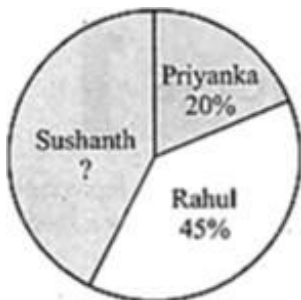
- A. The diagonals of a parallelogram are equal.
- B. The diagonals of a square are perpendicular to each other.
- C. If the diagonals of a quadrilateral intersect at right angles, it is not necessarily a rhombus.
- D. Every quadrilateral is either a trapezium or a parallelogram or a kite.

- a) Both (B) and (C)
- b) Only (B)
- c) (A), (B) and (C)
- d) Only (C).

18. Which of the following is not a random experiment?

- a) Rolling a die
- b) Tossing a coin
- c) Throwing a stone from the roof of a building
- d) Choosing a card from a deck of 52 cards.

19. The pie chart shows a percentage breakdown of 1000 votes in student elections. How



many votes did Sushanth receive?

- a) 350
- b) 550
- c) 450
- d) 330.

20. A coin is tossed three times. The number of possible outcomes is:

- (a) 4 b) 8 c) 6 d) 3.

21. A card is drawn at random from a pack of 52 cards. Find the probability that the card drawn is a red king

- a) $1/13$ b) $1/26$ c) $1/52$ d) $1/2$.

22. A die is thrown. The probability that the number comes up even is _.

- a) $1/3$ b) $1/2$ c) $1/6$ d) $1/4$.

23. When a die is thrown, list the outcomes of an event of getting a composite number.

- a) 1, 3, 5 b) 2, 4, 6 c) 4, 6 d) None of these

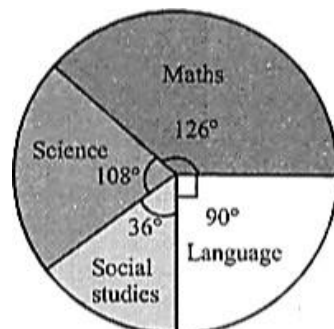
24. A bag has 4 red balls and 6 yellow balls. A ball is drawn from the bag without looking into the bag. Find the probability of getting a yellow ball

- a) $3/5$ b) $2/3$ c) $1/5$ d) none of these.

25. Total number of outcomes, when a ball is drawn from a bag which contains 3 red, 5 black and 4 blue balls, is:

- a) 8 b) 12 c) 7 d) 9.

26. A school has strength of 2000 students. The following pie graph shows the interests of students in different subjects. The number of students interested in Maths is:

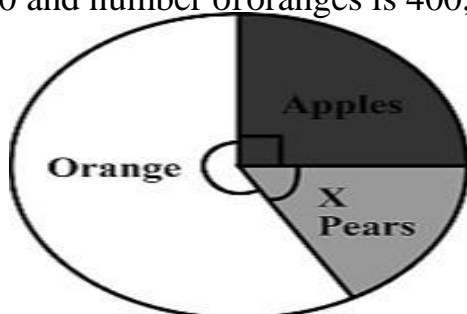


- a) 700 b) 500 c) 600 d) 200.

27. In a pie chart, the total angle at the centre of the circle is:

- a) 360° b) 180° c) 90° d) 270° .

28. The pie chart shows the number of fruits sold in a store. Given that the number of apples is 180 and number of oranges is 400, the value of x, in degrees, is:



34. The associative property is applicable to:

a) Addition and subtraction

b) Multiplication and division

c) Addition and Multiplication

d) Subtraction and Division

35. The additive identity of rational numbers is:

a) 0

b) 1

c) 2

d) -1

36. What is the sum of $\frac{2}{3}$ and $\frac{4}{9}$?

a) $\frac{6}{3}$

b) $\frac{6}{9}$

c) $\frac{10}{9}$

d) $\frac{10}{3}$

37. What is the product of $\frac{2}{9}$ and $\frac{3}{4}$?

a) $\frac{1}{6}$

b) $\frac{2}{3}$

c) $\frac{1}{9}$

d) $\frac{1}{4}$

38. What is the value of $\frac{3}{4} + \frac{5}{6} + \frac{2}{7}$?

a) $\frac{10}{84}$

b) $\frac{134}{84}$

c) $\frac{157}{84}$

d) $\frac{167}{84}$

39. What should be subtracted from $-\frac{2}{3}$ to get -1?

a) $\frac{1}{3}$

b) $-\frac{1}{3}$

c) $\frac{2}{3}$

d) 1

40. The rational number that does not have a reciprocal is

(a) 0

(b) 1

(c) -1

(d) $\frac{1}{2}$

SECTION B – SCIENCE

41. Cultivation of vegetables, fruits, and flower plants on large scale is known as:

- a) horticulture b) fruiticulture c) veggiculture d) mixed farming.

42. Choose the correct option for the more quantity of usage of fertilizers and pesticides in the farms -

1. They destroy the fertility of soil
 2. They make the farms barren after some time.
 3. They don't create adverse effect on the beneficial components of soil
 4. They are environment friendly
- a) (i), (iii) and (iv) b) (ii) and (iii) c) (i) and (ii) d) (i), (ii) and (iii).

43. Which of the following tools would a farmer use to remove weeds from the field?

- a) Axe b) Plough c) Hoe d) Cultivator.

44. A modern method of the irrigation system in which there is no run - off or wastage of water at all?

- a) Moat method b) Sprinkler system c) Chain pump system d) Drip system.

45. Chemical pesticides are poisonous hence following precaution should be taken:

- a) applying antiseptic cream on exposed areas. b) spraying with filters on the sprayer.
- c) consuming medicine before going to field. d) keep nose and mouth covered.

46. Which one of the following is a group of Kharif crops?

- a) Gram, maize, mustard b) Groundnut, pea, wheat
- c) Cotton, maize, paddy d) Cotton, gram, wheat.

47. Manures all

- a) organic substances b) inorganic substances
- c) salts d) both organic and inorganic .

48. Ploughing is a method of preparing soil. It is beneficial as

- a) All of these b) helps roots of penetrate deeper
- c) helps roots to breathe easily d) it removes weeds.

49. The term used for the process of separation of grains from chaff is

- a) Winnowing b) Hand picking c) Threshing d) Sieving.

50. Cooked food is preserved by:

- a) Heating b) Salting c) Drying d) Refrigeration.

51. Which substance in the body works against pathogens?

- a) Antibodies b) Antibiotics c) WBCs d) RBCs.

52. Measles is caused due to which of the following microorganism?

- a) Bacteria b) Fungi c) Virus d) Parasite.

53. Which of the following disease **does not** occur due to biting of mosquitoes?

- a) Malaria b) Filariasis c) Dengue fevere d) Sleeping Sickness.

54. Which of the following is used as a preservative of food materials?

- a) Sodium Benzoate b) Barium chloride c) Alum d) Ferric Chloride.

55. If denitrifying bacteria are removed from earth which element will get reduced in air?

- a) nitrogen b) carbon c) oxygen d) phosphorus.

56. Which physical process occurs in the sky that converts the nitrogen gas to nitrogen compounds?

- a) Eclipses b) Cloud formation c) Lightning d) Precipitation.

57. The two micro - organisms which live in symbiotic association in lichens are

- a) Fungus and protozoa b) Alga and bacteria
c) Alga and fungus d) Bacteria and protozoa.

58. Viruses are unaffected by:

- a) antibodies b) both antibiotics & antibodies
c) antibiotics d) none of these.

59. The gas produced by burning of fossil fuels which itself is highly poisonous:

- a) Carbon monoxide b) Chlorofluorocarbons
c) Carbon dioxide d) Carbonic acid.

60. Petroleum is a mixture of:

- a) oxygen, sulphur and carbon b) oxygen and nitrogen
c) carbon and hydrogen d) hydrocarbons.

61. Burning of fossil fuels results in

- a) increased greenhouse effect b) air pollution
c) global warming d) All of these.

62. Uses of natural gas are:

- a) It is used for power generation.
- b) It is used as a starting material for the manufacture of a number of chemicals and fertilizers.
- c) All of these
- d) It is used as fuel for transport vehicles.

63. The slow process of conversion of dead vegetation into coal is called _____.

- a) evolution
- b) carbonification
- c) carbonization
- d) decomposition

64. A thick black liquid formed by heating coal in the absence of air:

- a) Coal tar
- b) Charcoal
- c) Coke
- d) Petroleum

65. Naphthalene balls are obtained from coal tar and are used as:

- a) Mosquito repellent
- b) Snake repellent
- c) Moth repellent
- d) Honey bee repellent

66. Coal is regarded as backbone of our national economy because:

- a) supports our agriculture and crop production as manure
- b) supports industries by providing raw material in its different forms
- c) is exported on large scale since our country has maximum reserves
- d) indirectly supports many industries and thermal power plants

67. Which one is not a natural resource?

- a) Coke
- b) Minerals
- c) Brass
- d) Forest

68. Which of the following is a pair of exhaustible natural resources?

- a) Wild life and minerals
- b) Water and petroleum
- c) Coal and soil
- d) Air and sun - light

69. Which among the following is considered as the cleanest fuel?

- a) Cow dung cake
- b) Hydrogen gas
- c) Kerosene
- d) Petrol.

70. The fuel, among the following, that has low calorific value and causes high pollution is

- a) petrol
- b) coal
- c) LPG
- d) cow - dung cake

71. Acid rain is caused by oxides of

- a) Sulphur, Nitrogen
- b) Sulphur, Carbon
- c) Phosphorous, Carbon
- d) Carbon, Nitrogen

72. Which of the following is the property of good fuel?
a) CO₂ b) High calorific value c) High temperature d) Low Calorific value
73. Shyam was cooking potato curry on a chulha. To his surprise he observed that the copper vessel was getting blackened from outside. It may be due to:
a) Burning of copper vessel. b) Improper combustion of the fuel.
c) Proper combustion of fuel. d) Improper cooking of potato curry.
74. If we completely burn the same amount of the following fuels, the maximum amount of heat will be obtained on burning
a) Petrol b) LPG c) Diesel d) CNG
75. When a fuel undergoes complete combustion it produces:
a) no any flame b) non luminous flame c) luminous flame d) smoky flame
76. Some substances do not burn with a flame such as:
a) Kerosene b) Wax c) Charcoal d) LPG
77. If a person's clothes catch fire, the best way to extinguish the fire is to:
a) Throw water on the clothes b) Cover the person with a woolen blanket
c) Cover the person with a polythene sheet d) Use fire extinguisher
78. In villages, people use wood as fuel because:
a) Of its easy availability and low cost. b) It is environment friendly.
c) It catches fire easily. d) It is considered to be an ideal fuel.
79. A non inflammable substance out of the following is:
a) LPG b) Carbon dioxide c) CNG d) Alcohol
80. When the supply of oxygen is not sufficient, the fuels burn incompletely producing mainly
a) blue flame b) yellow flame
c) orange flame d) dark blue flame.

SECTION C – SOCIAL SCIENCE

81. What is a botanical survey?

- a) A survey of plant resources b) A survey of animal resources

- c) A survey of a group of people in a region
- d) A survey of the weather and climatic conditions of a place

82. It is believed that the period of British rule was one of darkness because:

1. the period did not witness any economic growth or progress.
 2. religious tolerance, caste taboos, and other superstitious practices existed in India.
 3. the Rulers and Kings who were incapable.
 4. the Rulers and Kings always fought against each other for power.
- a) Only D b) Only C c) Only B d) Only A

83. What was the important suggestion made by James Mill to the British?

1. British should conquer all the territories in India to ensure the enlightenment and happiness of Indian People.
 2. India will progress without British help.
 3. With Religious tolerance, caste taboos and other superstitious practices only India can progress.
 4. Introduction of European manners and Western education will lower the level of Indian civilization.
- a) Only B b) Only C c) Only D d) Only A.

84. The National Archives of Indian up in the

- a) 1930s b) 1950s c) 1940s d) 1920.

85. Who are calligraphists?

- a) People specialized in the art of clay moulding b) People specialized in the art of typing
- c) People specialized in the art of preparing skilled graphs
- d) People specialized in the art of beautiful writing.

86. Census operation are held

- a) Every ten years b) Every seven years c) Every twelve years d) Every five years.

87. The Governor - General who was impeached by:

- a) Lord Hasting b) Lord Dalhousie c) Warren Hasting d) Lord Mountbatten.

88. Which were the important territories gained by the British after the Second Anglo - Maratha war?

- a) Orissa, Agra, Delhi b) Baroda and Agra c) Agra and Gwalior d) Orissa and Gwalior.

89. Select the option that best describes the Sanskrit texts prescribing social rules and codes of behavior composed from c.500 BCE onwards.

- a) Dharmashastra b) Upanishad c) Ramayana d) Vedas.

90. Who died in the Second Anglo - Mysore war of 1780 - 84?

- a) Haidar Ali of Hyderabad. b) Tipu sultan c) Warren Hastings d) The Nizam

91. Which of the following reasons would be the most appropriate one that provoked Tipu sultan to attack Travancore, an ally of the British?

- a) Tipu Sultan was against the Subsidiary system introduced in Travancore by Lord Wellesley
b) Tipu sultan started spice trade with the French and Travancore, an ally of British, the only supplier of pepper resisted this.
c) Tipu Sultan wanted to expand his empire and attacked Travancore
d) After Hyder Ali was defeated and killed, British entered into an agreement with Travancore to fight against Tipu Sultan.

92. Satara, Sambalpur, Udaipur, Nagpur were annexed by the British by applying the Doctrine of Lapse. Which kingdom among the following options can be added to this list?

- a) Cochin b) Karaikal c) Gwalior d) Jhansi.

93. Which one of the following is considered as the Golden R's of conservation?

- a) Reduce, Reclaim, Reprocess, Recover b) Reduce, Reuse, Recycle, Recover
c) Renew, Recondition, Reuse, Refuse d) Retrieve, Regain, Recoup, Reprocess.

94. What would you call resources of limited stock?

- a) Non - renewable Resources b) Human - made Resources
c) Localised Resources d) Renewable Resources.

95. Which one of the following reasons is best suitable as to why human beings are called the ultimate(best) resource on the earth?

1. Human beings can explore, develop and convert the natural resources into useful goods as per the abilities and demands
 2. Human beings are found everywhere on earth
 3. Human beings are Renewable resources
 4. The population of human beings in the world is ever - increasing
- a) Only A b) Only D c) Only C d) Only B.

96. Resources that are drawn from Nature and used without much modification are called _____.

- a) human resources b) artificial resources c) good resources d) natural resources.

97. Which one of the following is a human - made resource?

- a) Tropical forests b) Spring water c) medicines to treat cancer d) None of these

98. From the following list, which one cannot be considered as a Localised resource.

- a) Copper b) Coal c) Iron d) Sunlight

99. Water can neither be added nor subtracted from the earth. Its volume remains constant. Its abundance may seem to vary because it is in constant motion, cycling through the oceans, the air, land, and back again, through the processes of evaporation, precipitation, and run-off. What is this entire process called?

- a) Water Movement b) Water Progression c) Water Cycle d) Water Sequence.

100. The major factors of soil formation are the nature of parent rock and _____.

- a) deforestation b) soil erosion c) climatic factors d) overgrazing

101. Cite one good reason as to why Earth is called Water Planet.

1. Due to the fact that water is a vital renewable resource.
2. Due to the fact that water is responsible for moderate temperature conditions.
3. Due to the fact that three fourth's of the earth's surface is covered with water.
4. Due to the fact that water can neither be added nor subtracted from the earth.

- a) Only B b) Only D c) Only C d) Only A

102. Some important techniques to cope with Landslide are given below. Pick out the one that is not applicable.

- a) The decrease in vegetation cover b) Construction of retention wall to stop the land from slipping

c) Hazard mapping locate areas prone to landslides

d) Implementation of the surface drainage control

103. A few factors which lead to soil degradation are given below, pick out the one that is not a factor for soil degradation.

- a) Mulching b) Rain wash and floods c) Overuse of fertilizers d)

Deforestation.

104. Full form of CITES:

1. The Convention on International Trade in Endangered Species of Wild Fauna and Flora
2. The Convention on International Threatened Species of Wild Fauna and Flora
3. The Convention on International Trade in Endangered Species
4. The Community on International Trade in Endangered Species

- a) Only D b) Only C c) Only A d) Only B.

105. The bare ground between plants is covered with a layer of organic matter like straw to help retain soil moisture. Name this important method of soil conservation.

- a) Mulching b) Contour Barriers c) Rock Dams d) Terrace Farming.

106. The directives to the government which ensure social and economic reforms are called _____.

- a) directive viewpoints b) directive values c) directive philosophies d) directive principles.

107. With respect to the Indian Constitution, there is no discrimination on the basis of religion i.e. all religions are treated equally, Which one of the following terms refers to the above statement?

- a) Secular b) Sovereign c) Republic d) Democratic.

108. Fundamental rights refer to:

1. The list of subjects of the central government.
 2. The list of subjects of the state government.
 3. The basic rights which are granted to citizens for the holistic growth of the individuals.
 4. The list of subjects of both the state and central governments.
- a) Only B b) Only C c) Only A d) Only D.

109. Which one of the following is not a key feature of the Indian Constitution?

- a) Separation of Power b) Secularism
c) Presidential form of Government d) Federalism.

110. Indian Constitution was made in how much time period?

- a) 1 years 11 months 18 days b) 2 years 11 months 18 days
c) 3 years 11 months 18 days d) None of these.

111. This Fundamental Right allows citizens to move the court if they believe that any of their Fundamental Rights have been violated by the state.

- a) Right against Exploitation b) Right to Constitutional Remedies
c) Cultural and Exploitation d) Right to Freedom of Religion.

112. Which term refers to **All citizens of India have political rights which means that they can elect their representatives in the government** with special reference to the Indian Constitution?

- a) Socialist b) Liberty c) Democratic d) Secular.

113. The three - tier federal structure of the Indian government is composed of:

- a) Two at the state level and one at the local level
b) One government at the centre and two at the local level
c) One government at centre, another at state, another at local level
d) One government at the centre and two at the state level.

114. Indian Constitution does not contain

- a) equality b) fundamental rights c) reservations d) discriminations.

115. In American secularism, there is a:

- a) loose separation between religion and the state
b) strict separation between religion and the state
c) strict rule that contracts all religions
d) strict mingling of religion with the state

116. Secularism means

- a) separation of religion from State power.
- b) mixing of religion with politics.
- c) separation of one community from another.
- d) separation of politics from religion.

117. What can we not do in government schools?

- a) Celebrate religious festivals
- b) None of these
- c) Sing the national song
- d) Celebrate national festivals

118. The right provided by the constitution is called:

- a) Governmental Right
- b) Economic Right
- c) Optional Right
- d) Fundamental Right.

119. Untouchability is an ancient practice of

- a) Hinduism
- b) None of these
- c) Christianity
- d) Islam.

120. Majority of the population of Israel is

- a) Christian
- b) Muslim
- c) Jewish
- d) No majority religion in Israel