Atomic Energy Central School No. 4 Rawatbhata

Class VIII (Mathematics, Science, Social Science)

Time: 3 hours Multiple Choice Questions Examination July (2019-20) MM: 120

Name of student:_____Class:_____ Roll No._____

General Instructions:1. Darken the appropriate circle in the OMR answer sheet.

2. Each question carries 1 mark. There is no negative marking.

Mathematics

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

   a) 2 b) -2

   c) 3 d) None of these

2. The sum of three consecutive multiples of 8 is 888. Find the multiples. **1**

   a) None of these b) 288, 296 and 304

   c) 288, 300 and 304 d) 288, 296 and 310

3. Sum of two numbers is 95. If one exceeds the other by 15, find the numbers. **1**

   a) none of these b) 50 and 60

   c) 60 and 70 d) 40 and 55

4. Solve: $\frac{3x}{5} = \frac{12}{15}$ **1**

   a) $\frac{4}{3}$ b) -3

   c) -4 d) 3

5. What should be added to twice the rational number $-\frac{7}{3}$ to get $\frac{3}{7}$? **1**

   a) 21 b) 0

   c) $\frac{107}{21}$ d) 107

6. Fifteen years from now Ravi's age will be four times his present age. What is Ravi's present age? **1**

   a) 5 years b) 20 years

   c) 10 years d) 15 years

7. Two numbers in the ratio 5:3. If they differ by 18, what are the numbers? **1**

   a) 27, 36 b) 27, 40

   c) 36, 45 d) 45, 27

8. The difference between two whole numbers is 66. The ratio of the two numbers is $2:5$. What are the two numbers? **1**

a) None of these
b) $11, 55$
c) $44, 22$
d) $44, 110$

9. Solve: $2x - 3 = x + 2$ **1**

a) 5
b) 0
c) 4
d) 3

10. The denominator of a rational number is greater than its numerator by 8. If the numerator is increased by 17 and the denominator is decreased by 1, the number obtained is $\frac{3}{2}$. Find the rational number. **1**

a) 13
b) $\frac{13}{21}$
c) 21
d) $\frac{21}{13}$

11. Solve: $x + 7 - \frac{8x}{3} = \frac{17}{6} - \frac{5x}{2}$ **1**

a) -5
b) 4
c) 3
d) 5

12. Solve: $0.25\ (4m - 3) = 0.05\ (10 - 9)$ **1**

a) 0.6
b) 0.1
c) 0.12
d) 0.8

13. Solve: $3\ (5z - 7) - 2\ (9z - 11) = 4\ (8z - 13) - 17$ **1**

a) 4
b) 2
c) 5
d) 3

14. Arvind is twice as old as Shafali. Five years ago his age was three times Shafali's age. Find their present ages. **1**

a) None of these
b) $10 years, 20 years$
c) $15 years, 30 years$
d) $15 years, 20 years$

15. Solve: $2y + \frac{5}{3} = \frac{26}{3} - y$ **1**

a) $\frac{7}{3}$
b) 7
c) 3
d) None of these

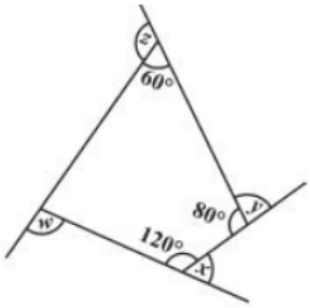
16. Find the measure of each exterior angle of a regular polygon of 30 sides. **1**

a) none of these
b) $30°$
c) $12°$
d) $36°$

17. Find the measure of each exterior angle of a regular polygon of 8 sides. **1**

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

18. Find x + y + z + w **1**



a) 360° b) 90°

c) 45° d) 180°

19. State the name of a regular polygon of 8 sides. **1**

a) none of these b) hexagon

c) heptagon d) octagon

20. Which of the following quadrilaterals has two pairs of adjacent sides equal and diagonals intersecting at right angles? **1**

a) square b) rectangle

c) kite d) rhombus

21. Find the number of sides of a regular polygon whose each exterior angle has a measure of $40°$. **1**

a) 6 b) 7

c) 8 d) 9

22. Which of the following quadrilaterals has a pair of opposite sides parallel? **1**

a) trapezium b) rectangle

c) kite d) rhombus

23. Find the number of sides of a regular polygon whose each exterior angle has a measure of $60°$. **1**

a) 4 b) 3

c) 5 d) 6

24. Two adjacent angles of a parallelogram have equal measure. Find the measure of each of the angles of the parallelogram. **1**

a) acute angle b) none of these

c) right angle d) obtuse angle

25. Find the measure of each exterior angle of a regular polygon of 12 sides. **1**

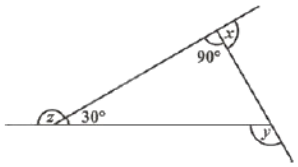
a) $60°$ b) $30°$

c) none of these d) $90°$

26. The _____ of a rhombus are perpendicular bisectors of one another. **1**

a) diagonals
b) none of these
c) sides
d) angles

27. Find x + z: **1**



a) 180
b) 240
c) none of these
d) 210

28. Find the number of sides of a regular polygon whose each exterior angle has a measure of 90°. **1**

a) 3
b) 2
c) 1
d) 4

29. The opposite angles of a parallelogram are of _____ measure. **1**

a) different
b) not equal
c) equal
d) greater than the other

30. What is the sum of the measures of the angles of a convex quadrilateral? **1**

a) 90^o
b) 45^o
c) 180°
d) 360^o

31. In the quadrilateral ABCD, the diagonals are **1**

a) AB and CD
b) CD and BC
c) BC and AD
d) AC and BD

32. Which property is used to construct a rhombus, if its two diagonals are given? **1**

a) Diagonals are perpendicular to each other
b) Diagonals are bisects to each other
c) Diagonals are congruent
d) Diagonals of a rhombus bisect each other at right angle

33. The diagonals of a _____ are of equal length. **1**

a) triangle
b) pentagon
c) rectangle
d) none of these

34. How many measurement can determine a rhombus? **1**

a) 1
b) 3
c) 4
d) 2

35. In a parallelogram PQRS, the measure of $\angle P = 75^0$, so the measure of $\angle Q$ will be_____. **1**

a) 105^0 b) None of these

c) 75^0 d) 100^0

36. The interior has a _____. **1**

a) side b) edge

c) boundary d) none of these

37. We get four congruent triangles, when we draw the two diagonals of which quadrilateral? **1**

a) Square b) Parallelogram

c) Kite d) None of these

38. A parallelogram each of whose angles measures 90° is _____. **1**

a) rectangle b) trapezium

c) kite d) rhombus

39. The sum of the measures of the external angles of any polygon is _____. **1**

a) 360^0 b) 90°

c) None of these d) 180°

40. Find the value of the unknown x. **1**

a) 100^o b) 70^o

c) 90^o d) 80^o

Science

41. Fodder crop examples are : **1**

a) Chenopodium & Alfalfa b) Amaranthus & Alfalfa

c) Burseem & Alfalfa d) Parthenium & Amaranthus

42. Blight of potato can be controlled by the use of : **1**

a) herbicide b) weedicide

c) insecticide d) fungicide

43. CAN & NPK are : **1**

a) biofertilizer b) mixed fertilisers

c) green manures d) pesticides

44. Process of separating grains from chaff is : **1**

a) Harvesting b) Winnowing

c) Buffering d) Threshing

45. The freshly harvested grains promote fungal growth because : **1**

a) they contain no pesticides b) they have stored microbial spores

c) they are in contact with ground d) They have moisture

46. Read the following statements : **1**

(i) Seed drill sows seeds non uniformly.

(ii) Seed drill covers seeds with soil after sowing.

a) Statement i) is correct and ii) is wrong

b) both are correct

c) both are wrong

d) Statement (ii) is correct and (i) is wrong.

47. Chemical pesticides are poisonous hence following precaution should be taken : **1**

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.

48. Which of the following is nutrient specific? **1**

a) fertiliser

b) both manure and fertiliser

c) only weedicides

d) manure

49. Viruses belong to _____ of living world. **1**

a) plantae kingdom

b) animalia kingdom

c) viralia kingdom

d) none of the kingdoms

50. Viruses are unaffected by : **1**

a) none of these

b) both antibiotics & antibodies

c) antibiotics

d) antibodies

51. Freezing ensures food preservation because : **1**

a) changes nutrients inside food

b) changes water inside food into ice

c) changes microbial flora inside food

d) kills microbes and its all spores

52. Read the following statements : **1**

i) Bacteria are unicellular organisms.

ii) Bacteria lack cell membrane but contain a cell wall.

a) both are wrong

b) Statement ii) is correct but i) is wrong.

c) both are correct

d) Statement i) is correct but ii) is wrong.

53. That group of microbes who can synthesize their own food? **1**

a) plasmodium

b) algae

c) fungi

d) viruses

54. Hepatitis can be prevented by: **1**

a) drinking boiled water

b) both drinking boiled water and vaccination

c) vaccination

d) eating balanced diet

55. We can prevent cases of malaria by: **1**

a) avoiding living in the vicinity of malaria patients
b) avoiding water from collecting anywhere
c) all the above
d) allowing water to collect in surroundings

56. Yeast catalyses conversion of sugar into : **1**

a) CO_2 and penicillin
b) alcohol and Carbon dioxide
c) citric acid and Carbon dioxide
d) lactic acid and Carbon dioxide

57. We can control the physical properties of synthetic fibres by : **1**

a) rearranging the dimers
b) rearranging the polymer
c) rearranging the tetramers
d) rearranging the monomers

58. The scratch proof and corrosion resistant low friction protective coating on metal surface is : **1**

a) Dacron
b) Teflon
c) Formica
d) Nylon

59. Atul was climbing mountain and he wondered about the strength of rope in his hand which was stronger than a steel wire. This rope would have been made up of : **1**

a) rayon
b) nylon
c) polyester
d) Dacron

60. Crushing the plastic bottles and containers initiates its : **1**

a) rejuvenation
b) biosynthesis
c) degradation
d) recycling

61. We should never dispose off polythenes in the sewage system because: **1**

a) all of them
b) release toxic fumes and gases
c) it chokes drains and pollutes the soil.
d) makes sewage non biodegradable

62. Dress materials made from synthetic fibres are : **1**

a) non airy
b) quite airy
c) good absorbant of sweat
d) non allergic

63. Recycled plastic can be produced from : **1**

a) unused thermosetting plastic
b) used thermosetting plastic
c) all synthetic fibres
d) used thermoplastic

64. _____ of plastics releases foul smell and toxic gases : **1**

a) biodegradation b) bioremediation

c) incineration d) Recycling

65. Read the following statements : **1**

i) Non metals are poor conductor of heat.

ii) Diamond is a non metal and good conductor of heat.

a) both are correct b) statement i) is correct but ii) is wrong

c) both are wrong d) statement ii) is correct but i) is wrong

66. Which non metal is required for proper functioning of thyroid : **1**

a) Sulphur b) Iodine

c) Chlorine d) Bromine

67. Tip of a matchstick has _____ in it : **1**

a) phosphorus b) potassium

c) sodium d) carbon

68. Read the following statements: **1**

i) Nitrogen is an inactive liquid non metal.

ii) Fluorine is an extremely reactive gaseous non metal.

a) statement ii) is correct but i) is wrong b) both are correct

c) statement i) is correct but ii) is wrong d) both are wrong

69. Steel is an alloy of : **1**

a) iron and tin b) iron and carbon

c) iron and copper d) iron and bronze

70. Copper and Zinc mixture forms : **1**

a) Brass b) Bronze

c) Steel d) Stainless steel

71. Tungsten is used in incandescent bulb because tungsten : **1**

a) has very high melting point b) high malleability & ductility

c) has very low melting point d) sonorosity

72. Two non-metals of greatest significance to life on earth are : **1**

a) iodine and oxygen b) hydrogen and oxygen

c) nitrogen and oxygen d) sulphur and oxygen

73. Such resources which can be continually replenished are called : 1

a) exhaustible resources b) natural resources

c) inexhaustible resources d) non replenishable resources

74. That gas produced by burning of fossil fuels which is itself highly poisonous: 1

a) Carbon monoxide b) Chlorofluorocarbons

c) Carbon dioxide d) Carbonic acid

75. CNG is a smokeless and environment friendly fuel : 1

i) On burning CNG produces carbon dioxide and water.

ii)On burning CNG produces carbon dioxide, hydrogen and ash.

a) both are wrong b) statement ii) is correct but i) is wrong

c) statement i) is correct but ii) is wrong d) both are correct

76. Petroleum is a mixture of : 1

a) oxygen, sulphur and carbon b) oxygen and nitrogen

c) carbon and hydrogen d) hydrocarbons

77. Petroleum is also known as : 1

a) black gold b) black diamond

c) noble liquid d) inert substance

78. Naphthalene balls used to repel insects and moths are obtained from : 1

a) Coke b) CNG

c) Coal gas d) Coal tar

79. Coal is classified according to : 1

a) its non carbon content b) its carbon content

c) time taken in its formation d) layer of earth surface it is found

80. Excessive use of coal & petroleum may lead to : 1

a) acid rain b) greenhouse effect

c) energy crisis d) all of these

81. The Governor – General who was impeached

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

82. Who is called a Mufti?

a) A jurist of the Muslim community responsible for expounding the law that the qazi would administer
b) A man on a horse
c) A judge
d) A scholar who has written and prescribed social rules and codes of behavior

83. Name the Chaukidar from Kittor who continued the resistance against the British even after the death of Rani Channamma in 1829.

a) Rayanna
b) Siddappa
c) Jayanna
d) Madhavappa

84. Which Battle was considered as the first major victory of the Company in india?

a) Second Carnatic War
b) Frist Carnatic war
c) Plassey
d) Buxar

85. What was farman?

a) It was a royal order.
b) It was a royal food.
c) It was a royal procession.
d) It was a royal dress.

86. Who ultimately won the Frist Anglo-Mysore War of 1767-1769?

a) Marathas
b) Nizam of Hyderabad
c) Hyder Ali
d) British

87. From the years mentioned below, choose the correct date of death of Aurangzeb, the Mughal ruler

a) On 3rd March 1800
b) On 3rd March 1850
c) On 3rd March 1707
d) On 3rd March 1750

88. From the list given below, which one would best describe a Resident of the East India Company ?

a) They were given the responsibility of handling soldiers of the Company .
b) They were given the responsibility of collecting revenue collection only
c) They were traders and incharge of the trade of the Company.
d) They were political or commercial agents and their job was to serve and further the interests of the Company

89. What happened on 20th March 1860, with respect to the indigo cultivation?

a) The price of indigo was increased by the British to encourage more cultivation
b) There was a very good harvest on indigo
c) Thousands of ryots started fresh new cultivation of indigo.
d) Thousands of ryots refused to grow indigo and started a rebellion.

90. One-third of the population was wiped out from Bengal because

a) an epidemic broke out
b) a terrible famine occurred there
c) none of these
d) a civil was broke out

91.Why, after an indigo harvest, the land could not be sown with rice?

a) British wanted only the cultivation of indigo and no other crops as only indigo cultivation was profitable.
b) The climate was not suitable for rice cultivation.
c) The cultivation of indigo made the soil infertile and hence not suitable for rice cultivation
d) Many colonies were set up along the canals and hence not suitable for crop cultivation.

92. Why was there a popular demand for Indian indigo in Italy, France and Britain?

a) Indigo imports were tax free

b) India was the biggest producer of indigo and no other country produced indigo

c) Indigo was used to dye cloth and there was a huge demand

d) There was a ban on indigo import in other countries .

93. The Mahalwari system was devised by

a) Charles Cornwallis

b) James Mill

c) Holt Mackenzie

d) Robert Clive

94. From the given map, identify the place marked in red with the help of the clue given :

This place in Bihar witnessed a massive uprising against the British indigo planters under the leadership of Mahatma Gandhi

a) Amritsar

b) Calcutta

c) Champaran

d) Ahmedabad

95. A process to make indigo pulp is given below. Fill up the missing link from the choices given so that the cycle is complete from the harvest till ready for sale :

Step-1 : After harvest the indigo plant is taken to the vats in the factory

Step-2 : Leaves removed and soaked in warm water for fermenting

Step-3 : _____

Step-4 : When liquid turn green and then blue , lime water added to the vat

Step-5 : Liquid drained off and the muddy sediment , the indigo pulp pressed and dried for sale.

a) Workers Press and mould the indigo pulp

b) Workers stamp and cut the pressed indigo pulp.

c) Rotten leaves taken out , solution stirred with paddles by Vat beaters

d) Women carried indigo plant to the factory .

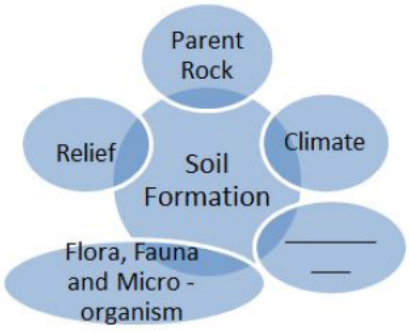
96. The picture shows an indigo factory, located near the indigo fields. After harvest, the women usually carry the indigo plant to a fermenting storage vessel to manufacture the dye. Name this storage unit used for fermenting the indigo leaves

a) Drum
b) Barrel
c) Cask
d) Vat

97. What is the majority of land in India used for?

a) cultivation
b) Other Use
c) forests
d) pasture

98. Analyse the given representation and complete the blank by filling it up an important factor of soil formation.



a) Contour Lines
b) Shelter Belts
c) Mulching
d) Time

99. _____ forests do not shed their leaves simultaneously in any season of the year

a) Evergreen
b) Temperate
c) Tropical
d) Deciduous

100. Based on the clues given below, guess Who am I ?

Three fourths of earth surface is covered by this

An important renewable natural resource

Though primarily used for drinking and washing , also used for productive purposes like irrigation, generation of electricity etc

a) Resources
b) Soil
c) Mud
d) Water

101.Trenches are made in front of the barriers developed with the help of stones or grass along the contour lines in the field. From the following list, choose the name given to this method of soil conservation.

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

102.Name this important method of soil conservation used in the coastal and dry regions.

a) Inter Cropping
b) Contour Ploughing
c) Mulching
d) Shelter Belts

103.Name the life bearing layer of the earth

a) Lithosphere
b) Atmosphere
c) Hemisphere
d) Biosphere

104.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

105.Which one is a correct statement with regard to Saudi Arabia?

a) They cannot build a temple, church, etc.
b) They can live in their own way.
c) None of these
d) Non-Muslims can gather in a public place for prayer.

106.The most important aspect of secularism is its .....

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

107.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

108.The government cannot force Sikhs to wear a helmet while driving two wheelers because.....

a) they look handsome in pagrí
b) wearing a pagri is a very important part of Sikh religion
c) they do not obey government rules
d) Sikhs are very powerful

109.Mention the number of Elected members of the Rajya Sabha .

a) 125
b) 200
c) 238
d) 340

110.The Parliament of India is the _____ law-making institution.

a) Lowest
b) Midst
c) All of the above
d) Supreme

111.Under which Article can President's Rule be imposed if an administrative machinery of a State breaks down ?

a) Article 366
b) Article 353
c) Article 356
d) Article 360

112.How many years normally do the Prime Minister and the Council of Ministers enjoy their term ?

a) Six
b) Five
c) Ten
d) Four

113.A few statements related to the Election and Powers of the Vice President of India are given below. Pick out the one that is not TRUE.

a) The Vice President acts on behalf of President when the President resigns
b) The Vice President acts on behalf of President when the President dies in office
c) The Vice President acts on behalf of President when the President is indisposed owing to illness or absence or nay other reason .
d) The Vice President is elected only by the members of the Rajya Sabha

114.How many building are there for central secretariat?

a) 5 b) 3

c) 2 d) 4

115.A sequence of passing the ordinary bills is given below: Pick out the correct sequence from the following

(i) Any member either of the ruling party or opposition may introduce the bill in any one of the houses ? Lok Sabha or Rajya Sabha

(ii) The Bill is send to the President for his assent

(iii) Voting on bill takes place after the debate and it goes to the Other house.

(iv) When President signs the Bill it becomes an Act.

a) (i), (iii),(ii),(iv) b) (ii),(iii),(iv),(i)

c) (i),(ii),(iii),(iv) d) (ii),(i),(iii),(iv)

116.Which house dissolves after 5 years?

a) Parliament b) Rajyasabha

c) Both LokSabha and RajyaSabha d) LokSabha

117.Impeachment refers to :

a) A process to conduct smooth and fair elections in a country b) A process in which a bill becomes a law

c) A process to legislate on the matters in the state list during an emergency d) A process in which the charges are levelled against the President.

118.What did universal adult franchise mean?

a) Right to Information b) Right against exploitation

c) Right to Discriminate d) Right to vote

119.The Parliament of India is also known as.....

a) Parliament House b) Lok Sabha

c) None of these d) Sansad

120.The parliament is made up with _____ .

a) President, Lok sabha, Rajya sabha b) All of the above

c) VidhanSabha d) Prime minister, BJP

Solution

Class 08 - Mathematics

MCQ July

Section A

1. (b)

   -2

   Explanation:

   $3\ (t-\ 3)\ =\ 5\ (2t+\ 1)$

   $or, 3t-9=10t+5$

   $or, 10t-3t=-9-5$

   $or, 7t=-14$

   $or, t=-14\div 7$

   $or, t=-2$

2. (b)

   288, 296 and 304

   Explanation:

   let first number be = x

   second multiple of 8 = $x+8$

   third multiple of 8 = $x+16$

   According to question

   $x+x+8+x+16=888$

   or, $3x+24=888$

   or, $3x=888-24$

   or, $3x=864$

   or, $x=864/3$

   or, $x=288$

   now first multiple of 8 =288

   second multiple of 8 =296

   third multiple of 8 =304

3. (d)

   40 and 55

Explanation:

Let two numbers be x and x+15.

Therefore, x+x+15=95

or, 2x =80

or, x= 40

One number is 40.

Another number is 55.

4. (a)

$\frac{4}{3}$

Explanation:

$\frac{3x}{5} = \frac{12}{15}$

by crossmultiplication

$3x \times 15 = 12 \times 5$

45x = 60

x =60/45

x= 4/3

5. (c)

$\frac{107}{21}$

Explanation:

Let the number be = x

according to question

2 (-7/3) + x = 3/7

-14 /3 + x = 3/7

by transposing

x = 3/7 + 14/3

by L.C.M

x = (9 + 98) / 21

x = 107 / 21

6. (a)

5 years

Explanation:

Let ravi's age = x

15 years from now his age will be =$x + 15$

According to question,

$x + 15 = 4 \times x$

or, $x + 15 = 4x$

or, $15 = 4x - x$

or, $15 = 3x$

or, $15/3 = x$

or, $5 = x$

Ravi's present age = 5 years

7. (d)

45, 27

Explanation:

Let the number be 5x and 3x.

Therefore, 5x - 3x=18

or, 2x=18

or, x=9

So, the numbers are 45 and 27.

8. (d)

$44, 110$

Explanation:

Let the number be = x

ratio $2 : 5$

according to question

$5x - 2x = 66$

or, $3x = 66$

by transposing

or,$x = 22$

Now put the value of x

first number =$5x = 110$

second number = $2x = 44$

9. (a)

5

Explanation:

$2x - 3 = x + 2$

by transposig both sides

2x - x = 2 + 3

x = 5

10. (b)

$\frac{13}{21}$

Explanation:

Let the number of numerator be = x

denominator = $x + 8$

According to the given condition

$x + 17/x + 8 - 1 = 3/2$

or, $x + 17/x + 7 = 3/2$

by crossmultiply,we get,

or, $2(x + 17) = 3(x + 7)$

or, $2x + 34 = 3x + 21$

or, $34 - 21 = 3x - 2x$

or, $13 = x$

Numerator =$x = 13$

Denominator = $x + 8 = 21$

Fraction = $13/21$

11. (a)

-5

Explanation:

$x + 7 - \frac{8x}{3} = \frac{17}{6} - \frac{5x}{2}$

or, $x - 8x/3 + 5x/2 = 17/6 - 7$

or, $(6x - 16x + 15x)/6 = (17 - 42)/6$

Eliminating denominator both sides and calculating, we get,

or, $5x = -25$

or, $x = -5$

12. (d)

0.8

Explanation:

$0.25\ (4m-\ 3)\ =\ 0.05\ (10-\ 9)$

or, m - 0.75 =0.05

or, m = 0.8

13. (b)

2

Explanation:

$3\ (5z-\ 7)\ -\ 2\ (9z-\ 11)\ =\ 4\ (8z-\ 13)\ -\ 17$

solve the brackets

$or, 15z-21-18z+22=32z-52-17$

$or, -3z+1=32z-69$

by transposing

$or, -3z-32z=-69-1$

$or, -35z=-70$

$or, z=2$

14. (b)

$10 years, 20 years$

Explanation:

Let Arvind's age be = x

shafali's age =$2x$

Five years ago,

Arvind's age be = $x-5$

shafali's age = $2x-5$

According to question,

$2x-5=3(x-5)$

or, $2x-5=3x-15$

or, $2x-3x=-15+5$

or, $-x=-10$

by cenceling (-) from both sides,

or, $x=10$

Now,

Arvind's age be =$x = 10$ years

shafali's age = $2x = 20$ years

15. (a)

$\frac{7}{3}$

Explanation:

$2y + \frac{5}{3} = \frac{26}{3} - y$

or, $2y + y = 26/3 - 5/3$

or, $3y = 21/3$

or, $3y = 7$

or, $y = 7/3$

16. (c)

12°

Explanation:

Exterior angle= $\frac{360^0}{number-of-sides}$

$n = \frac{360^0}{30} = 12^{\text{o}}$

17. (d)

45°

Explanation:

Exterior angle= $\frac{360^0}{number-of-sides}$

$n = \frac{360^0}{8} = 45^{\text{o}}$

18. (a)

360°

Explanation:

Given is a quadrilateral. Sum of all interior angles of quadrilateral = 360°

Single side of quadrilateral = 360 - (60 + 80 + 120)° = 360 - 260 = 100°

x + 120 = 180°

$\Rightarrow 180 - 120 = 60^{\circ}$By linear pair property

$y + 80 = 180^{\circ} \Rightarrow y = 180 - 80 = 100^{\circ}$

$z + 60 = 180^{\circ} \Rightarrow z = 180 - 60 = 120^{\circ}$

$w + 100 = 180^\circ \Rightarrow w = 180 - 100^\circ = 80^\circ$

x + y + z + w = 60 + 100 + 120 + 80 = 360°

19. (d)

octagon

Explanation:

An octagon is an eight-sided polygon or 8-gon

20. (c)

kite

Explanation:

kite

21. (d)

9

Explanation:

Number of sides = $\frac{360^0}{exterior-angle}$

$n = \frac{360^0}{40^0} = 9$

22. (a)

trapezium

Explanation:

trapezium

23. (d)

6

Explanation:

Number of sides

$n = \frac{360^0}{60^0} = 6$

24. (c)

right angle

Explanation:

Let an angle $= x$

$x + x = 180^0$ (sum of adjecent angle of a parallelogram is 180^0)

$2x = 180^o$

$x = \frac{180^0}{2}$

$x = 90^o$

25. (b)

30°

Explanation:

Exterior angle= $\frac{360^0}{number-of-sides}$

$n = \frac{360^0}{12} = 30^o$

26. (a)

diagonals

Explanation:

Diagonals bisect each other at right angle in a rhombus

27. (b)

240

Explanation:

z + 30 = 180^o (Linear pair)

z = 180 - 30 = 150^o

x + 90 = 180^o (Linear pair)

x = 180 - 90 = 90^o

Therefore, x + z = 90 + 150 = 240^o

28. (d)

4

Explanation:

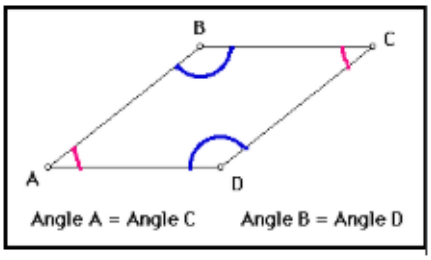
Number of sides

$n = \frac{360^0}{90^0} = 4$

29. (c)

equal

Explanation:

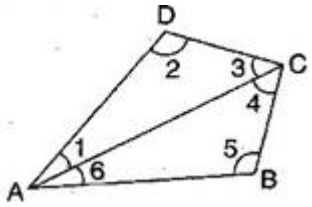


In the above picture we can see that in parralellogram ABCD, $\measuredangle A = \measuredangle C$ & $\measuredangle B = \measuredangle D$

30. (d)

360^o

Explanation:



Let ABCD is a convex quadrilateral, then we draw a diagonal AC which divides the quadrilateral into two triangles.

$\angle A + \angle B + \angle C + \angle D$

$= \angle 1 + \angle 6 + \angle 5 + \angle 4 + \angle 3 + \angle 2$

$= \angle(1 + 2 + 3) + \angle(4 + 5 + 6)$

We are aware that the total sum of the interior angles of any triangle will be 180^o and a quadrilateral is made up of two triangles

Thus, the sum of the interior angles of both the triangles are

$180 + 180 = 360^\circ$

So,the sum of the measures of the angles of a convex quadrilateral is 360^o

31. (d)

AC and BD

Explanation:

The diagonals of a quadrilateral are the lines that connects the opposite vertices of the quadrilateral. So, in quadrilateral ABCD, A & B are the opposite vertices to C & D repectively. So, diagonals thus formed will be AC & BD.

32. (d)

Diagonals of a rhombus bisect each other at right angle

Explanation:

To construct a rhombus whose two diagonals are given draw a line segment equal to the length of one diagonal and then using the property that the diagonals of a rhombus perpendicularly bisect each other , draw a perpendicular bisector of that diagonal equal to the length of other diagonal. Join all the four points.

33. (c)

rectangle

Explanation:

A rectangle has two diagonals. Each one is a line segment drawn between the two opposite vertices of the rectangle. The diagonls of a rectangle are equal and bisect each other.

34. (d)

2

Explanation:

To determiine a rhombus we need 2 measurements which may be either two diagonals or the adjacent sides and interior angle.

35. (a)

105^0

Explanation:

As we know that the alternate angles of a quadrilateral are supplementary.

$\implies \angle P + \angle Q = 180^0 \implies \angle Q = 180^0 - 75^0 = 105^0$

36. (c)

boundary

Explanation:

The interior of a polygon is the area inside the closed loop formed by the line segments. That's why interior always have boundary.

37. (a)

Square

Explanation:

As we know that the square has four equal sides and both the diagonals are equal and bisect each other. So when two diagonals diveide a square into four triangles then they have equal sides. So these four triangles are said to be congruent.

38. (a)

rectangle

Explanation:

A rectangle is a type of parallelogram in which all the four angles are of 90^0 but the opposite sides are equal.

39. (a)

360^0

Explanation:

Let the number of sides of a convex polygon be 'n'.

Let the interior angle be a_1, a_2, ---------a_n and the corresponding exterior angles be b_1, b_2,-------,b_n.

We know that the sum of each interior angle and the corresponding exterior angle is 180^0.

Hence, $a_1 + b_1 = 180^0$; $a_2 + b_2 = 180^0$ and so on.

Let sum of exterior angles of polygon be S_1. Also, the sum of interior angles is (2n-4)x90.

Hence, (2n-4)x90 + S_1 = 180n $\implies$ S_1 = 180n-180n+360 = 360^0

Thus the sum of exterior angle of a polygon is 360^0.

40. (a)

100^o

Explanation:

As we know that the sum of opposite angles of a parallelogram is 180^0.

$\Rightarrow \angle x + 80^0 = 180^0 \Rightarrow \angle x = 100^0$

Solution

Class 08 - Science

MCQ JULY 2019

Section A

41. (c)
    Burseem & Alfalfa

    Explanation:
    Those crops which are grown for fodder of animals are called fodder crops. The most common fodder crops are Burseem and Alfalfa.

42. (d)
    fungicide

    Explanation:
    Blight of potato is caused by fungi, so it can be controlled by use of fungicides that kills the fungi. In this disease leaves of potato plant become blackish and reduce photosynthesis.

43. (b)
    mixed fertilisers

    Explanation:
    CAN stands for Calcium, Ammonium Nitrate fertiliser and NPK stands for Nitrogen, Phosphorous and Potassium fertilisers. Both CAN and NPK are mixed fertilisers.

44. (d)
    Threshing

    Explanation:
    The process of separating grain or seeds from chaff or straw is called threshing. Threshing is carried out with the help of a machine called thresher.

45. (d)
    They have moisture

    Explanation:

Freshly harvested grains contain lots of moisture that promote fungal growth. Seeds are dried in sunlight before storing to avoid the fungal growth.

46. (d)
Statement (ii) is correct and (i) is wrong.

Explanation:
Seed drill sows seeds uniformly at equal distance. Seed drill covers the seeds with soil after sowing to avoid loss of seeds by birds.

47. (d)
keep nose and mouth covered.

Explanation:
During spraying pesticides nose and mouth should be covered because chemical pesticides are poisonous and may be inhaled during breathing.

48. (a)
fertiliser

Explanation:
Fertilisers are nutrient specific and provide one or a few nutrients to the soil. On the other hand manure is not nutrient specific. It contains all nutrients as well as humus.

49. (d)
none of the kingdoms

Explanation:
Viruses are not included in any kingdom of Robert Whittaker because they show property of both living and non-living. They do not possess cellular structure too.

50. (c)
antibiotics

Explanation:
Antibiotics are substance by WBC in response to microbes. Viruses are unaffected by antibiotics as they lack cellular mechanism on which antibodies

acts.

51. (b)
changes water inside food into ice

Explanation:
Freezing ensures food preservation because at low temperature microbial growth do not take place and water inside the food is changed into ice.

52. (d)
Statement i) is correct but ii) is wrong.

Explanation:
Bacteria are unicellular prokaryotic organisms not contain well defined nucleus. Bacteria contain both cell membrane as well as cell wall.

53. (b)
algae

Explanation:
The group of organisms that can synthesize their own food are called autotrophs. They contain chlorophyll that captures the solar energy for photosynthesis. Algae contain chlorophyll; hence they can prepare their own food.

54. (b)
both drinking boiled water and vaccination

Explanation:
Hepatitis is a viral disease transmitted through contaminated water and food. Hepatitis can be prevented by drinking boiled water and taking vaccine of hepatitis time to time.

55. (b)
avoiding water from collecting anywhere

Explanation:
Malaria can be prevented by avoiding water from collecting in the surrounding. Stagnant water provides breeding ground for mosquito that

carries plasmodium from infected person to healthy person.

56. (b)
alcohol and Carbon dioxide

Explanation:
Yeast catalyses conversion of sugar molecules into alcohols and carbon dioxide in absence of oxygen. The process of formation of alcohol by yeast is called as fermentation.

57. (d)
rearranging the monomers

Explanation:
The physical properties of fibre can be changed by rearranging the monomers, the inter and intrachain bonding etc.

58. (b)
Teflon

Explanation:
Teflon is scratch proof and corrosion resistant low friction protective coating on metal surface. It is coated on cookware to make them scratch resistant.

59. (b)
nylon

Explanation:
Nylon is synthetic fibre which is used to make rope and other household articles. The strength of rope made of nylon is stronger than a steel wire and it is also elastic and light, which makes it easier to carry. Strength is due to cross linking polymerisation.

60. (d)
recycling

Explanation:
Crushing the plastic bottles and containers initiates its recycling. Plastic bottles and other containers should be crushed to avoid its reuse without sterilisation.

61. (c)
it chokes drains and pollutes the soil.

Explanation:
We should never dispose off polythene in the sewage system because polythene chokes drains leading to overflowing on roads and streets and also pollutes the soil,since it takes long time to decomposed .

62. (a)
non airy

Explanation:
Dress materials made from synthetic fibres are non airy as monomers of these materials are closely packed. Although they are soak less water and are also resistant to acids and alkalis.

63. (d)
used thermoplastic

Explanation:
Recycled plastic can be produced from used thermoplastic. Thermoplastic can be melted by heating and can be moulded into other desired products. This plastic can be used to produce recycled plastic articles.

64. (c)
incineration

Explanation:
Incineration is a waste treatment process by burning. Incineration of plastics release foul smell and toxic gases into the environment that leads to air pollution.

65. (a)
both are correct

Explanation:
Non-metals are poor conductor of heat and electricity but diamond is a non metal which is good conductor of heat and electricity.

66. (b)
Iodine

Explanation:
Thyroid gland is important gland that produce thyroxin hormone essential for metabolism of carbohydrates, proteins and fats. Iodine is essential for functioning of thyroid.

67. (a)
phosphorus

Explanation:
The tip of matchstick has phosphorus in it. When matchstick is rubbed on match box, it catch fire due to friction.

68. (a)
statement ii) is correct but i) is wrong

Explanation:
Nitrogen is an inactive gaseous non-metal. Nitrogen forms the maximum proportion of air. Fluorine is an extremely reactive gaseous non-metal due to smaller size.

69. (b)
iron and carbon

Explanation:
Alloys are homogenous mixture of two or more metal or non metal in a fixed ration. Steel is an alloy of iron and carbon.

70. (a)
Brass

Explanation:
The homogenous mixture of copper and zinc form an alloy called as brass. Brass is used to make utensils and statues.

71. (a)
has very high melting point

Explanation:
Tungsten is used in incandescent bulb because tungsten has very high melting point and it has very high resistivity. It converts electrical energy into light energy.

72. (b)
hydrogen and oxygen

Explanation:
Water the basic need of life is made up of hydrogen and oxygen. So, hydrogen and oxygen are two non metals which are the gretest significance of life on earth.

73. (c)
inexhaustible resources

Explanation:
Natural resources are either exhaustible or inexhaustible. Those resources which can be continually replenished are called inexhaustible resources.

74. (a)
Carbon monoxide

Explanation:
Incomplete burning of fossil fuels produces carbon monoxide gas in place of carbon dioxide. Carbon monoxide gas is a poisonous gas that bind with haemoglobin to reduce oxygen carrying capacity.

75. (c)
statement i) is correct but ii) is wrong

Explanation:
CNG is a smokeless and environmental friendly fuel as on combustion, CNG produces carbon dioxide and water along with large amount of energy to run vehicles.

76. (d)
hydrocarbons

Explanation:
Petroleum is a mixture of different hydrocarbons starting from methane (CH_4) to higher hydrocarbons. Compounds of carbon and hydrogen are called as hydrocarbon.

77. (a)
black gold

Explanation:
Petroleum is also known as black gold as it is an important resource for industry, household and all other aspects of like. It is also sold at high price.

78. (d)
Coal tar

Explanation:
Naphthalene balls used to repel insects and moths from cloths are obtained from coal tar. Coal tar is obtained as by product of fractional distillation of petroleum.

79. (b)
its carbon content

Explanation:
Different kinds of coal are found in earth crust. They are classified into different categories on basis of carbon content in it.

80. (d)
all of these

Explanation:
Excessive use of coal and petroleum causes green house effect, acid rain and energy crisis in future. Burning of fossil fuels release carbon dioxide gas. Carbon dioxide gas causes green house effect.

Solution

Class 08 - Social Science

MCQ Examination July (2019-20)

Section A

81. (c) Warren Hasting

    Explanation:

    When Warren Hastings went back to England in 1785, Edmund Burke accused him of being personally responsible for the misgovernment of Bengal. This led to an impeachment proceeding in the British Parliament that lasted seven years.

82. (a) A jurist of the Muslim community responsible for expounding the law that the qazi would administer

    Explanation:

    A mufti is an Islamic scholar who interprets and expounds Islamic law. Muftis are jurists qualified to give authoritative legal opinions known as fatwas. Historically, they were members of the ulama ranking above qadis

83. (a) Rayanna

    Explanation:

    When the British tried to annex the small state of Kitoor,Rani Channammatook to arms and led an anti -British resistance movement. She was arrested in 1824 and died in prison in 1829.But Rayanna, a poor chowkidar of Sangoli in Kitoor,carried on the resistence. With popular support he destroyed many British camps and records.He was caught and hanged by the British in 1830.

84. (c) Plassey

    Explanation:

    The Battle of Plassey was a decisive victory of the British East India Company over the Nawab of Bengal Siraj-ud-daulah and his French allies on 23 June 1757. The battle consolidated the Company's presence in Bengal, which later expanded to cover much of India over the next hundred years.The Battle of Plassey became famous because it was the first major victory the Company won in India.

85. (a)

    It was a royal order.

Explanation:

A Farman is a royal edict or a royal order. For example;Aurangzeb's farman, for instance, had granted only the Company the right to trade duty free.

86. (c) Hyder Ali

Explanation:

The First Anglo–Mysore War (1767–1769) was a conflict in India between the Sultanate of Mysore and the East India Company. The war was instigated in part by the machinations of Asaf Jah II, the Nizam of Hyderabad, who sought to divert the company's resources from attempts to gain control of the Northern Circars.As Hyder Ali gain some measure of success against the British, almost capturing Madras. The British convinced the Nizam of Hyderabad to attack Hyder, but the Nizam changed sides, supporting the Sultan,that helped Hyder ali to win the war.

87. (c) On 3rd March 1707

Explanation:

Aurangzeb was the sixth emperor of the Mughal Empire. He ruled over most of the Indian subcontinent. His reign lasted for 49 years from 1658 until his death in 3 March 1707. During this time, Aurangzeb greatly expanded the territory of the Mughal Empire. He was constantly at war. Victories in the south expanded the Empire to more than 3.2 million square kilometres. He was the last great ruler of the Mughal dynasty. After his death, the power of the Mughal Empire declined quickly.

88. (d) They were political or commercial agents and their job was to serve and further the interests of the Company

Explanation:

A Resident or Political Agent was an official of the East India Company (and after 1813, the British Government), who was based in a princely state and who served as part diplomat, part adviser to the native ruler, and part monitor of activities in the princely state.

89. (d) Thousands of ryots refused to grow indigo and started a rebellion.

Explanation:

As the rebellion spread,ryots refused to pay rentsto the planters,and attacked indigo factories armed with swords and spears,bows and arrows.Women turned up to fight with pots,pans and kitchen implements.

90. (b)
a terrible famine occurred there

Explanation:
A terrible famine occurred there which killed ten million people in Bengal which is almost one-third population of Bengal.

91. (c) The cultivation of indigo made the soil infertile and hence not suitable for rice cultivation
Explanation:
The planters usually insisted that indigo be cultivated on the best soils in which peasants preferred to cultivate rice.Indigo moreover ,had deep roots and it exhausted the soil rapidly.

92. (c) Indigo was used to dye cloth and there was a huge demand
Explanation:
Cloth dyers preferred indigo as a dye. Indigo produced a rich blue colour, where as the dye from easily available woad was pale and dull.

93. (c)
Holt Mackenzie

Explanation:
Holt Mackenzie developed this new system based on the estimated revenue of each plot with a village. He added up to calculate revenue that each village or mahal had to pay. That is why it is called mahalwari system.

94. (c)
Champaran

Explanation:
When Mahatma Gandhi returned from South Africa,a peasant from Bihar persuaded him to visit Champaran and see the plight of Indigo cultivators there.

95. (c) Rotten leaves taken out , solution stirred with paddles by Vat beaters
Explanation:
Now the rotten leaves were taken out and the liquid drained into another vat that was placed just below the first vat.In the second vat(known as the beater

vat)the solution was continously stirred and beaten with paddles.

96. (d)
Vat

Explanation:
After the harvest, indigo plant was taken to vats in the indigo factory.Vat was a fermenting or storage vessel. Three to four vats were needed to manufacture the dye. Each vat had a seperate function. The vat beater stirred the solution in the vat. These workers had to remain in waist deep water for over eight hours to beat the indigo solution.

97. (a)
cultivation

Explanation:
In India the percentage area in crop land (cultivation) is about 57% .Hence the majority of land in India used for Cultivation.

98. (d)
Time

Explanation:
Factors of soil Formation

i. Relief: Altitude and slope determines the accumulation of soil.
ii. Parent Rock: It determines, colour, texture, chemical properties, mineral contents, etc.
iii. Climate: Rainfall and temperature influence rate of humus and weathering.
iv. Flora, Fauna and Micro organisms.
v. Time: It determines thickness of soil profile.

99. (a) Evergreen
Explanation:
Forests are broadly classified as evergreen and deciduous depending on when they shed their leaves. Evergreen forests do not shed their leaves simultaneously in any season of the year.

100. (d) Water
Explanation:

A.Water is a vital renewable natural resource. Three-fourth's of the earth's surface is covered with water.
B.Humans use huge amounts of water not only for drinking and washing but also in the process of production. Water for agriculture, industries,generating electricity.

101. (b) Contour Barriers
Explanation:
Contour Barriers: Stones, grass, soil are used to make barriers. Trenches are made in front of the barriers to collect water.

102. (d)
Shelter Belts

Explanation:
Shelter Belts: Rows of trees are planted to create shelter. Thus, the speed of wind is reduced.Such practice is done in dry and coastal region.

103. (d) Biosphere
Explanation:
Natural vegetation and wildlife exist only
in the narrow zone of contact between the
lithosphere, hydrosphere and atmosphere that we call biosphere. In the biosphere living beings are inter-related and interdependent on each other for survival.

104. (a) Mulching
Explanation:
Mulching: Bare ground between plants is covered with a layer of organic matter like straw. It helps to retail soil moisture.

105. (a) They cannot build a temple, church, etc.
Explanation:
In Saudi Arabia, non-Muslims are not allowed to build a temple, church etc, and nor can they gather in a public place for prayers.

106. (d) separation of religion from State power
Explanation:
The most important aspect of secularism
is its separation of religion from State power. This is important for a country to

function democratically.

107. (b) strict separation between religion and the State
Explanation:
There is one significant way in which Indian secularism differs from the dominant understanding of secularism as practised in the United States of America. This is because unlike the strict separation between religion and the State in American secularism, in Indian secularism the State can intervene in religious affairs.

108. (b) wearing a pagri is a very important part of Sikh religion
Explanation:
For Sikhs, wearing a pugri is a very important part of their religion. The government cannot force them to wear a helmet.

109. (c) 238
Explanation:
Article **80** of the Constitution lays down the maximum strength of Rajya Sabha as **250**, out of which **12** members are nominated by the President and **238** are representatives of the States and of the **two** Union Territories.

110. (d)
Supreme

Explanation:
The Parliament of India (Sansad) is the supreme law-making institution. It has two Houses, the Rajya Sabha and the Lok Sabha.

111. (c) Article 356
Explanation:
Under Article 356, the President may issue a proclamation to impose emergency in a state if he is satisfied on receipt of a report from the Governor of the concerned State, or otherwise, that a situation has arisen under which the administration of the State cannot be carried on according to the provisions of the constitution.

112. (b) Five
Explanation:
The tenure of the Prime Minister and the Council of Ministers is 5 years.

113. (d) The Vice President is elected only by the members of the Rajya Sabha
Explanation:
The Vice-President is elected by the members of the Lok Sabha and Rajya Sabha

114. (c)
2

Explanation:
There are 2 buildings for central secretariat.

115. (a) (i), (iii),(ii),(iv)
Explanation:
Firstly the bill is introduced in both the houses.After the debate the voting is done and it goes to other house.It is then sent to president for his assent.The bill becomes law when the president signs it.

116. (d)
LokSabha

Explanation:
In LokSabha,Members are elected for a period of 5 years . It is a temporary house and it dissolves after 5 years.

117. (d) A process in which the charges are levelled against the President.
Explanation:
The President may also be removed before the expiry of the term through impeachment for violating the Constitution of India by the Parliament of India.The process may start in either of the two houses of the Parliament. The house initiates the process by levelling the charges against the President.

118. (d)
Right to vote

Explanation:
Universal Adult Franchise means that the right to vote should be given to all adult citizens without the discrimination of caste, class, colour, religion or gender

119. (d) Sansad

Explanation:

The Parliament of India is also commonly known as Sansad.

120. (a)

President, Lok sabha, Rajya sabha

Explanation:

Parliament consist of President, Lok sabha, Rajya sabha