

Atomic Energy Central School No 4 Rawatbhata

Multiple Choice Questions Examination (November 2019-20)

MM: 120

Class VI (Mathematics, Science, Social Science)

Time: 3hour

Name of student : _____ **Roll No.** _____ **Class Sec** _____

Date: _____ **Invigilator's Sign:** _____

Mathematics

1. Which has larger perimeter? 1
a) a regular pentagon of side 3 cm b) a regular heptagon of side 3 cm
c) a regular octagon of side 3 cm d) a regular hexagon of side 3 cm
2. If the area of one tile is 102 cm^2 . What will be the area of 5 tiles? 1
a) 50 cm^2 b) 100 cm^2
c) 510 cm^2 d) None of these
3. What is the length of the garden if area of rectangular garden of width 60 m is 300 sq. m ? 1
a) 8 m b) 50 m
c) 5 m d) 7 m
4. Find the perimeter of a rectangular sheet, if its area is 440 cm^2 and the length is 20 cm. 1
a) 25 cm b) 20 cm
c) 28 cm d) 84 cm
5. A room is 5 m 40 cm long and 3 m 75 cm wide. Find the area of the carpet needed to cover the floor. 1
a) 2025 m b) 20.25 m^2
c) None of these d) 20 m 25 cm
6. If perimeter of triangle is 15 cm and any two sides are of length 4 cm and 3 cm, then length of third side will be 1
a) 6 cm b) 7 cm
c) 8 cm d) 5 cm
7. The perimeter of a rectangle whose length is 4 cm and breadth is 5 cm 1
a) 18 cm b) 9 cm
c) 1 cm d) 20 cm
8. A floor is 5 m long and 4 m wide. A square carpet of sides 3 m is laid on the floor. Find the area of the floor that is not carpeted. 1
a) 11 m b) 11 m^2
c) 9 m^2 d) None of these
9. An athlete takes 10 rounds of a rectangular park, 50 m long and 25 m wide. Find the total distance covered by him. 1
a) 1200 m b) None of these
c) 1300 m d) 1500 m
10. A table top measures 3 m by 50 cm, the area in sq. m will be 1
a) 9 m^2 b) 1.5 m^2
c) 12 m d) 6 m
11. The cost of fencing a square park of side 100 m at the rate of Rs 10 per m will be 1
a) Rs 400 b) Rs 40000
c) Rs 4000 d) None of these

12. _____ of a rectangle = length \times breadth 1
- a) length b) breadth
 c) perimeter d) area
13. What is the length of side of square whose area is 64 m^2 ? 1
- a) 32 cm b) 16 cm
 c) 40 cm d) 8 cm
14. Area of rectangular garden of 50 m broad is 300 sq. m, the length of garden is 1
- a) 6 m b) 12 m
 c) 60 m d) 30 m
15. The perimeter of a rectangular sheet is 100 m. If the length is 25 m, find its area. 1
- a) 150 m^2 b) 100 m^2
 c) 625 m^2 d) 200 m^2
16. Find the area in square metre of a piece of cloth 1m 25 cm wide and 2 m long. 1
- a) 1.5 square m b) 4.5 square m
 c) 2.5 square m d) None of these
17. Five square flower beds each of sides 1 m are dug on a piece of land 5 m long and 4 m wide. What is the area of the remaining part of the land? 1
- a) 5 square m b) None of these
 c) 10 square m d) 15 square m
18. The width in area of rectangle is 1
- a) Area \times Length b) $\frac{\text{Area}}{\text{Length}}$
 c) None of these d) $\frac{\text{Length}}{\text{Area}}$
19. Area of blackboard of your class will be _____ than the area floor. 1
- a) None of these b) greater
 c) less d) equal
20. The perimeter of a rectangle is 130 m. If the breadth of the rectangle is 30 m, find its area. 1
- a) None of these b) 1500 m^2
 c) 1050 m^2 d) 1750 m
21. The perimeter of a regular hexagon is 18 cm. How long is its one side? 1
- a) 4 cm b) None of these
 c) 6 cm d) 3 cm
22. The perimeter of a rectangle is 130 cm. If the breadth of the rectangle is 30 cm, find its length. 1
- a) 35 cm b) 30 cm
 c) 25 cm d) None of these
23. Find the perimeter of a rectangle whose length and breadth are 150 cm and 1 m respectively. 1
- a) 5 m b) None of these
 c) 4.5 m d) 6 m
24. Find the breadth of a rectangular plot of land, if its area is 440 m^2 and the length is 22 m. 1
- a) 15 m b) 2 m
 c) None of these d) 20 m
25. Area of a triangle with sides 3cm, 4cm, 5cm is 1
- a) 41sqcm b) 2sqcm
 c) 3sqcm d) 6sqcm
26. $1 \text{ m}^2 = \text{_____ cm}^2$ 1
- a) 10 b) 100
 c) 10000 d) 1000
27. The perimeter of a rectangular sheet is 100 cm. If the length is 35 cm, find its breadth. 1
- a) None of these b) 10 cm

- a) raw
c) unorganise
- b) None of these
d) organise
40. _____ can be 'grouped' and presented systematically through 'grouped frequency distribution'. **1**
- a) None of these
c) Interval
- b) Raw data
d) Observation

Science

41. Which type of motion is shown by fish in water? **1**
- a) Non-random motion
c) Periodic motion
- b) Circular motion
d) Random motion
42. In 1790, French created a standard unit of measurement called **1**
- a) Naino system
c) International standard system
- b) Metric system
d) Modern system
43. Which mode of transport should be used to travel other countries? **1**
- a) Bus
c) Aero plane
- b) Car
d) Train
44. Standard unit is necessary for **1**
- a) Selling and buying
c) Uniformity in measurement
- b) Having equal value
d) Maintaining the record
45. Correct arrangement in increasing order is **1**
- a) $1\text{m} < 1\text{mm} < 1\text{cm} < 1\text{km}$
c) $1\text{cm} < 1\text{mm} < 1\text{m} < 1\text{km}$
- b) $1\text{km} < 1\text{cm} < 1\text{m} < 1\text{mm}$
d) $1\text{mm} < 1\text{cm} < 1\text{m} < 1\text{km}$
46. Tip of a second clock moves in **1**
- a) Oscillatory motion
c) Periodic motion
- b) Linear motion
d) Circular motion
47. When a body does not change its position with time with respect to surrounding the body is said to be in state of **1**
- a) Speed
c) Motion
- b) Velocity
d) Rest
48. Electric trains, monorails and supersonic Aeroplane are invention of **1**
- a) 18th century
c) 20th century
- b) 19th century
d) 17th century
49. The rate of change in position of a body is called **1**
- a) Acceleration
c) Motion
- b) Rest
d) Speed
50. The standard unit of length in SI system is **1**
- a) Metre
c) Yard
- b) Foot
d) Centimeter
51. Moving along a straight line is known as **1**
- a) Periodic motion
c) Curvilinear motion
- b) Periodic motion
d) Rectilinear motion
52. Time interval of 1000 years is called **1**
- a) Trillion
c) Decade
- b) Century
d) A millennium
53. Change in position of a body with time is called **1**
- a) Distance
c) Displacement
- b) Motion
d) Speed
54. A body moving along a curve is said to have a **1**
- a) Vibratory motion
c) Curvilinear motion
- b) Circular motion
d) Rectilinear motion

55. One cm is equal to 1
 a) 100 m b) 1 m
 c) 10 mm d) 1 km
56. The accurate measurement are important aspect of any 1
 a) Cereals weighing b) Scientific experiment
 c) Vegetable and fruit selling d) Measuring distance between two places
57. Height of a boy is 1.65 m. Its height in cm is 1
 a) 16.50 cm b) 16.05 cm
 c) 155 cm d) 165 cm
58. Speed of vehicle is not always uniform on road because of 1
 a) Road is not always straight b) Red light slows down the speed
 c) Other vehicle moving in opposite direction d) Traffic and red light
59. Standard unit of measuring mass is called 1
 a) Ton b) Gram
 c) Quintal d) Kilogram
60. Motion of pendulum and motion of child on swing are example of 1
 a) Periodic motion b) Non- uniform motion
 c) Vibratory motion d) Circular motion
61. The colour of shadow 1
 a) Depends upon colour of the object b) Depends upon size of the object
 c) Is always black d) Is always coloured
62. When you stands in front of a small mirror. The image formed will appear to be of 1
 a) Larger and inverted b) Same size and erect
 c) Smaller and erect d) Larger and erect
63. We are able to see the object when 1
 a) Refracted light enters the eyes b) Light emitted by object enters the eyes
 c) All of these d) Reflected light from the object enters the eyes
64. Which of the following is not necessary for shadow formation? 1
 a) Unidirectional light b) Translucent body
 c) Large sized transparent body d) Opaque object
65. In which condition, shadow cannot be formed. 1
 a) Light is very bright b) Light is coming from all direction
 c) Object is very small d) Object is very large
66. Which group contains only luminous body? 1
 a) Moon, Stars, jugnoo b) Jugnoo, starfish, cat
 c) Tube-light, Sun, Stars d) Bulb, moon, Stars
67. The shadow of earth is formed on moon during 1
 a) Solar eclipse b) Rainbow formation
 c) Lunar eclipse d) Inversion
68. Which type of mirror is used to make Periscope? 1
 a) Plane mirror b) Concave mirror
 c) Virtual mirror d) Convex mirror

69. The small patches of sunlight under the tree are the 1
 a) Images of leaves b) Images of Sun
 c) Shadow of tree d) Shadow of leaves
70. Which one is a natural living luminous body? 1
 a) Bat b) Fish
 c) Jugnoo d) Cat
71. When light bounces off from polished surface, the surface is called 1
 a) Translucent b) Reflector
 c) Opaque d) Transparent
72. An object that allows the partial passing of light through it is called 1
 a) Transparent object b) Reflecting object
 c) Translucent object d) Opaque object
73. Which of the following physical quantity do not require medium for propagation? 1
 a) Light b) Image
 c) Speed d) Sound
74. Mirror is a reflecting surface but glass is a 1
 a) Non-luminous object b) Transparent object
 c) Luminous object d) Opaque object
75. Which of the following is not always necessary to form a shadow? 1
 a) Screen b) Opaque object
 c) Source of light d) Sun
76. Which one is a transparent object? 1
 a) Wax paper b) Dense fog
 c) Reading glass d) Stone
77. Shadow is formed by opaque object but image is formed by 1
 a) Mirror b) Transparent object only
 c) Translucent object d) Opaque object
78. Which source of light is called ultimate source of light? 1
 a) Electric bulb b) Sun
 c) Street light d) Moon
79. From a source, light travels as rays which are 1
 a) Divergent b) Convergent
 c) Parallel d) Diffused
80. The image formed by pin hole camera is 1
 a) Virtual and inverted b) Virtual and erect
 c) Real and inverted d) Real and erect

Social Science

81. Where is the Great wall located? 1
 a) Greece b) Egypt
 c) Iraq d) China
82. When did Ashoka ascend the throne 1
 a) 327 B.C b) 237 B.C
 c) 273 B.C d) 372 B.C
83. Where were Ashoka's message inscribed? 1
 a) Roof b) Land
 c) Pillar d) Wall
84. Who was dhamma mahamatta 1
 a) Prince b) Soldiers
 c) King d) Officials
85. Which part of the Mauryan Empire was important for precious stones 1
 a) North b) West
 c) South d) East

86. Who was last Mauryan emperor 1
 a) Chandragupta b) Ashoka
 c) Bimbisara d) Brihadartha
87. Which of the following is not reason for downfall of Mauryan empire 1
 a) Empty treasure b) Capable successor of Ashoka
 c) Vast Empire d) Policy of non-violence
88. A code of morality enacted by the Ahsoka for his people to lead to peaceful and virtuous life 1
 a) Dhamatta b) Dhaman
 c) Dhamma d) Dharmana
89. Arrange in order of their happenings, options are as follows 1
 (I) Chandagupta defeated Seleucus
 (II) Ashoka became Buddhist
 (III) Ashoka conquered Kalinga
 (IV) Ashoka send his son to Sri Lanka
 Options are as follows:
 a) I,III,IV, II b) I,III,IV, II
 c) I,II,III,IV d) I,III,II,IV
90. Ahsoka wanted to popularise 1
 a) Christianity b) Buddhism
 c) Jainism d) Muslim
91. How empires different from kingdoms 1
 a) They need less officials than that of kingdom b) They need less money than that of kingdom
 c) They required more resources than that of kingdom d) They are small in areas than that of kingdom
92. According to the description of Patliputra, written down by Megasthenes, it has _____ 1
 a) 450 towers and 46 gates b) 570 towers and 64 gates
 c) 650 towers and 68 gates d) 350 towers and 54 gates
93. When members of the same family become rulers one after another the family is called often 1
 a) Association b) Dynasty
 c) Kingdom d) Empire
94. After ascending throne, Ashoka wages war against Kalinga in 1
 a) 216 BC b) 361 BC
 c) 261 BC d) 361 BC
95. Where is Rampura at present 1
 a) Andhra Pradesh b) Gujarat
 c) Uttar Pradesh d) Bihar
96. Cotopaxi mountain is in 1
 a) South America b) Asia
 c) Africa d) North America
97. Which mountains are created when large areas are broken and displaced vertically? 1
 a) Fold b) Block
 c) Volcanic d) Earthquake
98. Water from the mountains is also used for irrigation and generation of 1
 a) solar-electricity b) None of these
 c) hydro-electricity d) wind-electricity
99. Mt.Fujiyama is in 1
 a) Europe b) Russia
 c) Japan d) China
100. ____ is an area where the land meets a stretch of ocean or a lake 1
 a) Sandbar b) River
 c) Shore d) Sea cave

101. Glaciers are found in 1
 a) the plains b) the mountains
 c) the plateaus d) land
102. The Himalayan Mountains and the Alps are ____ mountains with rugged relief and high conical peaks. 1
 a) triangular fold b) old fold
 c) young fold d) circular fold
103. The Himalayan Mountains and the Alps are young fold mountains with rugged 1
 a) relief and high cylindrical peaks b) relief and low conical peaks
 c) relief and low cylindrical; peaks d) relief and high conical peaks
104. The Salt range is in 1
 a) Bangladesh b) Pakistan
 c) Sri Lanka d) India
105. The Tibet plateau is the highest plateau in the world with a height of ____ metres above the mean sea level 1
 a) 7,000 to 8,000 b) 6,000 to 7,000
 c) 4,000 to 5,000 d) 4,000 to 6,000
106. A ____ is any natural elevation of the earth surface. 1
 a) Mountain b) Rivers
 c) Plains d) Plateau
107. It is a place where fresh water from a river or stream meets a saltwater body of water like a sea or ocean. 1
 a) Estuary b) Delta
 c) Eco-system d) Environment
108. ____ is unbroken flat land. 1
 a) Hills b) Plateau
 c) Mountains d) Plain
109. Which of the sports are not popular in mountains? 1
 a) Hang gliding b) River rafting
 c) Cricket d) Paragliding
110. The mountains differ from the hills in terms of 1
 a) slope b) elevation
 c) Shape d) Aspect
111. Urbanization means the increase in the proportion population of a country who live in the 1
 a) Rural areas b) District areas
 c) Village areas d) Urban areas
112. Who is SHO 1
 a) In charge of court b) In charge of Hospital
 c) In charge of railway station d) In charge of Police station
113. Match the following 1
- | | |
|------------------------|-----------------------------|
| a. Head of Corporation | I. Vice-Chairman |
| b. Head of Nagar Nigam | II. Mayor |
| c. Municipality elects | III. Municipal commissioner |
- a) a(I), b(II), c(III) b) a(I), b(III), c(II)
 c) a(II), b(I), c(III) d) a(II), b(III), c(I)
114. The Gram ____ prevents the Panchayat from doing wrong things like misusing money or favouring certain 1
 people
 a) Zila b) Sabha
 c) Panchayat d) Janpad
115. Which of the following is false regarding Gram Panchayat 1
 a) Their main task is to implement development programmes for all villages that come under it. b) It levies and collects local taxes.
 c) Seats are reserved for women, SC and ST in the Panchayat. d) It is the place where all plans for the work of the Gram Panchayat are placed before the people

116. The Gram Panchayat is answerable to the 1
a) Punch b) Gram Sabha
c) Wards d) Gram
117. The _____ is responsible for calling the meeting of the Gram Sabha and Gram Panchayat and keeping a record of the proceedings 1
a) Punch b) Sarpunch
c) Secretary d) Government
118. The local government realises ___ from people 1
a) Export tax b) Professional tax
c) Municipal tax d) Land tax
119. Who works at the lowest level? 1
a) Gram Panchayat b) District Panchayat
c) Zila Panchayat d) Janpad Panchayat
120. Which is the Apex of the three tier system of Panchayat Raj 1
a) Gram Panchayat b) Gram Sabha
c) Zila Parishad d) Janpad

Solution
Class 06 - Mathematics
MULTIPLE CHOICE QUESTION EXAMINATION

Section A

1. (c)
a regular octagon of side 3 cm

Explanation:

Octagon means 8 sides. So Perimeter of octagon = $8 \times \text{Side}$

Heptagon means 7 sides, So perimeter of heptagon = $7 \times \text{Side}$

Hexagon means 6 sides, So perimeter of hexagon is = $6 \times \text{Side}$

And pentagon means 5 sides, SO perimeter of pentagon is = $5 \times \text{Side}$

If side is equal = 3 cm

Then Perimeter of Octagon is greater.

2. (c)
 510 cm^2

Explanation:

Area of one tile = 102 cm^2

Area of 5 tiles = 5×102

Area of 5 tiles = 510 cm^2

3. (c)
5 m

Explanation:

Area of rectangular garden of = 300 sq. m

Width of rectangular garden = 60 m

We have to find the length of the rectangular garden

We know that Area = length x width

$300 = \text{length} \times 60$

Length = $\frac{300}{60}$

length = 5 m

4. (d)
84 cm

Explanation:

If area of rectangular sheet is 440 cm^2 and the length is 20 cm.

Area of rectangle = $l \times b$

$20 \times b = 440$

$b = 440 \div 20 = 22 \text{ cm}$

So perimeter of rectangle = $2l + 2b = 2(20) + 2(22) = 40 + 44 = 84 \text{ cm}$

5. (b)
 20.25 m^2

Explanation:

A room is 5 m 40 cm long and 3 m 75 cm wide.

$l = 5.40 \text{ m}$ and $b = 3.75 \text{ m}$

Area of rectangle = $l \times b = 5.40 \times 3.75 = 20.25 \text{ m}^2$

SO, the area of the carpet needed to cover the floor is 20.25 m^2 .

6. (c)
8 cm

Explanation:

Perimeter of triangle = sum of all three sides

Here Perimeter = 15 cm, and two sides are = 4 cm and 3

Let length of third side will be l

$$\text{Perimeter} = 4 + 3 + l$$

$$15 = 4 + 3 + l$$

$$15 = 7 + l$$

$$l = 15 - 7$$

$$l = 8$$

Length of third side = 8 cm

7. (a)
18 cm

Explanation:

Perimeter of rectangle = $2 \times (l + b)$

Here length = 4 cm and breadth = 5 cm

So, Perimeter = $2 \times (4 + 5)$

$$\text{Perimeter} = 2 \times 9$$

$$\text{Perimeter} = 18 \text{ cm}$$

8. (b)
 11 m^2

Explanation:

Area of the floor of length = 5m , width = 4m

$$\text{Area} = l \times b$$

$$\text{Area} = 5 \times 4$$

$$\text{Area of the floor} = 20 \text{ m}^2$$

Area of the square carpet = $l \times l$, where $L = 3 \text{ m}$

$$\text{Area of the carpet} = 3 \times 3$$

$$\text{Area of the carpet} = 9 \text{ m}^2$$

so, the area of the floor that is not carpeted is = area of floor - area of carpet

$$\text{i.e.} = 20 - 9$$

$$= 11 \text{ m}^2$$

9. (d)
1500 m

Explanation:

An athlete takes 10 rounds of a rectangular park, 50 m long and 25 m wide.

So perimeter = $2(l + b) = 2(50 + 25) = 2(75) = 150 \text{ m}$

The total distance covered in 10 rounds = $150 \times 10 = 1500 \text{ m}$

10. (b)
 1.5 m^2

Explanation:

We know that 100 cm = 1 m

$$\text{So, } 50 \text{ cm} = \frac{1}{100} \times 50$$

$$50 \text{ cm} = 0.5 \text{ m}$$

Area of table top in sq. m = 3×0.5

$$\text{Area} = 1.5 \text{ m}^2$$

11. (c)
Rs 4000

Explanation:

To find the cost of fencing a square park, first we need to find the perimeter of the park.

Perimeter of a square park of side 100 m = 4×100 (as $P = 4 \times l$)

Perimeter = 400 m

The rate of fencing the park is Rs 10 per m

So, to fence the 400 m , the cost will be = 400×10

= Rs 4000

12. (d)
area

Explanation:

Area is the quantity that expresses the extent of a two-dimensional figure or shape in the plane

Rectangle is two dimensional figure having length and breadth so the area of rectangle is = length x breadth

13. (d)
8 cm

Explanation:

The Area of a square = $l \times l$

Here area = 64 cm^2

so the length is

$$64 \text{ cm}^2 = l \times l$$

$$\text{length} = \sqrt{64}$$

$$\text{length} = 8 \text{ cm}$$

14. (a)
6 m

Explanation:

Area of rectangular garden = $l \times b$

Here area = 300 m^2 and breadth = 50 m

So, the length of garden is = $\frac{300}{50}$

Length = 6 m

15. (c)
 625 m^2

Explanation:

We know the perimeter of a rectangular sheet = $2 \times (l + b)$

Here perimeter = 100 m and the length = 25 m

For finding the area of a rectangular sheet, we need to find out the breadth first.

$$100 = 2 \times (25 + b)$$

$$\frac{100}{2} = 25 + b$$

$$50 = 25 + b$$

$$\text{Breadth} = 50 - 25$$

$$\text{breadth} = 25 \text{ m}$$

Area of a rectangular sheet = $l \times b$

Here length = 25 m and breadth = 25 m

$$\text{Area} = 25 \times 25$$

$$\text{Area} = 625 \text{ m}^2$$

16. (c)
2.5 square m

Explanation:

The area in square metre of a piece of cloth 1m 25 cm wide and 2 m long = length \times breadth = 1.25 m \times 2m = 2.5 square m.

17. (d)
15 square m

Explanation:

Side of bed = 1m

So area of bed = side \times side = 1 \times 1 = 1 m²

Area of five square flower beds = 5 \times 1 = 5m²

Area of piece of land of 5 m long and 4 m wide = 5 \times 4 = 20 m²

The area of the remaining part of the land = 20 - 5 = 15 square m

18. (b)
 $\frac{\text{Area}}{\text{Length}}$

Explanation:

We know that Area of a rectangle = length \times width

So, for finding width = $\frac{\text{area}}{\text{length}}$

19. (c)
less

Explanation:

Area of blackboard of a class is $l \times b$

And the area floor is $L \times B$

We know that length and breadth of blackboard is less than that of the floor.

So, the area of blackboard is less than that of floor.

20. (c)
1050 m²

Explanation:

We know the perimeter of a rectangle = $2 \times (l + b)$

Here, perimeter of a rectangle = 130 m and the breadth of the rectangle = 30 m,

$$130 = 2 \times (l + 30)$$

$$\frac{130}{2} = l + 30$$

$$65 = l + 30$$

$$\text{Length} = 65 - 30$$

$$\text{Length} = 35 \text{ m}$$

Area of a rectangle = $l \times b$

Here length = 35 m and breadth = 30 m

$$\text{Area} = 35 \times 30$$

$$\text{Area} = 1050 \text{ m}^2$$

21. (d)
3 cm

Explanation:

The perimeter of a regular hexagon is 18 cm.

The perimeter of a regular hexagon = 6 \times side = 18

$$\text{Side} = 18 \div 6 = 3 \text{ cm}$$

So, side of hexagon = 3 cm

22. (a)
35 cm

Explanation:

We know the perimeter of a rectangle = $2 \times (l + b)$

Here, perimeter = 130 cm and the breadth = 30 cm

$$130 = 2 \times (l + 30)$$

$$\frac{130}{2} = l + 30$$

$$65 = l + 30$$

$$\text{Length} = 65 - 30$$

$$\text{Length} = 35 \text{ cm}$$

23. (a)
5 m

Explanation:

The length and breadth rectangle are 150 cm and 1 m = 100 cm respectively.

The perimeter of a rectangle = $2(\text{length} + \text{breadth}) = 2(150 + 100) = 2(250) = 500 \text{ cm} = 5 \text{ m}$

24. (d)
20 m

Explanation:

We know that the area of rectangular surface = $l \times b$

Here length 22 m and area of rectangular plot of land is 440 m^2

$$\text{So, the length} = \frac{440}{22}$$

$$\text{Length} = 20 \text{ m}$$

25. (d)
6sqcm

Explanation:

Area of a scalene triangle is $\sqrt{s(s-a)(s-b)(s-c)}$ sq units, where s is the semiperimeter.

$$S = (a+b+c)/2 = (3+4+5)/2 = 12/2 = 6, \text{ Area} = \sqrt{6(6-3)(6-4)(6-5)} = \sqrt{6 \times 3 \times 2 \times 1} = \sqrt{36} = 6 \text{ sqcm}$$

26. (c)
10000

Explanation:

We know that 1 m = 100 cm

$$\text{And } 1 \text{ m} \times 1 \text{ m} = 1 \text{ m}^2$$

$$1 \text{ m}^2 = 100 \times 100 \text{ cm}^2$$

$$1 \text{ m}^2 = 10000 \text{ cm}^2$$

27. (c)
15 cm

Explanation:

We know the perimeter of a rectangular sheet = $2 \times (l + b)$

Here perimeter of a rectangular sheet is = 100 cm and the length is = 35 cm

For finding breadth,

$$100 = 2 \times (35 + b)$$

$$\frac{100}{2} = 35 + b$$

$$50 = 35 + b$$

$$b = 50 - 35$$

Breadth = 15 cm

28. (d)
20 cm

Explanation:

If common multiple is x.

The sides of a rectangle are in the ratio 5 : 4.

So length = 5x and breadth = 4x

Perimeter of rectangle = 2l + 2b

$$2(5x) + 2(4x) = 72$$

$$10x + 8x = 72$$

$$18x = 72$$

$$x = 72 \div 18 = 4$$

So length of rectangle = 5x = 5 (4) = 20 cm

29. (d)
Bulbul

Explanation:

Sweety runs around a square park of side 75 m.

Perimeter of square = 4 × side = 4 × 75 = 300 m

Bulbul runs around a rectangular park with length 60 m and breadth 45 m.

Perimeter of rectangular = 2(length + breadth) = 2(60 + 45) = 2(105) = 210 m

So, Bulbul covers less distance.

30. (c)
7 m

Explanation:

Breadth of the rectangle

= Area/ length units

Breadth = 350 sq m / 50 m

= 7 m

31. (b)
Raw data

Explanation:

raw means which is not prepared/ unorganised

32. (c)
5000

Explanation:

$$5 \times 1000 = 5000$$

33. (a)
10 - 20 and 40 - 50

Explanation:

Both have 6 frequency

34. (d)
2007 - 2008

Explanation:

350..maximum

35. (a)
20

Explanation:
 $2 \times 10 = 20$

36. (c)
USD 450

Explanation:
 $4.5 \times 100 = 450$

37. (b)
Friday

Explanation:
As Friday has number of absentees $8 \times 5 = 40$. highest number in the week.

38. (c)
2002

Explanation:
Highest bar

39. (d)
organise

Explanation:
organised data = information which give some meaning

40. (b)
Raw data

Explanation:
group of raw data gives meaningful information

Solution
Class 06 - Science
Multiple Choice Question Examination

Section A

41. (d)
Random motion

Explanation:

Motion in which direction keeps on changing is called random motion . Fish in water shows random motion as direction is not fixed.

42. (b)
Metric system

Explanation:

Scientists all over the world have accepted a set of standard units for measurements. This system of units is called International System of Units (SI units).

* In 1790, the French created a standard unit of measurement called the metric system.

* SI unit of length is metre (m) while for large distances; the unit is kilometer (km).

* 1 km = 1000 m

43. (c)
Aero plane

Explanation:

Aero plane is fastest mode of transport. So to travel other countries aeroplane should be used as it takes less time in covering long distance.

44. (c)
Uniformity in measurement

Explanation:

The Central Office of Measures (GUM) performs tasks in the scope of scientific, industrial and legal metrology. It makes possible to ensure the uniformity of measures and required accuracy of measurement in Poland by realization and maintenance of measurement standards and dissemination of units of measurement. This concerns SI units and other legal units of measurement.

45. (d)
 $1\text{mm} < 1\text{cm} < 1\text{m} < 1\text{km}$

Explanation:

1 mm = 10 cm

1 cm = 100 m

1 m = 1000 km

So, the correct arrangement in increasing order is $1\text{mm} < 1\text{cm} < 1\text{m} < 1\text{km}$.

46. (d)
Circular motion

Explanation:

Circular motion is a movement of an object along the circumference of a circle or rotation along a circular path. So, Tip of a second clock moves is in Circular motion.

47. (d)
Rest

Explanation:

A body is said to be at rest if its position does not change with time with respect to an observer (or a reference point). For example, the chairs of the dining table.

48. (c)
20th century

Explanation:

The early years of 1900 saw the development of aeroplanes. These were later improved to carry passengers and goods. Electric trains, monorail, supersonic aeroplanes and spacecraft are some of the 20th century contributions.

49. (d)
Speed

Explanation:

Speed is distance traveled per unit of time. The rate of change in position of a body is called as speed. Speed is a scalar quantity.

50. (a)
Metre

Explanation:

Scientists all over the world have adopted a common set of units. It is called the International System of Units, also known as SI units. Standard units have a fixed quantity and do not vary from person to person or place to place. The standard unit of length in SI system is Metre (m).

51. (d)
Rectilinear motion

Explanation:

When a body moves on a straight line the motion is said to be Rectilinear motion. Movement along a straight line is known as rectilinear motion.

52. (d)
A millennium

Explanation:

A millennium is a period equal to 1000 years, also called kiloyears. It derives from the Latin mille, thousand, and annus, year.

53. (b)
Motion

Explanation:

Motion is the change of position of a body with time, with respect to a stationary body. When a body remains in same position for a long time, it is said to be at rest.

54. (c)
Curvilinear motion

Explanation:

The motion of an object moving in a curved path is called curvilinear motion. Curvilinear motion describes the motion of a moving particle that conforms to a known or fixed curve. A body moving along a curve path is said to have a curvilinear motion.

55. (c)
10 mm

Explanation:

10 millimetres (mm) = 1 centimetre (cm)

100 centimetre (cm) = 1 metre (m)

1000 metres (m) = 1 kilometre (km)

56. (b)
Scientific experiment

Explanation:

It is important for an experiment to be a fair test. The scientific method is a process for experimentation that is used to explore observations and answer questions. Accurate measurement is important in aspect of any scientific experiment to get the exact result.

57. (d)
165 cm

Explanation:

Height of boy in meter = 1.65 m.

1 meter = 100 cm.

So, 1.65 m = 1.65×100 cm = 165 cm

58. (d)
Traffic and red light

Explanation:

We have to apply brakes many time due to which velocity decreases therefore velocity do not remains uniform so the speed of a vehicle not always uniform. Speed of vehicle is not always uniform on road because of traffic and red light.

59. (d)
Kilogram

Explanation:

The quantity of matter in an object is called its mass. The standard unit of mass is kilogram and in short it is written as kg. It is used to measure the mass of heavy objects such as bags of grain, stones, etc. The smaller unit of mass is gram and in short it is written as g. It is used to measure the mass of lighter objects.

60. (a)
Periodic motion

Explanation:

If an object repeats its motion along a certain path, about a certain point, in a fixed interval of time, the motion of such an object is known as periodic motion. So motion of pendulum and motion of child on swing are example of periodic motion.

61. (c)
Is always black

Explanation:

The colour of shadow is always black irrespective of colour of the object. A shadow is a dark area where light from a light source is blocked by an opaque object. Shadow is not a real object. So it can't reflect light. Anything which doesn't reflect has black colour.

62. (b)
Same size and erect

Explanation:

The image formed by a plane mirror is always virtual (meaning that the light rays do not actually come from the image), upright, and of the same shape and size as the object it is reflecting. A virtual image is a copy of an object formed at the location from which the light rays appear to come. However, the image is a laterally-inverted "mirror-image" of the object. If a person is reflected in a plane mirror, the image of his right hand appears to be the left hand of the image.

63. (d)
Reflected light from the object enters the eyes

Explanation:

We are able to see the object when reflected light from the object enters the eyes to form image on retina. Its final destination is the retina, which lines the back of your eye. It's like the screen in a movie theater or the film in a camera. The focused light hits cells called photoreceptors.

64. (c)
Large sized transparent body

Explanation:

Large sized transparent body is not necessary for shadow formation. Transparent body is a medium which allows light to pass through it. The opaque and translucent objects form the shadow as they do not or partially allow the light to pass through them.

65. (b)
Light is coming from all direction

Explanation:

Light coming from all direction cannot form image. Shadows are created when an object, animal or person blocks out a portion of a light source. Shadows form in the opposite direction of whatever is blocking that source. We need: (a) An opaque object., (b) A screen, (c) A source of light.

66. (c)
Tube-light, Sun, Stars

Explanation:

Tube-light, Sun, and Stars are luminous body while moon, and cat are non-luminous body. Luminous Objects are objects which exhibit light in their own. Non- Luminous objects are objects that reflect light from luminous bodies.

67. (c)
Lunar eclipse

Explanation:

Shadow of earth is formed on moon during lunar eclipse. A lunar eclipse occurs when the Moon passes directly behind the Earth into its umbra (shadow). This can occur only when the sun, Earth, and moon are aligned exactly, or very closely so, with the Earth in the middle.

68. (a)
Plane mirror

Explanation:

Periscope is a device used to see object that are not in direct line of vision. Plane mirror is used to make periscope. A plane mirror is a mirror with a flat (planar) reflective surface. For light rays striking a plane mirror, the angle of reflection equals the angle of incidence.

69. (b)
Images of Sun

Explanation:

Small patches of sunlight under the tree are the image of Sun due to reflection by leaves. This is due to an interesting pin hole camera in nature. These circular images are, in fact, pin hole images of the Sun. The gaps between the leaves, act as the pin holes. These gaps are all kinds of irregular shapes, but, we can see circular images of the Sun.

70. (c)
Jugnoo

Explanation:

Jugnoo is a small insect that emit light from its tails so, it is a living luminous body. Firefly (Jugnoo) emit short bursts of light due to photochemical reaction, which take place in its body temperature.

71. (b)
Reflector

Explanation:

When light bounces off from surface, the surface is called reflector. We see things when light bounces off objects into our eyes. This is called reflection. Almost everything reflects light but some surfaces are better reflectors than others.

72. (c)
Translucent object

Explanation:

An object that allows the partial passing of light through it is called translucent object. A translucent material lets light pass through, but objects on the other side can't be seen clearly. Frosted glass is translucent, and regular glass is transparent.

73. (a)
Light

Explanation:

Light do not require material medium for its propagation. It can travel in vacuum too.

74. (b)
Transparent object

Explanation:

Mirror is a reflecting surface but glass is a transparent object. A mirror is an object that reflects light while Glass is a non-crystalline amorphous solid that is often transparent.

75. (d)
Sun

Explanation:

Sun is not always necessary to form a shadow. Other sources of light in presence of opaque object and screen can form image. Opaque objects do not allow light to pass through them and cast dark patches behind them. These dark patches are called shadows.

76. (c)
Reading glass

Explanation:

Reading glass is a transparent object as light passes through it. Materials like air, water, and clear glass are called transparent. When light encounters transparent materials, almost all of it passes directly through them.

77. (a)
Mirror

Explanation:

Shadow is formed by opaque object but image is formed by mirror due to reflection of light. Shadows are formed when the path of light is obstructed by an object.

78. (b)
Sun

Explanation:

Sun light is called as ultimate source of light as sun is most common source of light. The sun is a large sphere consists full of hot gases. Plants convert light energy from the sun into chemical energy (food) by the process of photosynthesis. Animals eat plants and use that same chemical energy for all their activities.

79. (c)
Parallel

Explanation:

From source, light travels as rays which are parallel to each other. Sun's light appear to travel as parallel beams towards earth. Reflected rays are parallel to each other.

80. (c)
Real and inverted

Explanation:

A pinhole camera is a simple camera without a lens but with a tiny aperture, a pinhole – effectively a light-proof box with a small hole in one side. Light from a scene passes through the aperture and projects a real and an inverted image on the opposite side of the box.

Solution
Class 06 - Social Science
MULTIPLE CHOICE QUESTION EXAMINATION

Section A

81. (d)
China

Explanation:

The great wall was built by the Chinese emperors before the Mauryan period about 2400 years ago. They built it to protect their Northern frontiers from pastoral people.

82. (c)
273 B.C

Explanation:

After the death of Bindusara in 272 BC Ashoka fought a war of succession but came up triumphant and was crowned.

83. (c)
Pillar

Explanation:

Ashoka got his messages inscribed on rocks and pillars and also instructed his officials to read the message to those who could not read it.

84. (d)
Officials

Explanation:

Ashoka appointed officials who went from place to place teaching people about dharma.

85. (c)
South

Explanation:

Arthashastra tells us, precious stones were collected as tribute from south India.

86. (d)
Brihadartha

Explanation:

Ashoka was followed for 50 years by a succession of weaker kings and Brihadratha was the last ruler and after his assassination Shunga dynasty was established.

87. (b)
Capable successor of Ashoka

Explanation:

Successors of Ashoka were weak and incapable to rule the vast empire. Brihadratha the last Mauryan ruler was assassinated by his general Pushyamitra Shunga and Shunga dynasty was established.

88. (c)
Dharma

Explanation:

Dharma which is the prakrit word for dharma, was propagated by Ashoka, for which he appointed officials, who went from place to place to teach the people how they could solve their problems like quarrel

in the family and neighbourhood.

89. (d)
I,III,II,IV

Explanation:

Seleucus Nicator was defeated in 305 BC by Chandragupta who was Ashoka's grandfather. When Ashoka came to the throne he fought the war of Kalinga and the aftermaths of the war persuaded him to follow Buddhism and after becoming a Buddhist he sent his son to Sri Lanka to spread the faith.

90. (b)
Buddhism

Explanation:

After the Kalinga war when Ashoka roamed in the city all he could see were burnt houses and scattered corpses. He was moved and inspired by the teachings of Buddha. So to lead a peaceful and stable life he decided to popularise Buddhism.

91. (c)
They required more resources than that of kingdom

Explanation:

Empires were much larger than kingdoms, so the emperor (ruled the empire) needed more resources than kings (ruled the kingdom). Emperors also needed large armies to protect the empire and more number of officials to collect taxes from the vast empire.

92. (b)
570 towers and 64 gates

Explanation:

Patliputra was a large and beautiful city surrounded by a massive wall. This wall had towers and gates at distances.

93. (b)
Dynasty

Explanation:

Like in Mauryan dynasty Bindusara became the ruler after Chandragupta who was his father and Ashoka ascended the throne after Bindusara who was his father. So all the three form a dynasty because they are the members of the same family

94. (c)
261 BC

Explanation:

The battle of Kalinga was fought after nine years of coronation (269 BC) of Ashoka and was his last battle of annexation.

95. (d)
Bihar

Explanation:

Rampurwa bull placed in Rashtrapati bhawan was a part of the pillar at Rampurwa in Bihar

96. (a)
South America

Explanation:

Cotopaxi is an active stratovolcano in the Andes Mountains, South America.

97. (b)

Block

Explanation:

Block Mountains are created when large areas are broken and displaced vertically. The uplifted blocks are termed as horsts and the lowered blocks are called graben.

98. (c)
hydro-electricity

Explanation:

Water from the mountains is also used for irrigation and generation of hydro-electricity.

99. (c)
Japan

Explanation:

Mt.Fujiyama in Japan is example of volcanic mountains

100. (c)
Shore

Explanation:

A coastline or a seashore is the area where land meets the sea or ocean, or a line that forms the boundary between the land and the ocean or a lake,

101. (b)
the mountains

Explanation:

In some mountains, there are permanently frozen rivers of ice. They are called glaciers.

102. (c)
young fold

Explanation:

The Himalayan Mountains and the Alps are young fold mountains with rugged relief and high conical peaks.

103. (d) relief and high conical peaks

Explanation:

The Himalayan Mountains and the Alps are young fold mountains with rugged relief and high conical peaks.

104. (b)
Pakistan

Explanation:

Salt Range, series of hills and low mountains between the valleys of the Indus and Jhelum rivers, located in the northern part of the Punjab region of Pakistan.

105. (d) 4,000 to 6,000

Explanation:

The Tibet plateau (Figure 5.1, p.31) is the highest plateau in the world with a height of 4,000 to 6,000 metres above the mean sea level.

106. (a)
Mountain

Explanation:

A mountain is any natural elevation of the earth surface. The mountains may have a small summit and a broad base. It is considerably higher than the surrounding area.

107. (a)
Estuary

Explanation:

Estuary definition: An estuary is the wide part of a river where it joins the sea.

108. (d)
Plain

Explanation:

Plains are large stretches of unbroken flat land.

109. (c)
Cricket

Explanation:

Mountains provide an idyllic site for tourists. They visit the mountains for their scenic beauty. Several sports like paragliding, hang gliding, river rafting and skiing are popular in the mountains.

110. (b)
elevation

Explanation:

The mountains differ from the hills in terms of elevation. A hill is a land surface that rises higher than the surrounding area. Generally, a steep hill with an elevation of more than 600 metres is termed as a mountain.

111. (d) Urban areas

Explanation:

Urban areas

112. (d) In charge of Police station

Explanation:

In charge of Police station

113. (d)
a(II), b(III), c(I)

Explanation:

a(II), b(III), c(I)

114. (b) Sabha

Explanation:

Sabha

115. (d)
It is the place where all plans for the work of the Gram Panchayat are placed before the people

Explanation:

It is the place where all plans for the work of the Gram Panchayat are placed before the people

116. (b) Gram Sabha

Explanation:

Gram Sabha

117. (c) Secretary

Explanation:

Secretary

118. (c) Municipal tax

Explanation:

Municipal tax

119. (a) Gram Panchayat

Explanation:

Gram Panchayat

120. (c) Zila Parishad

Explanation:

Zila Parishad