

1 vii Maths
Multiple Choice Questions (MCQs)
 (for 2nd Term)
CLASS: VII
SUBJECT: MATHS

Chapter – 6

- Question 1) A _____ is a collection of well defined objects
 (a) Data (b) set (c) object (d) None of these
- Question 2) A set whose members can be counted
 (a) infinite (b) finite (c) empty (d) None of these
- Question 3) A set which contains unlimited number of elements
 (a) finite (b) infinite (c) empty (d) None of these
- Question 4) A set containing only one element.
 (a) singleton (b) empty (c) finite (d) None of these
- Question 5) A set containing no element
 (a) singleton (b) finite (c) Null set (d) None of these
- Question 6) The number of distinct elements in a finite set is called its
 (a) cardinal number (b) empty set (c) element (d) None of these
- Question 7) Two sets are said to be _____ if they have exactly the same elements
 (a) Equal sets (b) empty set (c) finite (d) None of these
- Question 8) The set contain same number of elements which may not be same.
 (a) Disjoint (b) Equivalent (c) Equal (d) None of these
- Question 9) Sets which do not contain any element in common.
 (a) Equivalent (b) Disjoint (c) Equal (d) None of these
- Question 10) Sets which have at least one element is common
 (a) Overlapping (b) Equivalent (c) Equal (d) Disjoint
- Question 11) A set of elements from which elements may be chose to form sets for a particular discussion
 (a) Cardinal (b) Universal (c) empty (d) None of these
- Question 12) Which of the following is not an empty set?
 (a) $\{x:x \in N, 6 < x < 7\}$ (b) $D = \{ \}$ (c) $E = \{x; x \text{ is prime number } \times 52 < x < 55\}$
 (d) The set of odd natural numbers divisible by 2
- Question 13) Which of the following is an infinite set ?
 (a) The set of all letters of English alphabet (b) $C = \{x:x \text{ is a multiple of } 7\}$
 (c) $D = \{x:x \text{ is a factor of } 25\}$ (d) $E = \{x:x \text{ is negative integer } > -3\}$
- Question 14) The cardinal number of the set of the letters of the word 'SCHOOL' is
 (a) 6 (b) 5 (c) 7 (d) 4
- Question 15) Sets can be specified by.
 (a) Roster method (b) Universal (c) Empty (d) None of these
- Question 16) The sets are usally denoted by
 (a) small letters (b) Capital letters (c) None of these (d) empty
- Question 17) The members of the set are denoted by
 (a) small letters (b) Capital letter (c) empty (d) None of these
- Question 18) The symbol \in means
 (a) element or belongs to (b) empty (c) None of these (d) Null
- Question 19) The set of 'FOLLOW' is
 (a) $\{F,O,L,W\}$ (b) $\{F,O,L,L,W\}$ (c) $\{F,O,L,L,O,W\}$ (d) None of these
- Question 20) In Roster form _____ is not done while listing the elements.
 (a) repetation (b) Tabulation (c) Empty (d) None of these
- Question 21) Which is correct $P = \{x:x \text{ is the integers greater than } -5\}$
 (a) $P = \{-4,-3,-2,-1,0 \dots\}$ (b) $P = \{0,1,2,3\}$ (c) $P = \{-7,-6,-5\}$ (d) $P = \{-10,-9,-8,-7 \dots\}$
- Question 22) What type of set is $\{a,e,i,o,u\}$
 (a) empty set (b) Null set (c) finite set (d) None of these
- Question 23) What type set is the set of even numbers
 (a) empty set (b) infinite set (c) finite set (d) None of these
- Question 24) The set of even prime numbers is called
 (a) empty set (b) singleton (c) infinite (d) None of these
- Question 25) The set of first 4 prime numbers is called
 (a) empty set (b) singleton (c) finite (d) None of these

Chapter – 7

- Question 1) If $a:b = 3:4$ and $b:c = 8:9$ then $a:c = ?$
 (a) 1:2 (b) 3:2 (c) 1:3 (d) 2:3
- Question 2) If $2A = 3B$ and $4B = 5C$ then $C:A = ?$
 (a) 4:3 (b) 8:15 (c) 3:4 (d) 15:8
- Question 3) If 15% of $A = 20\%$ of B then $A:B = ?$
 (a) 3:4 (b) 4:3 (c) 17:16 (d) 16:17
- Question 4) If $A = \frac{1}{3}B$ and $B = \frac{1}{2}C$ then $A:B:C = ?$
 (a) 1:3:6 (b) 2:3:6 (c) 3:2:6 (d) 3:1:2
- Question 5) If $A:B = 5:7$ and $B:C = 6:11$ then $A:B:C = ?$
 (a) 30:42:55 (b) 30:42:77 (c) 35:49:66 (d) None of these

2 vii Maths

- Question 6) The ratio between two numbers is 11:9. If the sum of these two numbers is 40, What is the product of the numbers?
 (a) 396 (b) 432 (c) 400 (d) 384
- Question 7) A fraction bears the same ratio to $\frac{1}{27}$ as $\frac{3}{7}$ does to $\frac{5}{9}$ the fraction is
 (a) $\frac{7}{45}$ (b) $\frac{1}{35}$ (c) $\frac{45}{7}$ (d) $\frac{5}{21}$
- Question 8) Which of the following arrangements of the numbers 75,4,3,100 forms a proportion?
 (a) 100, 3,75,4 (b) 3,4,75,100 (c) 3,100,4,75 (d) 3,75,100,4
- Question 9) The third proportional to 0.8 and 0.2 is
 (a) 0.6 (b) 0.16 (c) 0.05 (d) 0.4
- Question 10) Which of the following ratios is the largest?
 (a) 5:8 (b) 1:4 (c) 10:33 (d) 2:3
- Question 11) If $\frac{A}{3} = \frac{B}{4} = \frac{C}{5}$ then A:B:C = ?
 (a) 3:4:5 (b) 4:3:5 (c) 5:4:3 (d) 20:15:12
- Question 12) If $\frac{1}{x} : \frac{1}{y} : \frac{1}{z} = 2:3:5$ then x:y:z
 (a) 2:3:5 (b) 15:10:6 (c) 5:3:2 (d) 6:10:15
- Question 13) If x:y = 3:4 the $(7x+3y) : (7x-3y) = ?$
 (a) 4:3 (b) 5:2 (c) 11:3 (d) 37:39
- Question 14) If $(3a+5b) : (3a-5b) = 5:1$, then a:b = ?
 (a) 2:1 (b) 3:2 (c) 5:2 (d) 5:3
- Question 15) A _____ is formed when two quantities are compared by division, i.e. a:b or $\frac{a}{b}$
 (a) ratio (b) proportion (c) extremes (d) None of these
- Question 16) If 7:x :: 35:45 then x = ?
 (a) 11 (b) 15 (c) 9 (d) 5
- Question 17) What number has to be added to each term of 3:5 to make the ratio 5:6 ?
 (a) 6 (b) 7 (c) 12 (d) 11
- Question 18) What least number is to be subtracted from each term of the ratio 15:19 to make the ratio 3:4 ?
 (a) 3 (b) 5 (c) 6 (d) 9
- Question 19) The third proportional to 9 and 12 is
 (a) 10.5 (b) 8 (c) 16 (d) 21
- Question 20) The mean proportional between 9 and 16 is
 (a) 12.5 (b) 12 (c) 5 (d) None of these
- Question 21) If Rs.420 is divided between A and B in the ratio 3:4 then A's share is
 (a) Rs.180 (b) Rs.240 (c) Rs.270 (d) Rs.210
- Question 22) If A:B = 2:3 and B:C = 4:5 then C:A = ?
 (a) 15:8 (b) 6:5 (c) 8:5 (d) 8:15
- Question 23) Three quantities a,b,c are said to be in _____ if a:b :: b:c or $b^2=ac$
 (a) continued proportion (b) mean proportion (c) fourth proportion (d) None of these
- Question 24) An equality of two ratio is called
 (a) ratio (b) proportion (c) mean (d) None of these
- Question 25) The first and fourth terms of a proportion are called
 (a) mean (b) extremes (c) proportion (d) None of these

Chapter – 8

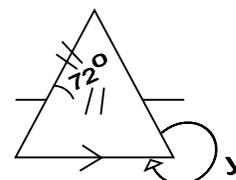
- Question 1) If 4.5m of a uniform rod weighs 17.1kg. What is the weight of 12m of such a rod?
 (a) 51.2kg (b) 53kg (c) 45.6kg (d) 56kg
- Question 2) In a map 0.8cm represents 8.8km. How much distance will be represented by 80.5cm?
 (a) 805km (b) 855.5km (c) 644km (d) none of these
- Question 3) In a race, Raghu covers 5km in 20 minutes, how much distance will he cover in 50 minutes?
 (a) 10.5km (b) 12km (c) 12.5km (d) 13.5km
- Question 4) A garrison of 500 men had provisions for 24 days However a reinforcement of 300 men arrived. The food will now last for
 (a) 18 days (b) $17\frac{1}{2}$ days (c) 16 days (d) 15 days
- Question 5) If $\frac{4}{5}$ of a cistern is filled in 1 minute, how much more time will be required to fill the rest of it?
 (a) 20 sec (b) 15 sec (c) 12 sec (d) 10 sec
- Question 6) If 21 cows eat as much as 15 buffaloes, how many cows will eat as much as 35 buffaloes ?
 (a) 49 (b) 56 (c) 45 (d) none of these
- Question 7) A tree, 6m tall casts a 4m long shadow. At the same time a flag pole casts a 50m long shadow How long is the flag pole?
 (a) 50m (b) 75m (c) $33\frac{1}{3}$ m (d) none of these
- Question 8) 8 men can finish a piece of work in 40 days. If 2 more men join them the work will be completed in
 (a) 30 days (b) 32 days (c) 36 days (d) 25 days
- Question 9) If 16 men can reap a field in 30 days. In how many days will 20 men reap the same field?
 (a) $10\frac{2}{3}$ days (b) 24 days (c) 25 days (d) $37\frac{1}{2}$ days
- Question 10) 10 pipes of the same diameter can fill a tank in 24 minutes. If 2 pipes go out of order how long will the remaining pipe take to fill the tank?
 (a) 40 min (b) 45 min (c) 30 min (d) $19\frac{1}{5}$ min
- Question 11) 6 dozen eggs are bought for Rs.108. How much will 132 eggs cost?
 (a) Rs.204 (b) Rs.264 (c) Rs.184 (d) Rs.198
- Question 12) 12 workers take 4 hours to complete a job. How long would it take 15 workers to complete the job?
 (a) 2 hrs 40 min (b) 3 hrs 12 min (c) 3 hrs 24 min (d) 3 hrs 30 min

3 vii Maths

- Question 13) A garrison of 500 men had provisions for 27 days. After 3 days a reinforcement of 300 men arrived. The remaining food will now last for how many days?
 (a) 15 days (b) 16 days (c) $17\frac{1}{2}$ days (d) 18 days
- Question 14) A rope makes 140 rounds of the circumference of a cylinder, the radius of whose base is 14cm. How many times can it go round a cylinder with radius 20cm ?
 (a) 28 (b) 17 (c) 98 (d) 200
- Question 15) A worker makes a toy every $\frac{2}{3}$ hour. If he works for $7\frac{1}{3}$ hours, then how many toys will he make?
 (a) 22 (b) 18 (c) 16 (d) 11
- Question 16) 10 men can finish the construction of a wall in 8 days. How many men are added to finish the work in half a day?
 (a) 160 (b) 100 (c) 120 (d) 150
- Question 17) A besieged town has a provisions to last for 3 weeks. Its population is 22400. How many people must be sent away in order that the provisions last for 7 weeks?
 (a) 9600 (b) 12800 (c) 20160 (d) 2240
- Question 18) It is found that a book will contain 350 pages if 32 lines are allowed in a page. How many lines should be allowed in a page. If the book is to contain 280 pages?
 (a) 46 lines (b) 42 lines (c) 40 lines (d) 44 lines
- Question 19) If A and B together can complete a work in 18 days. A and C together in 12 days and B and C together in 9 days, then B alone can do the work in
 (a) 18 days (b) 24 days (c) 30 days (d) 40 days
- Question 20) A cistern can be filled by a tap in 4 hours and emptied by an outlet pipe in 6 hours. How long will it take to fill the cistern, if both the tap and the pipe are opened together.
 (a) 9 hours (b) 12 hours (c) 8 hours (d) 10 hours
- Question 21) A car runs 300km on 25 litres of petrol. How many kilometers will it run on 18 liters of petrol?
 (a) 200km (b) 206km (c) 216km (d) 220km
- Question 22) If 5 men finish a piece of work in 4 days, how many men could be required to finish in 1 day?
 (a) 10 (b) 15 (c) 20 (d) 18
- Question 23) A, B and C can complete a piece of work in 12, 24, and 36 days respectively. In how many days will they together complete the same work?
 (a) $5\frac{6}{11}$ (b) 4 (c) $6\frac{6}{11}$ (d) 6
- Question 24) If a similar pumps all working together empty a tank in 20 min. How long would it take to empty the same tank with only 5 pumps working?
 (a) 30 min (b) 36 min (c) 45 min (d) 40 min
- Question 25) If 16 men can reap a field in 30 days. In how many days will 20 men reap the same field
 (a) 24 days (b) 25 days (c) $10\frac{2}{3}$ days (d) $37\frac{1}{2}$ days

Chapter – 17

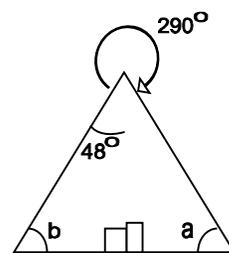
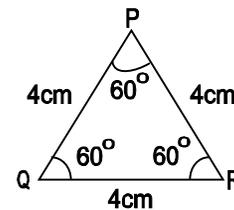
- Question 1) A closed figure formed by joining three non collinear points is called
 (a) quadrilateral (b) triangle (c) polygon (d) none of these
- Question 2) Number of vertices in triangle
 (a) one (b) two (c) three (d) four
- Question 3) Points which lie inside the triangle are called
 (a) exterior region (b) interior region (c) lie on triangle (d) none of these
- Question 4) Points lying on the sides of the triangle are said to be on the
 (a) boundary region (b) exterior (c) interior region (d) none of these
- Question 5) According to lengths of their sides, triangles can be classified into
 (a) two types (b) three types (c) one type (d) none of these
- Question 6) The three angles and the three sides are known as the _____ of the triangle.
 (a) parts or elements (b) boundary (c) none of these (d) region
- Question 7) Points which lie outside the triangle are said to be in the
 (a) exterior region (b) interior region (c) boundary (d) none of these
- Question 8) In a right triangle, the side opposite to right angle is called
 (a) Perpendicular (b) hypotenuse (c) base (d) none of these
- Question 9) The sum of the angles measure of a triangle is
 (a) 360° (b) 720° (c) 180° (d) 90°
- Question 10) A triangle can have only one _____ and not more.
 (a) right angle (b) obtuse (c) Acute (d) none of these
- Question 11) A triangle in which all the three sides and angles are equal is called.
 (a) Isosceles (b) scalene (c) equilateral (d) none
- Question 12) A triangle in which two sides are of equal length is called an
 (a) Isosceles (b) scalene (c) equilateral (d) none of these
- Question 13) Angles opposite equal sides of an isosceles triangle are.
 (a) different (b) not same (c) equal (d) none of these
- Question 14) The angle at the vertex of an isosceles triangle is four times its base angles. The angles at the vertex is
 (a) 20° (b) 80° (c) 120° (d) 30°
- Question 15) In the given figure, what will be the value of $\angle y = ?$
 (a) 288° (b) 252° (c) 306° (d) 216°



- Question 16) The longest side of a right triangle is
 (a) hypotenuse (b) Perpendicular (c) base (d) none of these

4 vii Maths

- Question 17) If the triangle is right triangle, then which one is the correct?
 (a) $(\text{Hypotenuse})^2 = (\text{Perpendicular})^2 + (\text{Base})^2$ (b) $(\text{Base})^2 = (\text{Hypo})^2 + (\text{Perpen})^2$
 (c) $\text{Base}^2 + (\text{Hypotenuse})^2 = (\text{Perpendicular})^2$ (d) none of these
- Question 18) Find the perimeter of a rectangle whose one side measures 10m and the diagonal is 26m
 (a) 98m (b) 68m (c) 80cm (d) 100cm
- Question 19) A 20m ladder is placed against the wall in such a way that the foot of the ladder is 16cm away from the wall. How up on the wall is the upper end of the ladder?
 (a) 20m (b) 12m (c) 18m (d) 24m
- Question 20) Which of the following is not a correct classification of ΔPQR ?
 (a) Acute (b) Equilateral
 (c) Equiangular (d) Right
- Question 21) In which of the following cases, the angles are not possibly the angles of a triangle
 (a) $90^\circ, 42^\circ, 48^\circ$ (b) $78^\circ, 41^\circ, 61^\circ$ (c) $39^\circ, 48^\circ, 85^\circ$ (d) $30^\circ, 40^\circ, 110^\circ$
- Question 22) The vertical angle of an isosceles triangle measures $(5t-18)^\circ$ and one of the base angles measures $3t^\circ$. The value of t is
 (a) 15 (b) 24 (c) 18 (d) 12
- Question 23) Who has gives the concept. In a right Δ the square of the hypotenuse equals the sum of the squares of the remaining two sides.
 (a) Pythagoras (b) Aryabhata (c) Kautilya (d) none of these
- Question 24) A triangle with three unequal sides is called
 (a) Equilateral (b) scalene (c) Isosceles (d) none of these
- Question 25) By how much is $\angle a$ bigger than $\angle b$ in the given figure.
 (a) 22° (b) 26°
 (c) 42° (d) 20°



Chapter – 22

- Question 1) 60 square tiles of equal size were needed to cover a floor area of 135 square metres. What is the length of each tile?
 (a) 105cm (b) 150cm (c) 70cm (d) 210cm
- Question 2) A typist uses a sheet measuring 20cm by 30cm length wise. If a margin of 2cm is left on each side and a 3cm margin on top and bottom, then the percent of page used for typing is
 (a) 40 (b) 60 (c) 64 (d) 72
- Question 3) A field in the form of a \parallel gm has base 15dam and altitude 8 dam. Find the cost of watering the field at 10 paise per square metre.
 (a) Rs.12000 (b) Rs.120 (c) Rs.1200 (d) Rs.1120
- Question 4) The area of a parallelogram is 72cm^2 and its altitude is twice the corresponding base. The length of the base is.
 (a) 6cm (b) 8cm (c) 4cm (d) 12cm
- Question 5) A right angled triangle has the largest side as 13cm and one of the sides containing the right angle as 12cm Its area in cm^2 is.
 (a) 30 (b) 39 (c) 80 (d) 78
- Question 6) The area of a right angled triangle is 40 times its base. What is its height?
 (a) 45cm (b) 60cm (c) 80cm (d) 20cm
- Question 7) What is the value of π
 (a) $\frac{22}{7}$ (b) $\frac{7}{21}$ (c) $\frac{7}{22}$ (d) none of these
- Question 8) The circumference of two concentric rings are 88cm and 66cm respectively. Find the width between the rings.
 (a) 3.5cm (b) 10.5cm (c) 5cm (d) 14cm
- Question 9) A man runs round a circular field of radius 50m at a speed of 12km/hr. How much time is taken by the man to run twenty rounds of the field
 (a) 30min (b) 32min (c) 34min (d) $31\frac{3}{7}$ min
- Question 10) Two small circular parks of diameters 16m and 12m are to be replaced by a bigger circular park what would be the radius of new park if the new park occupies the same space as the two small parks?
 (a) 10 m (b) 15m (c) 20m (d) 25m
- Question 11) A rope by which a calf is tied is increased from 12m to 23m. How much additional grassy ground shall it graze?
 (a) 1120m^2 (b) 1250m^2 (c) 1210m^2 (d) 1200m^2
- Question 12) What happens to the area of a square when its side is halved? Its area will
 (a) same (b) half (c) one-fourth (d) Double
- Question 13) A 16m by 18m rectangular section of a wall is to be covered by square tiles that measure 2m on each side. If the tiles are not cut, how many tiles will be needed to cover the section of the wall?
 (a) 288 (b) 144 (c) 72 (d) 17

5 vii Maths

- Question 14) If the ratio of areas of two circles in 225:256 then the ratio of their circumference is
 (a) 225:256 (b) 256:225 (c) 15:16 (d) 16:15
- Question 15) The perimeter of a square is 48cm. The area of a triangle is 4cm^2 less than the area of the square. If the base of the triangle is 14cm then its height is.
 (a) 2cm (b) 40cm (c) 10cm (d) 20cm
- Question 16) The area of a circle is 154cm^2 . Its diameter is
 (a) 14cm (b) 11cm (c) 7cm (d) 22cm
- Question 17) The circumference of a circle is 44cm. Its area is
 (a) 308cm^2 (b) 154cm^2 (c) 77cm^2 (d) 616cm^2
- Question 18) The area of a square is 50cm^2 long. Its diagonal is
 (a) $5\sqrt{2}\text{cm}$ (b) 10cm (c) $10\sqrt{2}\text{cm}$ (d) 8cm
- Question 19) The length and breadth of a rectangular park area in the ratio 4:3 and its perimeter is 56m. The area of the field is
 (a) 192m^2 (b) 300m^2 (c) 432m^2 (d) 228m^2
- Question 20) The sides of a triangle are 13cm, 14cm and 15cm. The area of the triangle is
 (a) 84cm^2 (b) 91cm^2 (c) 105cm^2 (d) 97.5cm^2
- Question 21) Each side of an equilateral triangle is 8cm. Its area is.
 (a) $16\sqrt{3}\text{cm}^2$ (b) $32\sqrt{3}\text{cm}^2$ (c) $24\sqrt{3}\text{cm}^2$ (d) $8\sqrt{3}\text{cm}^2$
- Question 22) The diagonal of a square is 14cm long. Its area is
 (a) 196cm^2 (b) 88cm^2 (c) 98cm^2 (d) 147cm^2
- Question 23) One side of a \parallel gm is 14cm and the distanced of this side from the opposite side is 6.5cm. The area is
 (a) 45.5cm^2 (b) 91cm^2 (c) 182cm^2 (d) 190cm^2
- Question 24) The length of a diagonal of a rhombus are 18cm and 15cm. The area of rhombus is
 (a) 270cm^2 (b) 135cm^2 (c) 90cm^2 (d) 180cm^2
- Question 25) The area of a circle is 24.64m^2 . The circumference of the circle is.
 (a) 14.64m (b) 16.36m (c) 17.60m (d) 18.40m

Chapter – 23

- Question 1) _____ may be defined as the science of collection, presentation, analysis and description of numerical data
 (a) Statistics (b) Science (c) Optics (d) None of these
- Question 2) The collection of a particular type of information such as in the form of numerical figures is called.
 (a) Array (b) data (c) Range (d) None of these
- Question 3) Each numerical figure in the data is called an
 (a) Array (b) data (c) observation (d) None of these
- Question 4) Arranging the observations of a data in ascending or descending order are called an
 (a) Array (b) observation (c) none of these (d) data
- Question 5) The difference between the highest and the lowest values of the observations in a given is called its
 (a) Array (b) range (c) observation (d) none of these
- Question 6) The data collected from records or data already available are called
 (a) Raw data (b) secondary data (c) observation (d) none
- Question 7) The number of times a particular observation occurs is called its.
 (a) frequency (b) Tally Marks (c) Range (d) Array
- Question 8) The arithmetic mean in statistics is the same as _____ in arithmetic
 (a) average (b) Range (c) Array (d) None of these
- Question 9) Each observation from the data and count them with the help of stokes called.
 (a) Range (b) Tally Marks (c) Array (d) Arrow
- Question 10) For finding _____, it is not necessary to arrange the given data in an ascending or descending order.
 (a) Median (b) Mean (c) Mode (d) Range
- Question 11) ϵ (read as sigma) is a greek letter which represent
 (a) Data (b) range (c) sum (d) none of these
- Question 12) The _____ of a set of numbers is the middle number when all the numbers are arranged in order of size. (ascending or descending)
 (a) Mean (b) Median (c) Mode (d) None of these
- Question 13) The median of the numbers 85,86,78,89 and 64 is.
 (a) 85 (b) 84 (c) 78 (d) 86
- Question 14) The marks scored by 10 students are 5, 9, 8, 7, 2, 3, 4, 9, 6 and 8. The median marks are.
 (a) 6 (b) 7 (c) 6.5 (d) 5.5
- Question 15) The _____ of a set of numbers is the number which occurs most frequently in the set.
 (a) Mean (b) median (c) Mode (d) Range
- Question 16) The mean of $1^2, 2^2, 3^2, 4^2, 5^2, 6^2, 7^2$ is
 (a) 10 (b) 20 (c) 30 (d) 40
- Question 17) The mean of 2, 7, 6 and x is 5 and mean of 18, 1, 6, x and y is 10. What is the value of y?
 (a) 5 (b) 10 (c) 20 (d) 30
- Question 18) The mean of 6 numbers is 32. If one of the numbers is excluded. The mean reduces by 2. The excluded number is.
 (a) 36 (b) 42 (c) 44 (d) 40
- Question 19) The data obtained initially are called
 (a) Raw (b) secondary (c) finally (d) None of these
- Question 20) The mean weight of a sample of 10 oranges is 34gm Later it was shown that the weighing machine had shown the weight of each orange 5gm less. Find the correct mean weight of oranges.
 (a) 29gm (b) 31gm (c) 39gm (d) 37gm
- Question 21) If different numbers occur the same number of times, the set of data has mode
 (a) more than 1 (b) more than 2 (c) No mode (d) None of these

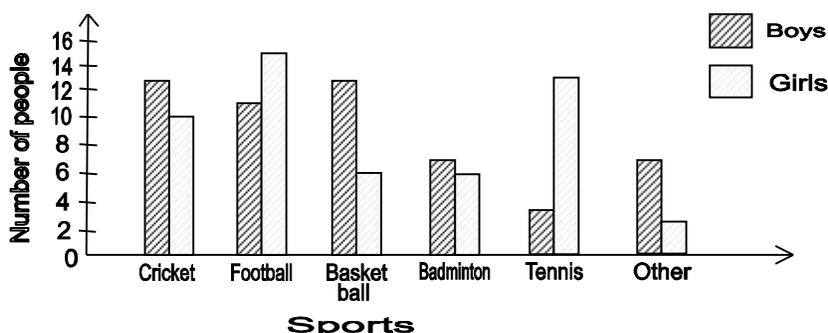
6 vii Maths

- Question 22) The mean of first 5 odd numbers is
 (a) 7 (b) 5 (c) 4 (d) 9
- Question 23) The numbers which occurs most frequently in a set of numbers called
 (a) mode (b) Range (c) Mean (d) None of these
- Question 24) The mean of first ten natural numbers?
 (a) 6.5 (b) 7.5 (c) 5.5 (d) 8.5
- Question 25) What is the range of the following data 40, 65, 25, 30, 15, 55, 70, 5
 (a) 50 (b) 55 (c) 65 (d) 70

Chapter – 24

- Question 1) The two forms are generally used for presenting data. Which is appropriate answer.
 (a) tables (b) graphs (c) both (a) and (b) (d) None of these
- Question 2) The pictorial representation of the numerical data by a number of bars of uniform width.
 (a) bar graph (b) line graph (c) Pie chart (d) None of these
- Question 3) A _____ bar graph is a graphical display of information using two bars besides each other at a various heights.
 (a) Double (b) Single (c) Triple (d) None of these
- Question 4) In a _____ graph, points are plotted on a graph paper with the help of two variables ie one along 'x' axis and the other along y-axis.
 (a) Pie chart (b) line graph (c) bar graph (d) none of these
- Question 5) A _____ is also known as a circle graph.
 (a) Pie chart (b) bar graph (c) line graph (d) none of these
- Question 6) In histogram the class intervals are taken along
 (a) y-axis (b) x-axis (c) Both x and y axis (d) Between x-and y-axis
- Question 7) Which one of the following is not the graphical representation of statistical data.
 (a) Bar graph (b) Histogram (c) Frequency polygon (d) Cumulative frequency distribution
- Question 8) In a frequency distribution, ogives are graphical representation of
 (a) Frequency (b) Relative frequency (c) Cumulative frequency (d) Raw data
- Question 9) A frequency polygon is constructed by plotting frequency of the class interval and the
 (a) upper limit of the class (b) lower limit of the class
 (c) mid value of the class (d) any values of the class
- Question 10) In a histogram the area of each rectangle is proportional to.
 (a) The class mark of the corresponding class interval
 (b) The class size of the corresponding class interval
 (c) Frequency of the corresponding class interval
 (d) Cumulative frequency of the corresponding class interval
- Question 11) A histogram is a pictorial representation of the grouped data in which class intervals and frequency are respectively taken along.
 (a) vertical axis and horizontal axis (b) vertical axis only
 (c) horizontal axis only (d) horizontal and vertical axis
- Question 12) In a histogram, each class rectangle is constructed with base as.
 (a) frequency (b) class intervals (c) range (d) size of class
- Question 13)

Favourite sport

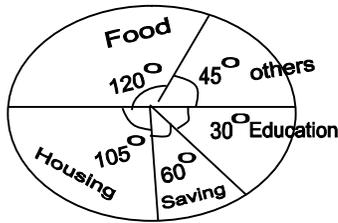


Look at the above graph Manas created a survey to find out the favourite sports of the boys and girls in his class at school. He draw the given graph to show the results.

- (i) How many people responded to the survey
 (a) 200 (b) 300 (c) 100 (d) 50
- Question 14) In the same graph (Q13) which game is liked the most by boys and girls.
 (a) Tennis (b) Cricket (c) football (d) Badminton
- Question 15) What is the difference between the number of boys and number of girls who like Cricket in Q13 graph
 (a) 3 (b) 4 (c) 5 (d) 6
- Question 16) What is the ratio of girls liking tennis to the number of boys liking tennis?
 (a) 3:1 (b) 1:3 (c) 2:3 (d) 3:2
- Question 17) In which game is the difference between the number of boys and girls liking that game is the least?
 (a) Tennis (b) Cricket (c) Badminton (d) Basketball

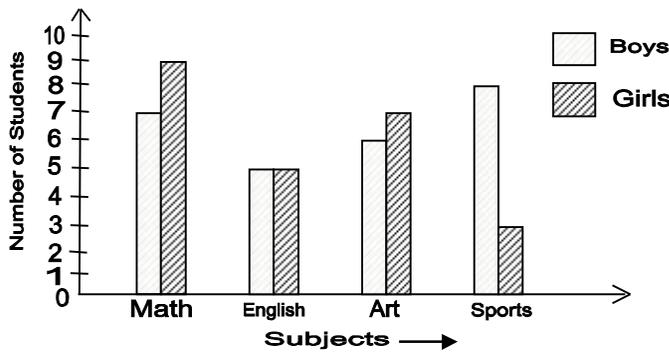
7 vii Maths

- Question 18) The pie chart given here shows expenditure incurred by a family on various items and their savings. Which amount to Rs8000 in a month. Study the chart and answer the questions from (Q18 to Q20) based on pie chart. How much more amount is spent on food than on housing?
 (a) Rs.1000 (b) Rs.3000 (c) Rs.2000 (d) Rs.2500



- Question 19) How much expenditure incurred on education on above pie chart in (Q18)
 (a) Rs.3000 (b) Rs.5000 (c) Rs.4000 (d) Rs.7000
- Question 20) What is the total expenditure of the family for the month?
 (a) Rs.40,000 (b) Rs.48,000 (c) Rs.45,000 (d) Rs.50,000

- Question 21) The graph given below shows the favourite subjects of boys and girls of grade 7A of a school. Which subject was liked the most by both boys and girls?
 (a) English (b) Maths (c) Art (d) Sports



- Question 22) Which subject do boys like more than the girls do? In Qno.21 graph.
 (a) Math (b) English (c) Art (d) Sport
- Question 23) What is the percent of students liking English out of the whole class in above graph (Qno.21)
 (a) 10% (b) 25% (c) 20% (d) 15%
- Question 24) A _____ (or break) is indicated near the origin in direction of x or y axis to show that the graph is not drawn at the origin
 (a) kink (b) point (c) origin (d) None of these
- Question 25) A _____ bar graph is a graphical display of Information using two _____ besides each other at a various heights
 (a) bars (b) kink (c) origin (d) none of these

Chapter – 25

- Question 1) The Probability of being chosen for a team is 9% This event can be described as.
 (a) likely (b) certain (c) having an even chance (d) Unlikely
- Question 2) It will be a Thursday is one of the next 7 days. The event is
 (a) likely (b) unlikely (c) certain (d) having an even chance
- Question 3) Ashita has 20 movies in her video collection and 5 of the movies feature her favourite actor. If she randomly choses a movie. What is the probability that she will choose one featuring her favourite actor?
 (a) $\frac{1}{5}$ (b) $\frac{1}{4}$ (c) $\frac{3}{4}$ (d) $\frac{3}{5}$
- Question 4) A card is drawn form a pack of 100 cards numbered 1 to 100. Find the probability of drawing a square number
 (a) $\frac{1}{10}$ (b) $\frac{9}{10}$ (c) $\frac{1}{5}$ (d) $\frac{2}{5}$
- Question 5) During a class survey, if was found out that cheese pizza is the favourite snack for 30 out 40 students. Which percent is closet to the probability that a student's favourite snack is cheese pizza
 (a) 50% (b) 60% (c) 75% (d) 80%
- Question 6) Tickets numbered 1 to 20 are shuffled. What is the probability that a ticket drown at random bears a number that is a multiple of 4?
 (a) $\frac{1}{5}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{3}{10}$
- Question 7) The probability of an impossible event is
 (a) 1 (b) 0 (c) less than 0 (d) greater than 1
- Question 8) The probability of certain event is
 (a) 0 (b) 1 (c) greater than 1 (d) less than 0
- Question 9) The probability an event of a trial is
 (a) 1 (b) 0 (c) less than 1 (d) more than 1
- Question 10) Which of the following cannot be the probability of an event?
 (a) $\frac{1}{3}$ (b) $\frac{3}{5}$ (c) $\frac{5}{3}$ (d) 1
- Question 11) Two coins are tossed simultaneously. The probability of getting at most one head is
 (a) $\frac{1}{4}$ (b) $\frac{3}{4}$ (c) $\frac{1}{2}$ (d) $\frac{1}{4}$
- Question 12) A coin is tossed 1000 times, if the probability of getting a tail is $\frac{3}{8}$ how many times head is obtained?
 (a) 525 (b) 375 (c) 625 (d) 725

8 vii Maths

- Question 13) A bag contains 50 coins and each cash is marked from 51 to 100. One coin is picked at random. The probability that the number on the coin is not a prime number is
 (a) $\frac{1}{5}$ (b) $\frac{3}{5}$ (c) $\frac{2}{5}$ (d) $\frac{4}{5}$
- Question 14) In a football match Ronaldo makes 4 goals from 10 penalty kicks. The probability of converting a penalty kick into a goal by Ronaldo is.
 (a) $\frac{1}{4}$ (b) $\frac{1}{6}$ (c) $\frac{1}{3}$ (d) $\frac{2}{5}$
- Question 15) Six of 20 students in a class are left handed write the probability of randomly selecting a left handed student as a decimal
 (a) 0.30 (b) 0.24 (c) 0.25 (d) 0.40
- Question 16) The probability that Sanchit will draw a vowel card from five cards bearing the letters a,e,i,o,u is
 (a) 0 (b) 1 (c) 0.5 (d) 0.75
- Question 17) The probability of rolling a number greater than 4 with a diw is
 (a) $\frac{2}{3}$ (b) $\frac{3}{4}$ (c) $\frac{1}{4}$ (d) $\frac{1}{3}$
- Question 18) Sonal Spins a spinner that is split into 8 equal parts. The parts are coloured as blue, green, red , green blue, red red, red. The probability of the needle of the spinner landing on blue colour is
 (a) $\frac{1}{2}$ (b) $\frac{1}{8}$ (c) $\frac{1}{4}$ (d) $\frac{3}{4}$
- Question 19) All probabilities have a value between –
 (a) 0 and 1 (b) 0 and 9 (c) 1 and 5 (d) None of these
- Question 20) An operation which can produce some well defined outcomes is called an
 (a) experiment (b) Trial (c) chance (d) None of these
- Question 21) By a _____ we mean performing a random experiment.
 (a) Throw (b) Trial (c) Chance (d) experiment
- Question 22) A coin is tossed 100 times and head is obtained 59 times. Find the probability of getting tail.
 (a) $\frac{41}{100}$ (b) $\frac{59}{100}$ (c) $\frac{50}{100}$ (d) $\frac{100}{41}$
- Question 23) A dice is tossed 80 times and the number 3 is obtained 14 times. Find the probability of getting the number 3
 (a) $\frac{7}{40}$ (b) $\frac{21}{100}$ (c) $\frac{1}{5}$ (d) $\frac{29}{100}$
- Question 24) A coin is tossed 300 times and we get head 136 times. What is the probability of getting head?
 (a) $\frac{136}{300}$ (b) $\frac{146}{300}$ (c) $\frac{156}{300}$ (d) $\frac{170}{300}$
- Question 25) Two coins are tossed simultaneously 200 times and we get two heads 58 times what is the probability of getting 2 heads
 (a) $\frac{39}{200}$ (b) $\frac{58}{200}$ (c) $\frac{48}{200}$ (d) $\frac{68}{200}$

Chapter – 29

- Question 1) Which equation could be used to generate both the ordered pairs (2,7) and (6,9)?
 (a) $y=9-x$ (b) $y=\frac{3}{2}x^2+1$ (c) $y=\frac{1}{2}x+6$ (d) $y=x+5$
- Question 2) Which ordered pair describe the point (2,5) shifted 3 units right and 2 units down?
 (a) (0,8) (b) (5,3) (c) (2,3) (d) (5,5)
- Question 3) Which table of ordered pair is generated when the values 1,2,3 and 4 substituted for x in the equation $y = 2x - 4$
- (a)

X	1	2	3	4
Y	-3	-2	-1	0

 (b)

1	2	3	4
-2	0	2	4

 (c)

1	2	3	4
-2	0	1	2

 (d) None of these
- Question 4) The coordinates of any point on the x axis of the form.
 (a) (x,0) (b) (0,0) (c) (0,x) (d) None of these
- Question 5) The coordinates of any point on the y axis of the form
 (a) (0,0) (b) (0,y) (c) (y,0) (d) None of these
- Question 6) The horizontal line is called
 (a) y axis (b) x axis (c) origin (d) None of these
- Question 7) The vertical line is called
 (a) x axis (b) origin (c) y axis (d) None of these
- Question 8) The point of intersect of the coordinate axes is
 (a) ordinate (b) abscissa (c) quadrant (d) origin
- Question 9) The abscissa and ordinate of the origin are
 (a) (0,0) (b) (1,0) (c) (0,1) (d) (1,1)
- Question 10) The measure of the angle between the coordinate axes is.
 (a) 0° (b) 90° (c) 180° (d) 360°
- Question 11) A point whose abscissa and ordinate are 2, and -5 respectively lies in (quadrant)
 (a) First quadrant (b) second (c) third (d) fourth
- Question 12) Points (-4,0) and (7,0) lie
 (a) on x axis (b) y axis (c) first quadrante (d) second quadrante
- Question 13) The ordinate of any point on x axis is
 (a) 0 (b) 1 (c) -1 (d) any number
- Question 14) The absissa of any point on y axis is
 (a) 0 (b) 1 (c) -1 (d) any number
- Question 15) The abscissa of a point is positive in the
 (a) First and second quadrant (b) Second and Third quadrant
 (c) Third and fourth quadrant (d) Fourth and first quadrant
- Question 16) A point whose absicissa is – 3 and ordinate 2 lies in quadrant.
 (a) First (b) second (c) third (d) fourth
- Question 17) Two points having same abscissa but different ordinate lie on
 (a) x axis (b) y axis (c) a line parallel to y axis (d) a line parallel to x axis

9 vii Maths

- Question 18) The perpendicular distance of the point P (4,3) from x axis is
 (a) 4 (b) 3 (c) 5 (d) none of these
- Question 19) The perpendicular distance of the point P (4,3) from y axis is
 (a) 4 (b) 3 (c) 5 (d) None of these
- Question 20) The distance of the point P (4,3) from the origin is
 (a) 4 (b) 3 (c) 5 (d) 7
- Question 21) In which quadrant (4,2) lie
 (a) First (b) second (c) third (d) fourth
- Question 22) The sign (-, +) lie in which quadrant
 (a) First (b) second (c) third (d) fourth
- Question 23) The coordinate of origin is
 (0,9) (b) (0,0) (c) (b,a) (d) (0,b)
- Question 24) A point on x axis is called
 (a) abscissa (b) ordinate (c) origin (d) None of these
- Question 25) The coordinate axes separate the plane into four regions are called
 (a) quadrant (b) axes (c) origin (d) None of these

Chapter – 30

- Question 1) A simple closed figure separates the plane into regions.
 (a) one (b) two (c) three (d) None of these
- Question 2) A figure is one whose all points lie in the same plane are called
 (a) plane (b) convex (c) Non convex (d) None of these
- Question 3) All figures drawn are plane since all points lie in the.
 (a) same plane (b) different plane (c) None of these
- Question 4) A simple closed plane figure bounded by line segments are called.
 (a) plane figure (b) polygon (c) boundary (d) None of these
- Question 5) The line segments are called
 (a) boundary (b) sides (c) Area (d) None of these
- Question 6) Each end-point of a side is called a
 (a) vertex (b) boundary (c) side (d) None of these
- Question 7) A polygon bounded by line segments is called
 (a) simple closed plane figure (b) boundary (c) vertex (d) None of these
- Question 8) If two sides have a common end point are called
 (a) sides (b) adjacent sides (c) diagonal (d) None of these
- Question 9) A line joining the non consecutive vertices of a polygon is called
 (a) diagonal (b) sides (c) None of these (d) vertex
- Question 10) A polygon is named by using its
 (a) vertices (b) boundary (c) diagonal (d) None of these
- Question 11) The measure of each interior angle is less than 180° is called a polygon.
 (a) concave (b) convex (c) Diagonal (d) None of these
- Question 12) If a polygon has at least interior angle with a measure greater than 180° the polygon is
 (a) convex (b) concave (c) Diagonal (d) None of these
- Question 13) A regular polygon is always.
 (a) convex (b) concave (c) None of these (d) Diagonal
- Question 14) If any part of a diagonal contains points in the exterior of the polygon is
 (a) concave (b) convex (c) None of these (d) Diagonal
- Question 15) A polygon have 6 sides are called
 (a) pentagon (b) triangle (c) Hexagon (d) polygon
- Question 16) A polygon have 10 sides are called
 (a) Nonagon (b) Decagon (c) heptagon (d) Triangle
- Question 17) If the sum of all sides of a polygon called
 (a) Area (b) perimeter (c) Volume (d) None of these
- Question 18) All the sides are equal in polygon are called
 (a) equilateral (b) isosceles (c) scalene (d) None of these
- Question 19) A regular polygon is a polygon with all its _____ and all its _____ are equal
 (a) vertices (b) angle (c) side (d) both b and c
- Question 20) When a polygon is regular, it fits exactly into a
 (a) square (b) rectangle (c) circle (d) None of these
- Question 21) We can draw a _____ passing through each vertex of the polygon
 (a) circle (b) square (c) rectangle (d) None of these
- Question 22) The sum of the angles of a quadrilateral is.
 (a) 180° (b) 90° (c) 360° (d) 540°
- Question 23) The sum of the angles of pentagon is
 (a) 540 (b) 360° (c) 180° (d) 90°
- Question 24) Each angle of a regular pentagon is
 (a) 360° (b) 180° (c) 108° (d) 90°
- Question 25) Each angle of a regular hexagon is
 (a) 108° (b) 120° (c) 360° (d) 90°

