

ATUL CLASSES

Test / Exam Name: Ab
Standard: 8th
Subject: Mathematics
Student Name:

Section:

Roll No.:

Questions: 100	Time: 01:00 hh:mm	Negative Marks: 0	Marks: 100
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- Q1.** Which of the following statement is false? **1 Mark**
- A All the four sides of a parallelogram are equal.
 B The opposite angles of a parallelogram are equal.
 C The diagonals of a parallelogram bisect each other.
 D All the four sides of a rhombus are equal.
- Q2.** If MP of a box is Rs 10 and a discount of 10% is allowed then what should be the sale price? **1 Mark**
- A Rs 10 B Rs 9 C Rs 11 D None of these.
- Q3.** How many natural numbers he between 8^2 and 9^2 ? **1 Mark**
- A 16 B 17 C 18 D 19
- Q4.** Which of the following is not a Pythagorean triplet? **1 Mark**
- A 3, 4, 5 B 6, 8, 10 C 5, 12, 13 D 2, 3, 4
- Q5. Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**
- Assertion (A):** Natural no. lie between 12^2 and 13^2 are 24.
Reason (R): The Natural numbers are the positive which start from 1 and at infinity.
- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true
- Q6.** Which of the following is a factor of $y^2 - 7y + 12$? **1 Mark**
- A $2y + 3$ B $y + 3$ C $y - 3$ D $2y - 2$
- Q7.** Find the multiplicative inverse of 7^{-2} . **1 Mark**
- A 7^4 B 7^3 C 7^5 D 7^2
- Q8. Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**
- Assertion (A):** The smallest number by which the number 250 must be divided to obtain a perfect cube is 2.
Reason (R): The cube root of a number is the factor that we multiply by itself three times to get that number.
- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.
- Q9.** Find the multiplicative inverse of 5^{-3} . **1 Mark**
- A 5^3 B $\frac{1}{5}$ C 5^2 D 5^{-2}
- Q10.** Simplify $4x(5 \times 2 + 3x) + 2x$ and find its value for $x = 2$ **1 Mark**
- A $20x^3 + 12x^2 + 2 \times 211$ B $20x^3 + 20x^2 ; 240$ C $20x^2 + 20x ; 120$
 D $20x^3 + 12 \times 2 + 2x ; 212$

Q11. The real factors of $x^2 + 4$ are: **1 Mark**

- A $(x + 2)(x - 2)$ B $(x^2 + 2)(x^2 - 2)$ C Does not exist. D None of these.

Q12. The multiplicative inverse of 10^5 is. **1 Mark**

- A 5 B 10 C 10^{-5} D 10^5

Q13. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

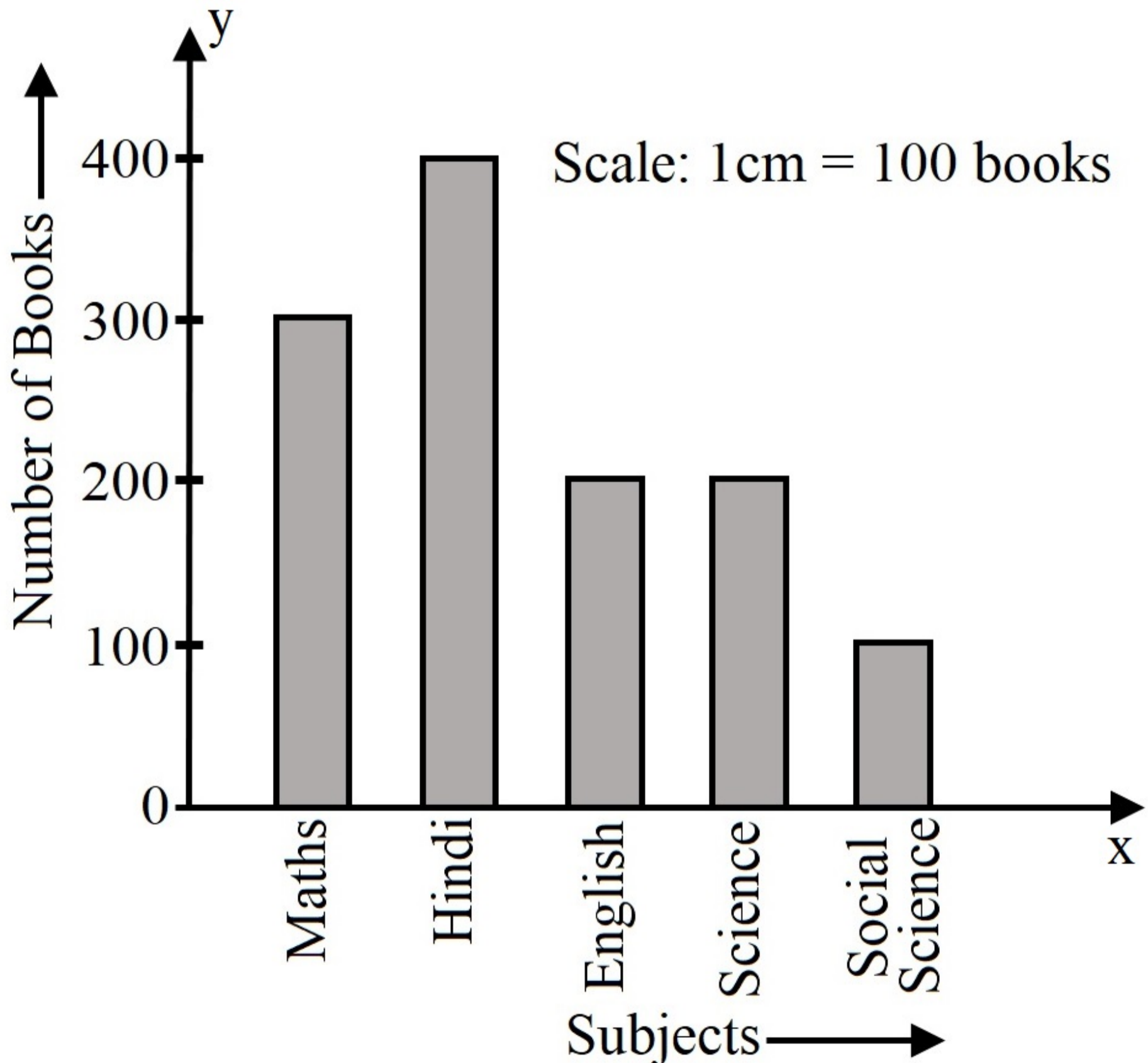
Assertion (A): The simple interest on Rs 2000 for 4 years is Rs 400. The rate percent of interest is 5%.

Reasons (R): Interest Rate = $(\text{Simple Interest} \times 100) / (\text{Principal} \times \text{Time})$

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q14. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Observe the figure as reasons for the following assertions:



Assertion (A): 300 books are of the subject Science.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q15. Find two rational numbers between $\frac{1}{3}$ and $\frac{5}{6}$. **1 Mark**

A $\frac{1}{2}, \frac{2}{3}$

B $\frac{1}{3}, \frac{2}{3}$

C $\frac{2}{3}, \frac{4}{3}$

D $\frac{1}{2}, \frac{1}{3}$

Q16. Directions: In the following questions, the Assertion (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Assertion (A): The one's digit of the cube of the number 326 is 6

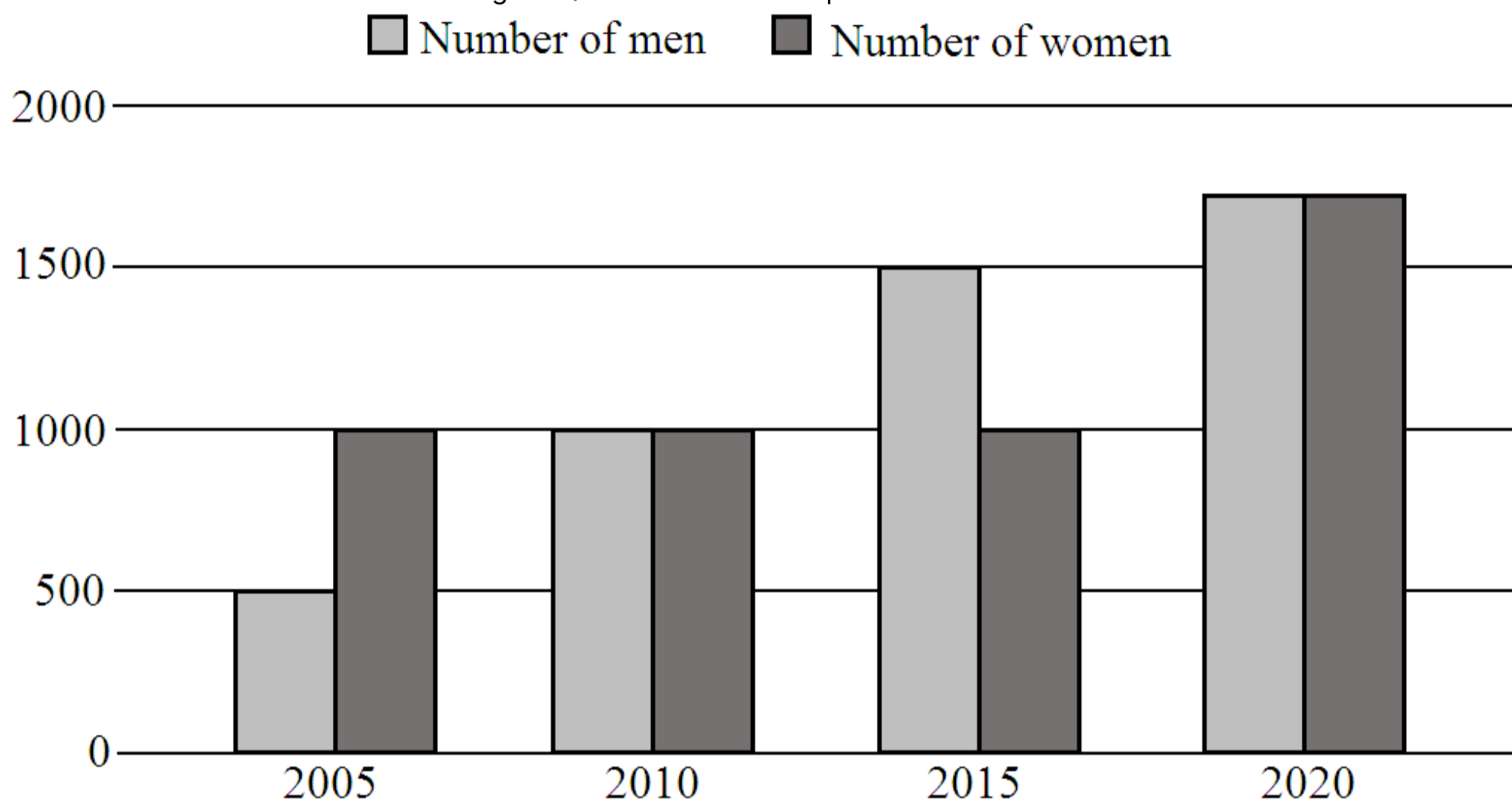
Reasons (R): A cube number is a number multiplied by itself 3 times

A Both A and R are true and R is the correct explanation of A.

B Both A and R are true but R is not the correct explanation of A. **C** A is true but R is false.

D A is false but R is true.

Q17. Below is the data of the number of men and women in a village for different years. Now based on this data answer the following MCQs with the correct option. **1 Mark**



Points scored

How many men were there in the village in 2010?

A 500

B 1500

C 1000

D 2000

Q18. Seven times a number is 42. This statement in the form of an equation is: **1 Mark**

A $x + 7 = 42$

B $7x = 42$

C $\frac{x}{7} = 42$

D $x - 7 = 42$

Q19. Tick (✓) the correct answer of the following: **1 Mark**

Which of the following numbers is not a perfect square?

Hint: The number 1843 ends in 3.

A 1843

B 3721

C 1024

D 1296

Q20. The cost of a vehicle is Rs. 1,75,000. If its value depreciates at the rate of 20% per annum, then the total depreciation after 3 years was: **1 Mark**

A Rs. 82,500

B Rs. 84,500

C Rs. 86,400

D Rs. 85,400

Q21. Which one has all the properties of a kite and a parallelogram? **1 Mark**

A Trapezium

B Rhombus

C Rectangle

D Parallelogram

Q22. The smallest number by which 54 should be multiplied so as to get a perfect square is: **1 Mark**

A 2

B 3

C 4

D 6

Q23. Directions: In the following questions, the Assertion (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following:

1 Mark

Assertion (A): Prime numbers are those which are divisible by 1 or itself.

Reason (R): Probability of getting an even prime number when a die is thrown is $\frac{1}{6}$.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q24. Divide as directed: $52pqr (p + q) (q + r) (r + p) \div 104pq (q + r) (r + p)$

1 Mark

- A $r(p+q)$ B $\frac{1}{2}r(p+q)$ C $\frac{1}{2}$ D None of these.

Q25. Directions: In the following questions, the Assertion (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following:

1 Mark

Assertion (A): In parallelogram ABCD, two points P and Q are taken on diagonal BD such that $DP = BQ$. Hence, $\triangle APD \cong \triangle CQB$.

Reason (R): The Side-Angle-Side theorem of congruency states that, if two sides and the angle formed by these two sides are equal to two sides and the included angle of another triangle, then these triangles are said to be congruent.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q26. If $x^2 - x - 42 = (x + k) (x + 6)$, then $k =$

1 Mark

- A 6 B -6 C 7 D -7

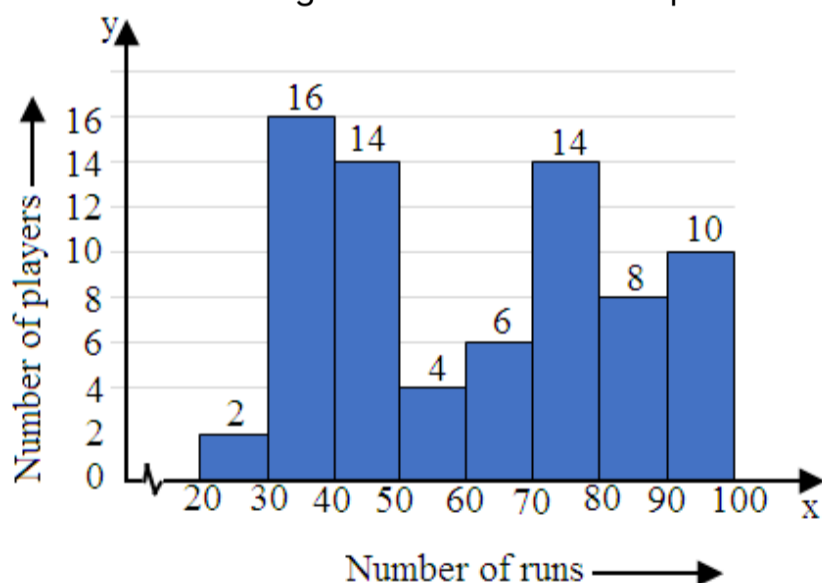
Q27. The root of the equation $2y = 5(3 + y)$ is:

1 Mark

- A 5 B $\frac{1}{5}$ C -5 D $-\frac{1}{5}$

Q28. Observe the histogram and answer the questions given below:

1 Mark



Which two groups have the same number of players?

- A 30-40 and 40-50 B 20-30 and 30-40 C 40-50 and 70-80 D 80-90 and 90-100

Q29. Which of the following statements is true?

1 Mark

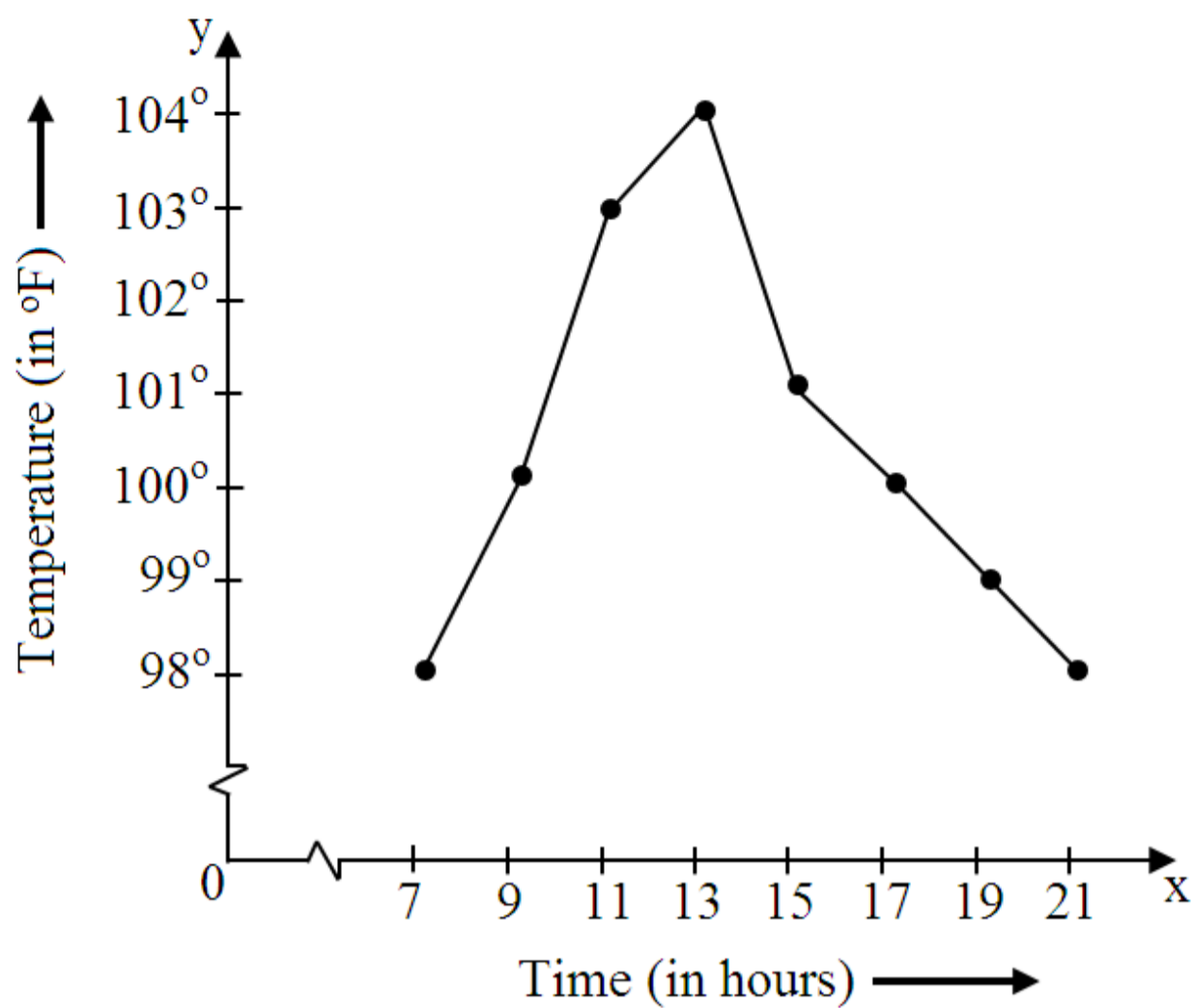
- A Natural numbers are commutative for subtraction.
 B Whole numbers are commutative for subtraction.
 C Integers are commutative for subtraction.
 D Rational numbers are not commutative for subtraction.

Q30. The value of 49^2 is:

1 Mark

- A $(50)^2 - 2(50)(1) + (1)^2$ B $(50)^2 + 2(50)(1) + (1)^2$ C $(50)^2 - (1)^2$
 D $(50)^2 + (1)^2$

- Q31. Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**
- Assertion (A):** Square is a quadrilateral.
Reason (R): Diagonals of a square are equal and bisect each other at right angles.
- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.
- Q32.** The root of the equation $\frac{5}{4x} = 15$ is: **1 Mark**
- A $\frac{1}{12}$ B $-\frac{1}{12}$ C $\frac{1}{20}$ D $-\frac{1}{20}$
- Q33. Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**
- Assertion (A):** 4 terms are there in the expression $4a - lab + 3b + 12$
Reasons (R): An algebraic expression consists of a group of terms separated by operators, which are either plus signs or minus signs
- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.
- Q34. Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**
- Assertion (A):** The one's digit in the cube root of the cube number 1331 is 1
Reasons (R): The cube root of a number is the factor that we multiply by itself three times to get that number.
- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.
- Q35. Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**
- Assertion (A):** Getting a head or tail while tossing a coin once is a sure event.
Reason (R): $P(A) + P(\text{NOT } A) = 0$.
- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.
- Q36.** Which of the following has the formula $\frac{1}{2}(\text{sum of parallel sides}) \times h$. **1 Mark**
- A Area of rectangle. B Area of rhombus. C Area of quadrilateral.
 D Area of trapezium.
- Q37.** Observe the following temperature time graph and answer the related questions: **1 Mark**



103°F temperature is at time.

- A 11 hours B 13 hours C 15 hours D 21 hours

Q38. A is used to compare the parts of the whole.

1 Mark

- A Histogram B Bar chart C Line Graph D Pie Graph

Q39. The value of $1 + \sqrt{\frac{0.01}{1}} - \sqrt{0.01}$ is close to:

1 Mark

- A 0.6 B 1.7 C 1.1 D 1.6

Q40. If $a+b+c=10$ and $a^2+b^2+c^2=36$ then $ab+bc+ca=$ _____

1 Mark

- A 136 B 64 C 32 D 68

Q41. The factorisation of $z^2 - 4z - 12$ is:

1 Mark

- A $(z+6)(z+2)$ B $(z-6)(z-2)$ C $(z-6)(z+2)$ D $(z+6)(z-2)$

Q42. **Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following:

1 Mark

Assertion (A): The factorisation of $6xy - 4y + 6 - 9x$ is $(3x - 2)(2y - 3)$

Reasons (R): The factorisation is defined as expressing or decomposing a number or an algebraic expression as a product of its prime factors or irreducible factors.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q43. $\frac{17}{11} - \frac{6}{11}$

1 Mark

- A 6 B -1 C 1 D 3

Q44. If the two angles of a triangle are 80° and 50° , respectively. Find the measure of the third angle.

1 Mark

- A 70° B 80° C 50° D 60°

Q45. Tick the correct answer in the following:

1 Mark

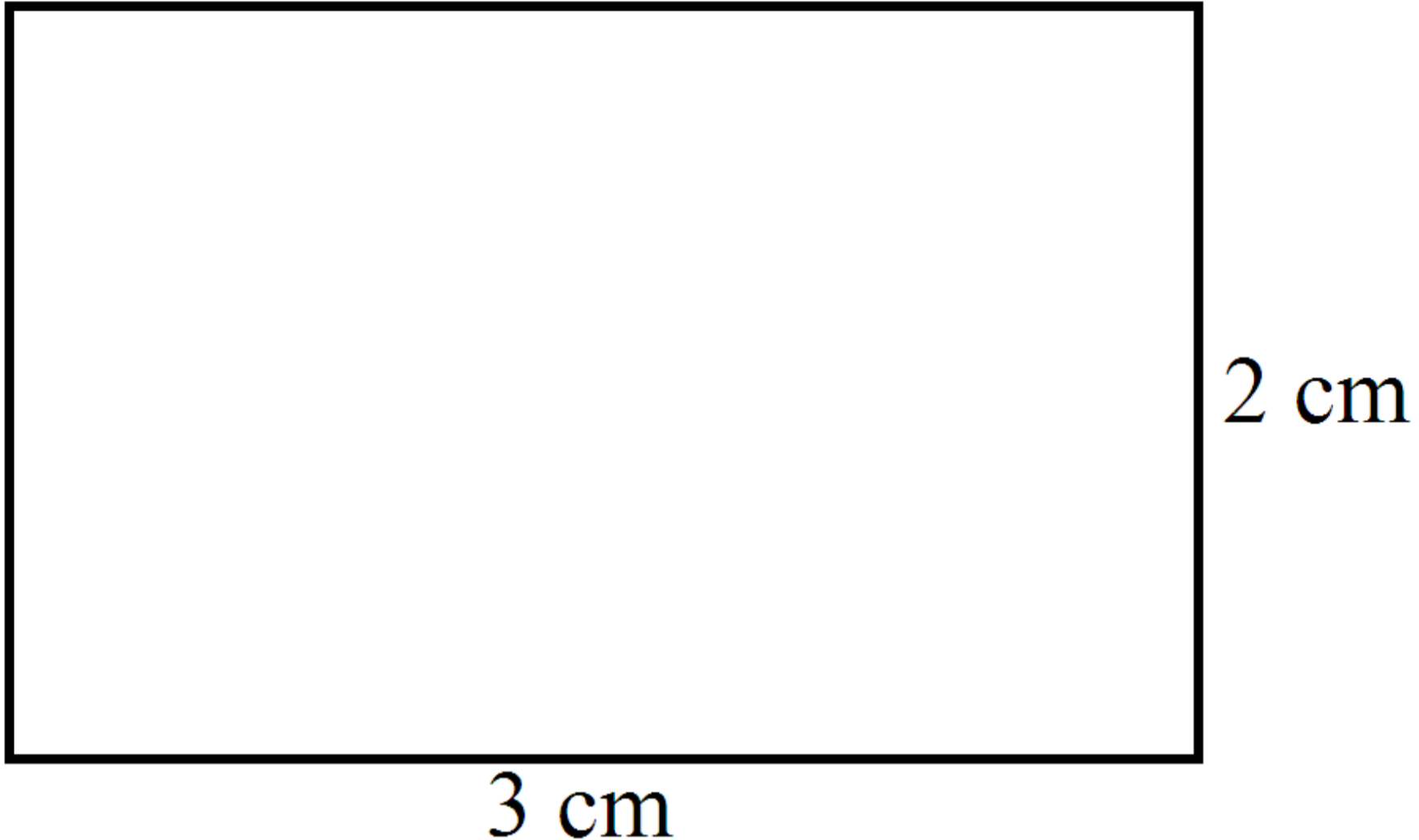
Two pipes can fill a tank in 10 hours and 12 hours respectively, while a third pipe empties the full tank in 20 hours. If all the three pipes operate simultaneously, in how much time will the tank be full?

A 7 hours 15 minutes. B 7 hours 30 minutes. C 7 hours 45 minutes. D 8 hours.

Q46. what should be percentage gain on a product when it is sold for Rs 120 with a gain of Rs 20. **1 Mark**

- A 20% B 25% C 22% D 16.25%

Q47. The area of the figure is: **1 Mark**



- A 6cm^2 B 12cm^2 C 5cm^2 D 10cm^2

Q48. The value of $\log 105 + \log 32 - \log 80 - \log 21$ is: **1 Mark**

- A $\log 4$ B $\text{\text{\{log\}3}$ C $\text{\text{\{log\}5}$ D $\text{\text{\{log\}2}$

Q49. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Assertion (A): 3 knives cost Rs 63. 17 knives costs Rs 353

Reasons (R): A direct proportion shows the direct the relation between two quantities.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q50. The one's digit of the cube of the number 347 is: **1 Mark**

- A 3 B 4 C 7 D 1

Q51. One of the factors of $(a^2 - b^2)(c^2 - d^2) - 4abcd$ is: **1 Mark**

- A $ac - bd + bc - ad$ B $(ac - bd + bc + ad)$ C Cannot be determined.
 D None of these.

Q52. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Assertion (A): Trapezium is a type of quadrilateral.

Reason (R): When in a quadrilateral, one pair of opposite sides is parallel, it is trapezium.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q53. Mark (✓) against the correct answer: **1 Mark**

$$3 + 23x - 8x^2 = ?$$

- A $(1 - 8x)(3 + x)$ B $(1 + 8x)(3 - x)$ C $(1 - 8x)(3 - x)$ D None of these

Q54. Which of the following points lies on y-axis?

1 Mark

- A $(-4, 0)$ B $(4, 0)$ C $(0, -4)$ D $(-4, 4)$

Q55. The area of a parallelogram is 60cm^2 and one of its altitude is 5cm.
The length of its corresponding side is:

1 Mark

- A 12cm B 6cm C 4cm D 2cm

Q56. What are the possible number of outcomes if a card is drawn from a pack of 52 cards?

1 Mark

- A 20 B 30 C 42 D 52

Q57. The factorisation of $8x + 4y$ is:

1 Mark

- A $4(2x + y)$ B $8(x + 4y)$ C $4(2x + 4y)$ D $8(x + y)$

Q58. The value of $(x - y)(x + y) + (y - z)(y + z) + (z - x)(z + x)$ is:

1 Mark

- A 0 B $x^2 + y^2 + z^2$ C $x + y + z$ D $xy + yz + zx$

Q59. For which of the following figures, all angles are equal?

1 Mark

- A Rectangle B Kite C Trapezium D Rhombus

Q60. The sale price of a shirt is Rs.176. If a discount of 20% is allowed on its marked price, what is the marked price of the shirt?

1 Mark

- A Rs.160 B Rs.180 C Rs.200 D Rs.220

Q61. The factorisation of $49p^2 - 36$ is:

1 Mark

- A $(7p + 6)(7p - 6)$ B $(6p + 7)(6p - 7)$ C $(7p + 6)^2$ D $(7p - 6)^2$

Q62. The volume of a cuboid with length, breadth and height as $5x$, $3x^2$ and $7x^4$ respectively is:

1 Mark

- A $105x^2$ B $105x$ C $105x^7$ D $105x^4$

Q63. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following:

1 Mark

Assertion (A): The square of the following numbers will be odd 10, 100, 1000, 99

Reason (R): Any odd integer when divided by two, either leaves a remainder or result is a fraction.

- A Both A and R are true and R is the correct explanation of A.
B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
D A is false but R is true.

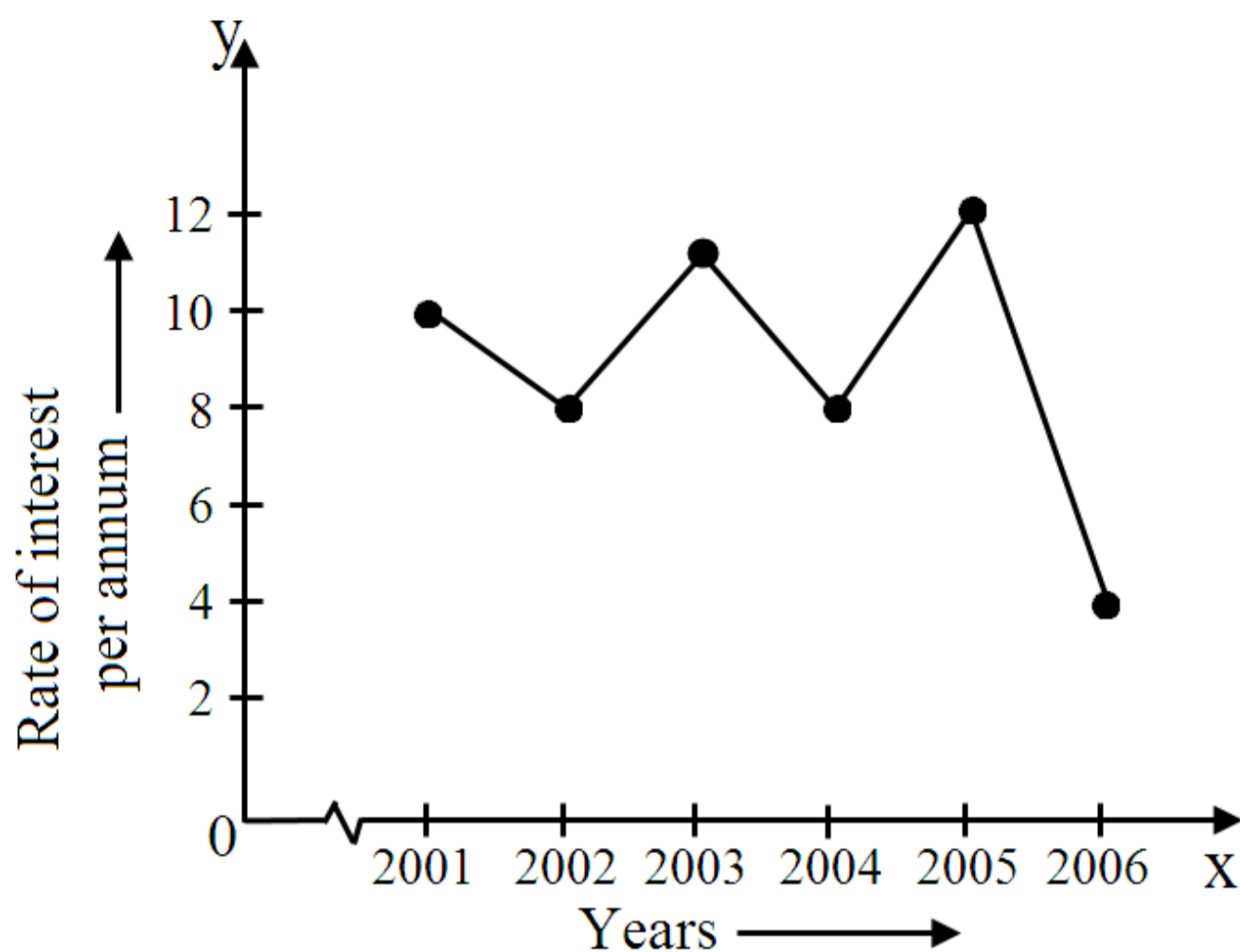
Q64. There are 2 Red, 3 Blue and 5 Black balls in a bag. A ball is drawn from the bag without looking in to the bag. What is the probability of getting a blue ball?

1 Mark

- A $\frac{3}{5}$ B $\frac{2}{5}$ C $\frac{3}{10}$ D None of these.

Q65. Read the graph and answer the related questions:

1 Mark



Rise in interest from 2004 to 2005 was.

- A 2% B 4% C 6% D 8%

Q66. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following:

1 Mark

Assertion (A): The expression $x + 3$ is in one variable

Reasons (R): The expression $(n + 3)$ represents the measure of an exterior angle of a regular octadecagon

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q67. $\left(\frac{3}{4}\right)^5 \div \left(\frac{5}{3}\right)^5$ is equal to:

1 Mark

- A $\left(\frac{3}{4}\right)^5 \div \left(\frac{5}{3}\right)^5$ B $\left(\frac{3}{4}\right)^5 \div \left(\frac{5}{3}\right)^1$
 C $\left(\frac{3}{4}\right)^5 \div \left(\frac{5}{3}\right)^0$ D $\left(\frac{3}{4}\right)^5 \div \left(\frac{5}{3}\right)^{10}$

Q68. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following:

1 Mark

Assertion (A): $(y - 9)^2 = y^2 + 81 - 18y$

Reasons (R): $(a - b)^2 = a^2 + b^2 - 2ab$.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q69. If a and b are two rational numbers, then:

1 Mark

- A $\frac{\text{a+b}}{2} < \text{a}$ B $\frac{\text{a+b}}{2} < \text{b}$ C $\frac{\text{a+b}}{2} = \text{a}$
 D $\frac{\text{a+b}}{2} > \text{b}$

Q70. If 22 workers can complete a work in 6 days. How many days would be required for 15 men to complete the same work?

1 Mark

- A 4 days B 5 days C 7 days
 D $8\frac{4}{5}$ days

Q71. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following:

1 Mark

Assertion (A): A toy marked at Rs 40 is available for Rs 32.40% discount is given on the marked price.

Reasons (R): The price on the label of an article/product is called the marked price.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q72. The cost of 5 metres of a particular quality of cloth is Rs. 210. Find the cost of 2 metres of cloth of the same type. **1 Mark**

- A Rs. 100 B Rs. 84 C Rs. 90 D Rs. 60

Q73. An equation having only one variable with power 1 is called: **1 Mark**

- A Linear equation in one variable B Linear equation in two variables C Quadratic equation
 D Polynomial

Q74. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Assertion (A): $-a \times b = b \times a$ is called commutative law for multiplication

Reason (R): Rational numbers are commutative under addition and multiplication

- A Both A and R are true and R is the correct explanation of A
 B Both A and R are true but R is not the correct explanation of A C A is true but R is false
 D A is false but R is true

Q75. If 15 is subtracted from a number, it becomes -5. This statement in the form of an equation is **1 Mark**

- A $x + 15 = -5$ B $x - 15 = 5$ C $x + 15 = 5$ D $x - 15 = -5$

Q76. Which of the following numbers would have digit 6 at unit place? **1 Mark**

- A 19^2 B 25^2 C 28^2 D 26^2

Q77. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Assertion (A): The angle sum of a convex polygon with number of sides n is $(n - 2) 180^\circ$

Reason (R): A convex polygon is a polygon that is the boundary of a convex set.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q78. The Clon Rs. 8000 for 1 year at 5% p.a. payable half-yearly is: **1 Mark**

- A Rs. 810 B Rs. 400 C Rs. 405 D Rs. 810

Q79. Tick (\checkmark) the correct answer in the following: **1 Mark**

On selling a chair for Rs. 720, a man loses 25%. To gain 25% it must be sold for.

- A Rs. 900 B Rs. 1200 C Rs. 1080 D Rs. 1440

Q80. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Assertion (A): Rational numbers are commutative for multiplication

Reason (R): Rational numbers are commutative under addition and multiplication

- A Both A and R are true and R is the correct explanation of A
 B Both A and R are true but R is not the correct explanation of A C A is true but R is false
 D A is false but R is true

Q81. The perimeter of a rectangle is 40cm. If its width is 10cm, then find the length. **1 Mark**

- A 40 B 10 C 30 D 20

- Q82.** If $x\%$ is the discount per cent on a marked price y , then selling price is: **1 Mark**
- A $\frac{\text{x}}{100}\text{y}$ B $\text{y} - \frac{\text{x}}{100}\text{y}$
 C $\text{y} + \frac{\text{x}}{100}\text{y}$ D $\frac{100}{\text{x}}\text{y}$
- Q83.** The smallest number by which 2560 must be multiplied so that the product is a perfect cube is: **1 Mark**
- A 25 B 15 C 5 D 10
- Q84.** If 'A' can finish a work in 'n' days then part of work finished in 1 day is: **1 Mark**
- A $1 - n$ B $\frac{1}{\text{n}}$ C $n - 1$ D None of these.
- Q85.** If $3x - 3 = 25 + 17x$. Then x is: **1 Mark**
- A A fraction B A rational number C An integer D Cannot be solved
- Q86.** For which of the following, diagonals bisect each other? **1 Mark**
- A Square B Kite C Trapezium D Quadrilateral
- Q87.** Which of 1322, 872, 722 and 2092 would end with digit 1? **1 Mark**
- A 1322 B 872 C 722 D 2092
- Q88.** The value of $(3^4)^3$ is: **1 Mark**
- A 3 B 3^{12} C 3^7 D None of the above.
- Q89.** Cube root of 15625 is: **1 Mark**
- A 25 B 5 C 35 D 15
- Q90.** A ____ is the representation of data by using graphical symbols such as lines, bars, pie slices, histogram etc. **1 Mark**
- A flow chart B diagram C equation D graph
- Q91.** Which is a two dimensional graph? **1 Mark**
- A pie B bar C histogram D frequency curve
- Q92.** The solution of the equation $ax + b = 0$ is: **1 Mark**
- A $\text{x} = \frac{\text{a}}{\text{b}}$ B $\text{x} = -\frac{\text{b}}{\text{a}}$ C $\text{x} = -\frac{\text{b}}{\text{a}}$ D $\text{x} = \frac{\text{b}}{\text{a}}$
- Q93.** To construct a unique parallelogram, the minimum number of measurements required is: **1 Mark**
- A 2 B 3 C 4 D 5
- Q94. Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**
- Assertion (A):** The marked price of a book is Rs 100. The shopkeeper gives 25% discount on it. 75 is the sale price of the book.
Reasons (R): The price after the original price has been reduced by a discount is known as sale price.
- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.
- Q95. Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**
- Assertion (A):** The common factor of $2x, 3 \times 3, 4$ is 1
Reasons (R): A common factor is a number that can be divided into two different numbers, without leaving a remainder.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q96. In the interval 35 – 45, 45 is called: **1 Mark**

- A Upper limit B Lower limit C Range D Frequency

Q97. PQRS is a square. PR and SQ intersect at O. Then $\angle \text{POQ}$ is a: **1 Mark**

- A Right angle B Straight angle C Reflex angle D Complete angle

Q98. Study the following frequency distribution table and answer the questions given below: **1 Mark**

Class interval	Age (in years)	Number of Persons
15-20		12
20-25		20
25-30		42
30-35		20
35-40		6

What is the size of the class intervals?

- A 5 B 10 C 15 D 20

Q99. Directions: In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Assertion (A): The common factor of p^3q^4 and p^4q^3 is p^3q^3

Reasons (R): A common factor is a number that can be divided into two different numbers, without leaving a remainder.

- A Both A and R are true and R is the correct explanation of A.
 B Both A and R are true but R is not the correct explanation of A. C A is true but R is false.
 D A is false but R is true.

Q100. The cube of an even natural number is: **1 Mark**

- A Even. B Odd. C May be even, may be odd.
 D Prime number.