



PUNJAB EXAMINATION COMMISSION

GRADE – 8 YEAR 2007

Mathematics Part-(A)

MULTIPLE CHOICE QUESTIONS

TIME ALLOWED: 1 hour 20 minutes

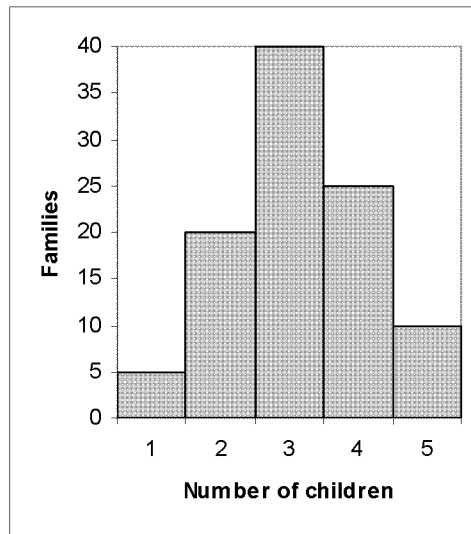
Specific Instructions:

Forty (40) Multiple Choice Questions (MCQs) are given in this part. Every question has one statement and four options for selection. Please tick the correct option on the computerized answer sheet. All questions must be attempted. All questions carry equal marks.

- Q. No.1.** If $A = \{1, 2, 3, 4\}$ $B = \{2, 5, 7, 9, 10\}$, then its universal set is
(a) $\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$
(b) $\{1, 2, 3, 4, 6, 7, 8, 9, 10\}$
(c) $\{1, 2, 3, 5, 6, 7, 8, 10\}$
(d) $\{2, 3, 4, 5, 6, 7, 8, 9, 10\}$
- Q. No.2.** If a train is moving with a certain speed from Lahore to Islamabad. Then relationship between time taken and distance covered by the train is
(a) Direct Proportion (b) Inverse proportion
(c) Compound Proportion (d) Converse Proportion
- Q. No.3.** Square root of a positive number is
(a) Negative Number
(b) Positive Number
(c) Both positive and negative numbers
(d) All
- Q. No.4.** If $4 < 7$ then
(a) $3 < 7$ (b) $5 < 7$ (c) $8 < 11$ (d) $13 < 14$
- Q. No.5.** $(11)_2 + (10)_2 = \dots\dots\dots$
(a) $(110)_2$ (b) $(101)_2$
(c) $(011)_2$ (d) $(111)_2$
- Q. No.6.** $(4)_5 \times (3)_5 = \dots\dots\dots$
(a) $(12)_5$ (b) $(7)_5$ (c) $(21)_5$ (d) $(22)_5$
- Q. No.7.** $\sqrt{0.04} = \dots\dots\dots$
(a) 0.2 (b) 0.02 (c) 2.0 (d) 2.00
- Q. No.8.** If a salaried person gets pay Rs 5530 per month. Then its Gross income is
(a) Rs 66960 (b) Rs 66060
(c) Rs 66360 (d) Rs 66660
- Q. No.9.** If $X = 3$, $Y = 2$, $Z = 1$ then value of $10XY + Z$ is
(a) 71 (b) 61 (c) 51 (d) 41

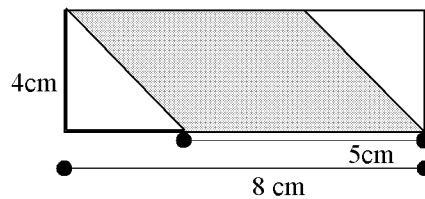
Q. No.10. The marks obtained out of 10 in test of 15 students of a class
3,5,7,10,7,9,3,7,5,4,6,8,7,5,2, frequency of 7 is
(a) 0 (b) 2 (c) 4 (d) 6

Q. No.11. No of families that have 2 children each are



- (a) 5 (b) 20 (c) 25 (d) 40

Q. No.12. Area of shaded region



- (a) 12 cm^2 (b) 32 cm^2
(c) 20 cm^2 (d) 6 cm^2

Q. No.13. 2,3,5,2,7 from the data which statement is true

- (a) Mean > Median (b) Mean < Median
(c) Mean = Median (d) $\sqrt{\text{Mean}} = \text{Median}$

Q. No.14. Square root of $2\frac{1}{4}$ is

- (a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{3}{2}$ (d) $\frac{9}{4}$

Q. No.15. Mean of 1,2,3,6 is

- (a) 1 (b) 2 (c) 3 (d) 6

Q. No.16. Value of $(111)_5$ in base 10 is

- (a) 31 (b) 111 (c) 15 (d) 11

Q. No.17. If $x + \frac{1}{x} = 2$ then value of $x^2 + \frac{1}{x^2}$ is equal to

- (a) 0 (b) 2 (c) 4 (d) 8

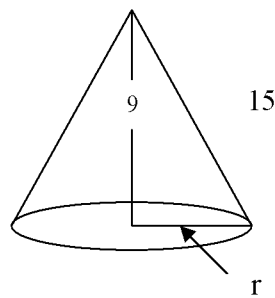
- Q. No.18.** If 3,4,2, x are in direct proportion then value of x
 (a) $\frac{6}{4}$ (b) $\frac{8}{3}$ (c) $\frac{12}{2}$ (d) $\frac{3}{4}$
- Q. No.19.** 10% of 10 is equal to
 (a) 0 (b) 1 (c) 10 (d) 100
- Q. No.20.** $(1+x)(1-x+x^2)$ is equal to
 (a) $1+x$ (b) $1-x+x^2$ (c) $1+x^3$ (d) $1-x^3$
- Q. No.21.** If diameter of a circle is 4 cm then its radius is
 (a) 1 cm (b) 2 cm (c) 3 cm (d) 4 cm
- Q. No.22.** If all the sides of geometrical shape are equal, but angles are not 90° , the shape is
 (a) Rectangle (b) Trapezium (c) Cuboids (d) Cube
- Q. No.23.** If X is subset of Y then
 (a) $x \subseteq y$ (b) $x < y$ (c) $y \subseteq x$ (d) $y < x$
- Q. No.24.** A regular octagon has sides
 (a) 5 (b) 6 (c) 7 (d) 8
- Q. No.25.** If radius of a circle is 2cm then its area is equal to
 (a) $2 \pi \text{cm}^2$ (b) $4 \pi \text{cm}^2$
 (c) $6 \pi \text{cm}^2$ (d) $8 \pi \text{cm}^2$
- Q. No.26.** $4xy$ is equal to
 (a) $(x+y)^2 + (x-y)^2$ (b) $(x+y)^2$
 (c) $(x-y)^2$ (d) $(x+y)^2 - (x-y)^2$
- Q. No.27.** Commission on Rs 500 at the rate of 15% is equal to
 (a) Rs. 15 (b) Rs. 75 (c) Rs. 500 (d) Rs. 7500
- Q. No.28.** $X^2 + Y^2$ is equal to
 (a) $(x+y)^2 - 2xy$
 (b) $(x+y)^2 + 2xy$
 (c) $(x-y)^2 - 2xy$
 (d) $(x-y)^2 + 2xy$
- Q. No.29.** Factors of $X^2 + 2X - 3$ are
 (a) $(X+3)(X-1)$
 (b) $(X-3)(X+1)$
 (c) $(X+3)(X+1)$
 (d) $(X-3)(X-1)$
- Q. No.30.** If $A = \{1,2,3,4,7,10\}$ and $B = \{4,7,10,12,15,18\}$ then $A - B$ is
 (a) $\{1,2,3\}$ (b) $\{4,7,10\}$ (c) $\{12,15,18\}$ (d) $\{10,15,18\}$
- Q. No.31.** Kashif eats 20 apples in 5 days. How many apples will he eat in 4 days?
 (a) 4 (b) 16 (c) 80 (d) 100
- Q. No.32.** "INTERSECTION OF SETS" is represented by the symbol
 (a) U (b) Φ (c) π (d) \cap

- Q. No.33.** $12X^4Y^2 - 8X^2Y^4$ is equal to
 (a) $2(6X^4Y - 4XY^4)$ (b) $12 X^2Y^2 (X^2 - 8Y^2)$
 (c) $4 X^2Y^2 (3X^2 - 2Y^2)$ (d) $X^4Y^4 (12Y^2 - 8X^2)$

- Q. No.34.** $(X^2 - Y^2)$ is equal to
 (a) $(X+Y)(X+Y)$ (b) $(X-Y)(X-Y)$
 (c) $(X+Y)(X-Y)$ (d) $(X-Y)^2 - 4XY$

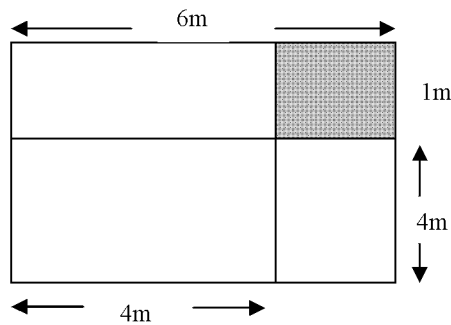
- Q. No.35.** Additive inverse of $\frac{5}{7}$ is
 (a) $\frac{5}{7}$ (b) $-\frac{5}{7}$ (c) $\frac{7}{5}$ (d) $-\frac{7}{5}$

- Q. No.36.** Value of radius "r" of right circular cone is



- (a) 6 (b) 12 (c) 18 (d) 24

- Q. No.37.** Area of Shaded region is



- (a) 2 m^2 (b) 4 m^2 (c) 6 m^2 (d) 16 m^2

- Q. No.38.** If $-X < -Y$ then which of the following will be true
 (a) $X < Y$ (b) $-X > -Y$
 (c) $Y < X$ (d) $1/Y < 1/X$

- Q. No.39.** For a sphere of radius "r" and a cylinder of height "2r" with radius "r" the true statement is
 (a) Surface Area of Sphere = Surface area of Cylinder
 (b) Curved Surface Area of Sphere = Curved Surface Area of Cylinder
 (c) Volume of Sphere = Volume of Cylinder
 (d) Capacity of Sphere = Capacity of cylinder

- Q. No.40.** For all x, y, z Q, if $x = y$ and $y = z$ then $x = z$ represents
 (a) Reflexive Property (b) Symmetric Property
 (c) Transitive Property (d) Commutative Property



PUNJAB EXAMINATION COMMISSION

GRADE – 8 YEAR 2007

Roll Number : _____ رول نمبر Center Code : _____ سنٹر کوڈ

Signature of Supervisor : _____ Dated : _____

Mathematics Part-(B)

OPEN ENDED QUESTIONS

TIME ALLOWED: 40 minutes

Instruction: This part has 5 Open Ended Questions. Please use blank space below the question to write the answers. Extra paper is provided for rough work.

Q. No.41. Construct a frequency table of 10 classes

727, 773, 859, 711, 860, 747, 862, 738, 774, 852, 791, 836, 834, 752, 828, 792,
908, 839, 752, 715, 880, 883, 852, 816, 751, 834, 818, 835, 831, 778, 873.

b) Eliminate X from both equations and write one equation

c) Find value of Y

d) Find value of X

Q. No.44. Construct a triangle with perimeter 14 cm while ratio among the lengths of sides
A : b : C :: 2 : 3 : 4

Q. No.45. Simplify

$$7\{-19x + 4(17x - 10x - 6)\}$$