Paper Mathematics (General)
FAISALABAD BOARD Class 9th 2013

Time : 20 Min   Objective Type(Group I)   Total Marks : 15

Note:- You have four choices for each objective type question as A,B,C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

S #	Questions	A	B	C	D
1	In ratio a : b, a is called.	Extreme	Antecedents	Consequent	Mean
2	0.13 as percentage is.	13	30	13%	10%
3	If there is one daughter and agnatic grand-daughters, their share are respectively.	$\frac{1}{2}, \frac{1}{6}$	$\frac{1}{2}, \frac{1}{3}$	$\frac{1}{2}, \frac{1}{4}$	$\frac{1}{2}, \frac{1}{8}$
4	Zakat on an amount of Rs. 200000 is.	500	5000	2500	25000
5	CP = ?	$\frac{100 \times SP}{100 + Profit\%}$	Loss-SP	MP+Discount	$\frac{100 \times Discount}{MP}$
6	The company undertaking the act of insurance is called.	Insurer	Insured	Insurance	Insurance policy
7	The return earned by the bank on loan is named as	Markup	Premium	Bonus	Profit
8	Money that must be paid to the state charged as proportion of income and profit added to cost of some goods and services is called.	Tax	Excise duty	Property tax	Income tax
9	The excise duty at the rate of 150%, one has to pay against an amount of Rs. 300000 is.	4500	45000	450000	14500
10	In $\sqrt{3}, 3$ is called.	Radical	Radicand	Integer	Natural number
11	A.M between $2\sqrt{5}$ and $6\sqrt{5}$ is	$4\sqrt{5}$	$3\sqrt{5}$	$5\sqrt{5}$	$7\sqrt{5}$
12	For 2,6,11,17,......... a_5 is	22	21	30	24
13	If R = {(4,5),(5,4),(5,6),(6,4)}, then domain of R is.	{4,6}	{4,5}	{4,5,6}	{5,6}
14	If $f(x) = \frac{x}{2}, 4 \le x \le 12$, x is a multiple of '2' the range of f(x) is.	{4,6,8,10,12}	{2,3,4,5,6}	{3,4,5}	{3,4,5,6}
15	The summary statistics which meausres the middle (or center) of the data is called.	Mean	Mode	Median	All of these

Marks : 60   ☆ Subjective (Part-I)☆   Time: 02:45

2.   Write short answers of any SIX parts.   (6 × 2 = 12)

(i) Define the percent.   (ii) Express the $\frac{3}{4}$ as percentage.

(iii) Convert $\frac{4}{25}$ into percent format.   (iv) What do you mean by Ushr?

(v) What is the rate of Ushr or agricultural produce obtain from natural and artificial resources?

(vi) What do you mean by inheritance?   (vii) Define profit and loss.

(viii) Find the selling price if cost price is Rs. 1540 and loss is 5%.

(ix) How many types of bank account?

3.   Write short answers of any SIX parts.   (6 × 2 = 12)

(i) Define premium.   (ii) The price of a tricylce is Rs. 4000. If 16% sales tax is charged then calcualte the amount of sales tax on 30 such tricycles.

(iii) A sales tax of 16% imposed on television. If the marked price of the television is Rs. 18000, calculate the total amount one has to pay, if the wants to purchase it.

(iv) What is difference between characteristics and mantissa?

(v) Solve: $\frac{\log 36}{\log 6}$ (vi) Simplify the $2ab^{\frac{1}{3}} \times 3a^{\frac{3}{5}}b^{\frac{4}{5}}$

(vii)What is meant by arithmetic mean?   (viii) Write the first three terms of $an = \frac{1}{(2n-1)^2}$

(ix) Find G.M. between 9 and 5.

4.   Write short answers of any SIX parts.   (6 × 2 = 12)

(i) What is bijective function?   (ii) If A = {-2,1,4} then write two binary relations in A.

(iii) If A = {1,4,7,8} and C = {3,4,5,7}, then find $A \cap C$.

(iv) Write coordinates of origin. (v) What is difference between abscissa and ordinate?

(vi) Write coordinates of the point lying on y-axis 4 units above x-axis.

(vii) Define arithmetic mean and give its formula.

(viii) Give formula for standard deviation for grouped and ungrouped data.

(ix) What are quartiles?

☆ Subjective (Part-II) ☆

Attempt any Three Questions. Each question has (8 × 3 = 24) marks.

5.   (a) If 82% of the houses have television. What percentage do not have?

(b) The inherited property amounting to Rs. 2000000 is left by a deceased. He left behind a widow and two sons. Workout the share of each.

6.   (a) An article is sold for Rs. 1000 after allowing a discount of 7% on the marked price. Find the marked price.

(b) At what annual rate of profit would a sum of Rs. 680 will increase to Rs. 850 in 3 years and 4 months?

7.   (a) If gross pay of a person is Rs. 45000 then calcualte his net take home salary after deduction of Rs. 400 as income tax, Rs. 1200 as benevolent fund, Rs. 1500 as G.P. Fund and Rs. 400 as group insurance.

(b) Evaluate using logarithmic table. $\frac{(25.36)^2 \times 0.4569}{847.5}$

8.   (a) If the A.M. between a and 10 is 40, then find the value of a.

(b) If U = {1,2,3,4,5,6,7,8,9}, A = {2,3,6,9} and B = {1,3,6,7,8}, then verify. $(A \cup B)^c = A^c \cap B^c$

9.   (a) If $f(x) = \frac{x}{2}$, $4 \le x \le 12$, and x is a multiple of 2, then find the domain and range of f(x).

(b) The total monthly income of 8 persons are Rs. 3000, Rs. 4000, Rs 3500, Rs. 3800, Rs. 4500, Rs. 4200, Rs. 3600 and Rs. 5400. Find their arithmetic mean.