***IQRA NATIONAL UNIVERSITY, KPK, PESHAWAR, PAKISTAN***

***Assignment***

***Business Mathematics:***

***Note: Attempt all questions. Submission in the form of MS word is compulsory***

***Question No.1 10***

i The solutions of  are

(a)  (b)  (c)  (d) only **(e) None of them** 

ii A man is going from the point  to the point then the increments in the x- and y-coordinates are (a) ( b )  (c) ( **(e) None of them**

iii A stair make an angle of inclination  with the horizontal then its slope is

(a) ( b )  (c)  **(d) None of them**

iv A painter can paint 100 wall in 10 hours. Then the time required to paint 4000  wall will be . Is (a) 60 hours(b) 90 hours (c) 30 hours (d) 50 hours **(e) None of them**

v If  of sale price  is equal to 50% of cost price then the cost price will be (a)  (b)  (c)  **(d) None of Them**

vi If  and then  is (a)  ( b )  (c)  (d) 

**(e) None of them**

vii The domain of a curve is (a)  ( b )  (c)  (d) 

**(e) None of them**

viii The net cost equivalent for  (a) .72 (b) .56 (c) .44 (d) .11 **(e) None of them**

ix The equation shows **(a)Linear function** (b) Linear profit function (c) Linear revenue function (d) None of them

x The sum of two numbers is 30 and difference is 10 then the numbers are = (a) (33,10) (b) (30,10) (c) (60,30) (d) 53 **(e)None of them**

***Question No.2 (5)***

1. Find the domain and range of the function  where 

**Answer: a;**

and 

Answer: a;

Domain f(x) = {xϵ IR / x ≠ 1

Domain g(x) = {xϵ IR / x ≠ -1

1. Solve the following 

**Answer: b;**

3x-3=4x-2

3x-4x=-2+3

-1x=1

X=-1

3x-3=-4-2

3x+4x=-2+3

X=1

***Question No.3 (5)***

1. Find the Inverse for the following



**Answer: a;**



1. Solve the following



**Answer: b;**



***Question No.4 (5)***

1. At what points the function is undefined 
2. **Answer: a;**



1. The sum of the ages of a girl and her brother is 26 years. Three years ago her age was four times the age of her brother. Find the present age of the girl and her brother.

Answer: b; let Boy=y

Girl=x

x +y =26

x=26-y

3 years ago: boy was y-3 and girl was x-3

Since girl was 4 times age of boy

x-3=4(y-3)

x-3=4y-12

x=26-y

(26-y)-3=4y-12

26-y-3=-4y-12

26-3+12=4y+1

23+12=5y

35=5y, y= 7

Boy is 7 years old

X=26-y

X=26-7

X=19 girl is 19 years old.

**Question No.5 (5)**

1. Find the factors of all orders of and 

**Answer: a;**



**And**



1. The manager of Roseville Appliance bought a coffee maker manufactured in Spain for $ 15 and will sell it for $18.75. Find the percent of markup based on cost.

**Answer: b ;**

Markup= selling price \_ cost price

Selling price $18.75 \_ cost price $15

Markup percentage = $3.75