**ECOECIS**

**D-17**

**BLE Qualifying Pre-Board Examination-2080**

**Class: 8 F.M.: 50**

**Sub: Maths Time: 2 hr. P.M.: 18**

***Attempt all the questions.***

1. The set A = {a,b,c} and B= {b,c,e} are two subsets of Universal Set U.
2. Define the proper subset. [1]
3. Write the common elements of Set A and Set B. [1]
4. Show the above information in Venn-diagram. [1]
5. The following data shows the expenditure of a person on different items during a month.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Items | Rent | Education | Food | Clothing | Others | Total |
| Amount (in Rs) | 2700 | 1800 | 2400 | 1500 | 2400 | 10800 |

1. Represent the data in a pie-chart. [2]
2. Calculate the average expenditure in Education and clothing. [1]

3) Ramesh lent a loan of Rs. 1800 of Suresh at a simple rate of interest for 2 years. At the end of period, Suresh refused him a total of Rs.2232.

1. Write p in terms of I, T and R where the symbols have their usual Meaning. [1]
2. Find the simple interest. [1]
3. At what rate of interest had Ramesh lent the loan? [2]

4) A School has a rectangular garden and a circular Swimming pool. Their areas are equal.

28m

o

77m

a) Write the formula to calculate area of circle. [1]

b) Find the area of circular Swimming pool. [2]

c) Calculate the perimeter of the rectangular garden. [2]

d) Which of the garden or swimming pool need more cost to fence? [1]

5) a) Express xa × xb as a power of x. [1]

b) Simplify:  [3]

1. Write the factors of a2 – b2. [1]

6) a) Simplify : × ×  [3]

b) What is the value of x˚. [1]

c) Factorize: x2+4x+3 [2]

7) a) Solve graphically: x+y=7, x-y=1 [3]

b) If x2=25, what will be the value of x? [1]

8) Two algebraic expressions x2+x-20 and x2-25 are given.

a) Find the L.C.M of given expressions. [3]

b) For what value of x, the value of x2-25 is zero.[2]

9) In the adjoining figure, AB intersects straight lines LM and PQ at

point E and F respectively. Observe the figure and answer the

A

M

L

F

G

Q

B

P

following questions.

3x

E

a) Write a pair of co-interior

Angles in the figure. [1]

2x

b) Find the value of x. [2]

c) At what value of , the given line segments LM and PQ become parallel?[1]

10) a) Construct a parallelogram ABCD with AB=7cm, BC=5cm and  = 60˚ [3]

b) In the given figure, if PQR  STR then find the measure of TR. [2]

10cm

R

S

T

p

Q

>

15 cm

>

25cm

11) Answer the following questions on the basis of given figure.

a) Draw ABC in graph and reflect the ABC in the x-axis. Then write the co-ordinates of the points A, B and C after reflection. [2]

b) On the basis of size and shape, what types of triangles are ABC and triangle after it’s reflection? Why?[2]

c) What will be the distance between point c and its reflection image c1 ? [1]

**A**

**X1 0 B C X**

**The End**