# UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Third Semester – Spring 2022

Paper: General Mathematics Course Code: EDE-109

Roll No. ......
Time: 3 Hrs. Marks: 60

## THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

### Q.1. Solve the following questions:

(6x5=30)

- i. Arif brought 40 chocolate bars and 60 marshmallows to distribute among his friends on his birthday. Find the maximum number of students to whom he can divide the sweets evenly.
- ii. Saima goes to her friend every 15 days and Laiba goes to same friend every 18 days. After how many days Saima and Laiba will visit the friend together?
- iii. Two numbers are in the ratio of 2:3 and if 8 is add to each of them, they become in the ratio of 3:4. Find the numbers.
- iv. Ashraf has Rs. 6 more than Asghar and Rs. 9 more than Adnan. All the three have Rs. 33 in all. Find the share of Ashraf.
- v. If the price of sugar be raised by 20%. Find by how much per cent a house holder must reduce his consumption so as not to increase his expenditure.
- vi. The price printed on a book is Rs. 40,000. The shopkeeper gives 25% discount on printed price of this book. How much you have to pay to buy this book.

## Q.2. Solve the following questions.

(3x10=30)

- 1. (a) 1440 men have sufficient food for 32 days in a camp. How many men may leave the camp so that the same food is sufficient for 40 days when the ratio is increased by  $1\frac{1}{2}$ .
  - (b) Saad, Saud and Saeed started a business with Rs. 12,000, Rs. 18,000 and Rs. 24,000 respectively. At the end of the year, they suffered with a loss of Rs. 13,500. Find the share of each in this loss.
- 2. (a) The denominator of a fraction is 5 more than the numerator. But if we subtract 2 from the numerator and denominator of the fraction, we get  $\frac{1}{6}$ . Find the Fraction.
  - (b) The cost of 2 footballs and 10 basketballs is Rs. 2300 while the cost of 7 footballs and 5 basketballs is Rs. 2650. Calculate the price of each football and basketball.
- 3. The following distances (in Km) were travelled by the students to reach their school. Compute the mean, median and mode of the distances travelled.

  2, 8, 1, 5, 9, 5, 14, 10, 31, 20, 15, 4, 10, 6, 5, 10, 5, 18, 12, 25, 30, 27, 20, 3, 9, 15, 15, 18, 10,

1, 1, 6, 25, 16, 7, 12, 1, 8, 21, 12.