



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program : Third Semester – Fall 2021

Paper: General Mathematics

Course Code: EDE-109

Roll No.

Time: 3 Hrs. Marks: 60

Q.1. Solve the following: (6x5=30)

- i. The signal lights on two towers flashed after every 30 and 40 seconds. If they flashed together at 7:30 p.m., when will they next flash together?
- ii. A 12 feet long and 8 feet wide room's floor is to be covered with tiles. What will be the maximum size of the tile to be used?
- iii. The sum of two numbers is twice their difference. If one of the numbers is 10 then find the other number.
- iv. 15 men can do a piece of work in 20 days, how many days can 25 men can finish the same work?
- v. In an examination a candidate must get 33% marks to pass. A candidate who gets 220 marks fails by 11 marks. What is the maximum number of marks?
- vi. The market price of a mobile phone is Rs. 3000. Discount on this mobile phone is 20%. Find the sale price of the mobile phone.

Q.2. Solve the following. (3x10=30)

1. (a) A contractor undertakes to dig a 12 km long canal in 350 days and employs 45 men. He finds after 200 days of Work that $4\frac{1}{2}$ km of canal has been completed. How many extra-men must be employed to finish the works in time?

(b) Aslam sold his car to Nasir at a profit of 10%. Nasir sold it for Rs. 1897.50 at a profit of 15%. What is the cost of Aslam?
2. (a) In an examination, a candidate who secures 25% of the maximum marks fails by 75 marks but another candidate who secures 42% of the maximum marks gets 10 marks more than necessary for passing. Determine the maximum numbers.

(b) The difference of two numbers is 4. The sum of twice of one number and the 3 times of the other number is 43. Find the numbers.
3. The following data show the marks obtained by the students in a mathematics test. Estimate the Mean, Median and Mode of their marks.
40, 32, 65, 0, 11, 28, 24, 31, 15, 5, 11, 0, 6, 14, 22, 47, 23, 27, 19, 7, 15, 32, 0, 23, 36, 45, 26, 31, 30, 25, 52, 50, 42, 34, 93, 53, 80, 74, 38, 69, 61, 54, 37, 50, 31, 39, 44, 68, 50, 55.