21/5/24

DOON UNIVERSITY, DEHRADUN
End Semester Examination
School of Management
Programme Name : Ability Enhancement Skills
Course Code with Title : Mathematical Ability for Competitive Maths (DUV111)

Time Allowed 2.00 Hours   *Maximum Marks: 80*

SECTION: A

(Total 20 marks)

1. What is the greatest number that will divide 2930 and 3250 and will leave as remainders 7 and 11 respectively ? (5 marks)

2. 10% of the voters did not cast their vote in an election. 10% of the votes poll were found invalid. The winning candidate got 54% of the valid vote and win by 1620 votes ? (5 marks)

3. The ratio of no. of boys to no. of girls in a school of 720 students is 3:5. If 18 new girls are admitted in the school, find how many new boys may be admitted so that the ratio of the no. of boys to the no. of girls may change to 2:3 ? (5 marks)

4. 'A' varies directly as 'b', and when b = 2, a = 7. What is the value of 'a' when b = 10 ? (5 marks)

SECTION: B

(Total 30 marks)

1. What is the least number by which 825 must be multiplied in order to produce a multiple of 715 ? (10 marks)

2. The LCM of two numbers is 2310 and their HCF is 30. If one of the numbers is 7 x 30 , find other number ? (10 marks)

3. (a)What is the chance that a leap year selected randomly will have 53 Sundays ; (b) What is the chance if the year selected is not a leap year? (10 marks)

1. A dice is thrown. What is the probability that the number shown on the dice is (a) an even no. ;(b) an odd no. ; (c) a no. divisible by 2 ; (d) a no. divisible by 3 (e) a no. less than 4; (f) a no. less than or equal to 4 ; (g) a no. greater than 6 ; (h) a no. less than or equal to 6 ? (15 marks)

2. A card is drawn from a pack of cards. What is the probability that it is (a) a card of black suit ; (b) a spade card ; (c) an honours card of red suit (d) an honours card of club (e) a card having the number less than 7 ;(f) a card having the number a multiple of 3 ; (g) a king or a queen ; (h) a digit card of heart ; (i) a jack of black suit ? (15 marks)