



DEPARTMENT OF MATHEMATICS

"T3-Examination, May-2018"

Semester:4th

Subject:Quantitative Aptitude

Branch: Physics/Chemistry/Math

Course Type:Core

Time: 90 minute

Max.Marks: 40

Date of Exam:25/05/2018

Subject Code:MAS230

Session: II

Course Nature:Soft

Program: B.Sc

Signature: HOD/Associate HOD:

PART-A

Note: Attempt Five Question in all, selecting two question from Sec B & Sec C. Sec-A (Q-1) is compulsory

- Q1(a). The H.C.F and L.C.M of two numbers are 21 and 84 respectively if the ratio of two numbers is 1:4, then what is the larger number of the two numbers. (2 marks)
- (b). The ratio of the number of boys and that of girls in a school having 504 students is 13:11. What will be the new ratio if 3 more girls are admitted? (2 marks)
- (c). In what time will Rs.1860 amount to 2641.20 at simple interest 12% per annum? (2 marks)
- (d). In a game of 80 points; A can give B 5 points and C 15 points. Then how many points B can give in game of 60? (2 marks)

PART-B

- Q-2. (a) One year ago, the ratio of Sita's and Gita's age was 6:7 respectively. Four year hence, this ratio would become 7:8. How old is Sita and Gita Presently? (4 marks)
- (b) Sixty five percent of a number is 21 less than four fifth of that number. What is the number? (4 marks)
- Q-3. (a) When a producer allows 36% commission on retail price of his product, he earns a profit of 8.8%. What would be his profit % if the commission is reduced by 24% (4 marks)
- (b) A bag contains 50P, 25P and 10P coins in the ratio 5:9:4, amounting to Rs.206. Find the number of coins of each type ? (4 marks)
- Q-4. (a) Two trains 100 meters and 120 meters long are running in the same direction with speed of 72km/hr. In how much time will the first train cross the second ? (4 marks)
- (b) 45 men can complete a work in 16 days. Six days after they starting working 130 more men joined them. How many days will they now take to complete the remaining work?(4 marks)

PART-C

- Q-5. (a) Find at what time between 8 and 9 O' clock the hands of a clock being the same straight will line but not together. (4 marks)
- (b) In how many ways, a committee of 5 members can be selected from 6 men and 5 ladies, consisting of 3 men and 2 ladies. (4 marks)
- Q-6. (a) A bag contain 6 white and 4 black balls, 2 balls are drawn at random. Find the Probability that they are of same colour. (4 marks)
- (b) Cone, a hemisphere and a cylinder stand on equal bases and have the same height. Find the ratio of their volumes. (4 marks)
- Q-7. (a) If Rs.600 amounts to Rs. 683.20 in two years compounded annually, find the rate of interest per annum. (4 marks)
- (b) Find the cost of carpeting a room 13 m long and 9 m broad with a carpet 75 cm wide at the rate of Rs 12.40 per square metre. (4 marks)