ST. JOSEPH'S COLLEGE (AUTONOMOUS) BENGALURU-27
MID SEMESTER EXAMINATION
B.COM / BPS – I SEMESTER
BC1418: QUANTITATIVE TECHNIQUES

TIME: 1 Hour

MAX. MARKS: 30 Marks

SECTION A

Answer any FIVE of the following questions. Each question carries two marks. (5x2=10)

1) Find the duplicate and triplicate ratio of 5:10.
2) If 15 men working 12 hours per day perform job in 16 days, how long will it take for 21 men working 10 hours daily to do the same job?
3) A fruit seller cheats his customer on the weights of fruits. This weighs 875 grams instead of 1kilogram. What is his gain and gain%?
4) Solve: $1 = \dfrac{3}{2x+5}$
5) Share Rs. 1250 among A & B in the ratio 2:3
6) Find the S.I. on Rs. 5555 for 5 years at 5% per annum.
7) PVR cinemas sold 1500 tickets at Rs. 250 each, while each ticket costs Rs. 360. Find the rate of discount.

SECTION B

Answer any TWO of the following questions. Each question carries five marks. (2x5=10)

8) A man sells 7 horses and 8 cows at Rs. 29,400 and 5 horses and 6 cows at Rs. 21,500. What is the selling price of each?
9) A clock rings after every 60 seconds. Another clock rings after every 62 seconds. They beeped together at 12 O'clock. Find the time when they ring together.qq
10) Rama sells a cycle to Bhima at 20% gain. Bhima sells it to Shyama at 15% gain and Shyama sells it to Bhama at a loss of 10%. If Bhama pays Rs. 1863, How much does Rama pay?

SECTION C

Answer the following compulsory question. The question carries ten marks.   (1x10=10)

11) a) Arun & Varun can complete the piece of work in 12 days. Varun and Cam can complete the piece of work in 15 days. Cam and Arun can complete the piece of work in 20 days. How many days will they take to complete the same work together? How many days will Varun alone complete the work?   **(5)**

b) In how many years will Rs. 2000 amount to Rs. 2525 at 6% C.I.   **(3)**

c) Mr. A is six times as old as Mr. B. In fifteen years, Mr. A will be three times as old as Mr. B. find their present ages.   **(2)**