Bharati Vidyapeeth (Deemed to be University), Pune
Centre for Distance and Online Education
School of Distance Education

Name of the Assignment Setter:	Sonali Pohekar	

Programme:	BBA	Semester:	I

Subject:	Foundation of Business Mathematics

Q.1)	Attempt **ANY ONE** of the Following (**1000 Words**)		**(10)**
	a)	Find inverse of the following matrix. $$A = \begin{bmatrix} 1 & 2 & 1 \\ 0 & 2 & 3 \\ 0 & 0 & 1 \end{bmatrix}$$	
	b)	A cap seller purchased 400 caps for ` 5500. He sold 300 at profit of 20% and remaining caps at loss of 15%. Find percent profit/loss in total transaction.	
Q.2)	Attempt **ANY TWO** of the Following (**800 Words**)		**(12)**
	a)	A certain amount is divided among three person A, B, C in the ratio of 6 : 7 : 10, find the amount if Rs. 450 is added to the share of 'C' is equal to half of the whole amount.	
	b)	A certain sum of money is deposited in a bank annually for five years at 8% p.a simple interest. If at the end of 5 years the amount standing to the credit of depositor is Rs. 49,600 find the amount deposited each year.	
	c)	Find $A^2 - 2B$	
	d)	Find the present value and amount of an ordinary annuity of 8 quarterly payments of Rs 500 each, the rate of interest being 8% p.a. compounded quarterly.	
Q.3)	Write Short Notes on (**ANY TWO**)		**(08)**
	a)	If 15 men takes 16 days to plough 20 acres of land, how long 25 men will take to plough 50 acres ?	
	b)	What sum will amount to Rs. 12167 in 5 years at 4% p.a compound interest	
	c)	Rohit sold car to Amar at 15% profit. Amar sold a car to Vijay at 5% profit for Rs. 48,300. Find the price at which Rohit has purchased the car.	
	d)	A man borrows Rs 37500 and agrees to repay in semi-annual installments of Rs 2250 each, the first due in 6 months. How many payments must he make if rate of interest is 6% compounded semi-annually?	

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