

AJK-11-19

Answer Sheet No. **Business Mathematics (OBJECTIVE)** Roll No.
PART - I 019/1
(INTERMEDIATE)

 Sign. Dy. Supdt. Fictitious Roll No. (For Office Use) Sign. Candidate

Business Mathematics (INTERMEDIATE)
(PART - I) 019/1 Marks : 10
(OBJECTIVE PART) Time : 15 Minutes

Note:- Write your Roll No. in space provided. Over writing, cutting, using of lead pencil will result in loss of marks. All questions are to be attempted.

1- Each question has four possible answers, Tick (\checkmark) the correct answer. (10)

1)	Ratio between 6 kg and 42 kg is;						
A	1 : 7	B	7 : 1	C	6 : 7	D	7 : 6
2)	60 % of 200 is;						
A	110	B	120	C	150	D	180
3)	If 5 : 10 :: 20 : x. then x is;						
A	60	B	80	C	40	D	30
4)	Formula for simple interest;						
A	$\frac{p \times r}{t \times 100}$	B	$\frac{p \times t}{r \times 100}$	C	$\frac{p \times r \times 100}{t}$	D	$\frac{p \times r \times t}{100}$
5)	If $4x - 5 = 2x + 7$. Then x is;						
A	6	B	12	C	4	D	3
6)	Solution set of $x^2 + 5x + 6 = 0$ is;						
A	{2, 3}	B	{-2, -3}	C	{-2, 3}	D	{2, 1}
7)	It $x + y = 7$ and $x - y = 5$. Then x is;						
A	2	B	4	C	6	D	8
8)	It $f: x \rightarrow y$. Then x is called;						
A	Range	B	Constant function	C	Onto function	D	Domain
9)	It $A = \begin{bmatrix} 1 & 2 & 3 \\ & & \end{bmatrix}_{1 \times 3}$, $B = \begin{bmatrix} 4 \\ 5 \\ 6 \end{bmatrix}_{3 \times 1}$ Then order of AB is;						
A	1 x 1	B	2 x 2	C	3 x 3	D	2 x 3
10)	$(1001)_2$ into base 10 is						
A	8	B	9	C	10	D	12

(The End)

SECTION - I

2- Write short answers of any six parts. (2 x 6 = 12)

i	Write different types of proportion.	ii	Define ratio and how it is expressed.
iii	What is the relationship among %age, base and rate?	iv	500 is what %age of 10000.
v	Write formula of simple interest.	vi	What will be simple interest on Rs. 700 borrowed for 5 years @ 9% p.a.
vii	Write formula for Amount of an Annuity due.	viii	Solve $3(4x - 2) = 4(2x + 3)$.
ix	Define the degree of an equation.		

3- Write short answers of any six parts. (2 x 6 = 12)

i	Solve $x^2 + 7x + 12 = 0$, by factorization.	ii	Define an irrational equation.
iii	Solve by elimination Method $x + y = 12$ & $x - y = 8$.	iv	Define an even function.
v	If $2x - y = 5$, then find slope and y - intercept.	vi	If $A = \begin{pmatrix} 11 & 7 \\ 6 & 3 \end{pmatrix}$, $B = \begin{pmatrix} 5 & 2 \\ 3 & 1 \end{pmatrix}$, then find $A + B$ & $A - B$.
vii	Define skew-symmetric and symmetric matrices.	viii	Convert 17 into Binary number system.
ix	Convert $(1101)_2$ into decimal number system.		

SECTION - II

Note:- Attempt any two questions. (8 x 2 = 16)

4- (a) Divide Rs. 750 in the ratio 3 : 2 (04)

(b) How long will it take for Rs. 50000 to earn simple interest as Rs. 10,000 at 10% per Annum. (04)

5- (a) Solve by completing square $x^2 + 18x - 40 = 0$ (04)(b) If $G(y) = y^2 - 2y + 1$ then find $G(-1)$, $G(1)$, $G(-2)$, $G(-3)$ (04)6- (a) Find the values of x if $\begin{vmatrix} 3 & 1 & x \\ -1 & 3 & 4 \\ x & 1 & 0 \end{vmatrix} = -30$ (04)(b) Evaluate $(11011)_2 \times (11110)_2$ (04)

(The End)