B.PHARM SEMESTER-I, INTERNAL EXAM (2023-24)

Subject code: BP107TT	Date: 07/12/2023
Subject Name: REMEDIAL MATHEMATICS	Total Marks: 20
Time: 10:30 AM TO 11:30 AM	Enroll. No:

ANSWER THE FOLLOWING QUESTIONS:

Q.1	Simplify the terms: $4 \log 5 + 2 \log 4$	(2)
Q.2	If $A = \begin{bmatrix} 7 & 2 \\ 8 & 9 \end{bmatrix}$ and $B = \begin{bmatrix} -1 & 4 \\ 0 & 5 \end{bmatrix}$ then find the following: (i) A+2B (ii) A-B (iii) AB (iv) 2A-3B	(4)
Q.3	Evaluate the following determinants: (i) $\begin{vmatrix} 2 & -1 & 5 \\ 3 & 4 & 2 \\ 1 & -2 & -1 \end{vmatrix}$ (ii) $\begin{vmatrix} 15 & 10 & 9 \\ -4 & 12 & 10 \\ 9 & 8 & 11 \end{vmatrix}$	(3)
Q.4	Obtain the Mantissa of the logarithm of the number 1974 <u>OR</u> Write the following in logarithmic form: i) $8^3 = 512$ ii) $10^{-2} = 0.01$	(2)
Q.5	Split into Partial fractions: $f(x) = \dfrac{11-3x}{(x-1)(x+3)}$	(3)
Q.6	Write down following definitions: i) Row matrix ii) Square matrix iii) Polynomial	(6)