Graphic Era HILL UNIVERSITY
Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)
University under section 2(f) of UGC Act, 1956

Pharmacy Sessional-I (Odd) Semester (Late/Lateral Admission) Examination
November 2025

Roll No.....

Name of the Course: B. Pharma
Semester: I
Name of the Paper: Remedial Mathematics
Paper Code: BP 106 RMT
Time: 1.5 Hour Maximum Marks: 30

Note:
(i) This question paper contains two sections.
(ii) All the questions are compulsory.

Section A

Q. 1 Short Questions: Attempt any four questions (4X 5 = 20 Marks)

a. Define function and its types with examples.
b. Resolve the following partial fraction

$$\frac{3x}{(x-1)(x+2)}.$$

c. Simplify

$$7log\ \frac{10}{9} - 2log\ \frac{25}{24} + 3log\ \frac{81}{80}.$$

d. Compute the determinants of the following matrices

(i) $\begin{bmatrix} 5 & 2 & 1 \\ 3 & 0 & 2 \\ 8 & 1 & 3 \end{bmatrix}$, (ii) $\begin{vmatrix} x^2 - x + 1 & x + 1 \\ x & x - 1 \end{vmatrix}$.

e. Define the following term with example
(i) Matrix,
(ii) Diagonal Matrix,
(iii) Scalar matrix,
(iv) Row Matrix,
(v) Determinant.

f. If $A = \begin{bmatrix} 3 & 4 & 6 \\ 4 & 5 & 2 \end{bmatrix}$, $B = \begin{bmatrix} -2 & 1 & 2 \\ 1 & 2 & 0 \end{bmatrix}$
Find (i) $5A + 3B$ (ii) Prove that $A + B = B + A$

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Section B

Q. 2 Long questions: Attempt any one question **(1X10 = 10 Marks)**

a. Resolve the following partial fraction

$$\frac{5x+7}{(x-2)(x-4)(x-6)}.$$

b. Find the inverse of the given matrix

$$A=\begin{bmatrix} 1 & 2 & 3 \\ 0 & 2 & 4 \\ 0 & 0 & 5 \end{bmatrix}$$