

[KW 806]

March 2010

Sub. Code: 3806

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION
(Regulations 2008 - 2009)**(Candidates admitted from 2008-2009 onwards)**
FIRST YEAR**Paper VI – REMEDIAL MATHEMATICS**
Q.P. Code : 383806**Time : Three hours****Maximum : 70 marks****Answer All questions****I. Essay Questions :****(2X 20 = 40)**

1. a) Define matrix,

$$A = \begin{pmatrix} 2 & 5 & 9 \\ 6 & 1 & 3 \\ -2 & 2 & -3 \end{pmatrix} \quad B = \begin{pmatrix} -2 & -2 & -4 \\ 0 & 4 & 6 \\ 1 & 3 & 5 \end{pmatrix}$$

- b) Show that

$$\begin{pmatrix} a+b & b+c & c+a \\ b+c & c+a & a+b \\ c+a & a+b & b+c \end{pmatrix} = 2 \begin{pmatrix} a & b & c \\ b & c & a \\ c & a & b \end{pmatrix}$$

2. a) If
- $x^2y + xy^2 = 25$
- verify

$$\frac{dy}{dx} \frac{dx}{dy} = 1.$$

- b) If
- $y = x^2 + x \log x$
- , prove that,
- $\frac{dy}{dx} = x^2 (1 + \log x) x^{\log x - 1} 2(\log x).$

II. Write Short Notes :**(6 X 5 = 30)**

1. Give the methods for evaluation of limits.
2. Define and explain about scalar matrix.
3. Find dy/dx of the function : $x^2 + 5x^2y + yx = 5$.
4. Draw graph of function $Y = 2x^2$.
5. Define lablace trans form and solve $\sin^2(at)^3$.
6. $L + \frac{x^2 + 5x + 6}{x+2}$ solve.
