

May 2011

[KY 806]

Sub. Code: 3806

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION

(Regulations 2008 - 2009)

(Candidates admitted from 2008-2009 onwards)

FIRST YEAR

PAPER VI – REMEDICAL MATHEMATICS

Q.P. Code : 383806

Time : Three hours

Maximum : 70 marks

Answer All questions

I. Essay Questions :

(2X 20 = 40)

1.a. Find the Inverse of

$$\begin{vmatrix} 1 & -1 & 2 \\ -3 & 0 & 4 \\ 1 & 2 & 5 \end{vmatrix}$$

b. If $A = \begin{vmatrix} 1 & 0 & -2 \\ 2 & 1 & 3 \\ 1 & -1 & 0 \end{vmatrix}$, $B = \begin{vmatrix} 3 & 1 & 0 \\ -2 & 0 & 3 \\ 2 & 0 & 1 \end{vmatrix}$

Find (i) $AB - BA$ (ii) $(A+B)(A-B)$

2.a. Integrate $\frac{3x+1}{(x-1)^2(x+3)} dx$

b. If $\cos\alpha = -12/13$ and $\cos\beta = 24/7$, where α lies in the second quadrant and β lies in fourth quadrant, find the values of

(i) $\sin(\alpha+\beta)$

(ii) $\cos(\alpha+\beta)$

(iii) $\tan(\alpha+\beta)$

(PTO)