

09-01-2019

Girijananda Chowdhury Institute of Pharmaceutical Science

Non University End Term Examination 2018

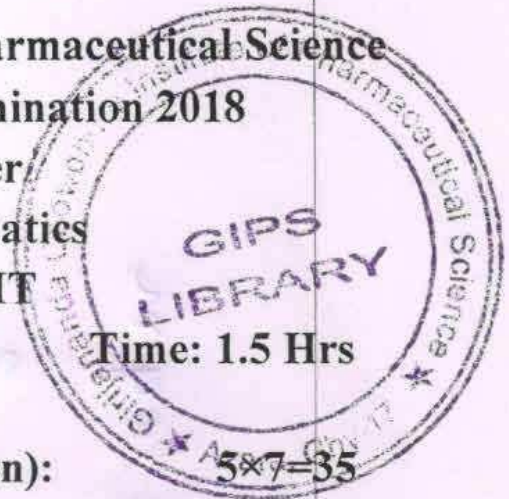
B Pharm 1st Semester

Sub: Remedial Mathematics

Sub Code: BP106RMT

Full Marks: 35

Time: 1.5 Hrs



Answer the following questions (any seven):

1. It is known that $\log 2 = 0.3010$, find the values of $\log 8$ and $\log 32$
2. Given $\log 2 = 0.3010$ and $\log 3 = 0.4771$, solve the equation $2^x \cdot 3^{2x} = 100$
3. If $f(x) = x^2 + x - 1$ and $g(x) = 4x - 7$, then find
 - i. $(f + g)(2)$
 - ii. $fg(-5)$
4. Resolve into partial fraction: $\frac{6x^2 + 5x - 2}{2x^3 - x^2 - x}$
5. Resolve into partial fraction: $\frac{5}{(x-3)^2(x-5)}$
6. Find the equation of the line passing through $(-4, -5)$ and perpendicular to the line joining $(1, 2)$ and $(5, 6)$.
7. Find the value of x , so that the points $(3, -2)$, $(x, 2)$, $(8, 8)$ may be collinear.
8. Find the derivative of $\sqrt{\frac{1+x}{1-x}}$ w.r.t x
9. Find $\int xe^x dx$
10. Solve the equation: $\frac{dy}{dx} = (4x + y + 1)^2$