

(OLD SCHEME)

Reg.No:

Second Year B.Pharm Degree Supplementary Examinations - July 2015

**MATHEMATICS, BIOSTATISTICS & COMPUTER APPLICATIONS
(2010 SCHEME)**

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Use ordinary calculators.
- Write section A and section B in separate answer books(32 Pages).
Do not mix up questions from section A and section B.

QP CODE: 205006 **Section A** –Mathematics & Biostatistics Marks: **50**

Essay

(1x10=10)

1. Evaluate $\int_0^{\pi/2} \frac{a \cos x + b \sin x}{\sin x + \cos x} dx$

Short notes

(8x5=40)

2. Find the first derivative if $y = \frac{1+x^2}{1-x^2}$
3. Differentiate $y = (\log x) \log x$
4. Solve $(D^2 \text{ (Read as D square)} - 6D + 5) y = \sin 4x$
5. Solve $(D^2 \text{ (Read as D square)} - 3D + 2) y = e^{5x}$ (Read as e raised to 5x)
6. Find the Laplace transform of $L[\sin 3t]$
7. Derive the Laplace transform of $L[e^{-at}]$ (Read as e raised to minus a)
8. Frequency polygon
9. Data Collection

P.T.O

Essay

(2x10=20)

1. How computer systems are used in community and clinical pharmacy
2. Explain the modern computing devices with examples.

Short notes

(6x5=30)

3. Plotters and scanners
4. What are the functions of a system software
5. What are different kinds of storage media and mention examples.
6. MS power point
7. Advantages of having a wireless network
8. Applications of computers in Pharmaceutical research and education
