

(OLD SCHEME)

Reg. No:

**Second Year B.Pharm Degree Supplementary Examinations
December 2018**

**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

(10)

1. Calculate the mean, median and mode for the following frequency distribution

CI	15 – 25	25 – 35	35 – 45	45 – 55	55 – 65	65-75	75 – 85
<i>f</i>	14	11	19	14	16	11	13

Short notes

(8x5=40)

2. Pie diagram with an example

3. Cumulative frequency curves with respective diagrams

4. Differentiate $y = \frac{x^2+1}{x^2-1}$

5. Integrate $\int x e^{2x} dx$

6. Evaluate $\int_0^{\pi/2} \frac{\sqrt{\sin x}}{\sqrt{\sin x} + \sqrt{\cos x}} dx$

7. Solve $(D^2+3D+2)y = e^{4x}$

8. Find the Laplace transform of $L\left(e^t + \frac{1}{e^t}\right)^2$

9. Find the Laplace transform of $L[t \sin 3t]$

P.T.O

QP CODE: 208006 Section B –Computer Applications

Marks: 50

Essay

(2x10=20)

1. Describe the various types of input and output devices
2. Explain the types of modern computing devices and its advantages

Short notes

(6x5=30)

3. Assembly language
4. Advantages of internet usage in pharmacy field
5. RDBMS
6. Brief about any to two secondary storage devices
7. Office software
8. Brief computer network
