(OLD SCHEME) Reg.No: ……………………..

Second Year B.Pharm Degree Supplementary Examinations February 2017

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. Calculate the standard deviation for the following

CI	15 – 25	25 – 35	35 – 45	45 – 55	55 – 65	65 – 75
f	14	11	18	14	10	12

Short notes   **(8x5=40)**

2. Brief the methods of data collection

3. Diagrammatic representation of data

4. Differentiate $y = (Sinx)^{sinx}$

5. Evaluate $\int_{0}^{\pi} x\sin^2 x$

6. Solve $(D^2+3D+1)\, y = \sin 2x$

7. Solve $(D^2 +5D + 6)\, y = e^{3x}$

8. Derive the Laplace transform of $L\,[\,e^{\,t}\,]$

9. Find the Laplace transform of $L\,[\,(t + 2t^2)^2\,]$

P.T.O

QP CODE: 208006   **Section B** –Computer Applications   Marks: **50**

Essay   **(2x10=20)**

1. Discuss the applications of computers in pharmacy field

2. Elucidate the programming languages

Short notes   **(6x5=30)**

3. Types of output devices

4. Various types of operating system

5. Explain embedded systems and its applications

6. Describe the types of computer networks

7. Concise about search engines

8. Brief the advantages of virtual library

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