

**QP Code: 107331**

**Reg No: .....**

**First Year M.Pharm Degree Examinations July 2015**

**(Pharmaceutical Chemistry)**

**Paper III – Chemistry of Natural Products**

**Time: 3 hrs**

**Maximum Marks: 100**

- *Answer all questions*
- *Draw diagrams wherever necessary*

**Essays:**

**(2x20 =40)**

1. What is quinine. Explain the constitution of quinine in detail
2. What are cardiac glycosides and classify it with suitable examples. Add a note on stereochemistry of cardiac glycosides

**Short Essays:**

**(6x10=60)**

3. Explain the importance of HPLC and HPTLC techniques for the structural elucidation of plant constituents
4. Outline the chemistry of rutin
5. Explain briefly the constitution of abietic acid
6. Discuss the chemistry of carotenes
7. Outline the importance of marine natural products as therapeutic agents
8. How natural products play a role in new drug development.

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