

Roll No .....

**MPY-204(PCL)**  
**M.Pharmacy II Semester**  
Examination, May 2019  
**Advanced Pharmacology - IV**  
*Time : Three Hours*

*Maximum Marks: 70*

- Note:** i) Attempt any five questions.  
ii) All questions carry equal marks.

1. Discuss signal Transduction in G- Protein coupled Receptors.
2. Explain the role of different biochemical molecules in inflammatory response.
3. Classify cholinergic and dopaminergic receptors with various drugs acting on them.
4. Discuss the physiological and pathological roles of Nitric Oxide.
5. Explain the various Reactive Oxygen Species and the antioxidants which protect against them.
6. Discuss the role of T and B Lymphocytes in Immunity.
7. What are the vectors used in gene therapy. Also give the recent developments in treatment of hereditary disease.

8. Write a notes on any two
- a) Opioid Receptors
  - b) Clinical Laboratory tests
  - c) Human genome mapping

\*\*\*\*\*