M. PHARM. SEM-II (CHOICE BASED CREDIT & GRADE SYSTEM) : SUMMER - 2018

SUBJECT: ADVANCE CORE SUBJECT - III: ADVANCED PHARMACOLOGY - III

10.00 AM to 01.00 PM S-2018-4006 Day: Thursday Time: 05/07/2018 Date: max. Marks. 60 **N.B.**: 1) Attempt any THREE questions from Section – I and Section – II each. 2) Answers to both sections should be written in **SEPARATE** answer books. 3) Figures to the right indicate FULL marks. **SECTION - I Q.1** Describe and classify the G-protein coupled receptor. Explain in detail their (10) secondary messenger pathway. Describe the endothelium derived relaxing factor. Explain the physiological (10) **Q.2** and pathological implications. Discuss the types of reactive oxygen species. Derive the significance of (10) Q.3 antioxidants as therapeutics agents. Write notes on any TWO of the following: $(2 \times 5 = 10)$ **Q.4** (10)Cytokines a) Neurosteroids b) Histamine receptors **SECTION - II** Q.5 Explain in detail the signaling of glucocorticoid receptor. (10)Explain in detail the concept of gene therapy. **Q.6** (10)**Q.7** Describe in detail the modulation of potassium ion channels. Highlight the (10) importance of drugs acting on them. **Q.8** Write notes on any TWO of the following: $(2 \times 5 = 10)$ (10)a) Apoptosis **b)** Insulin receptors Chronopharmacology

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