UG Even Semester (CBCS) Exam., May—2017

PHARMACEUTICAL SCIENCES

(6th Semester)

Course No. : BPH–607 (C)

(Pharmacology—II)

Full Marks : 75
Pass Marks : 30

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. What are cardiac glycosides? Write in detail the pharmacological action of digitalis. Explain the mechanism of action and mention the therapeutic utility of digitalis. 2+9+4=15

2. Write the mechanism of action, side effects and therapeutic utility of any *five* of the following drugs : 3×5=15

(a) Methyldopa

(b) Enalapril

(c) Quinidine

(d) Isosorbide dinitrate

(e) Verapamil

(f) Amiodarone

UNIT—II

3. *(a)* What do you mean by haematinics? Write the importance and daily requirements of iron. Discuss the absorption, transport, storage and daily turnover of iron in our body. 2+2+8=12

(b) Show the biochemical target for haematinic action of vitamin B_{12} and folic acid. 3

4. *(a)* Distinguish between antithrombics and anticoagulants. Classify anticoagulants with example. Compare the mechanism of action and therapeutic utility of heparin and warfarin. 2+2+6=10

(b) Write a note on fibrinolytics. 5

UNIT—III

5. *(a)* Classify serotonin receptors with their distribution and characteristic feature. 7

(b) Write the endogenous release and physiological role of histamine. 8

6. *(a)* What do you mean by eicosanoids? What are the main classes of prostanoids receptors? Discuss the physiological significance of prostanoids and their receptors. 1+1+8=10

(b) Write a note on PAF. 5

UNIT—IV

7. Write the characteristic feature and etiology of asthma. Classify anti-asthmatic drugs with example. Compare the action and utility of prednisolone and aminophylline. 3+6+6=15

8. *(a)* Explain the act of cough, with its causes. Classify drugs used in symptomatic treatment of cough with example and specific utility. 2+8=10

(b) Write a note on respiratory stimulant. 5

UNIT—V

9. *(a)* What do you mean by bio-assay? Write the general principle and indication of bio-assay. Give an outline of principle and methodology for bio-assay of atropine or mepyramin. 1+4+6=11

(b) Give an experimental design for ED_{50} determination. 4

10. *(a)* What do you mean by quantal and graded response measurement of bio-assay? Discuss the principle and methods of insulin bio-assay. 12

(b) Write the significance of four point bio-assay. 3

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