B. PHARMACY FOURTH YEAR SECOND SEMESTER – 2018

Medicinal Chemistry IV

Time : 3 hours **Full Marks 100**

Answer any five questions taking at least TWO from each group. Answers to all parts of a question should be written in the same place.

GROUP - B

5. Write notes on: -6+7+6
(a) Hammett sigma (b) Topliss scheme (c) Craig plot

6. Give an explanatory note on CoMFA and use of PLS regression in CoMFA analysis [20

7. Discuss on the followings: [4x5
(i) Conformational analysis
(ii) Molecular mechanics
(iii) de novo ligand design
(iv) STERIMOL paramters

Ref.No.: Ex/PHARM/ T/422/2018

Name of the Examinations: B.PHARMACY FOURTH YEAR SECOND SEMESTER-2018

Subject: MEDICINAL CHEMISTRY-IV Time: THREE HOURS Full Marks: 100

Group-A

Answer any five questions taking at least two from each group

Q.1.a) Outline the synthesis of artificial hormone used for induction of estrous phase in the laboratory animals. 8

b) How the sex steroid hormones are classified? Give one example from each category. 6

c) How testosterone is synthesized from cholesterol? 6

Q.2.a) Explain the structural features and actions oxytocin and vasopressin. 6

b)What are anabolic steroids? Give examples. 4

c)What are different forms of ACTH? Give examples. 6

d) What are oral and non-oral progestins? Give examples from long acting formulation from this category. 4

Q.3.a) Explain different forms of vitamin D. How they are manufactured? How they are preserved in formulation? 2+6+2

b) Outline the industrial synthesis of vitamin C. 6

c)How different forms of vitamin B-6 are synthesized? 4

Q.4.a) What are immunostimulants and immunosuppressive agents? Give examples. 2+4

b) Outline the synthesis of one i-stimulant and one i- suppressive agent. 6+6

c) What is the common structural unit present in fat soluble vitamin? 2