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DP—46—2022

FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (Fifth Semester) EXAMINATION

MARCH/APRIL, 2023

MEDICINAL CHEMISTRY-II

Paper-BP-501-T

(Thursday, 16-03-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time— Three Hours

Maximum Marks—75

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

1. Answer all the questions : 10×2=20
 - (a) Outline synthesis of furosemide.
 - (b) Write the structure and uses of any *two* aminoalkyl ether derivatives as antihistamic agents.
 - (c) Write structure and use of menadione and cholesteramine.
 - (d) Give the structure and uses of thyroid hormone.
 - (e) Write the structure of diltiazem HCL and nifedipine HCL.
 - (f) Explain mechanism of action of gastric proton pump inhibitors.
 - (g) Outline the synthesis of warfarin.
 - (h) Explain the synthesis of Disopyramide phosphate.
 - (i) Outline the synthesis of Benzocaine.
 - (j) Write a note on drugs used in CHF.

2. Attempt any *two* of the following : 2×10=20
 - (a) Define and classify antihypertensive agents. Explain the MOA of Angiotensin Receptor Blockers. Write the synthesis of methyl Dopa.
 - (b) Classify local anaesthetic agents and discuss SAR of Benzoic acid and Anilide class of local Anaesthetic agents with suitable examples.
 - (c) What are artineoplastic agents ? Classify them with examples. Discuss the mechanism of action of alkylating agents. Outline synthesis of Mechlorethamine.

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3. Solve the following (any seven) : 7×5=35
- (a) Define and classify antidiabetic drugs with suitable examples.
 - (b) Write a note on antimetabolites. Explain the synthesis of mercaptopurine.
 - (c) Explain the metabolism of steroids.
 - (d) What are estrogens ? Discuss about synthetic estrogens.
 - (e) Describe the chemistry of oral contraceptive.
 - (f) What are lipid lowering agents ? Give the structure and uses of lovastatin, clofibrate and cholesteramine.
 - (g) Write a note on cardiac glycosides used in the treatment of congestive heart failure.
 - (h) Write a note on antithyroid drugs and give the structure and uses of any two.
 - (i) What are potassium sparing diuretics ? Outline the synthesis and medicinal uses of chlorthiazide.

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FACULTY OF PHARMACEUTICAL SCIENCE AND TECHNOLOGY

B.Pharm. (Third Year) (Fifth Semester) EXAMINATION

MARCH/APRIL, 2023

INDUSTRIAL PHARMACY-I

Paper BP502T

(Saturday, 18-3-2023)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

N.B. (i) All questions are compulsory.

(ii) Draw appropriate diagram wherever necessary.

(iii) Answer to the point only.

1. Answer the following :

10×2=20

- (a) Stokes' law is applicable to dilute suspension. Justify**
- (b) Define Angle of repose and give its formula.**
- (c) Mention basic criteria for parenteral preparations.**
- (d) Enlist ideal characteristics for pharmaceutical packaging material.**
- (e) Define hair dyes and sun screen.**
- (f) Define bloom strength of gelatin.**
- (g) Define pellets and enlist equipments for manufacturing of pellets.**
- (h) Write the types of glasses used in containers.**
- (i) Write the significance of BCS classification.**
- (j) Write advantages of Granulation technique.**

P.T.O.

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2. Answer any two :

2×10=20

- (a) Describe formulation aspect of the parenteral preparations.
- (b) Explain various quality control test for tablets.
- (c) Describe evaluation of liquid orals.

3. Answer any seven :

7×5=35

- (a) Define Polymorphism. Explain various methods for characterization of polymorphs.
- (b) What are ophthalmic preparation ? Give its evaluation.
- (c) Enlist and explain techniques of pelletization.
- (d) Describe cold creams.
- (e) Write drug-plastic interactions.
- (f) What are propellants ? Write its functions and classifications.
- (g) Write formulation and manufacturing of aerosols.
- (h) Explain compression and processing problems of tablets.
- (i) Write evaluation test of capsules.

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FACULTY OF SCIENCE AND TECHNOLOGY

B.Pharm. (V Semester) EXAMINATION

MARCH/APRIL, 2023

PHARMACOLOGY

Paper-II

(Monday, 20-03-2023)

BP-503-F

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—75

N.B.— (i) All questions are compulsory.

(ii) Draw appropriate diagram, chart wherever necessary.

(iii) Answer to the point only.

1. Answer the following :

10×2=20

(i) Define antiplatelet drug. Give two examples.

(ii) What is shock ?

(iii) Write therapeutic uses of Lovastatin.

(iv) Write role of calcitonin.

(v) What are hematinics? Give two examples.

(vi) Write therapeutic uses of Indomethacin.

(vii) Classify anti-gout drugs.

(viii) Differentiate between hormone and autocooids.

(ix) Write applications of bioassay.

(x) What are androgens ?

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(2)

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2. Answer the following (any *two*) :

2×10=20

- (i) Classify diuretics. Write pharmacology of Furosemide.
- (ii) What is angina pectoris? Classify antianginal drugs. Discuss pharmacology of nitrates
- (iii) What is diabetes mellitus. Write pharmacology of Insulin. Enlist types of Insulin preparations.

3. Answer the following (any *seven*)

7×5=35

- (i) Write actions of estrogens.
- (ii) Write pharmacology of Propranolol.
- (iii) Discuss Parathormone.
- (iv) Discuss electro-physiology of heart.
- (v) Write pharmacology of heparin.
- (vi) Discuss actions of prostaglandins.
- (vii) Write actions of thyroid hormone.
- (viii) Enlist types of bioassay. Write bioassay of histamine.
- (ix) Discuss pharmacology of digitalis.

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