
**B. Pharmacy 6th
Semester
Question Paper
2017-2018**

Even Semester Examination 2017-18**B.PHARMA (SEMESTER-VI)****PHARMACOGNOSY-II****Time: 03:00 Hours****Max Marks : 100****Note :** Attempt **all** questions :**Note :** Attempt **all** questions as per instructions.1 Attempt **any four** parts of this section.**5x4=20**

- (a) Give short note on saponin glycoside.
- (b) Give identification test for anthraquinone glycoside.
- (c) Give biological source, macroscopic characters, chemical constituents and uses of aloe.
- (d) Discuss collection, cultivation and adulterants of digitalis.
- (e) Give biological source, macroscopic characters, chemical constituents and uses of senna.

2 Attempt **any two** parts of this section.**10x2=20**

- (a) Give biological source, macroscopic characters, chemical constituents and uses of saffron and ammi majus.
- (b) Write about production and utilization of sennoside
- (c) Write about production and utilization of diosgenin

3 Write short notes on **any two** of the following. 10x2=20

- (a) Bhilwa and Guggul
- (b) Shatavari and Tylophora
- (c) Amla and Kantkari

4 Attempt **any four** parts of this section. 5x4=20

- (a) Bhasma
- (b) Asavas
- (c) Siddha system of medicine
- (d) Ayurvedic system of medicine
- (e) Churanas

5 Attempt **any two** parts of this section. 10x2=20

- (a) Write in detail about biological source, chemical constituents and common uses of tulsi and shankhpushpi.
- (b) Give pharmacognosy of Brahmi.
- (c) Give biological source, cultivation and collection and uses of any two.
 - (i) Neem
 - (ii) Shilajit
 - (iii) Gymnema

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Even Semester Examination 2017-18**B. PHARMA (SEMESTER-VI)****PHARMACOLOGY-II****Time: 03:00 Hours****Max Marks : 100****Note :** Attempt **all** question, each question carries equal marks.

1. Attempt **any four** questions: (5 x 4 = 20)
 - (a) Explain the pharmacological action of the Vit. K & anticoagulants.
 - (b) Write the pharmacological action of Haematinics.
 - (c) Discuss the pharmacological action of fibrinolytics & antiplatelet drugs.
 - (d) Explains in brief about plasma volume expanders.
 - (e) Detail the pharmacological action of Thromboxane.
2. Write in detail : (Attempt **any four** questions) (5 x 4 = 20)
 - (a) Anti-asthmatic drugs.
 - (b) Anti-tussives & Expectorants,
 - (c) Respiratory Stimulants
 - (d) Prostaglandins
 - (e) Histamine
3. Attempt **any two** questions: (10 x 2 = 20)
 - (a) Write in detail about Antacids and Antiulcer drugs.
 - (b) Give the detail Pharmacology of Laxatives and antidiarrhoeal Agents.
 - (c) Write in detail about Emetics and antiemetics.
4. Discuss in brief: (Attempt **any four** questions) (5 x 4 = 20)
 - (a) Antianginal drugs.
 - (b) Antiarrhythmics.

Even Semester Examination 2017-18**B.PHARM (SEMESTER-VI)****PHARMACEUTICAL CHEMISTRY****MEDICINAL CHEMISTRY - II****Time: 03:00 Hours****Max Marks : 100****Note :** Attempt All questions. Attempt questions as per instructions given.**Q.1. Attempt any four:****(5x4=20)**

- (a) What is drug design? Discuss analogues based drug designing.
- (b) What is structural based drug designing. Discuss with suitable examples.
- (c) Give the mechanism of action and synthetic procedure of Ranitidine.
- (d) Write short note on synthetic hypoglycemic agents.
- (e) Give various parameter of QSAR studies.

Q.2. Answer any four of the following:**(5x4=20)**

- (a) Write a note on cardiac glycosides.
- (b) Classify anti-arrythmic agents with examples.
- (c) Discuss mechanism of action of various antianginal drugs.
- (d) SAR of β -Blockers.
- (e) Write a note on proton pump inhibitors.

Q.3. Attempt any two of the following:**(10x2=20)**

- (a) Give classification of Antihypertensive drugs with chemical structure, mechanism of action and uses of one member of each class.

- (b) Explain the mechanism of blood coagulation. Give examples with structure and mechanism Of action of oral anti-coagulants and SAR of coumarin derivatives.
- (c) Write a detail note on thiazide diuretics including their mode of action and SAR.

Q.4. Attempt any two of the following:

(10x2=20)

- (a) Classify diuretics drugs giving examples of each category. Write short note on osmotic agents and acidifying salts.
- (b) Define antipyretics? Write a detail note on cox-2 inhibitors.
- (c) Give synthetic procedure of:
 - i. Omeprazole
 - ii. Methyldopa
 - iii. Lovastatin
 - iv. Spironolactone.

Q.5. Attempt any two of the following:

(10x2=20)

- (a) Give synthetic procedure and uses of:
 - i. Aspirin,
 - ii. Captopril
 - iii. Heparine
 - iv. Paracetamol.
- (b). Discuss non selective cox inhibitors with MOA and SAR.
- (c). Discuss antitussive. Give the mechanism of action and synthesis of dextromthorphen.

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B.PHARMA (SEMESTER-VI)

PHARMACEUTICAL TECHNOLOGY-II

Time: 03:00 Hours

Max Marks : 100

Note : Attempt **all** questions. Each carry equal marks.

- i. Attempt any **four** of the following. (5x4)
- (a) Define the term "Tablets"? Classify the different types of tablets.
 - (b) Discuss in brief the various tests which are generally done to maintain the quality control of tablets.
 - (c) Common defects which occur in compressed tablets.
 - (d) Explain physics of tablet making.
 - (e) Enumerate the various type of tablet coating techniques emphasizing on sugar coating.
2. Attempt any **four** of the following. (5x4)
- (a) Describe gelatin production process.
 - (b) Difference between soft gelatin capsules and hard gelatin capsules.
 - (c) Explain the packaging and storage of Capsules.
 - (d) Write in detail about application of microencapsulation in pharmacy with some example.
 - (e) Give physiochemical methods of evaluation of microcapsules.

3. Attempt any **four** of the following. (5x4)
- (a) Give classification of parenteral products with suitable example based on their route of administration.
 - (b) Water for Injection
 - (c) Test for sterility of parenteral products
 - (d) Various component of Parenteral formulation.
 - (e) Selection of container and closure for parenterals.
4. Attempt any **two** of the following. (10x2)
- (a) What is major objective of controlled release formulations? Discuss various pharmacokinetic parameters in design of controlled release.
 - (b) Define the term sustained release. Give classification of sustained release dosage forms
 - (c) Write a note on in vitro evaluation studies of CRDDS.
5. Attempt any **four** of the following. (10x2)
- (a) Discuss in brief about various formulation ingredients required for nasal products .Give various evaluation tests done for nasal solutions and nasal drops?
 - (b) What are ophthalmic products? Discuss ideal characteristics of an ideal ophthalmic product emphasizing on recent advancement in ophthalmic products.
 - (c) Give the formulation and evaluation of otic products.

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B.Pharma. (SEMESTER-VI)

PHARMACEUTICAL BIOTECHNOLOGY

Time: 03:00 Hours

Max Marks : 100

Note : Attempt *all* questions.

1. (a) Describe various applications of biotechnology in pharmaceutical science
(8 marks)
- (b) Briefly describe **any two** of following (6x2=12 marks)
 - (i) Fermentor design
 - (ii) Protoplast fusion
 - (iii) Human insulin produced by recombinant DNA technology
2. Attempt **any two**: (10x2=20 marks)
 - (a) Describe various inhibitors of protein synthesis and their mechanisms of action
 - (b) Write detailed note on production of Hybridoma?
 - (c) Write an essay on historical development of antibiotics?
3. Write detailed note on **any two** of the following: (10x2=20 marks)
 - (a) Soil-screening for identification of antibiotic producing microorganisms
 - (b) Regulation of gene-expression in prokaryotes
 - (c) Autoimmune disorders

4. Attempt **any two**: (10x2=20 marks)

- (a) What are the factors affecting enzyme kinetics?
- (b) What are the various techniques used for immobilization of enzymes?
- (c) Describe various immunodeficiency disorders?

5. Write short note on **any four** of following (5x4=20 marks):

- (a) Antigen and haptens
- (b) Immunosuppression
- (c) Immunological tolerance
- (d) Genetic code
- (e) Applications of gene cloning

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