



PAP-003-1015021 Seat No. _____

B. Sc. (Sem. V) (CBCS) Examination

October / November - 2018

IC - 501 : Pharmaceuticals

Faculty Code : 003

Subject Code : 1015021

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :**
- (1) Question paper carries total 5 questions.
 - (2) All the questions are compulsory and carry 14 marks each.
 - (3) Draw labeled diagram wherever necessary.
 - (4) Assume suitable data.

- 1 (a) Answer the following questions : 4
- (1) A small factory known as "Bengal Chemicals and Pharmaceutical Works" was established in _____ city.
 - (2) Who was the chairman of third edition of Indian pharmacopoeia ?
 - (3) Dry heat sterilization is carried out by using oven. True/False ?
 - (4) Tablet or lozenge kept beneath the tongue, is _____ type of route of drug administration ?
- (b) Answer in brief : (any **one** out of two) 2
- (1) Write a brief note on pyrogen testing.
 - (2) Discuss glass as a packaging material.
- (c) Answer in detail : (any **one** out of two) 3
- (1) Enlist various routes of drug administration with examples.
 - (2) Discuss primary, secondary and tertiary packaging materials.
- (d) Write a note on : (any **one** out of two) 5
- (1) Explain various sterilization techniques in detail.
 - (2) Discuss history of Indian Pharmacopoeia in detail.

- 2 (a) Answer the following questions : 4
- (1) Phytochemicals are medicinally active and derived from _____ sources.
 - (2) Abscisic acid is also known as _____.
 - (3) Give full form of TLC.
 - (4) Which instrument is used to determine moisture content available in crude drugs ?
- (b) Answer in brief : (any **one** out of two) 2
- (1) Define :
 - (a) Stomatal No.
 - (b) Vein Islet No.
 - (2) What is Trichomes ?
- (c) Answer in detail : (any **one** out of two) 3
- (1) Explain morphological evaluation of crude drug in brief.
 - (2) Write a note on collection of crude drugs.
- (d) Write a note on : (any **one** out of two) 5
- (1) Explain plant growth regulators in detail.
 - (2) Discuss classification of crude drugs with examples.
- 3 (a) Answer the following questions : 4
- (1) Surgical dressing is also known as _____.
 - (2) Ideal dressing should be porous to water vapor. True/False ?
 - (3) Give full form of HLB.
 - (4) Give two examples of antioxidants.
- (b) Answer in brief : (any **one** out of two) 2
- (1) What are pharmaceutical excipients ? Give examples.
 - (2) Enlist any four features of dressing:
- (c) Answer in detail : (any **one** out of two) 3
- (1) Write a short note on wound repair.
 - (2) Discuss surgical gauze in detail.

- (d) Write a note on : (any **one** out of two) 5
- (1) Write a detailed note on sutures and ligatures.
 - (2) Discuss :
 - (a) Preservatives
 - (b) Coating agents
- 4 (a) Answer the following questions : 4
- (1) Carbohydrates are polyhydroxy amide. True/False ?
 - (2) Give general molecular formula of Terpenoid.
 - (3) Aspirin is also known as _____.
 - (4) _____ is the starting raw material for synthesis of Propranolol drug.
- (b) Answer in brief : (any **one** out of two) 2
- (1) Give synthesis of Atenolol drug.
 - (2) Discuss hypertensive agent with example.
- (c) Answer in detail : (any **one** out of two) 3
- (1) Give synthesis of Paracetamol.
 - (2) Write synthesis of Hexobarbitone.
- (d) Write a note on : (any **one** out of two) 5
- (1) Give synthesis of :
 - (a) Pentobarbital
 - (b) Mefenamic acid
 - (2) Give synthesis of :
 - (a) Ibuprofen
 - (b) Aprobarbital
- 5 (a) Answer the following questions : 4
- (1) Which microorganism is used for production of vinegar ?
 - (2) During glucose fermentation, formic acid is finally converted in to _____ and _____.
 - (3) Enzymes are also called as _____.
 - (4) Enzymes activity is dependent on temperature. True/False ?

- (b) Answer in brief : (any **one** out of two) **2**
- (1) Draw only diagram of structure of bacteria.
 - (2) Write synthesis of Ephedrine used as alkaloid.
- (c) Answer in detail : (any **one** out of two) **3**
- (1) Explain factors affecting enzyme activity.
 - (2) Discuss catabolism of lipids.
- (d) Write a note on : (any **one** out of two) **5**
- (1) Explain manufacturing of lactic acid with diagram.
 - (2) Describe manufacturing of penicillin via fermentation method.
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