

Seat No.:

No. of Printed Pages: 01



A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE
(AUTONOMOUS) (Grant-in-Aid)
Affiliated to Sardar Patel University
VALLABH VIDYANAGAR-388120



Bachelor of Science (Semester-6) Internal Theory Examination March- 2026

US06MAICV01: SYNTHETIC DYES AND DRUGS

Date: 06/03/2026, Friday

Time: 10:45 AM to 12:15 PM

Total Marks: 30

Note: Figures to the right indicate full marks.

Q-1 Write the most appropriate answer from the following multiple-choice questions. [6]

1. Which of the following is a natural Anthraquinone dye?
(a) Alizarin (c) Methylene blue
(b) Congo red (d) Indigo
2. Which dye is prepared by coupling the diazonium salt of sulphanilic acid with β -naphthol?
(a) Indigo dye (c) Orange II dye
(b) Xanthene dye (d) Orange I dye
3. Which functional group is found in azo dyes?
(a) $-C=O$ group (c) $-N=N-$ group
(b) $-OH$ group (d) $-NH_2$ group
4. What is the major disadvantage of glass as a packaging material?
(a) Fragility (c) Transparency
(b) Heavy weight (d) Ease of labeling
5. The primary protein responsible for drug binding in plasma is...
(a) Hemoglobin (c) Fibrinogen
(b) Myoglobin (d) Albumin
6. Drug toxicity refers to...
(a) Beneficial effect of a drug (c) Drug absorption process
(b) Harmful effect produced by a drug (d) Drug excretion process



Q-2 Write the classification of dyes on the basis of mode of applications. [6]
OR

Q-2 Write a note on anthraquinone dyes. [6]

Q-3 Discuss the method for determination of Amines. [6]
OR

Q-3 Discuss the procedure determinations of alpha and beta-naphthol. [6]

Q-4 Write a note on Indian pharmacopoeia. [6]
OR

Q-4 Write a note on plastics as drug packaging materials. [6]

Q-5 Write the preparation of p-acetamol and Ibuprofen. [6]
OR

Q-5 Write a classification of drug on the basis of their therapeutic actions. [6]

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Supervisor sign. ....

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**Bachelor of Science (Semester-6) Quiz - 2026**  
**US06MAICV01: SYNTHETIC DYES AND DRUGS**

Date: 06/03/2026, Friday

Time: 20 minutes

Total Marks: 15

**Q-1 Fill in the blanks with appropriate answer given in the bracket.**

**[08]**

1. A bathochromic auxochrome is a group that ..... the depth of colour, (increases / decrease)
2. .... is a substance that can impart color to a substrate by chemical or physical bonding. (Pigment / Dye)
3. Estimation of Azo dye involves a ..... reaction. (oxidation / reduction)
4. The Mercuric nitrite method is used for the estimation of ..... (Chloride / Calcium)
5. .... are widely used as drug packaging materials due to their lightweight and durability. (Glass / Plastics)
6. Parenteral dosage forms are administered ..... (By injection / Orally)
7. .... is the major drug-binding protein in the body. (Albumin / Myoglobin)
8. Sulphathiazole is synthesized by condensation of ..... with sulphanilamide. (p-aminofuran / p-aminothiazole)

**Q-2 Whether the following statement is true or false. Write your answer in the box.**

**[07]**

1. Diazotization is the process of converting a primary aromatic amine into a diazonium salt. [ ]
2. Bathochromic shift is also called a blue shift. [ ]
3. The SPADNS method is commonly used for chloride estimation. [ ]
4. Solid dosage forms include tablets, capsules, and powders. [ ]
5. The Indian Pharmacopeia (IP) provides official standards for drugs and pharmaceuticals in India. [ ]
6. p-Acetamol and Ibuprofen are examples of antipyretic drugs. [ ]
7. A prodrug is an inactive compound that is metabolized in the body to produce the active drug. [ ]