

Total No. of Printed Pages: 2

**SUBJECT CODE NO: - YY-2334**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**B.Sc. F.Y (Sem-II)**  
**Examination March / April - 2023**  
**Chemistry Paper-V Applied Chemistry**

**[Time: 1:30 Hours]****[Max. Marks: 40]**

Please check whether you have got the right question paper.

N. B

- 1) All questions are compulsory.
- 2) All questions Carry equal marks
- 3) Draw neat diagram and give labels wherever necessary

Q1 a) What is the principle of paper Chromatography? Explain the paper chromatography in detail. 10

**OR**

- b) Explain in brief
- i) Classification of drugs.
  - ii) Preparation of paracetamol

Q2 a) Explain the process of manufacture of glass. 10

**OR**

- b) Explain in brief
- i) Concept of chromophore
  - ii) Concept of auxochrome

Q3 Write short notes on (any two) 10

- a) Determination of  $R_f$  value
- b) Properties of ideal drug
- c) Varieties of glass
- d) Types of fertilizers

Q4 Choose Correct option for the Following 10

- 1) Chromatography is a physical method that is used to separate and analyse \_\_\_\_\_  
(a) Complex mixture (b) simple mixture  
(c) Amino acid (d) All of these
- 2) Preparation of TLC plate is done by \_\_\_\_\_  
(a) Dipping (b) spreading (c) Spraying (d) All of these

- 3) \_\_\_\_\_ are used as adsorbents.  
(a) Activated alumina (b) Silica gel  
(c) Molecular sieve (d) All of these
- 4) Which of the following functional group in paracetamol?  
(a) Anilide (b) phenolic-OH (c) Both a & b (d) None of these
- 5) Glass is a mixture of \_\_\_\_\_  
(a) Metallic silicates (b) Non metallic silicates  
(c) Metallic acetate (d) Metallic Carbonates
- 6) How many different types of glasses are there?  
(a) 4 (b) 10 (c) 15 (d) 1
- 7) Select the wavelength range Corresponding to uv-vis region  
(a) 400-800 nm (b) 25  $\mu\text{m}$ -2.5  $\mu\text{m}$   
(c) 200-800nm (d) 2.5 $\mu\text{m}$  – 1 mm
- 8) The possible transitions for water molecule in uv-visible region are  
(a)  $\sigma\text{-}\sigma^*$  (b)  $n\text{-}\pi^*$ ,  $\pi\text{-}\pi^*$  (c)  $\sigma\text{-}\sigma^*$ ,  $n\text{-}\pi^*$  (d)  $n\text{-}\sigma^*$
- 9) Bathochromic shift is also Called \_\_\_\_\_ shift.  
(a) Red (b) Violet (c) blue (d) yellow
- 10) Urea is \_\_\_\_\_ fertilizer.  
(a) phosphorus (b) Nitrogenous (c) Potash (d) None of these