

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN  
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)  
Chromepet, Chennai — 600 044.

B.Sc. END SEMESTER EXAMINATIONS APRIL - 2022

SEMESTER - I

20UFMAT1001 - Allied chemistry I

Total Duration : 3 Hrs.

Total Marks : 60

**Section A**

Answer any **SIX** questions ( $6 \times 5 = 30$  Marks)

1. What is buffer solution? Give few examples.
2. What is the common ion effect explain?
3. How will you purify the sea water by reverse osmosis?
4. Write the preparation and uses of Urea.
5. What are free radicals? How are they produced?
6. How do you explain hybridization?
7. Mentioned few uses of Pyridine.
8. State Grutthus Dropper law.

**Section B**

Answer any **THREE** questions ( $3 \times 10 = 30$  Marks)

9. a. Discuss the bufferaction in biological systems.  
b Define Strong and Weak electrolyte. Give suitable example.
10. Describe in detail various method's of potable water treatment.
11. Discuss the electrophilic substitution reaction mechanism in benzene.
12. How Will you prepare Thiophene? Mention few reaction of Thiophene.
13. Explain the following terms.  
a) Photosensitization b) phosphorescence  
c) Fluorescence d) Chemiluminiscence.

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