

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE SEM-VI Regular Examination May 2011**

**Subject code: 162803**

**Subject Name: Chemistry and Applications of Textile Auxiliaries**

**Date: 19/05/2011**

**Time: 10.30 am – 01.00 pm**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|------------|-----|---|-----------|
| <b>Q.1</b> | (a) | Explain in detail Amphoteric surfactants.                                     | <b>07</b> |
|            | (b) | Explain Cat-ionic Dye fixing agents in detail.                                | <b>07</b> |
|            |     |   |           |
| <b>Q.2</b> | (a) | Discuss in brief – Phosphate Esters.  | <b>07</b> |
|            | (b) | Explain Quaternary Ammonium Salts.  | <b>07</b> |
| <b>OR</b>  |     |   |           |
|            | (b) | Explain- Alkane Sulphonates   | <b>07</b> |
|            |     |   |           |
| <b>Q.3</b> | (a) | Explain- Polyol surfactants.  | <b>07</b> |
|            | (b) | Describe the group Basic Nitrogen joins directly to the hydrophobic part.     | <b>07</b> |
| <b>OR</b>  |     |   |           |
| <b>Q.3</b> |     | Explain Chemistry, Properties and Applications of Sodium salts of Fatty acid. | <b>14</b> |
|            |     |   |           |
| <b>Q.4</b> | (a) | Explain Dispersing and Sequestering agents.                                   | <b>07</b> |
|            | (b) | Explain in brief Migration inhibitors.  | <b>07</b> |
| <b>OR</b>  |     |   |           |
| <b>Q.4</b> | (a) | Explain Mercerizing wetting agents in brief.                                  | <b>07</b> |
|            | (b) | Explain Leveling agents in acid dyeing with Nylon.                            | <b>07</b> |
|            |     |   |           |
| <b>Q.5</b> | (a) | Discuss Mildoxidising agents.   | <b>07</b> |
|            | (b) | Elaborate Emulsification in brief.  | <b>07</b> |
| <b>OR</b>  |     |   |           |
| <b>Q.5</b> |     | Describe Roll of a Carrier in Polyester dyeing.                               | <b>14</b> |

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