

**SCHEME OF VALUATION**  
**B.Sc. III Year, Semester-V Practical Examination**  
**Subject : Chemistry**  
**Paper – V (Organic Synthesis and TLC) (CHE 551)**

1 a) Principle, reaction and mechanism for the preparation of the given organic compound	03 Marks
b) Preparation and submission of the crude sample of an organic compound	12 Marks
2. Separation of two component mixture by TLC and calculation of $R_f$ value for each component. Submission of the TLC plate with better separation of two components of the mixture.	05 Marks
3. Viva and Record	05 Marks
<b>Total</b>	<hr/> <b>25 Marks</b> <hr/>

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11/10/14

FACULTY OF SCIENCE

B.Sc. III Year, Semester-V Practical Examinations, 2018

Subject : Chemistry

Paper – V (Organic Synthesis and TLC) (CHE 551)

Question Bank

Max. Marks : 25

Time : 2 Hours

I a) Write the principle, reaction and mechanism for the preparation of an organic compound from the list given below: (03 Marks)

- |                         |                                   |
|-------------------------|-----------------------------------|
| 1. Aspirin              | 7. Benzoic acid                   |
| 2. Benzanilide          | 8. N-Butyl acetate                |
| 3. Nitrobenzene         | 9. $\beta$ -Naphthyl methyl ether |
| 4. m-Dinitrobenzene     | 10. Benzylidene aniline           |
| 5. p-Bromoacetanilide   | 11. Phenyl azo $\beta$ -naphthol  |
| 6. 2,4,6-Tribromophenol |                                   |

b) Prepare and submit the crude sample of an organic compound from the list given below: (12Marks)

- |                         |                                   |
|-------------------------|-----------------------------------|
| 1. Aspirin              | 7. Benzoic acid                   |
| 2. Benzanilide          | 8. N-Butyl acetate                |
| 3. Nitrobenzene         | 9. $\beta$ -Naphthyl methyl ether |
| 4. m-Dinitrobenzene     | 10. Benzylidene aniline           |
| 5. p-Bromoacetanilide   | 11. Phenyl azo $\beta$ -naphthol  |
| 6. 2,4,6-Tribromophenol |                                   |

II. Separate the two component mixture by TLC and calculate the  $R_f$  value for each component. Submit the TLC plate with better separation of two components of the mixture. (05 Marks)

1. 2,4-Dinitrophenyl hydrazones of acetone and 2-butanone mixture
2. ortho- and para-Nitroaniline mixture

III. Viva and Record

(05 Marks)