UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA Academic Lesson Plan for 2nd Semester - 2023 (Summer)

Name of the teaching faculty: Smt. Lopamudra Satpathy,

PTGF Lecturer (Chemistry)

Dept.: Department of Mathematics & Science

Semester: 2nd

Subject : Practical 2B : Engg. Chemistry Laboratory

No of Periods per week: 4, Total Periods: 60, End semester Exam.: 50 Marks, Sessional: 50 Marks,

Total Marks: 100 Marks

| Week | Period | Experiment | PRACTICAL |
|------|-----------------|------------|--|
| 1st | 1 st | | Introduction to chemistry lab, about safety measures, about maintenance of practical records. |
| | 2nd | | Introduction to the students about use of different lab equipments and how to handle them safely. |
| | 3rd | Exp.1 | Dictation of the procedure of exp. 1, preparation and study of properties of CO_2 gas, explanation of theory with equations. |
| | 4 th | Exp.1 | Dictation of the procedure of exp. 1, preparation and study of properties of CO_2 gas, explanation of theory with equations. |
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| | 1st | Exp.1 | Preparation Of CO ₂ gas |
| 2nd | 2 nd | Exp.1 | Expt. Conducted by the Students |
| | 3rd | Exp.1 | Expt. Conducted by the Students |
| | 4th | Exp.1 | Checking of rough practical record |
| | | | |
| 3rd | 1 st | Exp. 1 | Checking of practical records and discussion of viva questions of expt. 1 |
| | 2 nd | Exp.1 | Checking of practical records and discussion of viva questions of expt. 1 |
| | 3rd | Exp.2 | Dictation of the procedure of exp. 2 Preparation and study of properties of ammonia gas. Explanation Of Theory With Equations. |
| | 4th | Exp.2 | Dictation of the procedure of exp.2 Preparation and study of properties of ammonia gas. Explanation Of Theory With Equations |

| 4th | 1st | Exp.2 | Demonstrate of the exp.2 (Preparation of ammonia gas) |
|-----|-----------------|-----------------|--|
| | 2nd | Exp.2 | Expt. Conducted by the Students |
| | 3rd | Exp.2 | Expt. Conducted by the Students. |
| | 4th | Exp.2 | Checking of rough practical record |
| | | | |
| 5th | 1st | Exp.2 | Checking of practical records and discussion of viva questions of expt. 2. |
| | 2 nd | Exp.2 | Checking of practical records and discussion of viva questions of expt. 2. |
| | 3rd | Exp.3 | Dictation of the procedure of exp. 3. Crystallization of CuSO ₄ . Explanation Of Theory With Equations. |
| | 4th | Exp.3 | Dictation of the procedure of exp. 3. Crystallization of CuSO ₄ . Explanation Of Theory With Equations |
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| | 1 st | Exp.3 | Demonstrate of the exp.3(Crystallization) |
| 6th | 2nd | Exp.3 | Expt. Conducted by the Students |
| | 3rd | Exp.3 | Expt. Conducted by the Students |
| | 4 th | Exp.3 | Checking of rough practical record |
| | | | |
| 7th | 1 st | Exp.3 | Checking of practical records and discussion of viva questions of expt.3. |
| | 2 nd | Exp.3 | Checking of practical records and discussion of viva questions of expt.3. |
| | 3rd | Exp.4(i) & (ii) | Dictation of the procedure of exp.4 (i) and (ii) Acid Base Titration. Explanation Of Theory With Equations. |
| | | | Dictation of the procedure of exp.4 (i) and (ii) |
| | 4 th | Exp.4(i) & (ii) | Acid Base Titration. Explanation Of Theory |
| | | | With Equations |
| | | | |
| 8th | 1st | Exp.4(i) | Demonstrate of the exp.4(i) (Titration) |

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| | 2 nd | Exp.4(i) | Demonstrate of the exp. exp.4 (i) (Titration) |
| | 3rd | Exp.4(i) | Expt. Conducted by the Students Alkalimetry |
| | 4th | Exp.4(i) | Expt. Conducted by the Students Alkalimetry |
| | | | |
| | 1st | Exp.4 (ii) | Expt. Conducted by the Students Acidimetry |
| 9th | 2nd | Exp.4 (ii) | Expt. Conducted by the Students Acidimetry |
| | 3rd | Exp.4(i) & (ii) | Checking of rough practical record |
| | 4th | Exp.4(i) & (ii) | Checking of rough practical record |
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| | 1 st | Exp.4(i) & (ii) | Checking of practical records and discussion of viva questions of Exp.4(i) & (ii) |
| _ | 2 nd | Exp.4(i) & (ii) | Checking of practical records and discussion of viva questions of Exp.4(i) & (ii) |
| 10th | 3rd | Exp.5 | Dictation of the procedure of exp. 5. Test of acid radicals |
| | 4 th | Exp.5 | Dictation of the procedure of exp. 5. Test of acid radicals |
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| | 1st | Exp.5 | Demonstrate of the exp.5(Acid radicals) |
| 11th | 2nd | Exp.5 | Expt. Conducted by the Students |
| | 3rd | Exp.5 | Expt. Conducted by the Students |
| | 4th | Exp.5 | Checking of rough practical record |
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| 12th | 1st | Exp.5 | Checking of practical records and discussion of viva questions of expt.5. |
| | 2 nd | Exp.5 | Checking of practical records and discussion of viva questions of expt.5. |
| | 3rd | Exp.6 | Dictation of the procedure of exp.6. Test of basic radicals |
| | 4 th | Exp.6 | Dictation of the procedure of exp.6. Test of basic radicals |
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| | 1st | Exp.6 | Demonstrate of the exp.6(Basic radicals) |
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| 13th | 2 nd | Exp.6 | Expt. Conducted by the Students |

| | 4 th | Exp.6 | Checking of rough practical record |
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| 14th | 1st | Exp.6 | Checking of practical records and discussion of viva questions of expt.6. |
| | 2nd | Exp.6 | Checking of practical records and discussion of viva questions of expt.6. |
| | 3rd | Exp.7 | Test of unknown salt(expt.7) |
| | 4 th | Exp.7 | Expt. Conducted by the Students |
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| 15th | 1st | Exp.7 | Expt. Conducted by the Students |
| | 2 nd | Exp.7 | Checking of rough practical record |
| | 3rd | Exp.7 | Checking of practical records and discussion of viva questions of expt.7. |
| | 4th | Exp.7 | Checking of practical records and discussion of viva questions of expt.7. |

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