



Central University  
Allahabad Central University (ACU)

Prayagraj, Uttar Pradesh India



TEACHING PLAN

Programme : EEGG

Academic Year : 2024-2025

Class & Div : 12 A

Course & Code : T:EG-2024 Bio -

Course Type : Full Class

Credits : 10

Allotted Lectures : 20

Hrs/Week : 4

Course Objectives:

This is belonging to course objective

Course Outcomes:

CO-> This is my description

Programme Outcomes (Pos) addressed in this course

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1							
CO2							
CO3							
CO4							
CO5							

Syllabus:

Lecture No.	Contents	Schedule Date	Execution Date	CO Mapping
-------------	----------	---------------	----------------	------------

UNIT I Benzene and its derivatives:

01	1.1 Analytical synthetic and other evidences in the derivation of structure of benzene	08/02/2024	27/07/2024	CO1
02	1.2 Orbital picture of benzene	09/02/2024	27/07/2024	CO1
03	1.3 resonance in benzene Resonance theory Modern theory of aromaticity	10/02/2024	27/07/2024	CO1
04	1.4 Huckels rule	10/02/2024	27/07/2024	CO1
05	1.5 Reactions of benzene: Aromatic Electrophilic Substitution reactions	10/02/2024	27/07/2024	CO1
06	1.6 Mechanism of ArSE2	10/02/2024	27/07/2024	CO1
07	1.7 Rate and Orientation of Ar SE2	10/02/2024	27/07/2024	CO1
08	1.8 Nitration, Sulphonation and halogenation of benzene and substituted benzene	10/02/2024	27/07/2024	CO1
09	1.9 Friedel craft alkylation and acylation reactions Structure and uses of DDT Saccharin BHC and Chloramine	10/02/2024	27/07/2024	CO1
10	1.10 Friedel craft alkylation and acylation reactions Structure and uses of DDT Saccharin BHC and Chloramine	10/02/2024	27/07/2024	CO1

UNIT II: Phenols aromatic amines aromatic acids

11	2.1 Phenols Acidity of phenols effect of substituents on acidity	10/02/2024	27/07/2024	CO2
12	2.2 qualitative tests of phenols	10/02/2024	27/07/2024	CO2
13	2.3 Structure and uses of phenol cresols resorcinol naphthols	10/02/2024	27/07/2024	CO2
14	2.4b) Aromatic amines Basicity of amines	10/02/2024	27/07/2024	CO2
15	2.5 Effect of substituents on basicity	10/02/2024	27/07/2024	CO2

<b>16</b>	2.6 synthetic uses of aryl diazonium salts	10/02/2024	27/07/2024	CO2
<b>17</b>	2.7 Aromatic Acids Acidity	10/02/2024	27/07/2024	CO2
<b>18</b>	2.8 effect of substituents on acidity	10/02/2024	27/07/2024	CO2
<b>19</b>	2.9 important reactions of benzoic acid	10/02/2024	27/07/2024	CO2
<b>20</b>	2.10 important reactions of benzoic acid	10/02/2024	27/07/2024	CO2

### UNIT III Fats and Oils Fatty acids reactions.

<b>21</b>	3.1 Fatty acids reactions.	10/02/2024	27/07/2024	CO3
<b>22</b>	3.2 Hydrolysis Hydrogenation	10/02/2024	27/07/2024	CO2
<b>23</b>	3.3 Saponification and Rancidity of oils Drying oils	10/02/2024	27/07/2024	CO3
<b>24</b>	3.4 Saponification and Rancidity of oils Drying oils	10/02/2024	27/07/2024	CO3
<b>25</b>	3.5 Analytical constants Acid value Saponification value	10/02/2024	27/07/2024	CO3
<b>26</b>	3.6 significance and principle involved in their determination- Ester value	10/02/2024	27/07/2024	CO3
<b>27</b>	3.7 significance and principle involved in their determination Iodine value	10/02/2024	27/07/2024	CO3
<b>28</b>	3.8 Reichert Meissl (RM) value – significance and principle involved in their determination.	10/02/2024	27/07/2024	CO3
<b>29</b>	3.9 significance and principle involved in their determination- Acetyl value	10/02/2024	27/07/2024	CO3

### UNIT IV Polynuclear hydrocarbons

<b>30</b>	4.1 Synthesis reactions of Naphthalene	10/02/2024	27/07/2024	CO1
<b>31</b>	4.2 Synthesis reactions of Anthracene	10/02/2024	27/07/2024	CO1
<b>32</b>	4.3 Synthesis reactions of Phenanthrene	10/02/2024	27/07/2024	CO1
<b>33</b>	4.4 Structure and medicinal uses of Naphthalene and their derivatives	10/02/2024	27/07/2024	CO1
<b>34</b>	4.5 Structure and medicinal uses of Phenanthrene and their derivatives	10/02/2024	27/07/2024	CO1
<b>35</b>	4.6 Structure and medicinal uses of Anthracene and their derivatives	10/02/2024	27/07/2024	CO1

### UNIT V Cycloalkanes

<b>36</b>	5.1 Stabilities – Baeyers strain theory	10/02/2024	27/07/2024	CO4
<b>37</b>	5.2 limitation of Baeyers strain theory	10/02/2024	27/07/2024	CO4
<b>38</b>	5.3 Coulson and Moffitts modification	10/02/2024	27/07/2024	CO4
<b>39</b>	5.4 Sachse Mohr's theory	10/02/2024	27/07/2024	CO4
<b>40</b>	5.5 Reactions of cyclopropane and Cyclo-butane only.	10/02/2024	27/07/2024	CO4

#### Web Source References:

This is web reference

#### Books References:

This is book reference