Course Objective

• To understand the basic concepts of various biological activities and effects by drug like molecules in human body
• To study the methods and techniques for biological activity studies
• To study the role of various natural products and drugs in curing ailments.

Course Outcome

CO1: Comprehend the principles of bacterial and fungal actions.
CO2: Knowledge of the performance of bioassays and their significance in biomedical research.
CO3: Interpreting and integrating data obtained from various bioassays and their real-world applications.

Unit – 1

Unit – 2
Antidiabetic activity, antihypertensive activity, anti-inflammatory activity, hepatoprotective activity

Unit – 3

Unit – 4
Anticancer assays- Anticancer drug screening and development, cell based assays for evaluating anticancer activity-cell proliferation assay, analyzing and comparing the efficacy of potential anticancer agents, understanding of MTT assay and CCK-8 assay principle, performing MTT assay, CCK-8 assay. Integrating data from different assays to assess the overall biological activity, real world applications of biological assays in drug discovery and biomedical research. In silico approaches in bioactivity analysis.
Evaluation Pattern:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Internal</th>
<th>External</th>
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</thead>
<tbody>
<tr>
<td>Mid-Term Examination</td>
<td>30</td>
<td>0</td>
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<tr>
<td>Continuous Assessment (CA)*</td>
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<tr>
<td>End Semester Examination</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>40</strong></td>
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*CA - Can be Quizzes, Assignments, Projects, and Reports.

Further Reading


References


