## **BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI**

## End Semester Examination December (CLOSED BOOK)

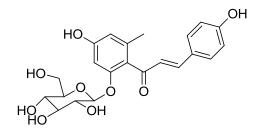
I <sup>st</sup> Sem 2023-2024	PHA G548 - Chemistry of Natural Drugs	Max. Marks 40
Date: 9/12/2023	Duration: 120 Minutes	Weightage: 30%
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## **Instruction:**

1. All questions are compulsory

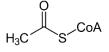
2. Write precise answers and use diagram/structure wherever necessary

- 1. Discuss in detail how bioassay can play a crucial role in speeding up drug discovery programme. [6]
- 2. Write an brief explanatory note on [6]
  - i. SEPBOX
  - ii. Drug that contains hepatoprotective C<sub>6</sub>-C<sub>3</sub> scaffold
- 3. Discuss the structure elucidation  $[{}^{1}H \& {}^{13}C NMR]$  of the following compound [10]



4. How is herbal drug standardization done? What are Marker and Biomarkers in natural product chemistry [5]

5. Describe the formation of a unique class of natural product from the following precursor [5]



6. A scientist wants to discover anti-obesity phyto-molecules that have unique structure. [8]How will he select the natural source? How will he plan the extraction and isolation of the natural products from it? Justify your answer with the help of scientific reasons