

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

Mid Semester Examination October (CLOSED BOOK)

Ist Sem 2023-2024

PHA G548 - Chemistry of Natural Drugs

Max. Marks 30

Date: 10/10/2023

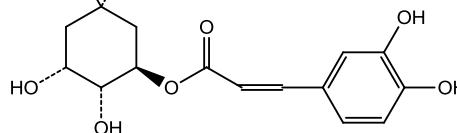
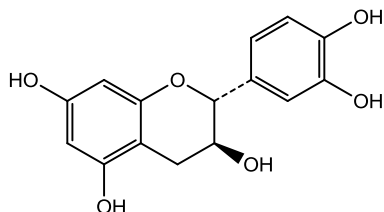
Duration: 90 Minutes

Weightage: 30%

Instruction:

1. All questions are compulsory
2. Figures to right in square bracket indicates maximum marks
3. Write precise answers and use diagram wherever necessary

1. Explain the biosynthetic origin of natural products that have ability to quench free radicals and are formed by crossover of two pathways . [5]
2. Write an explanatory note on [5]
 - i. Phytoalexins
 - ii. Factors affecting the chromatographic separations
3. Discuss in detail the class of natural products that are photosensitive in nature and find therapeutic applications in relieving constipation condition. [5]
4. A scientist wants work on natural products that are useful for treatment of a particular human disease condition. Kindly prepare a proposal for achieving this endeavor [6]
5. Answer the following in brief [5]
 - i. Give two examples of unique natural products and their clinical use
 - ii. Define natural products
 - iii. Draw structures of α -amyrin and β -amyrin
 - iv. Write two advantages of drying process in phytochemical analysis
 - v. Provide names of scaffold in the following structures



6. Can plants be used as drugs? Justify with at 2 concrete examples [4]
