

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: BPHARM
BRANCH: PHARMACY

SEMESTER : IV
SESSION : SP/18

SUBJECT: PS4403 NATURAL MEDICINALS

TIME: 3.Hours

FULL MARKS: 60

INSTRUCTIONS:

1. The question paper contains 7 questions each of 12 marks and total 84 marks.
 2. Candidates may attempt any 5 questions maximum of 60 marks.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) Define Amino acids and classify with suitable examples. [2]
Q.1(b) Enumerate the essential amino acids and draw their structures. [4]
Q.1(c) How will you synthesize Glycine and Phenyl alanine? [6]
- Q.2(a) Define Terpenoids and classify them. [2]
Q.2(b) Deduce the structure of Citral. [4]
Q.2(c) Discuss the chemistry of menthol and Menthone. [6]
- Q.3(a) Define and classify Alkaloids with suitable structural examples. [2]
Q.3(b) Elucidate the structure of Piperine. [4]
Q.3(c) Discuss the chemistry of Caffeine, Theophylline and Theobromine. [6]
- Q.4(a) What is Blanc's rule? [2]
Q.4(b) Write a note on Cardiac glycosides. [4]
Q.4(c) How will you prove the presence of -OH group double bond in Cholesterol? [6]
- Q.5(a) What are Steroidal hormones? [2]
Q.5(b) Highlight the importance of Cortisol and Cortisone. [4]
Q.5(c) Discuss the chemistry of Estrogens with their applications. [6]
- Q.6(a) Describe the Non steroidal hormones with examples. [2]
Q.6(b) What is Oxytocin? Describe its structural features. [4]
Q.6(c) Deduce the structure of Adrenaline and Nor adrenaline. [6]
- Q.7(a) What are Fat soluble Vitamins? [2]
Q.7(b) What is Avitaminosis? [4]
Q.7(c) Discuss the structural features of Vitamin A and D. [6]

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