

DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY  
BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(End Semester Examination)

CLASS: BPHARMACY  
BRANCH: PHARM SCI TECH

SEMESTER: II  
SESSION: SP/25

SUBJECT: BP205T COMPUTER APPLICATION IN PHARMACY

TIME: 2.00 Hour

FULL MARK: 50

A. Short Answers

(Answer six out of eight)

(06 x 05 = 30 marks)

1. Justify why Feasibility Analysis is required when new Software is developed. What type of study is required. Explain in detail. BT1,CO(2)
2. Perform : BT2,CO(1)
  - (i)  $(712.1)_{10} + (712.1)_{16} + (712.1)_8 + (AB.01)_{16} = ( )_2$
  - (ii)  $(1010111011101/11)_2$
3. Perform using complement metho. BT2,CO(1)
  - (i)  $(213)_{10} - (413)_{10} = ( )_2$
  - (ii)  $(741.02)_8 - (31.31)_{10} = ( )_2$
4. What is the best approach for handling legacy data during data migration process to a new system. BT2,CO(1,2)
5. Define Scalability and Specimen tracking w.r.t to laboratory information system. BT3,CO(1,5)
6. Describe the application areas for Forms? Write steps to add password field to be used in your created HTML document. BT2,CO(3)
7. What is DFD? Difference between DFD and Flowchart. Draw with proper symbol for patient payment system in the hospital. BT2,CO(2,3)
8. What is Bioinformatics? Explain Its application area. How Bioinformatics is helpful in the fields of medicine modification and discovery process. BT3,CO(5)

B. Long Answers

(Answer two out of three)

(02 x 10 = 20 marks)

1. Explain Mathematical Modelling of Drug Design? What are the advantages of using mathematical modelling technique for drug preparation, also explain its advantages and disadvantages for modification and design process before implemented for trail. BT3,CO(4)
2. What are the components of DBMS. Explain each one. Why concurrency control is required while transaction in process. Define Atomicity and Isolation with example. BT2,CO(2)
3. Define Laboratory Information System. Its uses/benefit in the field of patient treatment. Also explain its struggle with old Laboratory Information System. BT3,CO(3,5)

::::::01/05/2025::::::E