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

CLASS: BPHARM **SEMESTER: FIRST**
BRANCH: PHARMACY **SESSION: MO 2024**

SUBJECT: BP104T PHARMACEUTICAL INORGANIC CHEMISTRY

TIME: 3.00 Hours **FULL MARK: 75**

INSTRUCTIONS:
1. **The missing data, if any, may be assumed suitably.**
2. **Before attempting the question paper, be sure that you have got the correct question paper.**
3. **Tables/Data handbook/Graph paper, etc., to be supplied to the candidates in the examination hall.**
4. **This question paper consists of (03) three parts. Read the part wise instructions before attempting the questions.**

PART-I
Objective types questions (Instruction: Answer all questions)

Q1. (10 x 2 = 20

A. What do you mean by conjugate acid-base pair? CO1

B. What is the reason behind drug adulteration? CO1

C. What is Lewis acid and base? CO1

D. Write the extracellular buffers . CO1

E. Define poisons. CO1

F. Define cathartics. CO1

G. Give any two examples of bulk purgative. CO1

H. Recall the names of the devices used to measure the radioactivity. CO1

I. Define Radiopharmaceuticals. CO1

J. Recall the chemical name, structure and use of Rochelle Salt. CO1

PART-II

Short Answers
(Instruction: Answer seven out of nine questions)

(7 x 5 = 35 Marks)

Q2. Explain the limit test for Iron & Sulphate CO4
Q3. Derive the buffer equations for acid and base buffers. Give a note on its applications. CO4
Q4. What do you mean by replacement therapy? Explain the monograph of sodium chloride. CO3
Q5. Summarise the sources of impurities with suitable examples. CO4
Q6. Describe the assay procedure of Ammonium chloride. CO2
Q7. Write a note on emetics. CO2
Q8. Discuss the mechanism and classification of antimicrobials with suitable examples CO3
Q9. Define antacids. Write the ideal properties of antacids. CO2
Q10. What is cyanide poisoning? Explain the treatment of cyanide poisoning. CO3

PTO

PART-III
Long Answers
(Instruction: Answer two out of three questions)

(2 x 10 = 20 marks)

Q11.	**What do you mean by dental caries? Explain the methods to prevent it with detailed notes on each category.**	**CO5**
Q12.	Define antidotes and classify antidotes with examples. Write the uses and one method of preparation of sodium thiosulphate	CO4
Q13.	Write a note on alpha, beta and gamma rays emitting from the radioactive elements. Discuss the various applications of radiopharmaceuticals.	CO5

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