

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

(c) Use of calculator is not allowed

Q.No	Question	CO	Marks
Q1	A student needs to prepare 100 mL of 5% w/v glucose solution. a) Define percentage w/v solution. (1 mark) b) Calculate the amount of glucose required. (2 marks) c) Describe the preparation procedure briefly. (1 mark) d) Mention one pharmaceutical application of percentage solutions. (1 mark)		5
Q2	A student prepares: 200 mL of 0.5 M NaOH solution. Then dilutes 10 mL of this solution to 100 mL (Molecular weight of NaOH = 40 g/mol) a) Calculate the amount of NaOH required for 200 mL solution. (2 marks) b) Calculate the concentration after dilution. (2 marks) c) Define dilution factor. (1 mark)		5
Q3	Define vaccine. Suggest a method to identify and assay DPT vaccine.		5
Q4	What is streptokinase? Explain the tests and potency determination of streptokinase.		5
Q5	Assess the importance of Atropine and Alginic acid as a pharmaceutical product.		5
Q6	Write a note on the following: a. Types of tablets b. Friability test c. Disintegration test d. Hardness test		2.5*4 =10