SGU	**Sanjay Ghodawat University, Kolhapur** Established as State Private University under Govt. of Maharashtra. Act No XL, 2017	2019-20 EXM/P/09/00

Year and Program: **Final BPH(B. Pharm)-2022**	**School of Pharmaceutical Sciences**	**Department : Pharmacy**
Course Code : BP704T	**Course Title : Novel Drug Delivery System**	**Semester – VII**
Date:31/12/2022 **Day :Saturday** **Time:10:30am-1:30 pm**	**Examination: End Semester**	**Max Marks: 75**

Instructions: 1) All questions are compulsory.
2) Draw a neat labeled diagram if necessary.

			Marks	Bloom's Level	CO
Q.1		**Objective Type Questions (10X2)**	**20**		
	a)	Define Microsphere and Microcapsules.	02	1	1
	b)	Enlist any four reasons for Drug Targeting.	02	1	5
	c)	State any four applications of Niosomes.	02	2	4
	d)	Enlist suitable drug candidates for Gastro Retentive Drug Delivery System.	02	2	5
	e)	State four applications of IUDs.	02	1	5
	f)	Enlist four Advantages and disadvantages of Transdermal Drug Delivery System.	02	1	4
	g)	State any four Applications of Monoclonal Antibodies.	02	2	5
	h)	Explain dissolution and diffusion.	02	1	2
	i)	State any four types of Ocular Inserts.	02	1	5
	j)	Name any four hydrophilic polymers used in the Controlled Drug Delivery System.	02	2	3
Q.2		**Long Answers (Answer 2 out of 3)**	**20**		
	a)	Illustrate four approaches of Transdermal Devices with a neat labeled diagram.	10	2	5
	b)	Discuss in brief classification of Gastro Retentive Drug Delivery System on the basis of buoyancy mechanism.	10	1	3
	c)	Describe various methods of Microencapsulation with neat labeled diagram.	10	2	2

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Q3		Short Answers (Answer 7 out of 9)	35	Bloom's Level	CO
	a)	Explain pulmonary dosage forms of drug? Describe three types of devices used for Nasopulmonary drug delivery system.	05	1	1
	b)	Discuss the factors affecting the permeation of drugs through the skin.	05	2	3
	c)	Discuss about the drug candidate selection criteria for developments of controlled release drug delivery system.	05	2	4
	d)	Elaborate components of Transdermal drug delivery System with their Significance and examples.	05	3	4
	e)	Enlist five advantages and disadvantages of Mucoadhesive Drug Delivery System.	05	4	4
	f)	Discuss strategies and components of Targeted Drug Delivery Systems.	05	2	5
	g)	Write a Short note on Liposomes.	05	1	5
	h)	Explain the approaches for the Controlled release formulations based on dissolution.	05	4	2
	i)	Enumerate five advantages and disadvantages of Intrauterine Drug Delivery Systems.	05	4	5

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