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**Enrolment No:** 



## UPES

## **End Semester Examination, December 2024**

Course: Industrial Pharmacy - II Semester: VII

Program: B.Pharm
Course Code: BP 702T

Duration: 03 Hours
Max. Marks: 75

Instructions: Read the questions carefully and attempt as per the marks assigned.

## SECTION A (20Qx1M=20 Marks)

S. No.	Attempt all questions		COs
Q 1	QRM deals with		CO1
Q 2	Scale up of a formulation should be of final commercial scale batch size.  a) 1/1000 <sup>th</sup> b) 1/100 <sup>th</sup> c) 1/10 <sup>th</sup> d) 1/10000 <sup>th</sup>	1	CO1
Q 3	a) 1/1000 <sup>th</sup> b) 1/100 <sup>th</sup> c) 1/10 <sup>th</sup> d) 1/10000 <sup>th</sup> Master formula card include following except:  a) Product name b) Stability profile of drug c) Generic name d) Product strength	1	CO2
Q 4	SUPAC guidelines require submission of bioequivalence data for which level of change?  a) Level 1 b) Level 2 c) Level 3 d) Level 4	1	CO2
Q 5	Define acceptance criteria in technology transfer.	1	CO2
Q 6	"Granularity" in the technology transfer process refer to - a) The specific types of equipment used b) The level of detail in data and process information c) The speed of the transfer process d) The number of products being transferred	1	CO2
Q 7	Indian government organization is primarily involved in licensing patents and technologies is	1	CO2
Q 8	Which of the following document serves as the primary reference for the recipient during technology transfer?  a) Process Validation Plan  b) Technology Transfer Protocol	1	CO2
Q 9	c) Master Batch Record d) Quality Agreement  The process of NDA takes years. a) 5 b) 10 c) 12 d) 15	1	CO3
Q 10	How many zonal offices does CDSCO currently have? a) 4 b) 6 c) 8 d) 10	1	CO3
Q 11	DTAB stands for	1	CO3
Q 12	"Guidelines for Bioavailability & Bioequivalence Studies" mentioned in Schedule	1	CO3
Q 13	Six sigma allows for 6.4 defects per million opportunities for a defect to occur. <b>True/False</b>	1	CO4

Q 14	Who is the present DCGI of India?		CO4
Q 15	GLP is an FDA regulation which is accepted and approved by		CO4
Q 16	TQM deals with "prevention of defects rather than detection of defects".  True/False		CO4
Q 17	ISO 14000 focuses on : a) Quality risk management b) Environmental management systems c) Total quality managements d) Financial managements	1	CO4
Q 18	Q 18 Fault tree analysis is one of the approaches for total quality management.  True/False		
Q 19	ICH stands for		
Q 20	CoPP deals with	1	CO5
	SECTION B (20 Marks)		
	(2Qx10M=20 Marks)		
Attempt 2	2 Questions out of 3		
Q 1	Discuss in detail about scale up considerations for solid dosage forms emphasizing <b>any two</b> of the following processes: a) dry blending for direct compression, b) slugging, c) drying.		
Q 2	Explain the IND application process, including a) flow chart, b) objectives, c) criteria for application, and d) key information included in the application.		CO3
Q 3	Quality management systems are critical for preventing variation and maintaining the desired specifications in the process. Support the above statement by focusing on QbD and six sigma concepts.		CO4
	SECTION-C (35 Marks)		
	(7Qx5M=35 Marks)		
Attempt '	7 Questions out of 9		
Q 1			CO1
Q 2	What is the importance of analytical method transfer in technology transfer. Differentiate between any 4 basic responsibilities of sending unit and receiving unit.		CO2
Q 3	Write about any two technology transfer agencies in India in brief.	5	CO2
Q 4	Explain designing of platform technology with suitable examples.	4+1	CO3
Q 5	What is the significance of risk management in QRM? Describe event tree analysis approach in detail.		CO4
Q 6	Discuss DMAIC methodology.	5	CO4
Q 7	The customer specification limit of room temperature for a process is 26°C but the capability of the facility for average room temperature is approximately 22 °C with a standard deviation of 1.5°C. Calculate Z-value for the process.		CO4
Q 8	<b>Q 8</b> Write the name (not acronym) of regulatory authorities for regulation of medicines and medical devices in following countries: a) Europe, b) India, c)		
	Canada, d) Japan, e) Australia	5	