

C.U.SHAH UNIVERSITY**Summer Examination-2019****Subject Name: Computer Aided Drug Delivery system****Subject Code: MPH203T****Branch: M. Pharm (Pharmaceutics)****Semester: 2****Date : 30/04/2019****Time : 02:30 To 05:30****Marks: 75**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1	Explain the following:	(20)
A	QbD	2
B	PAT	2
C	NDA	2
D	ANDA	2
E	INDA	2
F	RLD	2
G	TQM	2
H	QTTP	2
I	Artificial Intelligence	2
J	Computational fluid dynamics	2

Attempt the following questions:

Q-2	Attempt <u>any two</u> of following:	(20)
A	Discuss the benefits of implementing quality by design for pharmaceutical industry.	10
B	Enumerate different optimization techniques for pharmaceutical formulation development and explain any two in detail.	10
C	Write a note on computers in clinical data collection and management.	10
Q-3	Attempt <u>any Seven</u> of following:	(35)
A	Discuss about determination of design space.	5
B	Write a note on <i>in-vitro</i> dissolution and in vitro- in vivo correlation.	5
C	Write a note on pharmaceutical automation.	5
D	Write a note on advantages and disadvantages of artificial intelligence.	5
E	Discuss about ethics of computing in pharmaceutical research.	5
F	Write a note on computer simulations in pharmacokinetics and pharmacodynamics.	5
G	Explain active transport and bbb-choline transporter.	5
H	Discuss about prediction of drug absorption using different modeling techniques.	5
I	Discuss about various statistical parameters used in F&D.	5

