

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[LQ 0121]

**JANUARY 2021**

**Sub. Code: 2937**

**(APRIL 2020 EXAM SESSION)**

**M.PHARMACY DEGREE EXAMINATION**

**SEMESTER-II (PCI New regulations 2016)**

**PHARMACEUTICS – MPH**

**PAPER III – COMPUTER AIDED DRUG DELIVERY SYSTEM**

***Q.P. Code : 262937***

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 75 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. The history of computers in Pharmaceutical Research and Development.
2. The experimental design in optimization of Pharmaceutical formulations.

**II. Write notes on:**

**(7 x 5 = 35)**

1. Role of P-gp efflux transporter in drug disposition.
2. Comparison of the traditional and QbD approach (ICH Q8 guidelines) in Pharmaceutical development.
3. Applications of computer in patents.
4. Computer simulations in whole organism.
5. Pharmaceutical automation in tablet manufacturing.
6. Applications of computer aided techniques in development of Pharmaceutical emulsion.
7. The benefits of QbD in Industry and regulation bodies.

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