P-MPH201-T

Seat No. _____

M. Pharm. (Sem. II) Examination

June / July – 2018

Molecular Pharmaceutics
(Nano Tech. & Targeted DDS)

Time : **3** Hours]   [Total Marks : **75**

Instruction :   Figure to the right indicate marks.

1   Answer the following questions :   **10×2=20**
   (a)   Define Electrosomes.
   (b)   Differentiate microsphere and microcapsule.
   (c)   Enlist the excipients used for the preparation of phytosomes.
   (d)   Enlist the evaluation parameters for pulmonary drug delivery system.
   (e)   Give difference between in vivo and ex vivo Gene Delivery Systems.
   (f)   Give the example of stabilizer used for the preparation of Nanoparticles.
   (g)   Give the advantages and disadvantages of MDI.
   (h)   Classify nebulizer and states its principle.
   (i)   Give advantages and disadvantages of liposomes mediated gene delivery system.
   (j)   Give the applications of Gene Targeting.

2   Answer any two out of the following :   **2×10=20**
   (a)   Explain in detail about various emerging technologies of Inhalation drug delivery system.
   (b)   Discuss the approaches for brain targeted drug delivery system.
   (c)   Briefly introduce the term nanotechnology and write a detail note on nanoparticle.

3 Answer any seven out of the following : 7×5=35

(a) Write a note on Aquasomes.

(b) Define liposome. Give the classification of liposome. Discuss characterization of liposomes.

(c) Discuss the application of monoclonal antibodies.

(d) Explain in detail about various factors affecting particle deposition in the lung.

(e) Explain in detail about mechanism of aerosol deposition.

(f) Give a brief idea about gene therapy.

(g) Write a brief note on niosomes.

(h) Write a detail note on factors affecting and evaluation test of nasal drug delivery system.

(i) Explain in detail about various techniques for preparation of microspheres.

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