Registration no: | | | | | | | | | | |

Total Number of Pages:01

M.PHARM.
M.PH2G.6

2nd SEMESTER REGULAR \ BACK EXAMINATION 2016-17
ADVANCED PHARMACEUTICAL TECHNOLOGY
Branch: PHARMACEUTICAL TECHNOLOGY
Time: 3 Hours
Max Marks: 70
Q.CODE: Z1152

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

Q1 **Answer the following questions:** **(2 x 10)**

a) What is optimization?
b) What are High Shear mixers?
c) What is Compaction? Differentiate compression and consolidation.
d) Define intranasal aerosol. Give its advantages.
e) Name four novel techniques of improving solubility of API.
f) Describe IVIV correlation in product development.
g) Mention few characteristics of HEPA filters.
h) What are the methods used for microbial environmental monitoring?
i) Define validation. Mention its objectives
j) What is scale up? Mention the parameters to be studied.

Q2 **a)** Write on the validation of HPLC method. **(5)**
b) What are propellants? Write briefly on propellants with examples. **(5)**

Q3 Explain in details about the materials used and the process involved for film coating. **(10)**

Q4 Describe the facilities needed for aseptic processing and their maintenance. **(10)**

Q5 Write the mechanisms of DPI. Mention the differences between DPI and Aerosols. Explain in details the working of metered dose inhalers. **(10)**

Q6 Give a note on applications of statistical techniques in QC and different stages of production. **(10)**

Q7 **a)** Explain the role of particle size and moisture content on the compaction behaiviours of powders. **(10)**
b) Explain working of a rotary tablet compression machine describing its basic components.

Q8 **Describe the followings (Any two):-** **(5 x 2)**

a) Physics of tablet compression.
b) Contamination control in aseptic processing.
c) Selection and evaluation of suitable equipments for packaging.
d) Explain briefly about the formulation of a dispersible tablet and its evaluation