

**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI (RAJASTHAN)**  
**INSTRUCTION DIVISION**  
First Semester 2016-2017  
Course Handout (Part II)

Date: 02.08.2016

In addition to part-I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course.

**Course No. : PHA G616**  
**Course Title : Pharmaceutical Administration & Management**  
**Instructor-in-charge : Dr. ANUPAMA MITTAL**

- 1. Scope & Objective of the Course:** It is a course intended to give the students an idea of various aspects of pharmaceutical management with emphasis on technology innovation, new drugs & products planning, strategic considerations, project implementation, product development, production management, marketing strategy, human resources development, ethical issues and R & D management.
- 2. Text Book:**
  - i. Raja, B. Smarta: *Strategic Pharmaceutical Marketing*, Wheeler Pub First edition 1994.
  - ii. Mickey C. Smith, *Principles of Pharmaceutical Marketing*, Lea & Febiger, First edition 1968.
- 3. Ref. Book:** The students should refer the following books for further knowledge.
  - i. Naresh Malhotra: *Marketing Research: An Applied Orientation*, Prentice Hall, Fourth edition.
  - ii. Lachmann, Liebermann & Kanig: *The Theory & Practice of Industrial, Pharmacy*, K.M. Varghese, Third Edition.
  - iii. Mark Dodgson, *The Management of Technological Innovation*, Oxford, First edition.
  - iv. Roberta S. Russell and Bernard W. Taylor III: *Operations Management*, Prentice Hall, Fourth edition.

**4. Course Plan:**

Lecture No	Learning objectives	Topics to be covered	Reference Chap/Sec
1	Scope & objective of course	Introduction	
2	Importance of Research Design	Research Methodology	3(i) Ch 1 - 7, 16 –20.
3	Planning, organizing & design of research in pharmaceuticals	Research Methodology	Class Notes
4-8	Study Designs	Research Methodology	3(i) Ch 1 - 7, 16 –20.
9-12	Optimization Techniques	Research Methodology	
12-14	Effect of internal validity and external validity on research design	Research Methodology	3(i) Ch 1 - 7, 16 –20.
14-18	Rating Scale and Questionnaire	Research Methodology	3(i) Ch 1 - 7, 16 –20.
19-20	Observation Method	Research Methodology	3(i) Ch 1 - 7, 16 –20.
21	Introduction	Management of Operations	3 (iv) Ch 3 – 4
22-24	Marketing Management	Management of Operations	3 (iv) Ch 3 – 4

25-26	Sales Forecasting	Management of Operations	3 (iv) Ch 3 – 4
27-29	Production Management	Management of Operations	3 (iv) Ch 3 – 4
30	Managing research teams & new product	R & D Management	3 (iv) Ch 3 – 4
31	Product decisions & planning	Competitive practices	2(ii) Ch 3 – 5, 3(v) Ch 8.
32	Options in the Indian environment, Segmentation & product positioning	Strategic Management	2(i) Ch 1 – 5
33	Analysis of various strategies	Implementation of Strategies	2(i) Ch 1 – 9
34-38	Basic Financial Management	Product Costing, Break Even analysis	Class notes
39	Planning of human resources for organizational effectiveness	HRD	Class notes
40	Concept of professional & business ethics	Ethical Aspects	Class notes

#### 5. Evaluation Scheme:

Component	Duration	Weightage (%)	Date & Time	Remarks
Mid Term Test	90 min	30	7/10 4:00 - 5:30 PM	CB
Seminar / Assignment/Surprise quiz		30	Continuous	-
Comprehensive Exam	3 hrs	40	12/12 AN	CB + OB

#### 6. Grading Procedure:

Grading would be done by the “bunching” procedure. The total mark obtained by students will be arranged in descending order, bunches identified and grades awarded accordingly. In borderline cases subjective judgment, based on attendance, sincerity etc. will be used to award the grades. It is not mandatory to award all the five grades (i.e. from A to E) Subjective judgment would be used in the award of A and E grades.

#### 7. Make-up Policy:

The facility of make-up test is meant to take care of ‘Unavoidable’ absence from scheduled tests. It is expected that the students will “keep faith” in this respect and avoid any misuse of this useful feature.

#### 8. Chamber Consultation Hour: To be announced in the class

#### 9. Notices: Notices, if any, concerning the course will be displayed on the Notice Board of Pharmacy Group Only

**Instructor In-Charge  
PHA G616**