## UNIVERSITY OF PUNE SYLLABUS FOR POST GRADUATE DIPLOMA IN PRINT ADMINISTRATION (PGDPA)

#### Effective Commencement from Academic Year 2008-2009

#### (I) NAME OF THE COURSE :

The name of the course shall be **Post Graduate Diploma in Print** Administration (PGDPA)

#### (II) **OBJECTIVE**:

a) To train the students to acquire knowledge of the administration of printing establishments.

b) To acquaint the students with understanding of various aspects of management used in printing establishments.

c) The objectives of the practical work is to provide enough exposure to printing industry and enable the students to administer and manage the printing establishment by undertaking project work.

#### (III) ELIGIBILITY:

a) Diploma/Degree in Printing Technology /Engineering from recognised institution/university.

OR

b) Graduate from any faculty of a statutory university with three years experience in the printing industry.

OR

c) Diploma holders from any other branch of engineering or technology with three years experience in the printing industry.

OR

d) Diploma holders in Print Engineering (Diploma run by Pune Vidyarthi Griha's Research Institute of Communication Technology).

#### (IV) DURATION :

The course is of one year duration. (two terms of 14 weeks each)

#### (V)SCHEME OF EXAMINATION :

The DPA Examinations are conducted at the end of the second term i.e. at the end of the year. The examinations are conducted by the University of Pune.

- a) The course consists of following heads of passing- 4 theory papers, 1 paper in practical and one project-work (Total number of heads 6).
- b) Each head comprises 100 marks.
- c) Out of these 100 marks, 70 marks are reserved for University evaluation based upon comprehensive written examination and 30 marks are reserved for internal evaluation by the individual institute.
- d) The Practical examination, viva-voce and the project assessment is done by internal and external examiners.

- e) Every student must secure 40% marks in both University evaluation as well as internal evaluation for passing.
- f) Practical examination is of 2 hours duration for 50 marks and viva-voce is for 50 marks.
- g) Marks awarded by individual institute in the internal evaluation must be communicated by them to the University before the commencement of University Examination.
- h) Candidates securing 40% and above percentage of aggregate marks will be awarded pass class; 50% and above second class; 55% and above Higher second class; 60% and above first class and 70% and above first class with distinction.
- i) Project is of 100 marks in which 50 marks are reserved for project report and 50 marks aòd reseòoed for viva-voce.

#### (VII) BACKLOG:

A student who fails in any subject in the internal or external examination shall be allowed to reappear for the same with the fresh batch in the next academic year.

Course Code Subject Title		Tec	ching Sche	Examination Scheme & Maximum Marks					
		TH	Tutorial	PR	Paper Hrs.	TH	PR	OR	Sessional
101	Printing Processes & Techniques	3	1	-	3	70	-	-	30
102	Practicals (Based on Paper I)	-	-	3	-	-	50	50	-
103	Production Planning & Control	3	1	-	3	70	-	-	30
104	Principles and Practices of Management and Organisational Behaviour	3	1	-	3	70	-	-	30
105	Business Applications	3	1	-	3	70	-	-	30
106	Project	-	2	-	-	-	-	50	50
	Total	12	6	3	12	280	50	100	170
Total Weekly Hours.					21 Hour	ſS			
Tota	l Marks				600				
Not	es: 1. Lectures of 2 Practicals in								

## (VIII) COURSE STRUCTURE :

2. Practicals in clock hours.

3. TH = Theory; PR = Practicals; OR = Orals

## (IX) SYLLABUS :

## PAPER 101 : PRINTING PROCESSES AND TECHNIQUES

## 1. Printing Processes:

- a) Types of printing processes and their principles, suitability and limitations
- b) Comparative study of all printing processes
- c) Methods of surface preparation, layout, suitability and limitations, CtP technique
- d) Raw materials used for all major processes i.e. types of inks and substrates

## 2. Pre-press techniques :

- a) Preparation of artwork and reproduction techniques such as continuous tone to halftone, dot, screen angle and ruling, colour theories, measurement of colour
- **b**) Imagesetter technology types, working, principles, advantages, limitations and applications
- c) Scanners, scanning techniques, advantages, limitations and applications
- **d**) Proofing techniques and devices

## 3. Printing Machines and Quality control:

- a) Construction and mechanism of printing
- **b**) Troubleshooting and remedies
- c) Quality consciousness, quality control devices or auxiliary equipments
- d) Quality control at different stages

## 4. Print Finishing:

- a) Materials and tools used in binding and their appropriate choice
- **b**) Types of bindings
- c) Various finishing processes–UV coating, laminations, varnishing, embossing etc.
- **d**) Covering styles

## 5. Packaging:

- a) Rigid packaging
  - Carton manufacturing
  - Materials and equipments used
  - Processes and design of rigid packaging
  - Testing of raw material
- **b**) Flexible packaging
  - Materials
  - Properties
  - Advantages and limitations
  - Applications

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### 6. Modern trends in printing :

- a) Bar coding
- b) Facsimile technology
- c) Lasers used in prepress
- d) Digital offset colour printing
- e) Security printing
- f) Printing on uneven surfaces

<u>Reference Books</u> : 1) Operator's Manual - GATF, 2) Maintenance Engineering Handbook -Lindley Higging, Mc Graw Hill.3) Flexo Primer-D.C.Mulvihill, GATF. 4) Basic Gravure Technology-PIRA 5) Packaging Technology Set I , II - Asian Packaging. 6) Various international magazines on printing trends 7) Colour scanning and imaging systems-Garryfield, GATF 8) Digital Colour Pre-press-Vol I and II-Steven Hannafort,Agfa 9) Newspaper Technology - Kelly 10) A Manual for Film Planning & Plate Making - A. L. Gatehouse, Litho training services, London. 11) Manual for Film Planning & Plate Making - R. K. Uniyal, Institutional Printing.12) Machine Printing - W. R. Durrant, Focal Press, London. 13) Machine Manuals.14) Silk Screen Printing -R. Krishnamoorthi, Print India Journal, Delhi. 15) Silk Screen Techniques - Biege leisen & Max A. C. , Dover Publication 16) Design for Printing Production - H. S. Warford, JE. Reeve Fowkes.

## <u>PAPER 102</u> : <u>PRACTICALS</u> (Based on Paper one)

Printi	ng processes & Techniques	3 Hrs	. Practicals
1.	Pre-press		б
2.	Screen printing		2
3.	Plate Making		3
4.	Offset Printing		7
5.	Gravure Printing		2
6.	Flexography		2
7.	Binding		4
8.	Packaging		2
		Total :	28

## PAPER 103 : PRODUCTION PLANNING AND CONTROL

## 1. Introduction :

a) Meaning, scope & objectives of Production control b) Methods of Planning & Documentation.

## 2. Print job Planning & Documenting:

a) Study of the job and its work flow b) Choosing suitable techniques / devices and material. c) Maximum utility of equipments and manpower by alternative schemes.

## 3. Stock Control:

a) Procurement of material for printing. b) Store-keeping, purchase, size and variety of stock, stockroom conditions c) Keeping records, monitoring stock.

## 4. Costing & Cost Control:

a) Cost & Cost Control, requisites of cost accounting, analysis of cost of production Fixed and Variable costs.
b) Cost elements - Direct material, Direct labour, Overheads, allocation of overhead cost, variation in overhead costs.
c) Methods of Costing - Job costing, Process costing, operative undertaking costing, break-even - analysis.

## 5. Estimating:

a) Estimating direct material-paper, ink, binding materials, films, plates etc., costing and estimating of cartons b) Wastage calculations c) Estimating Operation time of a job through the different departments.

**6.** *Modern trends* in the printing Industry in India and abroad, Use of computers in Production Planning.

<u>Reference Books</u>: 1) Printer's Costing & Estimating - B. D. Mendritta 2) Printing Estimating – Philip K. Ruggles 3) Cost and work accounting – Prof. R. G. Sathe, Prof. Dr. N. M. Nare, Dr. S. R. Valunj 4) Cost Accounting – M. Y. Khan, P. K. Jain 5) Production Planning and Inventory Control - Seetharama L. Narasimhan, Dennis W. Mcleavey, Peter J. Villington 6) Production Planning, Control and Industrial Management – K. C. Jain, L. N. Aggarwal

## <u>PAPER 104 : PRINCIPLES AND PRACTICES OF MANAGEMENT AND</u> <u>ORGANISATIONAL BEHAVIOUR (PPM&OB)</u>

## SECTION – I PRINCIPLES AND PRACTICES OF MANAGEMENT 40

## 1.Printing Business :

a) Project Formulation b)Technical Feasibility c) Economic Viability d) Site selection, e) Plant Layout.

## 2. Business, organisation and Administration

## 3. Definition and Basic concepts of management

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## 4. Evolution of management thoughts: Contribution by F. W. Taylor and Henry Fayol

## 5. Overview of functions of management:

- a) Planning What is planning ? steps and hierarchy of plan
- b) Organising-formal and informal, forms of organisation, line and staff organisation
- c) Leadership Autocratic Vs Democratic leadership
- d) Motivation Theories of motivation Maslow's Need Hierarchy and Herzberg's two factor theory, theory X and theory Y
- e) Coordinating
- f) Controlling

#### SECTION – II ORGANISATIONAL BEHAVIOUR

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### 1. Introduction :

Human nature, role relationship, technology and environment

## 2. Personality and attitudes :

Meaning of personality, development of personality, nature and dimensions of attitude, job satisfaction, organisational commitment

## 3. Management of change :

Importance, Forces responsible for change, resistance to change, overcoming resistance to change

## 4. Organisational Design :

Various organizational structures and their effects on human behaviour, organizational climate, organizational culture, organizational effectiveness

## 5. Conflict Management –

Traditional vs modern view of conflict, constructive and destructive conflict, conflict process, strategies for encouraging constructive conflict, strategies for resolving destructive conflict

<u>Reference Books : PPM -</u> 1) Essentials of Management – Koontz 2) Principles and Practices of Management – Saxena 3) Principles and Practices of Management – Shejwalkar andGhanekar 4) Management Concepts and Practices – Hannagan <u>OB -</u> 1) Organisational Behaviour, 9<sup>th</sup> Edition – Stephen Robbins 2) Organisational Behaviour – Uma Sekaran 3) Organisational Behaviour – Fred Luthans 4) Organisational Behaviour – K. Aswathappa 5) Human Behaviour at work – Keith Davis 6) Human Relations and Organisational behaviour – R. S. Dwivedi

## PAPER 105 : BUSINESS APPLICATIONS

#### 1. Sales and Distribution:

- a) Sales budgeting market segments / customers / products
- b) Customers enquiry and preparation of quotation
- c) Customer order processing from order acknowledgement to dispatch and invoicing
- d) Pending customer orders follow up
- e) Sales analysis
- **f**) Network of sales outlet distributed databases, While explaining this application consider an organisation manufacturing multiple products with sales outlet spread across the country.

#### 2. Manufacturing

- a) BOM processing with product configuration
- b) Capacity requirements planning for equipment manpower and time
- c) Shop floor control calculation of labour efficiency, productivity and equipment down time analysis
- **d**) Material procurement indenting, purchasing, vendor analysis, supplier's bill passing and receipt of material
- e) Stock accounting and control raw material, work in process and finished goods
- **f**) Sub contracting of work outside Vendors

## 3. Financial accounting :

Introduction of

- a) Journal / Day books
- **b**) General ledgers
- c) Financial statements P & L and Balancesheet
- d) Trial Balance
- e) Ratio analysis Gross profit ratio, Net profit ratio, current ratio

#### 4.Human resource :

- a) HRM Functions and practices
- **b**) Recruitment and selection
- c) Performance appraisal
- d) Training and Development
- e) Career Planning
- f) Payroll salary calculation and reporting, income tax calculation and reporting, loan accounting, PF and gratuity, bonus, ex-gratia, incentive, superannuation, arrears calculations

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## 5.Acts and labour legislations :

## ACTS :

- a) Press and book registration act
- **b**) Copy right act
- c) Sales tax act
- d) Shops and establishment act LABOUR LEGISLATIONS :
- a) Provisions in Factory act 1948
- b) Payment of wages act 1936
- c) Minimum wages act 1948
- d) Employees State Insurance act 1948

<u>Reference Books</u>: 1) MIS – W. S. Jawadekar 2) MIS – Jerome Kanter 3) MIS – Gordon B. Davis 4) MIS – Laudon and Laudon 5) Marketing Management – Philip Kotler 6) Fundamentals of Financial management – Prasanna Chandra 7) Personnel management – C. B. Mammoria 8) Human Resource and Personnel Management – K. Aswathapa 9) Production and Operations Management – Mayer 10) Modern Production Management – R. V. Badi 11) Industrial and labour laws - Dr. Sanjivkumar 12) The Central Sales Tax Act 1956 13) The Press and Registration of Books Act 1867 14) The Copyright Act 1957 15) The Bombay Shops and Establishments Act 1948 - S. D. Puri

## PAPER 106 PROJECT

- 1) Every candidate has to prepare project report on any aspect of Printing Management by visiting printing organization.
- 2) The report should be submitted to the Director by  $28^{th}$  February.
- 3) The project report could be about 5000 words.
- 4) The project report will be internally evaluated for 50 marks. The viva-voce would be conducted for 50 marks by external examiners.

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