



भारतीय पैकेजिंग संस्थान
Indian Institute of Packaging

An autonomous body under the Ministry of Commerce & Industry, Govt. of India

Prospectus & Syllabus

**DIPLOMA IN PACKAGING
(THROUGH CORRESPONDENCE)**

2020

Accredited by :



The Asian Packaging Federation



BACKGROUND:

There is more to packaging than meets the eye. Packaging is recognized as major industry in all the developing countries. This is not surprising as all the products manufactured or processed are packed in some way or the other. With trade barriers vanishing in many countries, export has increased, demanding more and more from packaging. Packaging is becoming a highly competitive field. It embraces various disciplines of science and technology. With the increasing importance for packaging and its growth, there would be growing opportunities for packaging professionals in their career.

It is a challenging task to acquire additional knowledge for the persons who are employed or engaged in business activities. The Distance Education Programme offers the best opportunity to such people to update their knowledge position, experience and accept higher responsibilities, on completing the course.

COURSE CURRICULLUM:

Packaging is multi-faceted activity. It protects preserves and sells the product at optimum cost. Protection, preservation and marketing involve understanding of environmental concerns, related laws, its economics and management besides knowledge of Packaging Technology.

The Course covers study of basic packaging materials like Paper, Paperboard, Glass and Metal containers, Plastic, Films, Laminated, Cushioning Materials, Ancillary Materials and other conventional and modern forms of packaging used in Food, Pharma, Engineering and other Industries. It also covers packaging techniques and processes, quality control and evaluation test and other management topics like standardization, packaging cost and economics etc.

The Correspondence Course is designed to develop packaging persons who can find opportunities in marketing, purchase, design and development, quality assurance and package processing of any industrial unit – be it a package manufacturer or a package user.

Methodology:

Candidates registered for the Course would be given course material for reading in advance.

Examination:

Examination will be conducted at the end of 18 months. A student also has to submit an essay on a prescribed topic before the examination. The examination would be conducted at Indian Institute of Packaging Mumbai or at its other offices at Kolkata, Delhi, Chennai, Hyderabad and Ahmadabad. The candidates are expected to attend the examination at his/her own cost. (For overseas candidate examination can be arranged at their place/country with prior intimation.)

The examination will consist of four paper of 100 marks each and dissertation in the form of essay of 100 marks. Papers I to IV will be set to cover topics from Packaging Technology Education Volumes – set 1 to 4 respectively given to the registered candidates.

A candidate can appear for examination on payment of reexamination fee within 3 years, for maximum three times, after registration. The minimum marks for passing the Diploma examination would be 40 percent in each head of passing and 50 percent in aggregate.

COURSE DURATION:

The course is of one and half year duration.

ELIGIBILITY:

Graduate in Science, Engineering, Technology, Commerce and Arts from UGC recognized University / Diploma from recognized technical board in Engineering / Technology are eligible for the course. Candidates should have minimum one year Industrial Experience in the operational areas like Production, Purchase, Marketing, Quality Control etc.

COURSE FEES:

Tuition Fee: Rs.70,000 + GST (18%) as applicable for Indian participant and for Overseas participants US \$ 1500/- (Including Form fee & Service Tax.)

RE-EXAMINATION FEE

For re-examination, after 1st attempt fee of Rs. 1000/- Per Paper will be payable for every examination.

COURSE MATERIAL:

Course material in the form of Packaging Technology Educational Volumes Set 1 to 4 along with Model Questions would be sent to the candidates on registration.

LIBRARY:

The students would be given identity cards by I.I.P. These cards must be produces at the time of library reference work.

CERTIFICATE:

The Distance Education Programme is accredited by Asian Packaging Federation. The successful student would be given a certificate titled. "Diploma in Packaging".

REGISTRATION / ADMISSION:

Application form along with Prospectus and Syllabus can be obtained from any centers of Indian Institute of Packaging by paying Rs. 250/- only by DD in favor of Indian Institute of Packaging.

The application forms should be sent directly to the "Indian Institute of Packaging, Mumbai" along with the fee by Demand Draft in favor of Indian

Institute of Packaging, payable at Mumbai. Fee can be paid in 2 installments i.e. Rs.60,000 + GST (18%) payable along with application form and Rs. 10,000 + GST (18%) within 6 months of admission. Fee once paid will not be refunded.

The application form can also be downloaded from website. Form fee of Rs.250/- is to be added in 1st installment of fee.

Commencement of Course	1st January, 2020
Orientation Programme	: January, 2021
Final Examinations	: June, 2021

SYLLABUS:

1) DPC - 101:

INTRODUCTION TO PRINCIPLE OF PACKAGING & MATERIAL (Examination paper 1 from volume I)

Packaging – A Total Concept, Packaging & Productivity, Package Components. Export packaging, Transit Hazards – Road, Rail, Sea & Air – Test Procedures for Evaluation of Transport – worthiness

(i) Physical (ii) Environmental, Protection Against Handling, Transport and Storage Hazards – Road, Rail, Sea, Air, Product Characteristics – Physical / Physico – Chemical, Biological, Physical Characteristics of the Product – Physical State, Weight, Center of Gravity, Fragility, Rigidity & Surface Finish, Packaging Components, Separation, Clearance support, Positioning, Cushioning, Weight Distribution, Suspension and Closure.

Test Procedures for Packaging Materials & Packaged Products Compatibility of the Package Manufacture & Properties of Packaging Paper and Board, Mineral Coating on Paper, Speciality Papers for Packaging, Folding Board cartons & Coated Carton - Manufacture, Types & Applications, corrugated Board, Box Styles and its Economics, Solid Fibreboard as a Transport Pack, Composite Container and its Applications. Multiwall Paper Sacks, Cellulosic Films.

Plastics, Thermoforming in Packaging, Co-extrusion, Extrusion - Stretch Blow Moulding. Low Density Polyethylene, Linear Low Density Polyethylene. High Density Polyethylene. High Molecular High Density Polyethylene, Polypropylene - Properties and Applications in Packaging, Biaxially Oriented Polypropylene Films, Polystyrene - Properties, Processing and Applications, PVC in Packaging, Nylon - 6 Films, Polyester Film, Identification of Plastics, Expanded Polystyrene, Expanded Polyethylene, Plastic Woven Sacks, Polycarbonate (PC)

2) DPC - 102:

RIGID PACKAGING MATERIAL & ADHESIVE (Examination paper II from Volume II)

Packaging in Glass Containers, Glass Containers Properties, Testing Methods.

Manufacture of Black Plate, Tin Plate Characteristics and Properties, Tinsplate Containers, Two Piece Metal Cans, Internal Food Can Lacquers, G.I. Drums – Oil Drums – Closures Manufacture and Usages, Aluminum Foil – Manufacture, Properties and Applications in Packaging, Aluminum Collapsible Tubes and Containers, Aerosol, Aerosol Packaging Technology, Seals Closures, and Pilfer proof Caps

Wooden Containers, Seasoning of Timber for Packaging cases, Crates Adhesives for Packaging Industries, Laminates, Laminated Tubes - Manufacture, Properties, Applications, Flexible Packaging – Laminates and Coatings – Applications, Role PVDC Coating in Packaging, Labels, & Labeling.

3) DPC - 103:

PACKAGING MACHINERY & PRINTING (Examination paper III from Volume III)

Printing, Printing Techniques, Gravure, Flexography, Inkjet Printing for coding, Marking Applications, Surface Design and Sales Appeal, Graphic and Surface design, Printing Inks, Bar Coding, Reinforcements on Distribution Packages, Corrosion Prevention in Packaging, Principles of Corrosion and its impact on Packaging.

Adhesive Tapes, their Manufacture, Properties & Laminations, BOPP Pressure Sensitive Tapes Cushion Design, Prevention of Shock Damage to Articles by various means and Measurement of Shock, Cushioning Materials and their Applications, Plastic Corrugated Board. Statistical Quality Control, Statistical Quality Control and its Role in Quality Assurance, Quality Control – Specifications and Performance Requirements of Fiberboard Boxes, Packaging Quality Control, Testing Methods for Evaluation of Transport Packages

Containerization, Containerization and Multimodal Transport System. Containerization Concept, Intermodal Containers - its Impact on Packaging. Packaging of Access and Spares - Skin. Blister and Shrink Packaging, Stretch Wrapping Systems. Strip Packaging, Blister Packaging. Form – Fill – Seal machine (systems), Developments in Packaging of Stand-up Pouches. Blow Molding machines, High Flow PEs - a New Trend in injection Molded Containers.

4) DPC - 104: PRODUCT PACKAGING

(Examination paper IV from volume IV)

Packaging of Processed Food Products, dehydrated. Ready to use Foods, Packaging of Meat, Fish & Poultry, Packaging of Fresh Foods, Packaging of Dairy Products, Packaging of Biscuits, Bread & Confectionery, Packaging of fruit Juices, Aseptic Packaging – Sterilization of Packaging Materials, Using Aseptic System, Aseptic Packaging, Sterilization by Irradiation, Radiation. Sterilization - Process Norms, Guidelines & Applications, Packaging of Horticultural Crops. Packaging of Pharmaceutical Products – injectibles, Packaging of Pharmaceutical products - Orals. Packaging of Textiles. Packaging of Fertilizers & Chemical, Developments and Trend in the Field of Packaging of Chemicals, Packaging of Fertilizers, Packaging in Pesticides Industry

Packaging of Soaps and Detergents, Packaging of Cosmetics, Packaging of Handicrafts for Exports. Packaging Hazardous Chemicals, Packaging of Light Engineering Goods, Packaging of Heavy Engineering Goods, Vacuum Packaging, Packaging management, Package Design - An Important Marketing Tool, Systems Approach to packaging, Systems Packaging, Scientific Packaging and Loss Prevention. Packaging Needs for Export. Basic Concepts in Standardization, Packaging Standardization and Physical Distribution, Standards - Basic Concepts, Packaging Materials, Rigid & Ancillary Materials and Export Packaging. Packaging Economics, Maximizing the Container Utility in Relation to the Product, Packaging Cost, Cost

Reduction in Packaging, Inventory Control, Value Analysis and Value Engineering, Packaging Laws, Consumer Protection in Food Packaging, marking and Labeling, Eco-friendly Packaging for Exports.

5) DPC - 5: PROJECTWORK

(Essay on a selected topic)

Details will be given separately.

SERVICES OFFERED BY INDIAN INSTITUTE OF PACKAGING

- Post Graduate Education
- Executive Development Programmes
- Research
- Testing, Development
- Standardisation
- Techno Economic Feasibility Studies
- Graphic Design
- Data Base
- Library
- Certificate Course
- Unit Based Programmes
- Technical Consultancy
- Shelf Life Studies
- Testing Equipment Development
- Market Research
- Industrial Photography
- Information
- Publications



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Proposed Branches

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