



भारतीय पैकेजिंग संस्थान  
Indian Institute of Packaging  
An autonomous body under the Ministry of Commerce & Industry, Govt. of India

# POST GRADUATE DIPLOMA IN PACKAGING

Prospectus  
36<sup>th</sup> Batch PGDP  
2020 - 2022

Consultancy & Projects

Research & Development

Testing & Evaluation

Training & Education



Autonomous Body under Ministry of Commerce & Industry, Government of India



## REMINISCENCES

## CONVOCATION

2015



Smt. Nirmala Sitaraman, former Minister for Commerce & Industry, Govt. of India was present as Chief Guest

2016



Shri Y. S. Chaudhary, Former Minister of State for Science & Technology, Govt. of India was present as Chief Guest

2017



Shri Sunil Kumar, IAS, Additional Secretary, Ministry of Commerce & Industry, Govt. of India was present as Chief Guest

2018



Shri Suresh Prabhu, Hon'ble Minister for Commerce & Industry, Govt. of India was present as Chief Guest



Annual Convocation 2017-31st Batch PGDP



Shri C. R. Chaudhary, Hon'ble Minister of State for Commerce & Industry, Govt. of India was present as Guest of Honour



# *Vision*

*To make Indian Institute of Packaging a World  
Class Centre of Excellence with Sustained  
Commitment from the Stake Holders.*

*To develop Close International Relationship with  
Worldwide Packaging Fraternity.*

*To make India a Focal Point for Contemporary  
Developments in Art, Science, Technology and  
Engineering in the Field of Packaging.*

# *Quality Policy*

*The Quality Policy of Indian Institute of Packaging is to provide assured tests and measurements at all times conforming to the specifications laid down in National, International or customer specified standards.*

*We believe in and strive for the involvement of every member of the Institute in evolving and implementing an effective and efficient Quality Assurance Programme as laid down in ISO/IEC 17025:1999.*

*We shall endeavour meticulous implementation and compliance with the Quality Manual and build an attitude essential for a prevention oriented work culture.*





**Dr. Tanweer Alam**

Director  
Indian Institute of  
Packaging

Indian Institute of Packaging (IIP) is an autonomous body in the field of packaging and working under the administrative control of the Ministry of Commerce and Industry, Government of India. The Institute was established on 14th May, 1966 with its headquarter and principal laboratories in Mumbai. The Institute set up its first branch office at Chennai in 1971, followed by branches at Kolkata, Delhi, Hyderabad, Ahmedabad in 1976, 1986, 2006 and 2017 respectively. In addition three more centres are to be made operational at Bangalore, Guwahati and Kakinada.

The main objective of the Institute is to promote the export market by way of innovative package design and development as well as to upgrade the overall standards of packaging in the country. The Institute is involved in various activities like testing and evaluation of packaging materials and packages, consultancy services and research & development related to packaging. Besides this, the Institute is involved in training and education in the field of packaging.

The Indian packaging industry has not only grown in size and volume, but also in its level of operation. In addition, globalisation has also forced the Indian packaging industry to become more competitive in the global markets and also to win major contracts abroad. Today, the Indian packaging industry is growing at an annual rate of 15% as against 5-6% growth of the global packaging industry. This has also created a great demand for packaging professionals by the Indian packaging industry. In fact, packaging training and education have become the 'Need of the Hour' in our country so as to upgrade the overall standards of packaging at the National level.

To value these facts, the Indian Institute of Packaging started two years full time Post Graduate Diploma in Packaging in the year 1985 in Mumbai which is one of its kind in the country. Subsequently, the Institute extended this facility by way of commencing a similar course in Delhi in the year 2000. Due to constant growth in demand of packaging professionals, IIP initiated this course in Kolkata with an intake of 15 students in 2010 and in Hyderabad with an intake of 16 students in 2011.

Today, the Post Graduate Diploma in Packaging (PGDP) course is established as one of the most popular programme and is well accepted by the packaging industry in India and abroad. Till date, over 2000 students have graduated under this programme with 100% campus placements in the past five years. On similar lines, the Institute started the Distance Education Programme in 1996 for the benefit of working people to upgrade their knowledge in the field of packaging.

In order to cater to the demand of the packaging industry, IIP has increased the intake of students from the academic year of 2017-2019.

I am confident that the youngsters who would be opting for this course as their career option will have a brilliant and bright future.

My best wishes to all the new aspirants who would be joining the illustrious IIP family.



**Dr. Tanweer Alam**

## GENESIS OF PACKAGING EDUCATION

It was in 1985, that we decided to take a step forward in the direction of Packaging Education. We are second in the world, besides USA, to start two years Post Graduate Diploma in Packaging. With the inputs of expert educationists under the chairmanship of Dr. D. V. Rege, then Director of University Department of Chemical Technology, Mumbai (now ICT) with Dr. V. Gupchup, then Principal of Victoria Jubilee Technical Institute, Mumbai (now Veermata Jijabai Technological Institute), Dr. Ravi Talwar; Mr. A. S. Athale; Dr. K. N. Kaul, Technical Director of M/s. Roche Products; Dr. R. Jayaraman, Vice-President of M/s. Britannia Industries Ltd. and others, the curriculum of two years full time Post Graduate Diploma in Packaging was developed.



Since packaging is an inter-disciplinary subject, the first semester includes exposure to subjects like Mathematics, Physics, Chemistry, Mechanical and Electrical Engineering.

Packaging technology is then introduced with detail and elaborate coverage on various packaging media, which includes paper and paperboard, glass, metals, plastics and composites. Similarly, laboratory practical training and visit to packaging converters and user industries are made part of the curriculum

to expose students to the practical aspects of the subject.

In an organisation, since a packaging professional plays a vital role, management subjects such as Production Planning and Control, Total Quality Management, Industrial Engineering, Materials Management, Marketing and Financial Management are also covered.

The post graduate diploma course commenced in 1985 and the curriculum is regularly reviewed with addition of new subjects. Some of the subjects recently included are Eco-Regulation, Computer Aided Design & Mould Design and Communication Skills, which now form a part of the syllabus.

We have a separate computer laboratory for Post Graduate Diploma students equipped with necessary software for their training and use. Experienced and dedicated faculty trains the students in CAD.

We have been conducting a three months certificate course since 1968. The course is accredited by Asian Packaging Federation of which IIP is the founder member and endorsed by World Packaging Organisation. The course is open to overseas participants as well. Both these courses being full time, a need was felt to introduce a Distance Education Course especially for working people who cannot attend the full time programme. In 1996, we started the Distance Education Course for many aspirants who are working in the industry and could not attend our full time courses to improve their professional qualification.

We are in the 23<sup>rd</sup> year of Distance Education Programme, which is of 1½ years duration. This course is also accredited by Asian Packaging Federation and is open to participants from any country. We have been receiving





overwhelming response for this course. For overseas students of this course, we conduct the examination in their city. Over the years, we have witnessed a significant growth in the number of students enrolling in this course. They come from various professional and educational backgrounds.

We started with student in-take of 20 for the 2-year Post Graduate Diploma in Packaging and today, our intake is raised to 500. Appreciation of this course by the industry is seen in the responses we receive for the campus interviews, in which almost all of the students are placed within a few days. The value of our course is recognised through repeat visits of many corporate bodies and MNCs for campus placement.

All our students are respectfully placed with exciting job offers. Recently, overseas organisations have fawned down and recruited our students.

The success story of these programmes is due to the efforts by the eminent faculty, who support the educational activities; from renowned educational institutions, the industry and many corporate bodies, through industrial visits and training of our students. Presently, Dr. Babu Rao Guduri, Head of Training & Education Division Wing-1 and Dr. Badal Dewangan, Head of Training & Education Division Wing-2 are looking after the overall activities of this Two Years Post Graduate Diploma in Packaging programme being the course co-ordinator of 2nd year and 1st year respectively.

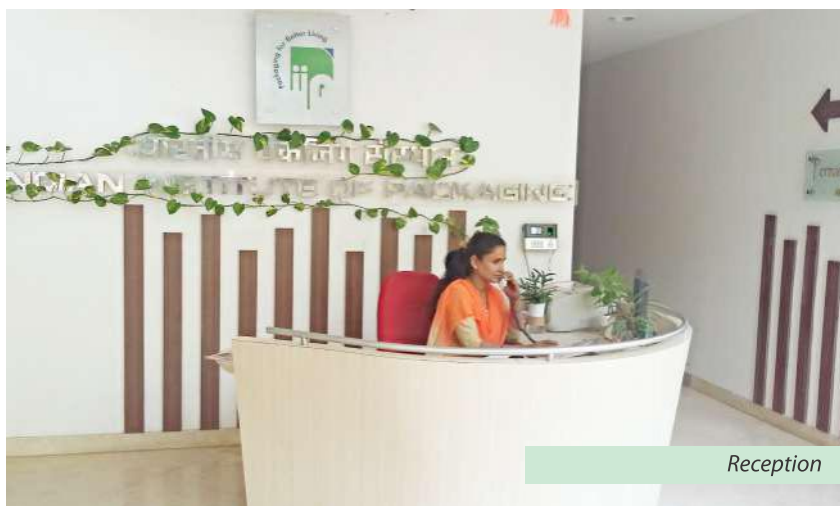
Packaging is one of the most dynamic fields and is sensitive to technical and commercial trends. Packaging trends need to be quickly identified, studied and exploited to survive in competition. Globalisation has brought consumers and producers closer than ever before. The role of packaging in modern methods of distribution through super markets and malls has, therefore, assumed great importance. Thus, the demand of this subject makes our job challenging; however, we always like challenges and endeavour to succeed.



**Dr. Badal Dewangan**  
**Joint Director & Head T & E Division**

## ABOUT INDIAN INSTITUTE OF PACKAGING

The Indian Institute of Packaging (IIP) is a national apex body which was set up in 1966 by the packaging and allied industries and the Ministry of Commerce, Government of India, with the specific objective of improving the packaging standards in the country. The Institute is an autonomous body working under the administrative control of the Ministry of Commerce.



Reception

The Institute endeavours to improve the standard of packaging needed for the promotion of exports and create infrastructural facilities for overall packaging improvement in India. This is achieved through the Institute's multifarious activities which are today, in line with those of premier packaging institutes the world over. The institute aims to make India a focal point for contemporary developments in Art, Science, Technology and Engineering, with respect to the field of Packaging.

The Institute began in a very humble way, with an office at Mumbai. It has now expanded, with its Head Quarters at Mumbai and centres located at Delhi, Kolkata, Hyderabad, Chennai and Ahmedabad.

The major activities of the Institute are:

- |                                      |            |
|--------------------------------------|------------|
| Testing, Certification & Consultancy | Training   |
| Basic Research                       | Education  |
| Applied Research                     | Incubation |

The other promotional efforts include exhibition and awards, information services and publications, library and database services.

The Institute has linkages with International organisations and is a founder member of the Asian Packaging Federation (APF); member of the Institute of Packaging Professionals (IOPP), USA; the Institute of Packaging (IOP), UK; Technical Association of Pulp and Paper Industry (TAPPI), USA and the World Packaging Organisation (WPO).

The Indian Institute of Packaging has helped many developing countries



Convocation 2019



Visitors Room



Lounge Area



Convocation-2019



in the promotion of packaging through projects carried out for prominent International bodies like the United Nations Industrial Development Organisation (UNIDO), International Trade Centre (ITC), the Commonwealth Fund for Technical Co-operation (CFTC) and the European Union (EU).

The Institute has successfully completed International residential training programmes for APF and WPO in the years 2005, 2006, 2010, 2012 and 2013.



Director's Office

At present, the Institute has members in varied categories such as Patron Members, Overseas Members, Life Members and large number of Ordinary Members who regularly use the expertise and the services available in the laboratories.

### Exhibition and Design

This division organises exhibitions on a regular basis.

INDPACK, the Annual National Exhibition organised at various cities around the country, offers the packaging industry an opportunity to display development in the machinery and material sector.



Permanent Exhibition

INDIAPACK International, a collaborative effort with exhibition organisers from overseas, is organised once in 2 / 3 years.

The Institute also organises industry participation in International exhibitions.



Convocation-2018



Convocation-2018

The Permanent Exhibition Centre in Mumbai, Delhi, Kolkata, Chennai and Hyderabad offer display outlets for the products of the industry.

Industrial designs are developed as per client's requirements.

## Awards

The Institute, while maintaining its unique position as an internationally reputed organisation responds to the needs of the country and at the same time acts as a window for India's capabilities in Packaging Science and Technology.

## INDIASTAR Awards

IIP has instituted the 'INDIASTAR' Awards, the National award for Excellence in Packaging in the year 1972 to promote and encourage excellence in packaging design, innovation and sustainability, once every two years. Over a period of time, this award programme is firmly entrenched and is most popular as the premier event for India's packaging fraternity.



Industry Showcase

This biennial INDIASTAR Award is the recognition of excellence in packaging development for functional design and appeal. The INDIASTAR Contest is also open to students under the Student Category.



## PACMACHINE Awards

The PACMACHINE Award symbolises achievement in the field of packaging and converting machinery, material handling and testing equipment.

Winning INDIASTAR entries may then compete for the ASIASTAR and the WORLDSTAR Awards.

## Information and Publication

This division provides information related to the packaging industry, in addition to publishing various monographs and textbooks, seminar papers and directories, periodically.



Canteen



More than Just Education



Administrative Block



‘Packaging India’, the official Journal of the Institute published six times a year, is an invaluable source of information for the packaging industry. It is mailed free of cost to members of the Institute, packaging and related institutions all over the world. Individual subscriptions are available on request.

The Institute’s publications are available at the Head Office and the Regional Centres.

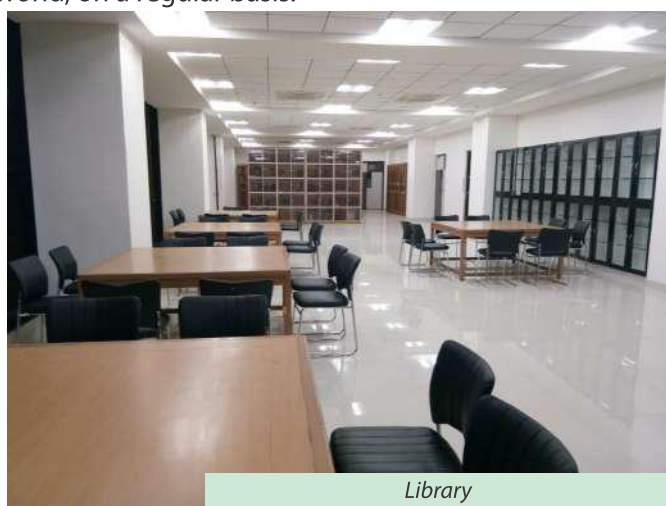
### Library and Internet Services

IIP is privileged to have one of the best reference libraries in the world, with books, International periodicals, bound volumes of journals; besides a large number of reports, National & International standards, database on products and materials along with reprographic facility also being available. Library facilities are extended to the members of the Institute all students and faculty.

The IIP library has a rich collection of nearly 7000 textbooks besides several packaging related National and International standards from different countries and organisations on materials, methods and systems, testing and quality control etc., besides having a number of seminar, technical reports and dissertations. The information input is also augmented through over 50 technical journals obtained from various sources in the world, on a regular basis.



Reference Literature



Library



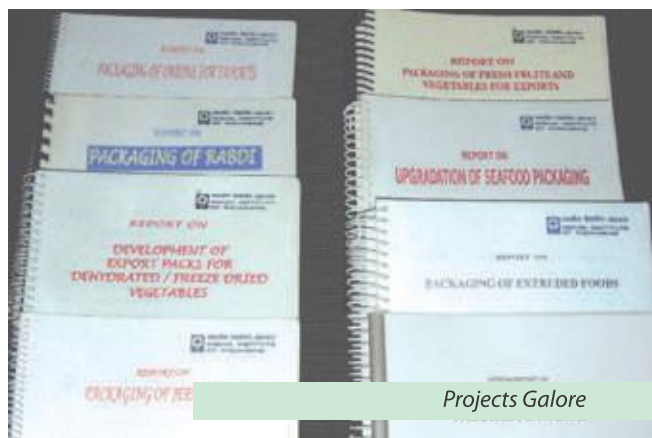
Classroom



Equipped Laboratory

## INDUSTRY CONSULTING SERVICES

The Institute undertakes self sponsored and industry participated applied projects covering different aspects of standards, substitutions of packaging materials, improvements in the designs of packages for a range of products including agricultural produce, marine products, processed food, pharmaceuticals, chemicals, consumer durables, light and heavy engineering products etc. Export packs for fresh fruits and vegetables are developed which include bulk and consumer packs. Consumer and bulk export packs with specification details are developed for pre-cut frozen fruits and vegetables.



*Projects Galore*

Consultancy services include:

- | Package design and development
- | Cost-effective packaging for domestic and overseas distribution
- | On-the-spot advisory visits
- | Techno-economic feasibility studies
- | Market research and survey reports
- | Projects profile with guidelines for machinery selection, computing investments and working capital as well as establishing economical feasibility.



*Partners*

Some of our esteemed clientele include MNC's, entrepreneurs, government departments, packaging material users and converters.

### Global Initiatives

To meet the growing demands from industrial units, in both, the organised and unorganised sector for qualified technical manpower, the Institute introduced 2-year programme leading to a Post Graduate Diploma in Packaging (PGDP) in 1985. The



*Indo-Africa Programme*



*Session in Progress*



course is designed to equip candidates with all the facets of packaging activity.

Other courses being offered by the Institute include the Graduate Diploma in Packaging through correspondence - a Distance Education Programme (DEP) 1996, recognised by the World Packaging Organisation (WPO) and accredited by Asian Packaging Federation (APF). The 18-month course, designed primarily for working professionals is open to industry personnel and to students in India, the Asia Pacific Region and other countries.

A 3-month Certificate Course in Packaging introduced in 1968 is conducted at the Head Office and at the Regional Centres, entries of which are on a first-cum-first-served basis. The course is also open to overseas participants deputed by their Governments under various schemes. This course is endorsed by the World Packaging Organisation (WPO).

IIP is probably, the first Packaging Institute in the world to hold a training programme for women entrepreneurs. The 1-month Entrepreneurship Development Programme is organised once a year.

Short Training Programmes, Seminars and Conferences of 1-day to 1-week duration are organised by the Head Office and the Regional Centres throughout the year in various parts of the country, specially designed for working executives as well as professionals needing to update their knowledge in the form of executive development programmes.

**Residential Training Programmes –**  
The Institute conducts Residential Training Programmes at its Campus in Mumbai. These programmes are designed to meet the specific requirements of the organisation / industry.

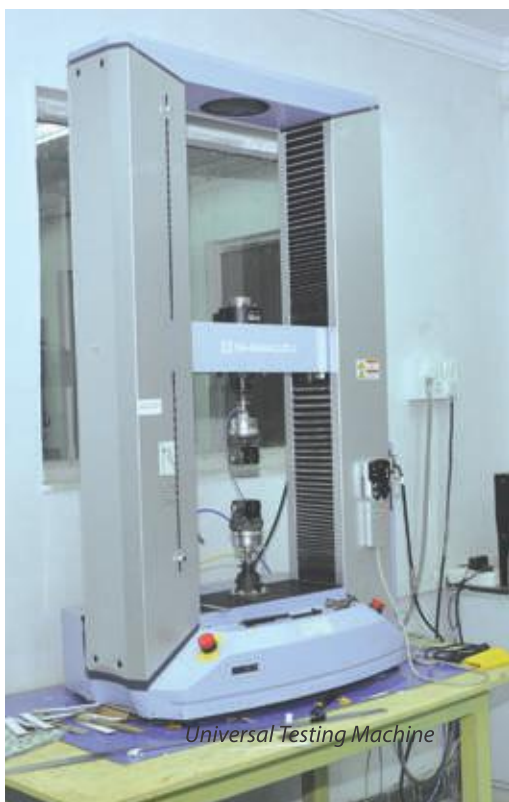


## TESTING AND EVALUATION SERVICES - NABL ACCREDITED LABORATORIES

Over the last 49 years, the Indian Institute of Packaging has been able to establish well-equipped laboratories for testing of various packaging material and packages at its principle laboratory at Mumbai and also its branch offices at Chennai, Kolkata, Delhi and Hyderabad, with continuous efforts towards upgradation. Financial assistance of the Ministry of Commerce and Industry, Government of India is awarded. Today, the Institute is proud to announce that the laboratory has got the facility for

testing over 300 parameters covering different areas like mechanical, chemical and physico-chemical properties of packaging material and packages.

Laboratories at the Head Office and regional centres extend testing facilities to the industry for domestic distribution and export, as per National and International Standards like the Bureau of Indian Standards (BIS), International Standards Organisation (ISO), British Standards (BS), American Society for Testing Materials (ASTM) and others. IIP also issues UN Certification for export packages for hazardous goods and equipment calibration standardisation certificates.



Universal Testing Machine



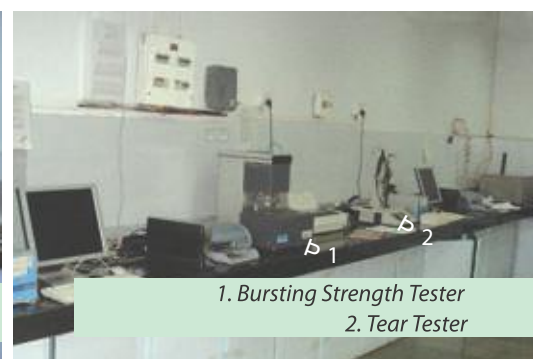
Universal Testing Machine  
for Geomembranes



Folding Endurance



1. Tear Tester  
2. Digital Puncture Resistance Tester



1. Bursting Strength Tester  
2. Tear Tester





DGS Audit

## Laboratory

The division comprises of the following laboratories:

- | Consumer Package Laboratory
- | Material Testing Laboratory
- | Optical and Barrier Properties Laboratory
- | Chemical Laboratory
- | Transport Laboratory
- | Microbiology Laboratory

## Activities

Activities carried out include:

- | General chemical and material testing
- | Testing for transport worthiness of packages
- | Testing of packages for the carriage of dangerous goods for export – IMDG and ICAO.
- | In-laboratory training programme
- | Training programme on testing and quality control
- | Testing based consultancy projects



1. Scuff Proofness Tester
2. Izod Impact Tester
3. Bursting Strength Tester



GCMS Equipped Laboratory

## POST GRADUATE DIPLOMA IN PACKAGING

It was in 1985 that IIP decided to take a step forward in the direction of Packaging Education to meet the growing demands from industrial units, in both, the organised and unorganised sectors for qualified technical manpower. IIP is second in the world, besides USA, to start 2-year Post Graduate Diploma in Packaging. With the inputs of expert educationist under the chairmanship of Dr. D. V. Rege, then Director of UDCT with Dr. V. Gupchup, then Principal of VJTI; Dr. Ravi Talwar; Mr. A. S. Athale; Dr. K. N. Kaul, Technical Director, M/s. Roche Products; Dr. R. Jayaraman, Vice-President, M/s. Britannia Industries Ltd. and others, the curriculum of 2-year full time Post Graduate Diploma in Packaging was developed.



Convocation-2019

Since packaging is an inter-disciplinary subject, the first semester includes exposure to subjects like Mathematics, Physics, Chemistry, Mechanical and Electrical Engineering.

Packaging Technology is then introduced with detail and elaborate coverage on various packaging media, which includes Paper and Paperboard, Glass, Metals, Plastics and Composites. Similarly, laboratory practical training and visit to packaging converters and user industries are part of the curriculum to expose the students to the practical aspects of the subject.

Since a packaging professional plays a vital role in an organisation, management subjects are also included, such as:

- | Production Planning and Control
- | Total Quality Management
- | Industrial Engineering
- | Materials Management
- | Marketing and Financial Management



An Updated Library



HPLC Equipped Laboratory



Classroom Session



The Post Graduate Diploma course commenced in 1985 and the curriculum is regularly reviewed with addition of new subjects. Some of the subjects recently introduced are eco-regulation, computer aided design & mould design and communication skills, which now form a part of the syllabus.

IIP has a separate computer laboratory for Post Graduate Diploma students, equipped with necessary software, for their training and use. Experienced and dedicated faculty trains the students in CAD.



Convocation-2019

A large number of factory visits are undertaken in line with the curriculum. These provide the students with practical experience with respect to the packaging industries.

The fourth semester is dedicated to industrial training. Every student is placed in an industry for hands-on practical training. At the end of this semester, a 'Campus Placement' drive is conducted at the Institute in Mumbai, and is open for students of all regions of the Institute. IIP

takes pride to convey that it takes effects for 100% placement of students, to date.

The details of the subjects taught in each semester along with the teaching and examination scheme is as detailed in the Tables ahead.

The students are encouraged to showcase their cultural and extracurricular abilities through the yearly 'PACKFEST' programme. It comprises of a series of cultural and technical competitions related to packaging. This festival was introduced at the 24<sup>th</sup> Batch Convocation and is continued till date.



Packfest 2019



Packfest 2019



Packfest 2019



Career fest -2018



Career fest -2018

## STUDENTS MERIT AWARD



On the occasion of the 'Silver Jubilee' convocation of the Post Graduate Diploma in Packaging programme (PGDP), it was planned to create a 'Students Merit Award Fund' for the educational activities and the interest amount so generated will be spent every year for making MEDALS for different categories. Thus, all contributions are for perpetuity.

The main objective in awarding Platinum, Gold, Silver and Bronze medals to meritorious students is to motivate the students of Post Graduate Courses and as well as Distance Education Programme (DEP).

The medals will be awarded to the students in the following manner:

Gold Medal – Overall Top Scorer

Silver Medal – Overall Second Scorer

Bronze Medal – Overall Third Scorer

The three toppers of the PGDP from each region will then compete for the topper amongst them all, for a Platinum Medal. A competitive examination on 'packaging' will be held at Mumbai every year before the convocation.

All medals have been sponsored by leading packaging companies and the contribution will be a one time contribution towards the Students Merit Award Fund. The medal would have the IIP Logo on one side and the logo of the sponsoring company will be embossed on the other side.





## SPONSORS

List of Sponsors for **Students Merit Award** for Post Graduate Diploma in Packaging (PGDP) and Distance Education Programme (DEP).

### Platinum Medal



### Gold Medal

### Silver Medal

### Bronze Medal

Mumbai



Parksons Packaging Limited



Associate Capsules Group



Electronic Devices

Delhi



Hindustan Adhesives Limited



Micro Mechanical Works



Triveni Polymers Limited

Kolkata



Manjushree Technologies Limited



Tata Tinplate Limited



Avery Dennison

Hyderabad



ITW Limited



Ecobliss Limited



Shivshakti Timber Works

DEP



DIC Limited



Hindustan Tin Works Limited



Perks Engineering

## SUCCESS STORIES...

- Placement in leading MNCs, FMCG, converter industries, KPO, food and pharmaceutical companies.
- All round professional and personality development.
- Industry oriented teaching.
- Green campus, reputed faculty, testing laboratories and excellent hostel facility at Mumbai.
- A unique Resource Centre to facilitate placements all over the world. Leading companies, across the world from various disciplines of packaging come for campus placement.



**Convocation - 2019**



## EMINENT REGULAR RECRUITERS

The success continues with a number of eminent recruiters as listed here.

Abbott Laboratories

Agro Tech Foods Limited

Alpla Limited

Atul Limited

Avery Dennison (I) Pvt. Limited

Amway India (P) Limited

Bajaj Electricals Limited

Biostadt India Limited

Castrol India Limited

Cavinkare Limited

Chainanalytics Pvt. Limited

Chandras chemical Entp. Pvt. Limited

Chep India Pvt. Limited

Coca-Cola India Inc.

Creative Polypack Limited

Cummins India Limited

Dabur India Limited

Dolcera ITES (P) Limited

Dr. Reddy's Laboratories Ltd.

Dream Bake Pvt. Limited

Eltete India TPC Pvt. Limited

Emami Agrotech Limited

Emami Limited

Ferrero India Pvt. Limited

Flint Group India Pvt. Limited

Flipkart Pvt. Limited

Godrej Consumer Products Limited

Haldirams Foods International Pvt. Ltd.

Hawkins Cookers Limited

Heinz India Limited

Himalaya Drug Co. Limited

Hindustan Unilever Limited

Integrated Plastics Packaging Inc.

IPCA Limited

ITC Limited

ITW Signode India Limited

Kansai Nerolac Limited

Kraft Foods Pvt. Limited

Kris Flexipacks Limited

L'Oreal India Pvt. Limited

## EMINENT REGULAR RECRUITERS

The success continues with a number of eminent recruiters as listed here.

Larsen & Toubro Limited

Lupin Limited

Manjushree Extrusions Limited

Manjushree Polypacks Pvt. Limited

Manohar Pkkg. Pvt. Limited

Mapro Foods limited

Marico Limited

Maruti India Pvt. Limited

Mondelez India Foods Pvt. Ltd.

Mersheys India Pvt. Limited

Mylan Laboratories

Nestle India Limited

Parksons Packaging Limited

Constantia Flexibles- Parikh Packaging Pvt. Limited

Pearl Polymers Limited

Perfetti Van Melle (I) Pvt. Limited

PepsiCo Pvt. Limited

Pidilite Industries Limited

Piramal Enterprises

Piramal Healthcare Inc.

Piramal Healthcare Limited

Polygel Technologies (I) Pvt. Limited

Ranbaxy Limited

Reckitt Benckiser (I) Limited

Saint Gobain

Sealed Air India Pvt. Limited

Skanem Interlabels Limited

Strides Specialities Pvt. Limited

Stylo Graphic Imaging Pvt. Limited

Surface Graphics Pvt. Limited

Switz Foods Pvt. Limited

Tata Global beverages Limited

Tulsian Group of Inds. Limited

TVS Motor Company

Uflex Limied

United Phosphorus Limited

Walmart India Limited

Wipro Consumer Care & Lighting

Wockhardt Limited



## THE INSTITUTES' FACULTY

### Dr. Tanweer Alam

Director  
Indian Institute of Packaging

#### Mumbai

Dr. Babu Rao Guduri, Joint Director & Head, R&D Division

Dr. Badal Dewangan, Joint Director & Head Training & Education Division

Mr. T. M. Mallik, Deputy Director, Laboratory Division

Mr. P. G. Meshram, Deputy Director, Laboratory Division

Dr. Nilay Kanti Pramanik, Deputy Director, R & D Division

Dr. Hemlata Raikwar, Deputy Director, Laboratory Division

Mr. Pon Kumar, Assistant Director, Training & Education Division

Mr. Subhash Dalvi, Assistant Director, Budget & Accounts Division

Mrs. Poonam Kanojia, Technical Officer, Laboratory Division

Mr. Anil Moule, Technical Officer, Laboratory Division

#### Ahmedabad

Dr. Amit Singla, Joint Director

Mr. Tushar K. Bandyopadhyay, Assistant Director

Mrs. Foram A. Badani, Technical Officer

Mr. Arpit Badani, Technical Assistant

#### Delhi

Mr. Madhab Chakraborty, Joint Director & Regional Head

Mr. Subodh K. Juikar, Deputy Director

Mr. Rahul Tirpude, Assistant Director

Dr. Atul Jadhav, Assistant Director

Mr. R. G. Butani, Technical Officer

Mr. Harshad Mangalassery, Technical Assistant

Mr. Dinkar Joshi, Technical Assistant

Mr. Sourabh Ghosh, Technical Assistant

#### Chennai

Mr. N.B. Lalwani, Deputy Director

Mr. R. Kolappan, Assistant Director

Ms. Shweta Shetty, Technical Officer

Mr. V. Premraj, Technical Assistant

Mr. Sachin P. Adakane, Technical Assistant

#### Kolkata

Mr. Bidhan Das, Deputy Director & Regional Head

Mr. Rishu Gautam, Assistant Director

Mr. Alok Basak, Technical Officer

Mr. Saroj Meher, Technical Officer

Mr. S. V. Ramesh, Technical Assistant

#### Hyderabad

Dr. Gaurav Madhu, Joint Director  
& Regional Head

Mr. N. Nataraj, Assistant Director

Mr. Manipati Madan Mohan, Assistant Director

Mr. Nallavalli Nandakishore, Technical Assistant

Mr. Saurabh Tripathi, Technical Assistant

Mr. Balakishan D., Technical Assistant

## The Guest Faculty

The guest faculty are invited from reputed institutes. Some of them are as highlighted below.

### Mumbai

Indian Institute of Technology (IIT)  
Mumbai University  
Usha Gandhi Pravin College of Management  
Shri Vile Parle Kelavani Mandal Education Institute  
V.K.Krishna Menon College of Commerce &  
Economics  
Tolani College of Commerce  
Thakur College Of Engineering and Technology

### Hyderabad

Osmania University  
Jawaharlal Nehru Technical University  
Institute of MSME  
Indian Institute of Chemical Technology

### Kolkata

Calcutta University  
Jadavpur University  
Bidhanchandra Krishi Vishwavidyalaya  
Indian Institute of Management (IIM)

### Delhi

Delhi University  
Netaji Subhash Institute of Technology  
Delhi Engineering College  
Indian Institute of Technology (IIT)



# PROSPECTUS

Consultancy & Projects

Research & Development

Testing & Evaluation

Training & Education

## PROSPECTUS

### About the Institute

The Indian Institute of Packaging (IIP), an autonomous body, is a National Institute set up in



the year 1966 under the administrative control of the Ministry of Commerce, Government of India, with the active support of the Indian industries. Its headquarters and principal laboratories are located on a sprawling campus in Mumbai and its Five regional centres are located at Chennai, Delhi, Kolkata, Hyderabad and Ahmedabad. Activities of IIP, today, are in line with those of premier packaging institutes the world over. These are Training & Education, Consultancy & Projects, R&D, Package Testing & Quality Evaluation among others.

IIP works in close association with International organisations. IIP is a founder member of Asian Packaging Federation (APF) and World Packaging Organisation (WPO).

### Course Objective

In recent times, with the globalisation of markets and trade, the role of packaging has assumed greater importance in marketing and distribution of agricultural produce, value added products, industrial products and mass produced consumer goods. As a result, there is now a demand for technically qualified cadre of people who can undertake design, development, production, quality control as well as make effective use of modern packaging technology.

There are over 7,000 organised industrial units and nearly 4,50,000 small industries in India who use or produce packaging materials and require qualified technical personnel.

The Indian Institute of Packaging has, therefore, to bridge the gap, developed a full time Post Graduate Programme of two year duration, which has become popular in industries since 1987.

### Curriculum

The curriculum is so designed that the successful candidates would be well-equipped in all major facets of packaging activities and will be easily employable in a package manufacturing, packaging machinery manufacturing or user industries like food, pharmaceuticals, cosmetics and others. With experience, they can also aspire to be self-employed professionals / entrepreneurs in their field.

In order to provide sound technical knowledge and at the same time, acquaint them with industrial practices, the theory sessions have been kept at 70 per cent of the curriculum and the balance 30 per cent is allotted for practical sessions. The theory section includes classroom sessions and library reference work. The practical side includes laboratory exercise, industrial visits, project work and industrial training. Involvement in R&D Activities of the Institute will form an important part of the curriculum

### Title

The two-year programme leads to a **Post Graduate Diploma in Packaging.**

### Eligibility: Maximum Age 30 years as on 29/05/2020

(Age relaxation : 3 years for OBC & 5 years for SC/ST)

A candidate seeking admission for the Post Graduate Programme should have passed the full time (not by correspondence or part time) Graduate degree examination in Science (12th + 3 years degree entire 5 years in science only) with Physics / Chemistry / Mathematics Microbiology or Biochemistry as the main subject or one of them as second subject in the three year degree or Agriculture / Food Science/ Polymer Science or Engineering / Technology degree of a AICTE/ recognised University with minimum second class. Those with equivalent overseas qualification would also be eligible for admission. The candidate needs to have consistently high academic performance and sound general knowledge.

Candidates appearing in the final year of the qualifying examinations can also apply, however, they must submit their results/ provisional results (as given by University) latest on the day of the personal interview and selection, as without their degree result, student are not eligible to appearing for personal interview and will be eliminated from the admission process.

## Admission/Selection Procedure:

The admission to this Programme will be done according to the following two steps:

- Written examination
- Personal Interview

## Selection Procedure:

### STEP 1: Written Examination

A candidate seeking admission to the PGDP Course will be required to appear in the written Entrance Examination which will comprise of multiple choice questions. The syllabus for the written test is at the graduate level and the subjects include Physics, Chemistry, Mathematics and Engineering. The candidate has the option to choose questions, provided the number of questions does not exceed a fixed limit. The entrance examination will be conducted on **10/07/2020** at Mumbai, Kolkata, Delhi, Chennai, Hyderabad and Ahmedabad centers of the Institute. The Institute has the discretion to fix minimum qualifying marks for the examination and short list the candidates who will be eligible for further consideration for admission.

Application for admission to the course needs to be submitted on or before **21/07/2020** along with attested copies of mark sheets and other credentials. Application form, Prospectus and Syllabus can be

## Tuition Fee and Other Fee Fee Structure

|    |                                                                                                      |                                    |
|----|------------------------------------------------------------------------------------------------------|------------------------------------|
| A. | One time fee (payable at the time of admission)                                                      | Rs. 55,000*                        |
| B. | Fees per semester<br>(Tuition Fee + Exam Fee)                                                        | Rs. 65,000*<br>Rs. (64,000 + 1000) |
| C. | Refundable Deposit (payable at the time of admission)                                                | Rs. 3,000                          |
| D. | Hostel fees (optional) only in Mumbai                                                                |                                    |
|    | 1) Payable at the time of admission<br>[Registration fee (Rs. 1000) + Deposit (Refundable Rs. 1000)] | Rs. 2,000                          |
|    | 2) Fee per semester                                                                                  | Rs. 25,000                         |
| E. | Fees for application form/ syllabus/prospectus/<br>set of previous year's question papers            | Rs. 500                            |

\* Fees + ST as applicable

Total fees payable at the time of admission = A+B+C+D (optional)

### Fee Payment

Fees for the subsequent semester should be paid as follows:

2nd Semester: 16th Dec. 2020 to 8th Jan., 2021

3rd Semester: 26th June to 13th July, 2021

4th Semester: 15th to 31st Dec., 2021

Note: Appropriate late fee applicable will be charged. Students will be allowed to attend in the next Semester on payment of Fees. All fees are to be paid by DD (in favour of Indian Institute of Packaging). Semester (2nd, 3rd & 4th) fees once paid will not be refunded under any circumstances.

obtained from **1<sup>st</sup> Week Of January, 2020** from any center by paying Rs. 500 in cash or by Demand Draft in favour of Indian Institute of Packaging payable at Mumbai or Kolkata or Delhi or Chennai or Hyderabad or Ahmedabad. The forms can also be downloaded from the IIP website. However, such forms should be accompanied with Rs. 500 Demand Draft in favour of Indian Institute of Packaging payable at Mumbai or Kolkata or Delhi or Chennai or Hyderabad or Ahmedabad.

### STEP 2: Personal Interview

Candidates, who clear the written examination as above, will be called for Personal Interview which will be held at the Mumbai, Kolkata, Delhi and Hyderabad centers of the Institute. The Institute has the discretion to fix minimum qualifying marks for Personal Interview which will make a candidate eligible for further consideration for admission. The final selection of candidates for admission to the course will be done in the order of their merit which will be based on the aggregate of marks calculated in each case according to the following weightage:

- Marks obtained in 10th Class/Matriculation : 10%
- Marks obtained in 12th Class/Sr. Secondary : 10%
- Marks obtained in Graduation level : 30%
- Marks obtained in the Entrance Examination : 30%
- Marks obtained in Personal Interview : 20%

Display of 1st list will be based on the 1st round cut-off. The 2nd list display is on the basis of 2nd round cut-off. Further lists will be displayed on the availability of seats when necessary.

### Cancellation of admission

- Cancellation on / before commencement of the course 10% deduction balance will be refunded.
- After commencement of the course, within 15 days 25% of fee deduction
- Within 1 Month 50% of fee deduction
- After 1 Month No Refund of fees



## Hostel

The programme is non-residential. However, separate hostel accommodation for boys and girls on a twin sharing basis (with mess facility) is available only in Mumbai. There are limited rooms and is provided on first-come first-served basis, for only the students residing outside Mumbai.



## Academic Calendar

|                                   |   |                                           |
|-----------------------------------|---|-------------------------------------------|
| Last Date of Form Submission      | : | 10th July, 2020                           |
| ENTRANCE-EXAM                     | : | 21st July, 2020                           |
| <b>Semester I</b>                 | : | <b>3rd September to December, 2020</b>    |
| Semester I Diwali Break           | : | 11th November to 20th November, 2020      |
| Semester I Examination            | : | December, 2020                            |
| Project Work                      | : | 1st January to 22nd January, 2021         |
| <b>Semester break</b>             | : | <b>23rd January to 31st January, 2021</b> |
| <b>Semester II</b>                | : | <b>1st February to June, 2021</b>         |
| Semester II Examination           | : | June, 2021                                |
| Project Work                      | : | 1st July to 23rd July, 2021               |
| <b>Semester II Break</b>          | : | <b>23rd July to 1st August, 2021</b>      |
| <b>Semester III</b>               | : | <b>2nd August to December, 2021</b>       |
| Semester III Diwali Break         | : | 1st November to 10th November, 2021       |
| Semester III Examination          | : | December, 2021                            |
| <b>Semester III break</b>         | : | <b>January, 2022</b>                      |
| <b>Semester IV</b>                | : | <b>1st February, 2022 to June, 2022</b>   |
| Semester IV Presentation and Viva | : | 1st week of July 2022                     |
| Campus Placement                  | : | July, 2022                                |

## Seats

The seats for every academic year are as follows:

|         |       |           |       |
|---------|-------|-----------|-------|
| Mumbai  | - 280 | Delhi     | - 100 |
| Kolkata | - 80  | Hyderabad | - 40  |

Seat reservation is as per the Government norms as below.

|     |         |
|-----|---------|
| OBC | - 27.0% |
| SC  | - 15.0% |
| ST  | - 7.5%  |

## Semester Examination

A candidate for the PGDP is required to pass three semester examinations and successfully complete the last semester devoted to industrial training and project work. Candidate with minimum 75% attendance in each subject will be allowed to appear for the Semester Exam.

## Passing Criteria

For eligibility of Post Graduate Diploma, a candidate must obtain at least 40 per cent marks in each paper and practicals. In addition, the candidate must obtain at least 50 per cent in the aggregate.

## Provision for ATKT

A student will be given an ATKT provided his / her overall performance is good and he / she is not failing in more than two subjects.

## Re-examination

A re-examination will be conducted for students who have cleared sem 1 and Sem 2 and failed to

clear Sem 3. Sem 3 Re-examination will be conducted before the convocation of that batch.

## Grade

|                                               |                              |
|-----------------------------------------------|------------------------------|
| <b>A</b> - 70% and above                      | First Class with Distinction |
| <b>B</b> - 60% and above<br>but less than 70% | First Class                  |
| <b>C</b> - 50% and above<br>but less than 60% | Second Class                 |



## Students Award

Subject toppers in packaging technology are awarded special certificaes.

Platinum, Gold, Silver and Bronze medals would be awarded to meritorious students so as to motivate the students of Post Graduate Courses Diploma.

The medals will be awarded to the students in the following manner:

|              |                         |
|--------------|-------------------------|
| Gold Medal   | – Overall Top Scorer    |
| Silver Medal | – Overall Second Scorer |
| Bronze Medal | – Overall Third Scorer  |

The three toppers of the PGDP from each region will then compete for the topper amongst them all, for a Platinum Medal.

## Code of Conduct

Following is the Code of Conduct which all the students enrolled for any of the courses organised by IIP need to follow:

Any violation of the code will attract disciplinary action. The disciplinary action will be entirely decided by the management of the Institute, and which may amount to removal of the student(s) from the course.

- All the students will be punctual in their attendance in the classroom and will be seated before the session starts as per the time-table.



- Students will behave properly in the classroom and within the campus of the Institute and will maintain the decorum.
- Decent dress code to be followed by the students.
- Following conduct / acts will be considered as violation of the code of conduct and is required to be followed by all the students:
  - Entering the classroom after the session / lecture has started / commenced.
  - Leaving the classroom, before the lecture / session is completed without the permission of the faculty.
  - Speaking loudly and among each other, during the progress of the lecture / session.
  - Any kind of teasing, abusing, using bad words, unparliamentary language with any of the students, staff of IIP, faculty, visitors or any other person within the campus of the Institute.



- Consumption of alcoholic drinks, smoking, consuming any undesirable products within the campus.
- Humiliating, insulting in any manner with the staff of the institute, faculty or any guest, within the campus.
- Misplacing, stealing of any items or property, belonging to any of the students, staff, faculty or the Institute.
- Misbehaviour in any manner with any of the students, staff, faculty or visitor in the Institute.
- Bringing in the campus, any undesirable person, product, pet, without prior authorisation.
- Talking with other students, copying, exchanging material, papers during the examination.
- Littering with wrappers, paper etc. in the classroom, campus etc.
- Mishandling / misusing learning aids / books / instruments of the Institute.
- Ragging in any manner with any student in the campus.
- Eating in classroom, making noise in the corridor etc.
- Using mobile phones / its accessories in the classroom / laboratory.
- Copying presentations, lecture notes from laptops without prior permission of the respective faculty.
- Roaming in the office premises, campus without any reason.
- Destroying plants / greenery in the campus.
- Internet surfing in the classroom other than the time slot allotted, specifically or the purpose.
- Any act not mentioned above, but undesirable in the academic field.

### Library Facility

The Institute has a well-equipped library with over 7,500 Indian as well as foreign books, in addition to reference books, journals, standards etc.

### Dissertation / Library Reference Work

The student is expected to submit a typed report at the end of each semester as dissertation on library

reference work, for evaluation. The subject for dissertation would be prescribed by the Institute.

### Industrial Visits

Number of industrial visits are organised for the students during Semester I and II with a view to expose them to actual industrial processes and give an opportunity to acquire practical experience on packaging and non-packaging related subjects.

### Additional Topics

To improve the skill of the students, new topics and additional lectures will be introduced.

### Practical Examination

The methodology of practical examinations is detailed by the faculty. Normally, students will be required to plan work, perform experiments, report results and give interpretation of the same.

During practical examinations, emphasis is laid on the methods of working and accuracy of results, rather than on information that is asked during the theory examinations.

The practical examinations are held in Packaging Technology and other related subjects only.

### Industrial Training

During the 4th semester, candidates are assigned to Industrial Training for 5 Months. Each candidate is required to submit a typed report (2 copies) as 'Project Work' providing methodology, findings etc. in detail as a part of industrial training.

Performance during industrial exposure, provided in the industrial unit, is evaluated based on the report to be submitted by each candidate and necessary assessment / certificate as may be obtained by the Institute from the concerned unit. 300 marks are assigned for industrial training and project work and 300 marks for overall performance of the candidate in all four semesters.

Marks are based on regularity in attendance (minimum 75%), conduct and progress as reported by the industrial supervisor, quality of report and viva-voce examination, besides behaviour etc.



## SYLLABUS (UNDER REVISION)

### Post Graduate Diploma in Packaging: Teaching and Examination Scheme - Semester I

| Sr. No.       | Subject                                 | No. of Credit Hrs. | No. of Papers | Examination Duration | Marks            |
|---------------|-----------------------------------------|--------------------|---------------|----------------------|------------------|
| 1             | Mathematics - I                         | 18                 | 1             | 2 hrs.               | 50               |
| 2             | Science (Chemistry and Physics)         | 18                 | 1             | 2 hrs.               | 50               |
| 3             | Electrical Technology                   | 18                 | 1             | 2 hrs.               | 50               |
| 4             | Applied Mechanics - I                   | 36                 | 1             | 3 hrs.               | 100              |
| 5             | Mechanical Technology                   | 18                 | 1             | 2 hrs.               | 50               |
| 6             | Engineering Mechanisms                  | 18                 | 1             | 2 hrs.               | 50               |
| 7             | Introduction to Principles of Packaging | 18                 | 1             | 2 hrs.               | 50               |
| 8             | Paper and Paperboard                    | 18                 | 1             | 2 hrs.               | 50               |
| 9             | Glass Technology                        | 9                  | 1             | 1 hrs.               | 25               |
| 10            | Introduction to Plastics and Polymers   | 9                  | 1             | 1 hrs.               | 25               |
| 11            | Project Work                            | -                  | -             | -                    | 50*              |
| 12            | Engineering Drawing                     | 18 <sup>§</sup>    | 1             | 2 hrs.               | 50**             |
| 13            | Industrial / Field Visit                | 85                 | -             | -                    | G <sup>#</sup>   |
| 14            | Practicals (Packaging Technology)       | 54                 | 1             | 3 hrs.               | 50 <sup>##</sup> |
| <b>TOTAL:</b> |                                         | <b>421</b>         |               |                      | <b>650</b>       |

\* Marks assigned on the basis of seminar, report, submission, presentation and viva-voce.

<sup>§</sup> For practical / exercises, additional 18 hrs.

\*\* 50% Marks assigned on the basis of submitted work (drawing sheets

with exercises) & 50 % based on exam.

<sup>#</sup>G means grade assigned on the basis of attendance, conduct and report submitted by the students.

<sup>##</sup>Marks assigned on the basis of tests and viva-voce  
One Credit Hour is 1 hrs. 15 min.

#### Theory Syllabus - Semester I

##### Mathematics I

Matrices, Differential Calculus, Differential Theorems, Integral Calculus and Differential Equations, Algebra, Polynomials, Business Mathematics

##### Chemistry and Physics

Chemical Bonds, Thermodynamics, Electro Chemistry, Gas Laws, Viscosity, Velocity and Acceleration, Force, Laws of Motion, Energy.

##### Electrical Technology

Circuits, Generators, Motors, Transformers, Measuring Instruments, Distribution.

##### Applied Mechanics I

Scalars and Vectors, Centre of Gravity,

Friction, Moment of Inertia, Stress-Strain Theory, Load Distribution, Bending Deflections, Torsion Analysis, Columns, Joints.

##### Mechanical Technology

Workshop Processes and their Appraisal, Hand Tools, Measuring Instruments.

##### Engineering Mechanisms

Kinematics, Mechanical Drives, Gear Trains, Clutches and Brakes, Bearings, Cams, Dynamometer.

##### Introduction to Principles of Packaging

Introduction, Components, Permeability, Mechanisms of Spoilage, Corrosion and Prevention of Corrosion, Package Evaluation, Ecological Aspects, Bar-coding Applications in Packaging.

##### Paper & Paper Board

Cellulosic Materials, Processes in Cellulose Industries, Paper and Board Manufacture, Testing of Cellulose and Paper Materials, Speciality Papers, Folding Cartons, Multiwall Paper Sacks, Composite Containers.

##### Glass Technology

Glass Containers: Manufacture, Properties, Applications and Testing.

##### Introduction to Plastics & Polymers

Polymeric Material, Properties, Applications, Polymer Composites, Polymer Blends, Additives for Plastics, Testing & Evaluation.

##### Engineering Drawing

Drawing exercises to be completed on drawing sheets for submission.

##### Practicals

Experiments based on Paper / Fibreboard and Glass Containers: Properties and Applications.

## Post Graduate Diploma in Packaging: Teaching and Examination Scheme - Semester II

| Sr. No.        | Subject                                                                  | No. of Credit Hrs. | No. of Papers | Examination Duration | Marks            |
|----------------|--------------------------------------------------------------------------|--------------------|---------------|----------------------|------------------|
| 1              | Economics                                                                | 18                 | 1             | 2 hrs.               | 50               |
| 2              | Principles of Management                                                 | 18                 | 1             | 2 hrs.               | 50               |
| 3              | Mathematics - II                                                         | 18                 | 1             | 2 hrs.               | 50               |
| 4              | Applied Mechanics - II                                                   | 36                 | 1             | 3 hrs.               | 100              |
| 5              | Industrial Electronics                                                   | 18                 | 1             | 2 hrs.               | 50               |
| 6              | Fluid Mechanics and Machinery                                            | 18                 | 1             | 2 hrs.               | 50               |
| 7              | Introduction to Plastics Processing                                      | 36                 | 1             | 3 hrs.               | 100              |
| 8              | Rigid packaging Material (Non-Plastic-CFB, Composites, Metal, Wood etc.) | 36                 | 1             | 3 hrs.               | 100              |
| 9              | Ancillary and other packaging material                                   | 18                 | 1             | 2 hrs.               | 50               |
| 10             | Package Printing Technology                                              | 18                 | 1             | 2 hrs.               | 50               |
| 11             | Machine Drawing                                                          | 18 <sup>§</sup>    | 1             | -                    | 50**             |
| 12             | Industrial / Field Visits                                                | 180                | -             | -                    | G <sup>#</sup>   |
| 13             | Project Work                                                             | -                  | -             | -                    | 50 <sup>##</sup> |
| 14             | Practical (Packaging Technology)                                         | 54                 | 1             | 3 hrs.               | 50 <sup>^</sup>  |
| <b>TOTAL :</b> |                                                                          | <b>486</b>         |               |                      | <b>800</b>       |

<sup>§</sup> For practical exercises, additional 18 hrs.

\*\* 50% Marks assigned on the basis of submitted

<sup>#</sup> G marks assigned on the basis of attendance, conduct and report submitted by the students.

<sup>##</sup> Marks assigned on the basis of report submission, presentation and viva-voce.

<sup>^</sup> Marks assigned on the basis of tests, journal and viva-voce.

One Credit Hour is 1 hrs. 15 min.

### Theory Syllabus - Semester - II

#### Economics

Study of Demand and Supply, Market Structure, Nature of Production, Distribution, National Income and Money.

#### Principles of Management

Definition, objective, function etc.

#### Mathematics - II

Introduction to Statistics, Application of Statistics in Packaging, Normal Distribution, Dimensional Analysis, Measures of Central Tendency, Measures of Dispersion Coefficient of Variations, Skewness, Simple Correlations and Regressions, Multiple Regression, Multiple and Partial Correlation and Variability, Design of Experiments for Packaging Applications, Statistical Quality control.

#### Applied Mechanics - II

Simple Stress-Strain Theory, Theory of Torsion, Columns and Struts.

#### Industrial Electronics

Electronic Devices : Tubes, Transistors, ICs, Rectifier, Amplifier, Oscillators, Analogue and Digital Measurements and Controls, Application of Computer in Packaging.

#### Fluid Mechanics and Machinery

Hydraulic and Pneumatic Machines, Rotary Pumps, Centrifugal Pumps, Constant and variable Delivery Pumps

#### Introduction to Plastic Processing

Injection moulding, Extrusion & Blow moulding, Calendering, Thermoforming, Rotational moulding, Foam Plastics, FRP Process, Coatings, Wax and lamination Processing Technics

#### Rigid Packaging Material (Non Plastic - CFB, Composites, Metal, Wood etc.

Fibreboard Containers, Drums, Tin, Aluminium Cans / Containers, Aluminium Foils, Steel Drums, Wooden Containers / Crates.

#### Ancillary and other Packaging Material

Cushioning, Textile Bags, Technics of sealing Process, Adhesive, Reinforcement, Twines and cards, Clips, Hooks, Stitching Methods, Seals & Closures.

#### Package Printing Technology

Process of Communication, Printing Processes and Methods, Layout & Paste-up, Composition for Printing, Theory of Full Colour Graphic Arts, Photography, Printing Image, Carriers, Printing Presses, Paper and other Printing Stocks, Printing Inks.

#### Machine Drawing

Submission of drawings based on exercises given.

#### Research Activities

Exposure to various research activities with laboratory assignments, analytical work as part of research projects by the Institute and also be entrusted with research projects after the completion of the Semester-II Examinations.

#### Practicals

Plastics Technology - Experiments connected with Plastics. Experiments on Seals, Coating, Laminates, Reinforcements.

## Post Graduate Diploma in Packaging: Teaching and Examination Scheme - Semester III

| Sr. No.       | Subject                                                                 | No. of Credit Hrs. | No. of Papers | Examination Duration | Marks      |
|---------------|-------------------------------------------------------------------------|--------------------|---------------|----------------------|------------|
| 1             | Production Management                                                   | 36                 | 1             | 3. hrs.              | 100        |
| 2             | Financial Management                                                    | 27                 | 1             | 2 1/2 hrs.           | 75         |
| 3             | Principles of Entrepreneurship                                          | 18                 | 1             | 2 hrs.               | 50         |
| 4             | Marketing Management                                                    | 18                 | 1             | 2 hrs.               | 50         |
| 5             | Material Management                                                     | 9                  | 1             | 1 hrs.               | 25         |
| 6             | Product Packaging (Food / Pharmaceuticals / Cosmetics / Chemicals etc.) | 36                 | 1             | 3 hrs.               | 100        |
| 7             | Packaging Machinery                                                     | 36                 | 1             | 3 hrs.               | 100*       |
| 8             | Packaging Laws and Regulation                                           | 18                 | 1             | 2 hrs.               | 50         |
| 9             | Tooling and Design of Moulds for Packaging                              | 27                 | 1             | 2 1/2 hrs.           | 75         |
| 10            | Introduction to Packaging Design Concepts                               | 9                  | 1             | 2 hrs.               | 25         |
| 11            | Application of Computers in Packaging Design                            | 18**               | 1             | 2 hrs.               | 50         |
| 12            | Communication Skills                                                    | 18                 | -             | -                    | -          |
| 13            | Practical (Packaging Technology)                                        | 54                 | 1             | 3 hrs.               | 50         |
| <b>TOTAL:</b> |                                                                         | <b>405</b>         |               |                      | <b>750</b> |

\* Portion of the marks will be assigned for project / library reference work.

\*\* For practical exercises, additional 18 hrs.

One Credit Hour is 1 hrs. 15 min.

### Theory Syllabus - Semester - III

#### Production Management

Industrial Engineering, Operations Research, Quality Control, Production, Planning and Control.

#### Financial Management

Cost Accounting and Financial Management.

#### Principles of Entrepreneurship

Definition, Objective, Function etc.

#### Marketing Management

Structure, Models, Market Research, Demand curves, Market Share estimation, Sale Models, New Product Development, Distributions Strategy, Market Research

#### Material Management

Concept & Objective for Material Function, Purchasing System, Inventory, Costing, Demand for Casting, Transportation, Evaluation Material

#### Product Packaging (Food / Pharmaceuticals / Cosmetics / Chemicals etc.

Introduction to Food Preservation/ Packaging Technology, Method of Storage, Packaging of Food, Pharmaceuticals, Cosmetics, Chemicals and other products.

#### Packaging Machinery

Filling of Dry and Liquid Products, Filling of Carbonated Liquids and other Packaging Techniques, Cartoning, Labelling, Thermoforming.

#### Packaging Laws & Regulations

Standards and Standardisation, Quality Standard, Eco Regulations, FSSAI Rules and Regulations etc.

#### Tooling and Design of Moulds for Packaging

Injection Moulds, Blow Moulds, Extrusion Dies, Product Design, Designing for Packaging Application.

#### Introduction to Packaging Design Concepts

Introduction to design, 2D & 3D dimensional Design, Study of Visual Elements, Principles of Typography, Introduction to visual ergonomics, understanding the relationship between consumer & communication Design

#### Application of Computers in Packaging Design

Setting drawing requirement, Commands and systems variables, To co-ordinate a system, Creating objects, Editing methods, Layers and object properties, Creating 3D objects etc.

#### Auto CAD - Practice Session Communication Skills

Techniques and practices.

#### Practicals (Packaging Technology)

Experiments connected with Metal Containers. Experiments connected with Permeability, Shelf-life Studies of Food, Cosmetics and Pharmaceutical Products.



## Postgraduate Diploma in Packaging: Teaching and Examination Scheme - Semester IV

| Sr. No. | Subject                                 | Duration | No. of Credit Hrs. | Marks |
|---------|-----------------------------------------|----------|--------------------|-------|
| 1       | Industrial Training & Report (5 Months) | 5 months | 480                | 500*  |
| 2       | Overall Performance                     |          | -                  | 100** |

\* To submit typed report as Project work based on training and viva-voce.

\*\* Marks will be assigned on the basis of regularity in attendance, conduct and progress.

One Credit Hour is 1.15 hrs.

## TOTAL CREDIT HOURS

|    |               |             |
|----|---------------|-------------|
| 1. | SEMESTER -I   | 421         |
| 2. | SEMESTER -II  | 486         |
| 3. | SEMESTER -III | 405         |
| 4. | SEMESTER -IV  | 480         |
|    | <b>TOTAL</b>  | <b>1792</b> |

## CAMPUS PLACEMENTS

At the end of the Semester IV campus placement is arranged, wherein, students have the opportunity to face interviews arranged with a number of interested companies including from abroad. Campus placement interviews will be conducted at Mumbai and Regional Centres.

Assistance in Placement will be provided by the Institute only to the Students who have 90% attendance in all the semesters in all the subjects. Student with less than 90% attendance will not be allowed to appear in the Campus Placement Procedure.

## PGDP CENTRES AT A GLANCE

### Mumbai



### Kolkata



### Delhi



### Hyderabad





## भारतीय पैकेजिंग संस्थान Indian Institute of Packaging

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

### HEAD OFFICE

E-2, MIDC Area, Post Box No. 9432, Andheri (E), Mumbai - 400 093. INDIA

Tel: 91-22-2821 9803 / 6751 / 9469, Fax: 91-22-2837 5302 / 2832 8178

E-mail: pgdpiip@iip-in.com, rneiip@iip-in.com / iip@iip-in.com

Web: www.iip-in.com

### BRANCHES

#### DELHI



Plot No. 21, Functional Industrial Estate, Patparganj,  
Opp. Patparganj Bus Depot,  
Delhi – 110 092.

Tel: 011-22166703-05

Fax: 011-22169612

E-mail: iipdelhi@iip-in.com

#### CHENNAI



Plot 169 Industrial Estate,  
Perungudi,  
Chennai - 600 096.

Tel: 044-2496 0730 / 24961560

Fax: 044 - 24961077

E-mail: iipchennai@iip-in.com

#### KOLKATA



Block CP-10, Sector-V, Salt Lake,  
Bidhan Nagar,  
Kolkata – 700 091.

Tel: 033-23670763/23676016

Fax: 033-23679561

E-mail: iipkolkata@iip-in.com

#### HYDERABAD



Lux - 3, Industrial Centre,  
Sanath Nagar,  
Hyderabad - 500 018.

Tel: 040-23814321

Fax: 040-2370 7148

E-mail: iiphyd@iip-in.com

#### AHMEDABAD



CFC Building, Apparel Park, GIDC,

Khokhra, Ahmedabad 380021

Tel : + 91-79-22930200,

Mobile : +91-9586494842

Email : iipahmedabad@iip-in.com

### Proposed Branches

Kakinada(AP)

Bangalore

Guwahati