

## CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

## Criteria 1

## **Curricular Aspects**

Metric Number of value-added courses for imparting	
1.3.2	transferable and life skills offered during last five years
1.3.2.1	How many new value-added courses are added within the last five years.

## **Supporting Documents**

1	Brochure or any other document relating to value added
	courses <b>(Year : 2017-18)</b>

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## Criteria 1.3.2- Number of value-added courses for imparting transferable and life skills

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# Faculty of Technology & Engineering

REGISTRATION FORM
Six Days Certificate Course on
STAAD.Pro and ETABS
11 <sup>th</sup> May 2018 to 17 <sup>th</sup> May 2018
Name:
ID No.: Level: UG PG
Institute:
Address:
E-mail:
Mobile:
Please pay your fees by cash, or cheque or DD in
favour of "Chandubhai S. Patel Institute of
Technology" payable at Anand.
DD/Cheque No.:
Dated:Rs.:
Drawn on: (Bank)
Signature of Applicant:
Note: Photocopy of this form can be used for Registration.

## CONVENER Dr. V. R. Panchal

Professor & Head,

Department of Civil Engineering

Chandubhai S. Patel Institute of Technology (CSPIT)

Changa – 388 421

E-mail: vijaypanchal.cv@charusat.ac.in

#### COORDINATORS

Ms. Dipali Patel Mobile: 99249 99774 E-mail: dipalipatel.cv@charusat.ac.in

Mr. Mohammad H. Jinyawala Mobile: 99985 86905 E-mail: mohammadjinyawala.cv@charusat.ac.in

IMPORTANT DATE	S AND VENUE	
Course Duration	: 11/05/18 to 17/05/18	
Last Date of Registration	: 5 <sup>th</sup> May, 2018	
Confirmation of Participation :8 <sup>th</sup> May, 2018		
Venue: Department of Civil Campus, Changa- 388 421	Engineering, CHARUSAT	

**Charotar University of Science & Technology** CHARUSAT Campus, Changa, Dist. ANAND - 388421, Gujarat, India PH. # 02697 – 247500, 248133, Fax # 02697 – 247100 Website: http://www.charusat.ac.in



#### Six Days Certificate Course on

and

**STAAD.Pro** 

**ETABS** 





Organized by:-

MANUBHAI SHIVABHAI PATEL DEPARTMENT OF **CIVIL ENGINEERING** 

> CHANDUBHAI S. PATEL INSTITUTE OF **TECHNOLOGY (CSPIT)**



CHAROTAR UNIVERSITY OF SCIENCE AND TECH

Accredited Grade "A" by NAAC, Government of India

#### PREAMBLE

- Civil Engineering is an extensive field where number of companies working in different areas such as planning, designing, construction, execution, management etc.
- Companies require project specific skills such as design consultancy require different software skills, for site execution skills to operate different instruments are necessary.
- After completion of UG Course, students may go for higher education or job.
- The training offered by the department will helpful to the participants for getting job in good company as well as in higher studies.

#### ABOUT THE DEPARTMENT

- Civil Engineering is a broad field of engineering that deals with the planning, construction, and maintenance of built environment and other infrastructure facilities and are closely related to earth, water and environment.
- The Department of Civil Engineering at CSPIT, CHARUSAT was established in year 2008 to impart quality education & conduct research in Civil Engineering to cater the rising needs and demands of the society.
- The Department has constantly been equipping itself with technological advancements of national priority and flexibly adapting to changing scenario in the fields of Civil Engineering.
- The department is also equipped with licensed software's like STAAD Pro. S6, Midas Civil, Bently Road max, STRUDS 12.0, ESRGSR V4, GEO5, Primevera P6 & Bently Combined.

#### **OBJECTIVES OF THE WORKSHOP**

- To make students aware about the advance technology have been used in civil engineering field
- To fill the gap between the industrial demand and the academic supply

#### MAJOR AREAS TO BE COVERED

#### STAAD.Pro & ETABS

- Modeling of structures
- Primary loads with horizontal forces
- Analysis of structures (2D & 3D)
- Design of RCC Frame
- Design of Roof Truss
- Steel Detailing

#### TRAINERS

- Ms. Dipali Patel (Asst. Prof., CHARUSAT)
- Mr. Mohammad H. Jinya (Asst. Prof., CHARUSAT)

#### ELIGIBITY CRITERIA

The PG, UG and Diploma Civil Engineering students can join the course.

#### 25 seats are available per course

Desirous participants should register at the earliest.

REGISTR	ATION	FEES	

CATEGORY	FEES
PG, UG & Diploma Students	Rs. 3000 per course

Charges towards tea, snacks, and lunch during the program, shall borne by participants.

#### ABOUT THE UNIVERSITY

Charotar University of Science & Technology (CHARUSAT) is established under the Gujarat Act No. 8 of 2009, Government of Gujarat. University Grants Commission has empowered CHARUSAT to award Degrees under Section 22 of UGC Act 1956. University recently accredited with "A" by NAAC, Bangalore. CHARUSAT aspires to advance learning and knowledge by teaching and research relevant to the society. A remarkable range of programmes offered at CHARUSAT are paired with an extraordinary breadth of extracurricular activities and opportunities for research, independent study and community service. Through its offering in professional programmes CHARUSAT educates and prepares students to realize their potential to become responsible increasingly in a diverse and citizens interdependent global world.



## CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT), CHANGA – 388 421

## Chandubhai S. Patel Institute of Technology

Name of Event/Course :	Certificate course on STAAD Pro. and ETABS
Date and Time of Event :	11 <sup>th</sup> May 2018 to 17 <sup>st</sup> May 2018
Event coordinator :	Dipali Patel & Mohammad H. Jinyawala
Resource person details (if any):	Dipali Patel & Mohammad H. Jinyawala

#### **Objective of the course:**

- To make students aware about the advance technology have been used in civil engineering field
- > To fill the gap between the industrial demand and the academic supply

#### Major areas to be covered:

Topics	Hours
Modeling of structures	06
Primary loads with horizontal forces	06
Analysis of structures (2D & 3D)	06
Design of RCC Frame & Detailing	12
Design of Roof Truss	06
Total	<mark>36</mark>

#### Course Outcome:

After successful completion of course:

- Students will be able to model the space frame / real building using STAAD Pro. and ETABS software
- > Students will be able to design the structures for primary and secondary loads

#### **CHARUSAT**

Charotar University of Science and Technology is established under the Gujarat Act No. 8 of 2009, Government of Gujarat. University Grants Commission has empowered CHARUSAT to award Degrees under Section 22 of UGC Act 1956. University recently accredited with "A" by NAAC, Bangalore. The University is identified with cutting edge research, robust academic programmes, quality teaching learning process and over-all personality development interventions of its students. CHARUSAT campus provides refreshing environment and stimulates intellectual growth and creativity.

#### M.S.Patel department of civil engineering

Civil Engineering is a broad field of engineering that deals with the planning, construction, and maintenance of built environment and other infrastructure facilities and are closely related to earth, water and environment. The Department of Civil Engineering at CSPIT, CHARUSAT was established in year 2008 to impart guality education & conduct research in Civil Engineering to cater the rising needs and demands of the society. The Department has constantly been equipping itself with technological advancements of national priority and flexibly adapting to changing scenario in the fields of Civil Engineering. The Department offers B.Tech in Civil Engineering (120 Seats), M.Tech - Structural Engineering (18 Seats) and PhD programmes in various discipline of Civil Engineering. The department is also equipped with licensed software's like STAAD Pro S6.

Midas Civil, Bently Road max, STRUDS 12.0, ESRGSR V4, GEO5, Primevera P6 & Bently Combined.

#### Department of Mechanical Engineering

The CHAMOS Matrusanstha Department of Mechanical Engineering offers undergraduate programme in Bachelor of Technology in Mechanical Engineering, postgraduate programme of Master of Technology (M. Tech. CAD/CAM) and Ph.D programs in Mechanical Engineering. The department is equipped with sophisticated laboratory equipments in various areas like Surface Engineering, Tribology, Unconventional Reverse Engineering, Machining, Control & Automation, Machine Vision etc. The department is also equipped with licensed software's like LABVIEW 2009, Hyper works 11.0, Autodesk, ANSYS, MINITAB, XOR, COMSOL and ABAQUS.

#### **Objectives of The Program**

- To apply the Finite Element Method for solving basic problems related to spring analysis, stress analysis, strain, Fluid flow etc.
- To explore how to use APDL, ANSYS workbench and Abaqus tools to solve Engineering problems.
- Appropriate application of Finite Element Technique to simulate the object as per its application of usage.
- To understand pre-failure behavior of the object developed using simulation softwares.







#### 12<sup>th</sup> to 17<sup>th</sup> March 2018

#### **Programme Coordinators:**

Mr. Nirpex Patel

Dr. Dattatraya Subhedar

Mr. Dipal Patel

#### Organised by:

M. S. Patel Department of Civil Engineering & Department of Mechanical Engineering, CSPIT, CHARUSAT

#### Address for Correspondence:

M. S. Patel Department of Civil Engineering, CSPIT, CHARUSAT Campus, Off Nadiad- Petlad Highway 139, Changa, Gujarat 388421

#### **Outline of Contents**

- Basics of FEM
- APDL Tool
- **ABAQUS Tool**
- **ANSYS Workbench**
- Hands on practice
- CDP
- Assembly & Job Creation
- Material Properties (Non-linear)
- **Multiple Functions** •
- 1-D, 2-D & 3-D Problems .
- Meshing Effectiveness
- Symmetrical Problems •
- All Types of Elements
- Quasi-static Solutions
- Interpretation of Results

#### **COURSE REGISTRATION FEES**

•	CHARUSAT Students	Rs. 2000
٠	External Students	Rs. 2000
٠	CHARUSAT Faculty	Rs. 2000
٠	External Faculty	Rs. 2500
٠	Industry Person	Rs. 3000

- 1. Registration fees includes breakfast and course materials with registration kit.
- 2. Working lunch will be provided to all participants.
- 3. All other expenses are to be borne by the participants.
- 4. Certificates will be issued to all participants.
- 5. Registration charges are non-refundable.

- Participants are required to make their 6. own arrangements for lodging, boarding and travelling.
- 7. However, on request, the arrangement for accommodation can be made on chargeable basis.

#### How to Apply

The applicants are required to send completely filled in application form (photocopy may also be used) along with the registration fees so as to reach the coordinator on or before 9 March, 2018.

#### For Whom

Interested UG/PG students and researchers, in the field of Structural engineering, Computer Aided Structural Analysis & Design, Applied Mechanics as a prerequisite Course, can fill up the attached application form and return it to the Coordinators.

#### For further details



#### Mr. Nirpex Patel

Cell No - 8511128313

Email: nirpexpatel.cv@charusat.ac.in

#### Dr. Dattatraya Subhedar

Cell No - 9712624320

Email: dattatraya.me@charusat.ac.in

#### or Online Registration - www.cspitcivil.com

#### **Registration Form**

	Six Days Certificate Course
	"Finite Element Simulation" with hands on practice using software (Abaqus/CAE & ANSYS)
1.	Name Mr./Ms/Prof./Dr.
2.	Age years
3.	Edu. Qualification (Highest)
4.	Designation
5.	Organization
6.	Internal/External Student
7.	If Internal Student Specify Roll No
8.	Address
	PhoneFax
	Email
9.	Experience in relevant area (if applicable)
	Academic:
	Industry:
10.	Date :
11.	Place :

#### Signature of Participant

Schedule - "Finite Element Simulation"							
	Monday - 12/03/2018	ay - 12/03/2018 Tuesday - 13/03/2018 Wednesday - 14/03/2018 Thursday - 15/03/2018 Friday - 16/03/2018				Saturday - 17/03/2018	
9:10 am to 11:10 am	Introduction to FEA Bar Element <b>Mr. Nirpex Patel</b>	Hands on ANSYS APDL Spring & Bar Element <b>Mr. Dipal Patel</b>	Introduction to Beam Element <b>Dr. Dattatraya Subhedar</b>	Hands on Abaqu Rectangular Ele <b>Mr. Nirpex Pa</b>	ment	Introduction to Truss Element Dr. Dattatraya Subhedar	Hands on Abaqus/CAE RC Frame - Experiment & Software Comparision <b>Mr. Nirpex Patel</b>
11:10 am to 12:10 pm	Lunch						
12:10 pm to 2:10 pm	FEA Basic Spring Element <b>Dr. Dattatraya Subhedar</b>	Introduction to CST Element <b>Mr. Nirpex Patel</b>	Hands on ANSYS Workbench Beam Element <b>Dr. Dattatraya Subhedar</b>	Experiment & Ha ANSYS - Drag A <b>Dr. Dattatraya Su</b>	nalysis	Hands on ANSYS APDL Truss Element <b>Mr. Dipal Patel</b>	Hands on Abaqus/CAE Earthquake Application <b>Mr. Nirpex Patel</b>
11:10 am to 12:10 pm	Refreshment						
2:20 pm to 4:20 pm	Hands on ANSYS APDL Spring Element <b>Mr. Dipal Patel</b>	Hands on Abaqus/CAE CST Element <b>Mr. Nirpex Patel</b>	Introduction to Rectangular Element <b>Mr. Nirpex Patel</b>	Experiment & Ha Abaqus/CAE-Brinell <b>Mr. Nirpex P</b> a	Hardness	CDP Modelling & Hands on Abaqus/CAE Flexural Element <b>Mr. Nirpex Patel</b>	Hands on Abaqus/CAE Beam-Column Connections <b>Mr. Nirpex Patel</b>

## CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT), CHANGA – 388 421

## Chandubhai S. Patel Institute of Technology

Name of Event/Course :	Certificate course on "Finite Element Simulation"
Date and Time of Event :	12 <sup>th</sup> March 2018 to 17 <sup>st</sup> March 2018
Event coordinator :	Nirpex Patel, Dr. Dattatraya Subhedar & Mr.
	Dipal Patel
Resource person details (if any):	Nirpex Patel, Dr. Dattatraya Subhedar & Mr.
	Dipal Patel

#### M. S. Patel Department of Civil Engineering

#### **Objective of the course:**

- To apply the Finite Element Method for solving basic problems related to spring analysis, stress analysis, strain, Fluid flow etc.
- To explore how to use APDL, ANSYS workbench and Abaqus tools to solve Engineering problems.
- Appropriate application of Finite Element Technique to simulate the object as per its application of usage.
- > To understand pre-failure behavior of the object developed using simulation softwares.

#### Major areas to be covered:

- ➢ Basics of FEM
- > APDL Tool
- ➢ ABAQUS Tool
- ANSYS Workbench
- ➢ Hands on practice
- > CDP
- Assembly & Job Creation
- Material Properties (Non-linear)

- Multiple Functions
- ▶ 1-D, 2-D & 3-D Problems
- Meshing Effectiveness
- > Symmetrical Problems
- All Types of Elements
- Quasi-static Solutions
- Interpretation of Results

#### Course Outcome:

After successful completion of course:

- > Students are able to solve the problems with the help of finite element tools
- Students are able to generate different meshing techniques
- Students are able to simulate the experimental work and also able to design various elements.

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT), CHANGA – 388 421 Chandubhai S. Patel Institute of Technology CHAMOS Matrusanstha Department of Mechanical Engineering M.S. Patel Department of Civil Engineering

## **Aptitude sessions**

#### **Course Objective:**

This course aims to make students able to critically evaluate various real-life situations by resorting to an analysis of key issues and factors. They should be smart enough to read between the lines and understand various language structures. This Aptitude Training helps them to demonstrate various principles involved in solving mathematical problems and thereby reducing the time taken for performing job functions.

#### **Learning Outcomes :**

On successful completion of the course the students will be able to:

- Understand the basic concepts of quantitative ability.
- Understand the basic concepts of logical reasoning skills.
- Acquire satisfactory competency in use of verbal reasoning.

• Solve campus placements aptitude papers covering Quantitative Ability, Logical Reasoning and Verbal Ability.

• Compete in various competitive exams like CAT, CMAT, GATE, GRE, GATE, UPSC, GPSC etc.

Topic

#### **Course Structure:**

Sr.No.

 Syllabus for Ouantitative Aptitude

 1
 Competency 1: Simple equations, Ratio, Proportion, Variation, Percentages Simple equations

 Simple Equation
 4 hrs

 • Definition of Linear Equations
 4 hrs

 • Problems on Ages, Fractions and Digits
 9 roblems on Ages, Fractions and Digits

 • Indeterminate system of equations
 9 special cases in indeterminate system of equation

Duration

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT), CHANGA - 388 421 Chandubhai S. Patel Institute of Technology CHAMOS Matrusanstha Department of Mechanical Engineering M.S. Patel Department of Civil Engineering Ratio and proportion 3 hrs Definition of Ratio • Properties of Ratios Comparison of Ratios • Problems on Ratios . **Compound Ratio** Problems on Proportion, Mean proportional and Continued Proportion Variation 3 hrs Direct variation Inverse variation Joint variation • Problems on Variations • 2 Competency 2: Percentages, Profit and loss, Partnership, Simple interest and Compound interest, Quadratic equations, progressions 4 hrs Percentages • Introduction Converting a percentage into decimals • Converting a Decimal into a percentage • Percentage equivalent of fractions • Problems on percentages Profit And Loss 4 hrs Problems on Profit and Loss percentage • Relation between Cost Price and Selling price • **Discount and Marked Price** Two different articles sold at same Cost Price Two different articles sold at same Selling Price ٠ Gain% / Loss% on Selling Price • Partnership 4 hrs Introduction Relation between capitals, Period of investments and Shares • Simple Interest 3 hrs Definitions

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT), CHANGA – 388 421 Chandubhai S. Patel Institute of Technology CHAMOS Matrusanstha Department of Mechanical Engineering M.S. Patel Department of Civil Engineering

	•	Problems on interest and amount	
	•	Problems when rate of interest and time period are numerically equal	
	Comp	ound Interest	3 hrs
	•	Definition and formula for amount in compound interest	
	•	Difference between simple interest and compound interest for 2 years on	
		the same principle and time period.	
	Quadi	atic equations	4 hrs
	•	General form of Quadratic equations	
	•	Finding the roots of Quadratic equations	
	•	Nature of the roots	
	•	Relation between the roots	
	•	Maximum and minimum value of Quadratic Expression	
Sv	labus	for Reasoning	
3	Comp	petency 3	
3	<b>Comp</b> Deduc	-	4 hrs
3	_	-	4 hrs
3	Deduc	ctions	4 hrs
3	Deduc •	Finding the conclusions using Venn diagram method	4 hrs 4 hrs
3	Deduc •	Finding the conclusions using Venn diagram method Finding the conclusions using syllogism method	
3	Deduc Conne	Finding the conclusions using Venn diagram method Finding the conclusions using syllogism method ectives	
3	Deduc Conne	etions Finding the conclusions using Venn diagram method Finding the conclusions using syllogism method ectives Definition of a simple statement	
3	Deduc Conne	etions Finding the conclusions using Venn diagram method Finding the conclusions using syllogism method ectives Definition of a simple statement Definition of compound statement	
3	Deduc Conne	etions Finding the conclusions using Venn diagram method Finding the conclusions using syllogism method ectives Definition of a simple statement Definition of compound statement Finding the Implications for compound statements	
	Deduc	etions Finding the conclusions using Venn diagram method Finding the conclusions using syllogism method ectives Definition of a simple statement Definition of compound statement Finding the Implications for compound statements Finding the Negations for compound statements	
	Deduc	etions Finding the conclusions using Venn diagram method Finding the conclusions using syllogism method ectives Definition of a simple statement Definition of compound statement Finding the Implications for compound statements Finding the Negations for compound statements	4 hrs
	Deduc	etions Finding the conclusions using Venn diagram method Finding the conclusions using syllogism method ectives Definition of a simple statement Definition of compound statement Finding the Implications for compound statements Finding the Negations for compound statements etency 4 tical Reasoning puzzles	4 hrs

- Problems on Selections
- Problems on Comparisons
- 5 **Competency 5**

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT), CHANGA – 388 421 Chandubbai S. Batal Institute of Technology

#### Chandubhai S. Patel Institute of Technology CHAMOS Matrusanstha Department of Mechanical Engineering M.S. Patel Department of Civil Engineering

	M.S. Patel Department of Civil Engineering	
Clocks		1 hr
•	Finding the angle when the time is given	
•	Finding the time when the angle is known	
•	Relation between Angle, Minutes and Hours	
•	Exceptional cases in clocks	
Calenc	lars	3 hrs
•	Definition of a Leap Year	
•	Finding the number of Odd days	
•	Framing the year code for centuries	
•	Finding the day of any random calendar date	
<b>Blood Rela</b>	<u>itions</u>	
•	Defining the various relations among the members of a family	3 hrs
•	Solving Blood Relation puzzles	3 hrs
•	Solving the problems on Blood Relations using symbols and notations	3 hrs
	Total Hours	<u>56 Hrs</u>

#### **Course Details:**

Name of Resource Person: Mr. Manan Shah/ Mr. Harshil Patel, Horizon Career Solutions.

Duration: 56 hrs.

Duration of Course: February 2018- February 2019.

**Coordinator:** 

Mr. Rugnesh Patel (ME)

Mr. Harmish Bhatt (ME)

Mr. Devang Patel (Civil)

Head of Deprtment

Page 4 of 4

## M.S Patel Department of Civil Engineering

Chandubhai S. Patel Institute of Technology Charusat- Changa 388421 Phone: (+91) 2697 245081 Email: Sce.Civil@Charusat.ac.in

## AUTOCAD 2017 TRAINING

In Association with Krishan CAD Center







Department of civil engineering in association with Krishna CAD Center is organizing evening training program in the department as per the following details. Interested students may register yourself with the department training co-ordinator.

Course Details :

Diploma in AutoCAD 2016 (Autodesk Product.)

- 2D Drafting Basic And Advance
- Productivity Tools Advance

Timing and Place: 4.30 to 6.30 PM Room no 501(CL-ME Building)

## **Course Duration**

7<sup>th</sup> September 2017 to 11<sup>th</sup> October 2017

## Certification :

AutoCAD 2016 Course Completion Certificate From Autodesk AutoCAD 2016 Grading Certificate

## About the Krishna Cad Center:

Krishna CAD Center was established in 10th April,2008, with the goal of provide world class education at economical rate.

Krishna CAD Center is one of the AutoDesk authorised training center network in the world.

For More Information: Mr. Prakash Dabhi

## SELECTION ON FIRST COM FIRST BASIS

## CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (CHARUSAT), CHANGA – 388 421

## Chandubhai S. Patel Institute of Technology

Name of Event/Course :	Certificate course on AutoCAD
Date and Time of Event :	7 <sup>th</sup> September 2017 to 11 <sup>th</sup> October 2017
Event coordinator :	Prakash Dabhi
Resource person details (if any):	Krishna CAD Center, Anand

#### M. S. Patel Department of Civil Engineering

#### **Objective of the course:**

> To impart computer aided drawing skill in students

Major areas to be covered:

Topics	<b>Hours</b>
Taking the AUTOCAD Tour	06
Create Basic Drawing	16
Manipulating Objects	08
Altering Objects	04
Drawing Organization and Inquiry	06
Command	
Annotating Drawings	04
Total	<mark>44</mark>

#### Course Outcome:

After successful completion of course:

Students will be able use Computer Aided Drawing to prepare building plans using AUTOCAD software.

#### CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Technology & Engineering Chandubhai S. Patel Institute of Technology

#### Red Hat System Administration

- A. Objective of the Course: The main objectives of the course are
- Understand and use essential tools for handling files, directories, commandline environments, and documentation
- Create simple shell scripts
- Operate running systems, including booting into different run levels, identifying processes, starting and stopping virtual machines, and controlling services
- Configure local storage using partitions and logical volumes
- Create and configure file systems and file system attributes, such as permissions, encryption, access control lists, and network file systems
- Deploy, configure, and maintain systems, including software installation, update, and core services
- Manage users and groups
- Manage security, including basic firewall and SELinux configuration
- Perform basic container management
- It is important for student's professional development.

#### B. Outline of the Course:

Sr. No.	Title of the Unit	Minimum Number of Hours
1	Managing files from the command line	04
2	Getting help in Red Hat Enterprise Linux	05
3	Creating, Viewing and Edition Text Files	04
4	Managing Local Linux Users and Group	04
5	Monitoring and Managing Linux Process	04
6	Configuring and Securing OpenSSH service	04
7	Analyzing storage log and managing Linux Networking	06
8	Scheduling Future Linux Tasks	03
9	Controlling Access to Files with Access Control Lists	03
10	Managing SELinux Security	03

Total hours: 40 Page 1 of 2

#### C. Detail Syllabus

1	Managing files from the command line	04 Hours
	The linux file hierarchy and practice, locating file and directories, managing files through command line, path name expansion	
2	Getting help in Red Hat Enterprise Linux	05 Hours
	Man,pinfo command and practice, viewing and controlling package, creating and viewing SoS report	
3	Creating, Viewing and Edition Text Files	04 Hours
4	Managing Local Linux Users and Group	04 Hours
5	Monitoring and Managing Linux Process	04 Hours
	Processes, controlling job, background and foreground process, monitoring and managing process	
6	Configuring and Securing OpenSSH service	04 Hours
	Accessing the remote command line with SSH, SSH key based authentication, SSH service, SSH key based authentication	
7	Analyzing storage log and managing Linux Networking	06 Hours
	System log architecture, managing and controlling syslog files, System journal	
8	Scheduling Future Linux Tasks	03 Hours
	Scheduling one-time tasks with at, recurring and scheduling job with cron, managing temporary files	
9	Controlling Access to Files with Access Control Lists	03 Hours
	POSIX access control list, interpret ACLs, securing files with ACLs, grant and limit access	
10	Managing SELinux Security	03 Hours
	Managing and monitoring SELinux, SELinux modes, troubleshooting SELinux	

#### D. Students Learning Outcomes:

- Enables you to compete in real-world tasks using all these technologies. These certifications enable the candidates with the skills of implementing and configuring the technologies in question.
- Red Hat certification offers administration skills, developer knowledge of specialized technologies that lead your path to success.
- The Red Hat Certified Engineer (RHCE) certification program creates certified skilled IT professionals, it is also one of the leading certification programs for Linux skills.

#### CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Technology & Engineering Chandubhai S. Patel Institute of Technology

#### **CCNA Routing and Switching: Introduction to Networks**

#### A. Objective of the Course:

The main objectives of the course are

- Work with routers, switches and wireless devices to configure and troubleshoot VLANs, Wireless LANs and Inter-VLAN routing.
- Develop critical thinking and problem-solving skills using real equipment and Cisco Packet Tracer.
- Configure and troubleshoot redundancy on a switched network using STP and Ether Channel.
- Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols.
- Create and configure file systems and file system attributes, such as permissions, encryption, access control lists, and network file systems
- Deploy, configure, and maintain systems, including software installation, update, and core services
- Manage users and groups
- Manage security, including basic firewall and SELinux configuration
- Perform basic container management
- It is important for student's professional development.

#### B. Outline of the Course:

Sr. No.	Title of the Unit	Minimum Number of Hours
1	Explore the Network	04
2	Configure a Network Operating System	05
3	Network Protocols and Communications	04
4	Network Access	04
5	Ethernet	04
6	Network Layer	04
7	IP Addressing	03
8	Subnetting IP Networks	03
9	Transport Layer	03

10	Application Layer	03
11	Build a Small Network	03

#### Total hours: 40

## C. Detail Syllabus

1	Explore the Network	04 Hours
	Globally connected, LANs, WANs and the Internet, The	
	Network as a platform, the changing network environment	
2	Configure a Network Operating System	05 Hours
	Introduction, IOS Bootcamp, Basic Device Configuration,	
	Address Schemes	
3	Network Protocols and Communications	04 Hours
	Rules of Communication, Network Protocols and Standards,	
	Data transfer in the network	
4	Network Access	04 Hours
	Physical layer protocols, Network Media, Data Link Layer	
	Protocols, Media Access Control.	
5	Ethernet	04 Hours
	Ethernet Protocol, LAN Switches, Address Resolution	
	Protocol	
6	Network Layer	04 Hours
	Network Layer Protocols, Routing, Routers, Configure a	
	Cisco Router.	
7	IP Addressing	06 Hours
	IPv4 Network Addresses, IPv6 Network Addresses,	
	Connectivity Verification.	
8	Subnetting IP Networks	03 Hours
	Subnetting an IPv4 Network, Addressing Schemes, Design	
	Considerations for IPv6.	
9	Transport Layer	03 Hours
	Transport Layer Protocols, TCP and UDP.	
10	Application Layer	03 Hours
	Application Layer Protocols, Well-Known Application	
	Layer Protocols and Services.	
11	Build a Small Network	03 Hours
	Network Design, Network Security, Basic Network	
	Performance, Network Troubleshooting	

### D. Students Learning Outcomes:

- Students will be able to build simple LANs
- Perform basic configurations for routers and switches, and
- Implement IP addressing schemes.

Page 3 of 3

### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### FACULTY OF TECHNOLOGY AND ENGINEERING

CHANDUBHAI S. PATEL INSTITUTE OF TECHNOLOGY

- Career Development and Placement cell introduce the course on "Quantitative Aptitude and Logical Reasoning" as a value added course. It is non-credit course. The objective of the course is to enhance the logical and soft skills of the students.
- ♦ Date and Time : 8<sup>th</sup> July, 2017 To 30<sup>th</sup> September, 2017 (Every Saturday Except third Saturday and declare holiday)
- ✤ About the course :

#### 1. General Aptitude

- 1.1 Percentage
- 1.2 Profit Loss Discount
- 1.3 Time Speed Distance
- 1.4 Time & Work
- 1.5 Ratio Proportion
- 1.6 Allegation & Mixture
- 1.7 Permutations & Contribution
- 1.8 Probability
- 1.9 Data Interpretation

#### 2. Logical Skills

- 2.1 Blood Relation
- 2.2 Number & Alpha Series
- 2.3 Coding Decoding CSPIT, CHARUSAT

#### 3. Soft Skill

- 3.1 Resume Building
- 3.2 Interview Skill, GD Skill
- 3.3 Communication

#### CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Technology & Engineering Chandubhai S. Patel Institute of Technology

#### Quantitative Aptitude and Logical Reasoning

- A. Objective of the Course: The main objectives of the course are
- The objective of the course is to enhance the candidate's aptitude. It also helps the students to find their weakness and strength.
- The students will be able to understand the importance of communication skills and this course will help them in achieving the expertise in communication skills.
- It is important for student's professional development.

#### B. Outline of the Course:

Sr. No.	Title of the Unit	Minimum Number of Hours
1	General Aptitude	20
2	Logical Skills	7
3	Soft Skills	5

#### Total hours: 32

#### C. Detail Syllabus

1	General Aptitude	20 Hours
1.1	Percentage	
1.2	Profit Loss Discount	
1.3	Time Speed Distance	
1.4	Time & Work	
1.5	Ratio Proportion	
1.6	Allegation & Mixtures	
1.7	Permutations & Combination	

1.8	Probability	
1.9	Data Interpretation	
2	Logical Skills	7 Hours
2.1	Blood Relations	
2.2	Number & Alpha Series	
2.3	Coding-Decoding CSPIT, CHARUSAT	
3	Soft Skills	5 Hours
3.1	Resume Building	
3.2	Interview skill, GD Skill	
3.3	Communication	

#### D. Instructional Method and Pedagogy:

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed.
- Lectures will be conducted with the aid of multi-media projector, black board, OHP and or Microsoft Teams.
- Attendance is compulsory.
- Assignments based on course content will be given to the students at the end of each unit/topic and will be evaluated at regular interval.

#### E. Students Learning Outcomes:

- The Students must at the end of the course be able to: Understand the concept communication skill and soft skill.
- Students can solve the complex problem of Quantitative aptitude and logical reasoning.

#### F. Recommended Study Material:

#### Reference Books:

1. Quantitative Aptitude by Dr. R S Aggarwal.



## APTITUDE BUILDING AND SOFT SKILL DEVELOPMENT

## JANUARY- MARCH 2018



Aptitude Building session By Mr. Himanshu Thakkar Director - Expert Educare Pvt Ltd.

## **Registration Link:**

https://forms.gle/uDZtM33rMZKkFT6a6



Soft Skill Session By Dr. Kamal Chakravartty Head, HRDC, CHARUSAT

## **Organizer:**

Career Development and Placement Cell (CDPC), Charotar University of Science and Technology(CHARUSAT),Changa





## CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH

Aptitude Building and Soft Skill Development (2017-18)

#### A. Objective of the Course

The main objective of Course are:

- The objective of the course is to enhance the candidates aptitude. It also helps the students to find their weakness and strength.
- The students will be able to understand the importance of communication skills and this course will help them to achieve the expertise in communication skills.
- It is important for the students' professional development.

#### **B.** Outline of the course:

Sr. No	Title of the Unit	No. of Hours
1	Aptitude Building	30
2	Skill Mapping Session Schedule	16

#### C. Detailed Syllabus

Apt	Aptitude Building		
Sr	Topic Name	No of Hours Required	
N			
0			
1	Ratio and proportion & partnership	2	
2	Percentage & Profit and loss	2	
3	Progression	2	
4	Time and work	2	





5	Time and distance	2		
6	Permutation and combination	2		
7	Set theory	2		
8	Fundamentals and applications of area and volume	2		
9	Reasoning on Venn Diagram	2		
10	Analytical Reasoning	2		
11	Visual Reasoning	2		
12	Reasoning on situation handling, coding - decoding, direction senses	2		
13	Reasoning on numbers and alphabets	2		
14	Sample practice questions and explanation about approach with real examples asked in placement test of major corporates / recruiters	2		
15	Dos and Don'ts in Interview and discussion on frequently asked questions in interview	2		
Skil	Mapping Session Schedule			
16	Communication Skill /Presentation Skill	4		
17	Teamwork Skill	2		
18	Problem Solving Skill	2		
19	Leadership Skill	2		
20	Skill To work under pressure	2		
21	Enterprise and Entrepreneurial Skill	2		
22	Analytical Skill	2		
Tota	Total Hours     46			





#### **D.** Instructional Method and Pedagogy

- At the start of course, the course delivery pattern , pre-requisite of the subject will be discussed.
- Lectures will be conducted with the aid of multi- media projector , black board , OHP and Microsoft Teams
- Attendance is Compulsory
- Assignments based on course content will be given to the students at the end of each topic

#### E. Students Learning Outcomes.

- The students must at the end of course be able to Understand the concept communication skills and soft skills
- Students can solve the complex problem of Quantitative aptitude and Logical Reasoning.

#### F. Recommended Study Material

**Reference Books** 

1. Quantitative Aptitude by R.S. Aggrawal.

# **Faculty of Pharmacy**

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy Packaging Material and Technology II

#### Hours: 30

#### Objectives of the Course

To make students familiar with the manufacturing and application of packages manufactured from glass and metals. The course is also set to provide preliminary information about need, principle and general methodologies adopted to carry out packaging compatibility studies.

Student Learning Outcomes/Objectives

At the end of the course, the student would be able to understand the application aspects of glass and metals in packaging. They should expected to realized the selection criterons for adhesives and rubber for various applications. The students should also be able to understand product – package compatibility and methodology to evolve those parameters.

#### Outline of the Course

	No.	Unit
٩	1	Testing of Packing Materials
- 、	2	Testing of Packed containers
	3	Compatibility studies on Packing

Detailed Syllabus

Sr.	Units	References		
No.				
1	Compatibility studies on Packing	1, 2		
	Introduction to stability approaches for determination of shelf life studi	es for product ir		
	different types of packs, Impact of seals and closures on stability of	product, Brief o		
	compatibility studies including Analytical techniques in compatibility studie	s through a typica		
	example.			
2 .	Glass and Metals as Packaging Materials	1, 2, 3, 4,5		
		. 1		
	Types of materials, general methods of manufacturing, their physico ch	iemical properties		
•	characteristics, quality control tests and applications			
$^{+}$ $\sim$	i. Glass			
	ii. Metal: Tin, Aluminum, Stainless steel			
	<ul><li>iii. Rubbers and Elastomers: Properties, Types, Agents used for its manufacturing.</li></ul>			
iv. Adhesives: theory and principles of adhesion, factors affecting bond stren				
	types of adhesives, adhesive tapes			
	Manufacturing considerations, brief of various methods for manufacturing	g 1, 2, 3, 4		
	packages from following types and applications:			
	Glass containers			
	Metal containers			
3 .	Printing of Packages	3,6		
	Introduction to Various Methods of Printing and Applications			
	introduction to various interious of rimning and rippleations			

#### Recommended study materials

- 1 Pharmaceutial Packaging Technology, Edited by D.A.Dean, E.R.Evans, I.H.Hall, Taylor and Fransis.
- 2 Encyclopedia Of Packaging Technology, Edited By Kit L. Yam, 3rd Edition, A John Wiley & Sons, Inc., Publication.
- 3 Handbook of Packaging Technology, by Eiri Board (Engineers India Research Institute).
- 4 Global Legislation for Food Packaging Materials, edited by Rinus Rijk and Rob Veraart, Wiley.

5 Packaging Closures and Sealing Systems, Edited by Nigel Theobald and Beinda Winder, Blackwell Publishing, CRC Press.

6 Fundamentals of Packaging Technology, Saroka Walter, Institute of Packaging Professionals

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy Packaging Material and Technology I

#### Hours: 30

#### Objectives of the Course

The course is designed to make students familiar with cellulosic and plastic packaging material for packaging of various types of goods. It is also expected to impart the knowledge about technology involved in manufacturing those packaging material as well prototype packages. The subject emphasizes the fundamental requirements of ideal packaging material & characteristics of packaging materials available in the market.

#### Student Learning Outcomes/Objectives

At the end of the course, the student will be able to understand the fundamental concepts of packaging which further will be helpful in understanding other advanced aspects of packaging applications in various fields.

#### Outline of the Course:

Sr No.	Unit
1	Introduction
2	Packaging Materials
3	Packaging Technology

#### Detailed Syllabus

Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.	ion of packages and		
1       Introduction         Definition, introduction to packaging, role of packaging, components of packaging Development of Packaging and various aspects of it, Evalua Physicochemical characteristics         2       Cellulosic and Plastic Packaging Materials         Types of materials, general methods of manufacturing, their physico chemic properties, characteristics, quality control tests and applications         i.       Plastics: high-density polyethylene, low-density polyethylene, linear low Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polycar plastics, Considerations of Polyethylene in Drug Packaging.         ii.       Cellulose Materials: Manufacturing of paper and boards, specialty papatifierent types of cartons, sacks, and composite containers.	kaging, Overview of ion of packages and		
<ul> <li>Definition, introduction to packaging, role of packaging, components of packaging Development of Packaging and various aspects of it, Evalua Physicochemical characteristics</li> <li>Cellulosic and Plastic Packaging Materials         <ul> <li>Types of materials, general methods of manufacturing, their physico chemic properties, characteristics, quality control tests and applications</li> <li>Plastics: high-density polyethylene, low-density polyethylene, linear low Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.</li> <li>Cellulose Materials: Manufacturing of paper and boards, specialty papatifierent types of cartons, sacks, and composite containers.</li> </ul> </li> </ul>	kaging, Overview of ion of packages and		
<ul> <li>the Packaging Development of Packaging and various aspects of it, Evalual Physicochemical characteristics</li> <li>Cellulosic and Plastic Packaging Materials         <ul> <li>Types of materials, general methods of manufacturing, their physico chemic properties, characteristics, quality control tests and applications</li> <li>Plastics: high-density polyethylene, low-density polyethylene, linear low Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.</li> <li>Cellulose Materials: Manufacturing of paper and boards, specialty paped different types of cartons, sacks, and composite containers.</li> </ul> </li> </ul>	ion of packages and		
<ul> <li>Physicochemical characteristics</li> <li>Cellulosic and Plastic Packaging Materials         Types of materials, general methods of manufacturing, their physico chemic properties, characteristics, quality control tests and applications         i. Plastics: high-density polyethylene, low-density polyethylene, linear low Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.         ii. Cellulose Materials: Manufacturing of paper and boards, specialty paped different types of cartons, sacks, and composite containers.     </li> </ul>			
<ul> <li>Cellulosic and Plastic Packaging Materials         Types of materials, general methods of manufacturing, their physico chemic properties, characteristics, quality control tests and applications         i. Plastics: high-density polyethylene, low-density polyethylene, linear low Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.         ii. Cellulose Materials: Manufacturing of paper and boards, specialty pap different types of cartons, sacks, and composite containers.     </li> </ul>	1224567		
<ul> <li>Types of materials, general methods of manufacturing, their physico chemic properties, characteristics, quality control tests and applications</li> <li>i. Plastics: high-density polyethylene, low-density polyethylene, linear low Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.</li> <li>ii. Cellulose Materials: Manufacturing of paper and boards, specialty pap different types of cartons, sacks, and composite containers.</li> </ul>	1224567		
<ul> <li>properties, characteristics, quality control tests and applications</li> <li>i. Plastics: high-density polyethylene, low-density polyethylene, linear low Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.</li> <li>ii. Cellulose Materials: Manufacturing of paper and boards, specialty pap different types of cartons, sacks, and composite containers.</li> </ul>	1, 2, 3, 4, 5,6,7		
<ul> <li>i. Plastics: high-density polyethylene, low-density polyethylene, linear low Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.</li> <li>ii. Cellulose Materials: Manufacturing of paper and boards, specialty pap different types of cartons, sacks, and composite containers.</li> </ul>			
<ul> <li>Polypropylene, Polystyrene, PVC, nylon, plastic woven sacks and Polyca plastics, Considerations of Polyethylene in Drug Packaging.</li> <li>ii. Cellulose Materials: Manufacturing of paper and boards, specialty pap different types of cartons, sacks, and composite containers.</li> </ul>			
plastics, Considerations of Polyethylene in Drug Packaging. ii. Cellulose Materials: Manufacturing of paper and boards, specialty pap different types of cartons, sacks, and composite containers.	i. Plastics: high-density polyethylene, low-density polyethylene, linear low-density polyethylene,		
ii. Cellulose Materials: Manufacturing of paper and boards, specialty pap different types of cartons, sacks, and composite containers.			
different types of cartons, sacks, and composite containers.			
	ii. Cellulose Materials: Manufacturing of paper and boards, specialty paper, corrugated boards,		
3 Manufacturing considerations and brief of various methods for manufacturin			
	1, 2, 3, 4, 5,6,7		
packages from following types:			
i.Plastic containers			
ii.Closures and Caps			
iii.Paper and paperboard			

Recommended Study material

- 1. Encyclopedia of Pharmaceutical Technology Vol.1-3, Swarbric, J and Bolyln, J. C., Marcel Dekker, Inc., New York.
- 2. United States Pharmacopoeia-27(NF-22), 2004, United State of Pharmacoppeal convention, INC, 12601 Twinbrook Parkway, Rockville, MD 20852.
- 3. Pharmaceutical Packaging Technology, Dean, D. A. Evans, E. R. and Hall, j. H., Taylor and Francis, London.
- 4. Packaging of Pharmaceutical & Healthcare products, H. Lockhart, F. A. Paine, Champman and Hall, London.
- 5. Fundamentals of Packaging Technology, Saroka Walter, Institute of Packaging Professionals

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy Packaging of Food Products

#### Hours:30

#### Objectives of the Course

The course is considers food article as a prototype FMCG products. The course is structured to disseminate the findings with respect to the fundamentals of food preservation and role of Packaging Technology applied to Food Materials. The course also aims to provide in-depth information on designing and selection of packages for different types of food products while keeping in mind the regulations for the same.

#### Student Learning Outcomes/Objectives

At the end of the course, the student would be able to understand the fundamental concepts of food preservation and role of package material for the same. It is also expected that the student would posses sufficient knowledge about the novel trends for the packaging of food material.

#### Outline of the Course

No.	Unit
1	Food Deterioration , Food Preservation and Determination of Shelf Life
4	Food in different Packaging
. 5	Packaging of Dairy Products and Current Legislations related to Food Packaging in India

#### Detailed Syllabus

Sr.No	Units	References		
1.	Food Deterioration and Methods of Preservation	1, 2, 4		
	Reasons of food deterioration, Food preservation methods (high and low temperatures, drying			
	and water activity control, chemical preservation, fermentation and other techniques)			
	Packaged Product Quality and Shelf Life 1, 2			
	Introduction, Chemical/biochemical processes, Microbiological processes	sses, Physical and		
	physico-chemical processes, Migration from packaging to foods, indices of failure.			
2	Food in different Packaging	1, 4, 6, 10		
	i. <i>Metal Packaging</i> . Processing of food and drinks in metal packages, Shelf life of canned foods.			
	ii. Glass containers: Attributes of food packaged in glass containers, Thermal processing of glass			
	packaged foods, Glass pack design and specification.			
· · ·	iii. <i>Plastics Packaging</i> . Types and use of plastics in food packaging, Food contact and barrier properties			
	iv. Paper and Paper board packaging. Introduction, functional properties or paper and paperboard			
3	Introduction to Active Packaging	1, 9		
a.	Packaging of Dairy products	2,5		
÷	Classification of dairy products, requirements of packing and packages for different types of			
	products.			
	Legislation	3		
	Introduction to Prevention of food adulteration act, Food Purchase Order.			

Recommended study materials:

- 1 Food and Beverage Packaging Technology, Second Edition, Edited by Richard Coles, Mark Kirwan, A John Wiley & Sons, Ltd., Publication.
- 2 Food Packaging and Shelf Life, A Practical Guide, edited by Gordon L. Robertson, CRC Press, Taylor and Francis Goup.
- 3 Global Legislation for Food Packaging Materials, edited by Rinus Rijk and Rob Veraart, Wiley.
- 4 Plastic Packaging Materials for Food, Edited by O.G.Piringer and A.L.Baner, Wiley.
- 5 Hand Book Of Milk Processing Dairy Products And Packaging Technology, by Eiri Board (Engineers India Research Institute).
- 6 Handbook of Packaging Technology, by Eiri Board (Engineers India Research Institute).
- 7 Thermal Processing of Packed Food, Donald Holdsworth, Ricardo Simpson, Springer.
- 8 Understanding Consumers of Food Products, Edited by Lynn Frewer and Hans Van Trijp, CRC Press, Woodhead Publishing Limited, England.
- 9 Smart Packaging Technologies for fast moving consumer goods, Editor Joseph Kerry and Paul Butler, Wiley.
- 10 Hand Book of Food Packaging Technology, by Eiri Board (Engineers India Research Institute).
- 11 Packaging Closures and Sealing Systems, Edited by Nigel Theobald and Beinda Winder, Blackwell Publishing, CRC Press.
#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy Packaging of Pharmaceuticals

#### Hours: 30

#### Objectives of the Course

The course is structured to familiarize the students with different types of packaging materials used for various types of pharmaceuticals and cosmetic products. The subject is also aimed to provide the students an insight in current regulatory processes with respect to Pharmaceutical product & packaging thereof.

#### Student Learning Outcomes/Objectives

At the end of the course, the student will be able to understand the packaging of different pharmaceutical and cosmetic products & regulations concerning the same.

#### Outline of the Course

Sr No.	Unit
1	Packaging Solid dosage forms
2	Sterilization and Sterile Products and Packaging
	Aerosol Packaging
3	Packaging of Liquid , SemiSolid Dosage Form and Medicinal Devises
Trancaction	of the course would be through various pedagony tools

Transaction of the course would be through various pedagogy tools.

#### Detailed Syllabus

Sr.No	Units	References
1	Introduction to Pharmaceutical Packaging	2,3, 8, 10
	Packaging Solid dosage forms	3, 5, 6,9
	Sterilization and Sterile Products Packaging	5,8
2	Aerosol Packaging	6,7
	Packaging of Liquid and Semisolid Dosage Forms	1, 3, 4, 5
3	Types of containers, filling and packaging technology.	
	Medical devices packaging	8
	Legislation	11
	Introduction to following Acts and the area of functioning:	-h
	ISO standards, Weight and measures (Packaged Commodities) Act, India	n Copyright Act.

#### Recommended Study material

- 1. Encyclopedia of Pharmaceutical Technology Vol.1-3, Swarbric, J and Bolyln, J. C., Marcel Dekker, Inc., New York.
- 2. United States Pharmacopoeia-27(NF-22), 2004, United State of Pharmacoppeal convention, INC, 12601 Twinbrook Parkway, Rockville, MD 20852.
- 3. Pharmaceutical Packaging Technology, Dean, D. A. Evans, E. R. and Hall, j. H., Taylor and Francis, London.
- 4. Packaging of Pharmaceutical & Healthcare products, H. Lockhart, F. A. Paine, Champman and Hall, London.
- 5. Packaging of Pharmaceuticals, C.F. Ross, Newnes-Butterworth.
- 6. The Theory and Practice of Industrial pharmacy, Lachmann, L., Lieberman, H.A. & Kanig, J.I., Lea and Fibiger, CBS Publishers and Distributers, New Delhi.

- 7. Modern Pharmaceutics, Banker, G.S. & Rhodes, C.T., Marcel Dekker Inc. New York and Basel.
- 8. Pharmaceutical Packaging Handbook, Edward J. Bauer, Informa Healthcare.
- 9. Smart Packaging Technologies for fast moving consumer goods, Editor Joseph Kerry and Paul Butler, Wiley
- 10. Handbook of Packaging Technology, by Eiri Board (Engineers India Research Institute).
- 11. Pharmaceutical Jurisprudence, N.K.Jain, Vallabh Prakashan

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy

# FORMULATION DESIGN AND EVALUATION- HAIR, DENTAL AND BABY CARE PRODUCTS

#### Hours: 30

#### Objectives of the Course

This course is designed to provide in depth knowledge regarding the designing, formulation, and manufacturing, quality control, packaging and labeling of various hair care and dental products. This course also addresses the formulation aspects related to Baby care products.

#### Student Learning Outcomes/ objectives

At the end of the course, the student will be able to understand the formulation and development of various hair care and dental care products. The students will also understand the differences in formulation of products for adults and babies.

#### Outline of the Course

No.	Unit
1	Hair care products
2	Dental care products
3	Baby care products

#### Detailed Syllabus

Sr.	Units
No.	
1	Hair care products Anatomy and physiology of hair, classification of various hair care products. Formulation, evaluation, packaging and labeling of various hair care products like shampoo, conditioner, hair tonics, hair wave sets, lacquer, rinses, hair grooming preparation, hair bleaches and colorants, depillatories and depilatories preparations.
2	Dental care products Anatomy and physiology of teeth, classification of various teeth care products. Formulation, evaluation, packaging and labeling of various teeth care products like tooth paste, tooth gel, tooth powder, mouth washes and teeth whitening agents.
3	Baby care products Introduction, difference in adult and baby formulations, classification of various baby care products. Formulation, evaluation, packaging and labeling of various baby care products.

- 1. Cosmetics Formulation Manufacturing & Quality Control, P.P. Sharma, 4th Ed., Vandana Publications.
- 2. Harry's Cosmeticology, Radelph Harry, 8th edition, Chemical Publishing Company.
- 3. Perfumes, Soaps, Detergents and Cosmetics, S.C. Bhatia, 1st edition, CBS publishers.
- 4. Poucher's Perfumes, Cosmetics and Soaps, H. Butler, 10th edition, Kluwer Academic Publishers.
- 5. Handbook of Cosmetic Science and Technology, Andre Barel, Marc Paye, Howard I. Maibach, CRC Press.
- 6. Cosmetic technology, Nanda S, Nanda A, Khar RK., Birla Publications Pvt. Ltd.
- 7. Cosmetics: Science and Technology, Balsam S.M. and Sagarin Edward, 2nd Ed, Wiley Interscience.

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy FORMULATION DESIGN AND EVALUATION- SKIN AND NAIL CARE PRODUCTS

#### Hours: 30

#### Objectives of the Course

This course aims to provide comprehensive knowledge regarding the designing, formulation, and manufacturing, quality control, packaging and labeling of various skin care products. This course also addresses the formulation challenges including their remedies.

#### Student Learning Outcomes/Objectives

At the end of the course, the student will be able to understand the fundamental concepts of formulation and product development of various skin care and nail care products.

#### Outline of the Course:

Sr No.	Unit
1	Skin care products -I
2	Skin care products -II
3	Nail Care Products

#### Detailed Syllabus

Sr.	Units
No	Cints
1	Skin care products -I
	Anatomy and physiology of skin, classification of various skin care products. Formulation,
	evaluation, packaging and labeling ofvarious skin care products like skin creams and lotions,
	suntan and anti sunburn, skin bleaching, skin tonics, anti aging cream.
2	Skin care products -II
	Formulation, evaluation, packaging and labeling ofvarious skin care products like face powder,
	body powders, lipstick, lip rouge, lip glosses, eye mascara, eye shadow, eyebrow cosmetics, anti
	perspirants and deodorants and bath preparations.
3	Nail Care Products
	Anatomy and physiology of nail, classification of various nail care products. Formulation,
	evaluation, packaging and labeling of various nail care products like cuticle cream, oil, nail
	bleaches, nail stain removers, nail lacquers and removers.

- 1. Cosmetics Formulation Manufacturing & Quality Control, P.P.Sharma, 4th Ed., Vandana Publications.
- 2. Harry's Cosmeticology, Radelph Harry, 8th edition, Chemical Publishing Company.
- 3. Perfumes, Soaps, Detergents and Cosmetics, S.C. Bhatia, 1st edition, CBS publishers.
- 4. Poucher's Perfumes, Cosmetics and Soaps, H. Butler, 10th edition, Kluwer Academic Publishers.
- 5. Handbook of Cosmetic Science and Technology, Andre Barel, Marc Paye, Howard I. Maibach, CRC Press.
- 6. Cosmetic technology, Nanda S, Nanda A, Khar RK., Birla Publications Pvt. Ltd.
- 7. Cosmetics: Science and Technology, Balsam S.M. and Sagarin Edward, 2nd Ed, Wiley Interscience.

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy REGULATORY ASPECTS IN COSMETICS INDUSTRY

#### Hours:30

Objectives of the Course

The course is prepared with the aim to familiarize the students with the principles of regulatory requirements in context of cosmetic industry.

Student Learning Outcomes/ objectives

At the end of the course, the student would be able to understand the fundamental concepts and essential component to maintain the quality of cosmetic products and meet the regulatory guidelines. Outline of the Course

No.	Unit
, 1	Regulation of cosmetics in India, Provisions applicable to cosmetics in Drug &
L	Cosmetic Act 1940
2	An introductory study of acts/ laws of that affect cosmetic product design,
. 2	manufacture and distribution in India((with latest amendments)
3	Cosmetic advertising & labeling claims, Global regulatory issues in cosmetic industry

#### Detailed Syllabus

Sr.No	Units
1	Regulation of cosmetics in India, Provisions applicable to cosmetics in Drug & Cosmetic Act
	1940 and Rules 1945
2	An introductory study of acts/ laws of that affect cosmetic product design, manufacture and
	distribution in India (with latest amendments)
	Environmental protection act
	• Factory act
	Consumer protection act
	• Patent act with Patent Rules
3	Cosmetic advertising & labeling claims, Global regulatory issues in cosmetic industry
ъ	

- 1. Cosmetics Formulation Manufacturing & Quality Control, P.P. Sharma, 4th Ed., Vandana Publications
- 2. Cosmetic Regulation in a Competitive Environment, Norman F. Estrin, James M.Akerson, Marcel Dekker
- 3. Consumer Testing and Evaluation of Personal Care Products, Howard R. Moskowitz, Marcel Dekker Incorporated
- 4. Global Regulatory Issues for the Cosmetics Industry, C.E. Betton, Elsevier Science.
- 5. The Cosmetic Industry: Scientific and Regulatory Foundations, Norman F. Estrin, Marcel Dekker Incorporated.
- 6. Drugs and Cosmetics act 1940 and Rules 1945
- 7. Environmental Protection act
- 8. Factory Act
- 9. Patent act 2005

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy ADVANCED COSMETIC TECHNIQUES

#### Hours: 30

#### Objectives of the Course

This course aims to provide in depth knowledge regarding the designing, formulation, and manufacturing, quality control, packaging and labeling of novel cosmetic products like herbal cosmetics, cosmeceuticals, and nutricosmetics.

**Student Learning Outcomes/Objectives** At the end of the course, the student would be able to understand the formulation and development of newer approaches in cosmetic technology.

#### Outline of the Course

Sr No.	Unit
1	Novel cosmetic delivery systems
2	Cosmeceuticals, Nutricosmetics and Herbal Cosmetics
3	Introduction of Laser Technology, Aerosol technology & Cosmetic Contact Lenses

#### **Detailed** Syllabus

Sr.No	Units
1	Novel cosmetic delivery systems
	Approaches of formulation, quality control, packaging and labeling of various novel cosmetic
	delivery system like Vesicular system, Particulate system, Colloidal system, Iontophoresis,
	Cosmetic patches and Microneedles
	Cosmeceuticals, Nutricosmetics and Herbal Cosmetics
2	Introduction, Formulation aspects and Applications of various Cosmeceuticals,
-	Nutricosmetics and Herbal cosmetics
3	Introduction of Laser Technology, Aerosol technology & Cosmetic Contact Lenses

- 1. Botanicals: A Phytocosmetic Desk Reference
- 2. Cosmetic nanotechnology: polymers and colloids in cosmetics, Sarah E. Morgan, Kathleen O. Havelka, Robert Y. Lochhead, American Chemical Society.
- 3. Novel Cosmetic Delivery Systems, Shlomo Magdassi, Elka Touitou, Marcel Dekker
- 4. Enhancement in Drug Delivery, ElkaTouitou, Brian W. Barry, CRC Press.
- 5. Delivery System Handbook for Personal Care and Cosmetic Products, MeyerRosen, Elsevier Science.
- 6. Cosmeceuticals and Active Cosmetics: Drugs vs. Cosmetics (Cosmetic Science and Technology) Peter Elsner, Howard I. Maibach, 2nd edition, CRS Press.
- 7. Controlled and Novel Drug Delivery Systems by N.K.Jain, CBS Publishers & Distributors.
- 8. Targeted And Controlled Drug Delivery: Novel Carrier Systems by Vyas S P, Khar R K, CBS Publishers & Distributors
- 9. The Theory and Practice of Industrial Pharmacy, Lachman and Lieberman, 3rd Edition, Lea & Febiger Publishers.

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY Ramanbhai Patel College of Pharmacy

#### Principles of Pharmacovigilance

#### Hours: 30

Course outcome:

- Students would be able to discuss the theory and background of pharmacovigilance, as well as identify major terminology in this arena.
- Students would be able to explain methods used to identify safety signals and statistical effects
- Students would be able to cite requirements which are necessary to develop pharmacovigilance programme in an organization.

#### Outline of Syllabus

Sr No	o Units	
1.	Introduction to Adverse Drug Reactions and Pharmacovigilance	
2.	Pharmacovigilance Methods	
3.	Setup of Pharmacovigilance Programme	

#### Detailed Syllabus

1.       Introduction to Adverse Drug Reactions and Pharmacovigilance         Definitions and classification of ADRs       Detection and reporting         •       Detection and reporting         •       Causality assessment         •       Severity and seriousness assessment         •       Predictability and preventability assessment         •       Management of adverse drug reactions         Introduction to pharmacovigilance       •         •       History and development of pharmacovigilance         •       Importance of safety monitoring / Why pharmacovigilance         •       Importance of safety monitoring / Why pharmacovigilance         •       Pharmacovigilance in India         •       Pharmacovigilance global perspective         •       WHO international drug monitoring programme         Basic terminologies used in pharmacovigilance       •         •       Terminologies of adverse medication related events         •       Regulatory terminologies         •       Drug dictionaries and coding in Pharmacovigilance         2.       Pharmacovigilance Methods         Different Pharmacoepidemiological methods       Different Pharmacoepidemiological methods	Sr No.	Units
<ul> <li>Detection and reporting         <ul> <li>Causality assessment</li> <li>Severity and seriousness assessment</li> <li>Predictability and preventability assessment</li> <li>Management of adverse drug reactions</li> </ul> </li> <li>Introduction to pharmacovigilance         <ul> <li>History and development of pharmacovigilance</li> <li>Importance of safety monitoring / Why pharmacovigilance</li> <li>Importance of safety monitoring / Why pharmacovigilance</li> <li>Pharmacovigilance in India</li> <li>Pharmacovigilance global perspective</li> <li>WHO international drug monitoring programme</li> <li>Basic terminologies used in pharmacovigilance</li> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> </ul> </li> <li>Pharmacovigilance Methods</li> </ul>	1.	Introduction to Adverse Drug Reactions and Pharmacovigilance
<ul> <li>Causality assessment</li> <li>Severity and seriousness assessment</li> <li>Predictability and preventability assessment</li> <li>Management of adverse drug reactions</li> <li>Introduction to pharmacovigilance</li> <li>History and development of pharmacovigilance</li> <li>Importance of safety monitoring / Why pharmacovigilance</li> <li>National and international scenario</li> <li>Pharmacovigilance global perspective</li> <li>WHO international drug monitoring programme</li> <li>Basic terminologies used in pharmacovigilance</li> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> </ul>		Definitions and classification of ADRs
<ul> <li>Severity and seriousness assessment</li> <li>Predictability and preventability assessment</li> <li>Management of adverse drug reactions</li> <li>Introduction to pharmacovigilance</li> <li>History and development of pharmacovigilance</li> <li>Importance of safety monitoring / Why pharmacovigilance</li> <li>National and international scenario</li> <li>Pharmacovigilance in India</li> <li>Pharmacovigilance global perspective</li> <li>WHO international drug monitoring programme</li> <li>Basic terminologies used in pharmacovigilance</li> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> <li>Pharmacovigilance Methods</li> </ul>		Detection and reporting
<ul> <li>Predictability and preventability assessment</li> <li>Management of adverse drug reactions</li> <li>Introduction to pharmacovigilance</li> <li>History and development of pharmacovigilance</li> <li>Importance of safety monitoring / Why pharmacovigilance</li> <li>National and international scenario</li> <li>Pharmacovigilance in India</li> <li>Pharmacovigilance global perspective</li> <li>WHO international drug monitoring programme</li> <li>Basic terminologies used in pharmacovigilance</li> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> </ul>		Causality assessment
<ul> <li>Management of adverse drug reactions         Introduction to pharmacovigilance         History and development of pharmacovigilance         Importance of safety monitoring / Why pharmacovigilance         National and international scenario         Pharmacovigilance in India         Pharmacovigilance global perspective         WHO international drug monitoring programme         Basic terminologies used in pharmacovigilance         Terminologies of adverse medication related events         Regulatory terminologies         Drug dictionaries and coding in Pharmacovigilance         Pharmacovigilance Methods</li></ul>		<ul> <li>Severity and seriousness assessment</li> </ul>
Introduction to pharmacovigilance• History and development of pharmacovigilance• Importance of safety monitoring / Why pharmacovigilanceNational and international scenario• Pharmacovigilance in India• Pharmacovigilance global perspective• WHO international drug monitoring programmeBasic terminologies used in pharmacovigilance• Terminologies of adverse medication related events• Regulatory terminologies• Drug dictionaries and coding in Pharmacovigilance2.		<ul> <li>Predictability and preventability assessment</li> </ul>
<ul> <li>History and development of pharmacovigilance</li> <li>Importance of safety monitoring / Why pharmacovigilance</li> <li>National and international scenario</li> <li>Pharmacovigilance in India</li> <li>Pharmacovigilance global perspective</li> <li>WHO international drug monitoring programme</li> <li>Basic terminologies used in pharmacovigilance</li> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> <li>Pharmacovigilance Methods</li> </ul>		
<ul> <li>Importance of safety monitoring / Why pharmacovigilance</li> <li>National and international scenario</li> <li>Pharmacovigilance in India</li> <li>Pharmacovigilance global perspective</li> <li>WHO international drug monitoring programme</li> <li>Basic terminologies used in pharmacovigilance</li> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> <li>Pharmacovigilance Methods</li> </ul>		1 0
National and international scenario         Pharmacovigilance in India         Pharmacovigilance global perspective         WHO international drug monitoring programme         Basic terminologies used in pharmacovigilance         Terminologies of adverse medication related events         Regulatory terminologies         Drug dictionaries and coding in Pharmacovigilance         Pharmacovigilance Methods		
<ul> <li>Pharmacovigilance in India</li> <li>Pharmacovigilance global perspective</li> <li>WHO international drug monitoring programme</li> <li>Basic terminologies used in pharmacovigilance</li> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> <li>Pharmacovigilance Methods</li> </ul>		
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<ul> <li>WHO international drug monitoring programme Basic terminologies used in pharmacovigilance</li> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> <li>Pharmacovigilance Methods</li> </ul>		
Basic terminologies used in pharmacovigilance         • Terminologies of adverse medication related events         • Regulatory terminologies         • Drug dictionaries and coding in Pharmacovigilance         2.         Pharmacovigilance Methods		
<ul> <li>Terminologies of adverse medication related events</li> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> <li>Pharmacovigilance Methods</li> </ul>		
<ul> <li>Regulatory terminologies</li> <li>Drug dictionaries and coding in Pharmacovigilance</li> <li>Pharmacovigilance Methods</li> </ul>		
Drug dictionaries and coding in Pharmacovigilance 2. Pharmacovigilance Methods		
2. Pharmacovigilance Methods		
		<ul> <li>Drug dictionaries and coding in Pharmacovigilance</li> </ul>
Different Pharmacoepidemiological methods	2.	Pharmacovigilance Methods
		Different Pharmacoepidemiological methods
<ul> <li>Passive surveillance – Spontaneous reports and case series</li> </ul>		
<ul> <li>Active surveillance – Sentinel sites, drug event monitoring and registries</li> </ul>	2	
<ul> <li>cohort study</li> </ul>		

	Targeted clinical investigations
	Adverse drug reaction reporting
	<ul> <li>Introduction to reporting systems</li> </ul>
	<ul> <li>Spontaneous reporting system</li> </ul>
	<ul> <li>Reporting to regulatory authorities</li> </ul>
	<ul> <li>Guidelines for reporting ADRs in biomedical literature</li> </ul>
	Signal detection, Risk assessment and management
	<ul> <li>Identification of new adverse drug reactions</li> </ul>
	<ul> <li>Signal detection in pre and post marketing period</li> </ul>
<	<ul> <li>Prioritization and risk assessment</li> </ul>
	Risk management
	Drug and Disease Classification
3.	Setup of Pharmacovigilance Programme
	Hospital and Industrial perspective of Pharmacovigilance setup
	SOPs-Types, Designing, Maintenance and Training
	<ul> <li>Roles and responsibilities of CROs, Market Authorisation Holders</li> </ul>

#### References

- 1. Textbook of Pharmacovigilance: S K Gupta, Jaypee Brothers, Medical Publishers.
- 2. Practical Drug Safety from A to Z by Barton Cobert, Pierre Biron, Jones and Bartlett Publishers.
- 3. Mann's Pharmacovigilance: Elizabeth B. Andrews, Nicholas, Wiley Publishers.
- 4. Stephens' Detection of New Adverse Drug Reactions: John Talbot, Patrick Walle, Wiley Publishers.
- 5. An Introduction to Pharmacovigilance: Patrick Waller, Wiley Publishers.
- 6. Cobert's Manual of Drug Safety and Pharmacovigilance: Barton Cobert, Jones& Bartlett Publishers.
- 7. Textbook of Pharmacoepidemiolog edited by Brian L. Strom, Stephen E Kimmel, Sean Hennessy, Wiley Publishers.
- 8. A Textbook of Clinical Pharmacy Practice -Essential Concepts and Skills:G. Parthasarathi, Karin Nyfort Hansen, Milap C. Nahat.
- 9. National Formulary of India
- 10. A Text Book of Medicine by Yashpal Munjal
- 11. Text book of Pharmacovigilance: concept and practice by GP Mohanta and PK Manna

# Faculty of Computer Science and Applications

# Smt. Chandaben Mohanbhai Patel Institute of

### Computer Applications (A Constituent Institute of CHARUSAT)



organizes

A Training Program on

Student Development Program 10th Jul, 2017 to 28th Oct, 2017



Charotar University of Science and Technology Changa - 388421 Dist.: Anand, Gujarat

#### **Overview of Program and its content**

We have organized a "Student Development Program" for MCA regular Semester 5, MCA Lateral semester – 3 and MSc. IT semester -3 students. Members of T&P are going to deliver sessions for improving their basics of object oriented, database technologies and aptitude skills from 10th Jul, 2017 to 28th Oct, 2017. Overview of the Content Covered

Numerical Aptitude: Numbers & Algebra |, Percentage, Average, Speed and Distance, Ratio and Proportion, Permutation and Combination, Object Oriented concepts and database fundamentals

Targeted Audience: MCA L Semester III,

M.Sc. (IT) Semester III,

 $MCA \ Semester-V$ 

#### **Resource Persons**

Dr. Jaimin N Undavia

Dr. Chirag Patel

Mr. Nilay Ganatra

Ms. Shreya Mahida

#### CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY Faculty of Computer Science & Applications Smt. Chandaben Mohanbhai Patel Institute of Computer Applications Student Development Program

A. Objective of the Course: The main objectives of the course are

- The objective of the course is to enhance the candidate's aptitude. It also helps the students to find their weakness and strength.
- The students will be able to understand the importance of communication skills and this course will help them in achieving the expertise in communication skills.
- It is important for student's professional development.

#### B. Outline of the Course:

Sr. No.	Title of the Unit	Minimum Number of Hours
1	General Aptitude	22
2	Domain Fundamental	6
3	Soft Skills	4

#### Total hours: 32

#### C. Detail Syllabus

1	General Aptitude	22 Hours
1.1	Percentage	
1.2	Profit Loss Discount	
1.3	Time Speed Distance	
1.4	Time & Work	
1.5	Ratio Proportion	
1.6	Allegation & Mixtures	
1.7	Permutations & Combination	
1.8	Probability	

1.9	Data Interpretation	
2	Domain Fundamental	6 Hours
2.1	Object Oriented Concepts	
2.2	Database Fundamentals	
3	Soft Skills	4 Hours
3.1	Resume Building	
3.2	Interview skill, GD Skill	
3.3	Communication	

#### D. Instructional Method and Pedagogy:

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed.
- Lectures will be conducted with the aid of multi-media projector, black board, OHP and or Microsoft Teams.
- Attendance is compulsory.
- Assignments based on course content will be given to the students at the end of each unit/topic and will be evaluated at regular interval.

#### E. Students Learning Outcomes:

- The Students must at the end of the course be able to: Understand the concept of communication skill and soft skill.
- Students can solve the complex problem of Quantitative aptitude and logical reasoning.
- Students will be able to understand the domain fundamental course in depth.

#### F. Recommended Study Material:

- 1. Quantitative Aptitude by Dr. R S Aggarwal.
- 2. Database Fundamentals by Navathe
- 3. Object Oriented Programming using C++ by Balaguruswami

# Faculty of Management Studies



# 30 Hours Bridge Course for fresher MBA | PGDM Students on

# **COMMUNICATION SKILLS-I**

Take your Managerial Communication to the Next Level!

August 03-10, 2017 | 30 Hours | 9:10 AM – 4:20 PM

• **Objectives:** To hone basic linguistic and communication skills; learn styles of communication and gain insights into how to deal with people with different communication styles; help learners use the language effectively for various functions

#### **Course Contents**

**An Introduction to Communication** 

• Communication: Definition, Process, Barriers; Introduction to C's of Communication; Types of Communication in the Professional World

**Introduction to Listening Skills** 

Listening: Need and Significance; Types of Listening; Techniques to improve Listening Skills
Introduction to Reading Skills

• Introduction to the importance of Reading Skills; Reading different types of texts; Reading, Interpreting and Analyzing; Reading and Interpreting Reports and Case Studies

**Introduction to Writing Skills** 

• Basics of good formal Writing; Good Writing Skills: Paraphrasing and Summarising; Writing for Professional purposes : Report, Emails

**Presentation Skills** 

• Basics of Public Speaking in a formal context; Understanding the art of Good Speaking: Use of Rhetoric; Developing Effective Presentation Skills: From audience analysis to preparing effective PowerPoint presentations

Faculty Coordinator: Dr. Bhaskar Pandya (9824269101) HSS Department, I<sup>2</sup>IM



INDUKAKA IPCOWALA INSTITUTE OF MANAGEMENT (I<sup>2</sup>IM) FACULTY OF MANAGEMENT STUDIES (FMS) DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES (HSS)

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MANAGEMENT STUDIES DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES MBA Programme A Bridge Course on Communication Skills – I

#### Scheme:

Semester	Course Name	Contact Hours	Marks	
1	Communication Skills-1	30	100	

#### **Course Objectives:**

- To hone basic linguistic and communication skills (of students) required in a business organization, namely: Listening, Speaking, Reading and Writing
- To help learners develop familiarity with varied styles of communication and gain insights into how to deal with people with different communication styles
- To help learners use the language effectively for various functions

#### **Course Components:**

Module No.	Title/Topic	Contact Sessions
1	An Introduction to Communication	04
	Communication: Definition, Process, Barriers	
	<ul> <li>Introduction to C's of Communication</li> </ul>	
	Types of Communication in the Professional World	
2	Introduction to Listening Skills	05
	Listening: Need and Significance	
	Types of Listening	
	<ul> <li>Techniques to improve Listening Skills</li> </ul>	
3	Introduction to Reading Skills	07
	<ul> <li>Introduction to the importance of Reading Skills</li> </ul>	
	<ul> <li>Reading different types of texts</li> </ul>	
	Reading, Interpreting and Analyzing	
	Reading and Interpreting Reports and Case Studies	
4	Introduction to Writing Skills	06
	Basics of good formal Writing	
	<ul> <li>Good Writing Skills: Paraphrasing and Summarising</li> </ul>	
	Writing for Professional purposes : Report, Emails	

5	Presentation Skills	08	
	Basics of Public Speaking in a formal context		
	Understanding the art of Good Speaking: Use of Rhetoric		
	Developing Effective Presentation Skills: From audience		
	analysis to preparing effective PowerPoint presentations		
9	<ul> <li>Managing Questions and Answers from the audience</li> </ul>		
	Total	30	

#### Instruction Methods and Pedagogy

The course is based on pragmatic learning. Classroom Teaching will be facilitated by Reading Material, Classroom Discussions, Task-based learning, projects, assignments and various interpersonal activities like case-studies, critical reading, group-work/pair-work, and presentations.

#### **Evaluation:**

Students' performance in the course will be evaluated on a continuous basis through the following components:

SI. No.	Component	Number	Marks per incidence	Total Marks
1	Pre-Test	1	30	30
2	Assignments ( Oral and Written)	4 .	10	40
3	Post-Test	1	30	30
	Total			100

#### **Learning Outcomes:**

At the end of the course, the students should have polished their grammar and developed the ability to communicate effectively in business situations, they should be able to communicate message accurately, handle situation that require thoughtful communication, to use appropriate words and tones and so on.

- Sanjay Kumar and PushpLata (First Edition, 2011), Communication Skills, Oxford University Press, New Delhi
- Krishna Mohan and Meena Banerji (2010), *Developing Communication Skills*, Macmillan Publications India Ltd., New Delhi
- M V Rodriques (2013), Effective Business Communication, Concept Publishing Company (P) Ltd., New Delhi

- Mohan and Meenakshi Raman (2006), Effective English Communication Krishna, Mcgraw-Hill Publishing Company Limited, New Delhi
- Geoffrey Leech & Jan Swartvik (1994), A Communicative Grammar of English, Longman Publications, New York
- o Jones Leo (1979), Functions of English, Cambridge University Press, UK

#### **Reference Reading:**

- o http://www.communicationskills.co.in/index.html
- o <u>http://www.hodu.com/default.htm</u>
- <u>http://www.bbc.co.uk/worldservice/learningenglish</u>
- o http://www.englishlearner.com/tests/test.html
- o http://www.englishclub.com/vocabulary/idioms-body.htm
- o <u>http://dictionary.cambridge.org</u>



# A Bridge Course On English Language and Communication @ 1<sup>st</sup> Semester BBA (July 3-9, 2017)

This course aims at enhancing English Language and Communication of new enrolled students at the institute. Special care will be taken to LSRW Skills of Beginner Learners of English Language. This course will help you gain confidence in using English Language effectively.	<ul> <li>The course will cover following topics:</li> <li>Parts of Speech</li> <li>Tenses and Moods</li> <li>Active-Passive</li> <li>Direct Indirect</li> <li>Interrogatives</li> <li>Introduction to Functional Communication</li> <li>Communication for Persona, Academic and Social Use</li> <li>Practice of Functional Communication</li> </ul>
Timing	9:10 AM to 4:20 PM
Duration	30 Hours

For any query, Contact: Mr. Kaushik Trivedi (9904987756) HSS Department, I<sup>2</sup>IM



INDUKAKA IPCOWALA INSTITUTE OF MANAGEMENT (I<sup>2</sup>IM) FACULTY OF MANAGEMENT STUDIES (FMS) DEPARTMENTOF HUMANITIES AND SOCIAL SCIENCES (HSS)

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MANAGEMENT STUDIES DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES BBA Programme A Bridge Course on English Language and Communication

#### **Teaching Scheme:**

Semester	Course Name	Contact Hours	Marks	
1	English Language and Communication	30	100	

#### **Course Objectives:**

- To develop familiarity with English language and communication
- To learn the basic use of language at personal, academic and professional fronts

#### **Course Components:**

Module No.	Title/Topic	Contact Sessions
1	<ul> <li>English Language</li> <li>Parts of Speech</li> <li>Tenses and Moods</li> <li>Active-Passive</li> </ul>	10
	<ul><li>Direct Indirect</li><li>Interrogatives</li></ul>	
2	<ul> <li>Functional Communication</li> <li>Introduction to Functional Communication</li> <li>Communication for Persona, Academic and Social Use</li> <li>Practice of Functional Communication</li> </ul>	20
	Total	30

#### Instruction Methods and Pedagogy

Teaching will be facilitated by reading material, discussion, task-based learning, projects, assignments and various interpersonal activities like case studies, critical reading, group work, independent and collaborative research, presentations, etc.

#### **Evaluation:**

Students' performance in the course will be evaluated on a continuous basis through the following components:

SI. No.	Component	Number	Marks per incidence	Total Marks
1	Pre-Test	1	30	30
2	Assignments ( Oral and Written)	4	10	40
3	Post-Test	1	30	30
	Total			100

#### Learning Outcomes:

At the end of the course, the students should have developed familiarity and orientation towards English language and basic patterns of communication.

#### **Reference Books:**

- Sanjay Kumar and PushpLata (First Edition, 2011), Communication Skills, Oxford University Press, New Delhi
- Krishna Mohan and Meena Banerji (2010), *Developing Communication Skills*, Macmillan Publications India Ltd., New Delhi
- M V Rodriques (2013), *Effective Business Communication*, Concept Publishing Company (P) Ltd., New Delhi
- Mohan and Meenakshi Raman (2006), Effective English Communication Krishna, Mcgraw-Hill Publishing Company Limited, New Delhi
- Geoffrey Leech & Jan Swartvik (1994), *A Communicative Grammar of English,* Longman Publications, New York
- o Jones Leo (1979), Functions of English, Cambridge University Press, UK

#### **Reference Reading:**

- o http://www.communicationskills.co.in/index.html
- o <u>http://www.hodu.com/default.htm</u>
- o http://www.bbc.co.uk/worldservice/learningenglish
- o http://www.englishlearner.com/tests/test.html
- http://www.englishclub.com/vocabulary/idioms-body.htm
- o <u>http://dictionary.cambridge.org</u>



### Indukaka Ipcowala Institute of Management

## A Bridge Course for the 3<sup>rd</sup> Semester BBA Students

# Academic English and Communication Skills: Speaking and Writing

## June 27 - July 3, 2017 | 30 Hours | 9:10 AM – 4:20 PM

A course aims to hone basic linguistic and communication skills (of students) required in a business organization, namely Speaking and Writing, and help learners develop familiarity with Academic English

#### Content:

- Module-1: An Introduction to Academic English
- Module-2: Basics of Communication and Language Skills
- Module-3: Introduction to Reading Skills
- Module-4: Introduction to Writing and Academic Writing Styles
- Module-5: Basics of effective Speaking

Faculty Coordinator: Mr. Robert Parmar (9925466788) HSS Department, I<sup>2</sup>IM



INDUKAKA IPCOWALA INSTITUTE OF MANAGEMENT (I<sup>2</sup>IM) FACULTY OF MANAGEMENT STUDIES (FMS) DEPARTMENT OF HUMANITIES AND SOCIAL SCIECES (HSS)

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MANAGEMENT STUDIES DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES BBA Programme

#### A Bridge Course onAcademic English and Communication Skills: Speaking and Writing

#### Scheme:

Semester	Course Name	Contact Hours	Marks
3	Academic English and Communication Skills: Speaking and Writing	30	100

#### **Course Objectives:**

- To hone basic linguistic and communication skills namely: Listening, Speaking, Reading and Writing
- To help learners develop familiarity with Academic English
- To help learners use the language fluently in formal contexts

#### **Course Components:**

Module No.	Title/Topic	Contact Sessions	
1	An Introduction to Academic English	04	
	<ul> <li>Academic English : Need and Characteristics</li> </ul>		
	<ul> <li>Role and function of Academic English today</li> </ul>		
	Charecteristics of Academic Writing Styles		
2	Basics of Communication and Language Skills	07	
	Communication and Language		
	Function and Use of Language in a formal Context		
	Basic Language Skills: Listening, Speaking, Reading,		
	Writing		
3	Introduction to Reading Skills	05	
	Basics of Reading Skills		
	Developing Reading Techniques		
	Practicing Reading Comprehension		
4	Introduction to Writing and Academic Writing Styles	06	
	<ul> <li>Mechanics of 'Academic Writing Style'</li> </ul>		

	<ul> <li>Mechanics of Writing : Cohesion and Unity</li> <li>Developing Topic Sentences and Paragraphs</li> </ul>	
5	Basics of effective Speaking     Effective Speaking: Strategies	08
	Tips and Traits of an effective Speaker	
	<ul> <li>Pronunciation, Intonation and Pause</li> </ul>	
	<ul> <li>Speaking in Context : Role plays, Extempore, Debate</li> </ul>	
	Total	30

#### Instruction Methods and Pedagogy

The course is based on pragmatic learning. Classroom Teaching will be facilitated by Reading Material, Classroom Discussions, Task-based learning, projects, assignments and various interpersonal activities like case-studies, critical reading, group-work/pair-work, and presentations.

#### **Evaluation:**

Students' performance in the course will be evaluated on a continuous basis through the following components:

SI. No.	Component	Number	Marks per incidence	Total Marks
1	Pre-Test	1	30	30
2	Assignments ( Oral and Written)	4	10	40
3	Post-Test	1	30	30
	Total			100

#### Learning Outcomes:

At the end of the course, the students should havedeveloped understanding and proficiency in language skills, they should be able to communicate message accurately and speak and present effectively; they should be able to write error free and lucid paragraphs with relative ease and less supervision.

#### **Reference Books:**

• Sanjay Kumar, P. L. (2015). Communication Skills. Oxford University Press India. (for Module I, III and V)

• Meenakshi Raman, P. S. (2006). Business Communication. Meenakshi Raman, Prakash Singh. (for module I and IV)

• J.P Parikh, AnshuSurve, Swarnabharati, AsmaBahrainwala (2011). Business Communication: Basic Concepts and Skills.

- R.K. Bansal, J.B. Harrison (2000). Spoken English.
- ParulPopat&KaushalKotadia. (2015).Communication Skills. Pearson Publication



## Indukaka Ipcowala Institute of Management (I<sup>2</sup>IM)

## A Bridge Course for the 5<sup>th</sup> Semester BBA Students

Academic Writing, Research & Communication Skills

## Sharpen, Learn and Relearn

## June 27- July 3, 2017 | 30 Hours | 9:10 AM - 4:20 PM

Take your Language skills to the next level. Prepare yourself to take on the academic and professional world through terrific Language Skills!!

**Content:** 

- Module-1: Introduction to Academic Writing
- Module-2: Formal Academic Language
- Module-3: Writing for Research
- Module-4: Developing Academic Writing Skills
- Module-5: Presentation skills

Faculty Coordinator: Mr. Vijay Makwana (9998380041) HSS Department, I<sup>2</sup>IM



INDUKAKA IPCOWALA INSTITUTE OF MANAGEMENT (I<sup>2</sup>IM) FACULTY OF MANAGEMENT STUDIES (FMS) DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES (HSS)

#### CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MANAGEMENT STUDIES DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES BBA Programme (5<sup>th</sup> Sem) A Bridge Course onAcademic Writing, Research & Communication Skills

#### **Teaching Scheme:**

Semester	Course Name	Contact Hours	
5	Academic Writing, Research &	30	100
	<b>Communication Skills</b>		

#### **Course Objectives:**

- To hone and develop critical thinking and advanced writing skills for research
- To help learners develop familiarity with academic vocabulary
- To help learners use the language effectively in a formal environment.

#### **Course Components:**

Module No.	e No. Title/Topic	
1	An Introduction to Academic Writing	
	Basics of Academic Writing : Need and Significance	
	<ul> <li>Developing critical Thinking for academic writing and research</li> </ul>	
2	Formal Language for Academic purposes	05
	Basic Language functions: Greeting and Introductions	
	<ul> <li>Interpretation and sharing of opinions</li> </ul>	
	Academic Vocabulary	
3	Writing for Research	
	Characteristics of Research Writing	
	<ul> <li>Formats of documents needed for Writing for Research</li> </ul>	
4	Introduction to Writing Skills	08
	<ul> <li>Good Writing Skills: Paraphrasing and Summarizing</li> </ul>	
	Writing for Professional purposes : Report, Emails,	
	Abstract	
	Learn to quote and cite: Introduction to style manuals	
5	Presentation Skills	06
	Presenting in a formal context	

<ul> <li>Preparation and Delivery in groups</li> </ul>	
Managing Q & A	
Total	30

#### Instruction Methods and Pedagogy

The course is based on pragmatic learning. Classroom Teaching will be facilitated by Reading Material, Classroom Discussions, Task-based learning, projects, assignments and various interpersonal activities like case-studies, critical reading, group-work/pair-work, and presentations.

#### **Evaluation:**

Students' performance in the course will be evaluated on a continuous basis through the following components:

SI. No.	Component	Number	Marks per incidence	Total Marks
1	Pre-Test	1	30	30
2	Assignments ( Oral and Written)	4	10	40
3	Post-Test	1	30	30
	Total			

#### Learning Outcomes:

At the end of the course, the students should have polished their basic writing skills and developed the ability to communicate formally in business and academic situations, they should be able to communicate message accurately, handle situation that require thoughtful communication, to use appropriate words and tones and so on. They should be able to work on small academic projects within minimal language based guidance.

#### **Reference Books:**

Academic Writing for International Students, Routledge Academic Writing: A Guide for Management Students and Researchers. Monipally, M.M. &Pawar, B.S. Sage. 2010. NewDelhi *Effective Academic Writing Level - 1,2,3,4 (Second Edition) By:* Alice Savage, Patricia Mayer, MasoudShafiei, Rhonda Liss, & Jason Davis; *Publisher:Oxford* Writing Your Thesis (2<sup>nd</sup>Edition) by Paul Oliver,Sage

# **Faculty of Sciences**





Department of Biological Sciences PD Patel Institute of Applied Sciences Charotar University of Science and Technology

## **SCIENTIFIC SEMINARS 2017-18**

Department of Biological Sciences, PDPIAS, CHARUSAT has introduced a course on Scientific Seminars for improving academic speaking skill of the students in the form of presentation of Seminars.

It is a Value added course (with more than 30 contact hours per year) whose objective is to improve the oratory skills of the students with enhancement of their confidence in public speaking. The course is non-credited and has been introduced to last year (semester VI) of Bachelor of Science (Biology) students.

Date and Time : Every second and fourth Saturday of the semester (Except third Saturday and declared holiday).

#### Scientific Seminars 2017-18

#### CREDITS: 0B.Sc. semester VI (BT/BC/MI)HOURS: Min 30h

Department of Biological Sciences, PDPIAS, CHARUSAT has introduced a course on Scientific Seminars for improving academic speaking skill of the students in the form of presentation of Seminars.

It is a Value added course (with more than 30 contact hours per year) whose objective is to improve the oratory skills of the students with enhancement of their confidence in public speaking. The course is non-credited and has been introduced to last year (semester VI) of Bachelor of Science (Biology) students.

Date and Time : Every second and fourth Saturday of the semester (Except third Saturday and declared holiday).

#### **COURSE DESCRIPTION:**

#### 1. Distribution of students among the teaching faculties as mentors

Students allotment to teachers for overall guidance and mentorship of improvement of students oratory skills

#### 2. Selection and discussion of the topic selected by student with the respective mentors.

Students have to interact with their respective mentors about the topics selected and guidance for analysis of data and literature available for the selected topic to be presented.

#### **3.** Preparation of the presentation of the topic by the student in guidance of the mentor Students prepare the presentation under the mentor guideship for comfortable delivery of academic seminars

#### 4. Presentation of the topic by the student in front of the faculties and students

Students prepare and demonstrate their final seminar in front of the staff and student assembly in the department.

#### **COURSE OUTCOME:**

- Seminars help students by increasing their English fluency, confidence of speaking and improvement of conversational skills.
- The student will be able to read, understand, discuss and present complex subjects in the field of Biology.

Dr. Aditi Buch (Course Incharge)

Dr. Janki Phakkar (HOD, Biological Sciences) DEPT. OF BIOLOGICAL SCIENCES P. D. PATEL INSTITUTE OF APPLIED SCIENCE3 CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY CHARUSAT CAMPUS, CHANGA-388421 DI. ANAND (GUJARAT)



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