



## Dr. N.G.P. ARTS AND SCIENCE COLLEGE

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)  
Approved by Government of Tamil Nadu and Accredited by NAAC with 'A++' Grade (3<sup>rd</sup> Cycle-3.64 CGPA)  
Dr. N.G.P. - Kalapatti Road, Coimbatore-641048, Tamil Nadu, India  
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### REGULATIONS 2023-24 for Post Graduate Programme (Outcome Based Education model with Choice Based Credit System)

#### M.Sc., Hospital Administration

(For the students admitted during the academic year 2023-24 and onwards)

#### Programme: M.Sc., Hospital Administration

##### Eligibility

Candidates for admission to the first year of the M.Sc., Hospital Administration full time degree course shall be required to possess a pass in "Bachelor's Degree" of any University and as per the norms set by the Government of Tamil Nadu or an Examination accepted as equivalent hereto by the Academic Council, subject to such conditions as may be described there to are permitted to appear and qualify for the M.Sc., Hospital Administration Post Graduate Degree Examination of this College after a course of study of two academic years.

##### Programme Educational Objectives

The Curriculum is designed to attain the following learning goals which students shall accomplish by the time of their graduation:

1. To learn efficient methods of Hospital Administration
2. To understand the concepts of management with relation to modern hospitals
3. To prepare and train qualified and efficient administrators to manage hospitals
4. To prepare and understand the principles of management and apply, when providing Quality patient Care in selected areas of Clinical Specialty in the Hospital and Community



5. To offer platform for working professionals in hospitals to achieve desired knowledge, skills and attitude in the field of hospital administration and enhance culture of professionalism in their approach.
6. To improve the ability of hospital based professionals in ethical decision making and implementation in key result areas of Hospital Administration.

#### PROGRAMME OUTCOMES:

On the successful completion of the program, the following are the expected outcomes.

PO Number	PO Statement
PO1	To understand the major concepts in the functional areas of accounting, marketing, finance, information technology, and management with relation to hospitals.
PO2	To build skills in the use of managerial tools of planning, organizing, and achieve optimal resource utilization in hospital settings.
PO3	Use oral and written communication skills to meet the needs of various audiences.
PO4	Use team, and organizational skills, supervision, and coaching techniques to effectively lead across organization, department, and work group units to meet diverse stakeholder and organizational goals in a variety of healthcare environments.
PO5	Develop innovative solutions to strategic, tactical and operational issues in managing healthcare systems and associated information technology through the combined use of information, data analytics, organizational knowledge, talent management, and critical and design thinking.





**M.Sc. HOSPITALADMINISTRATION**  
**Credit Distribution**

Subjects	No.of Papers	Credit	Semester No.
Core	14	56	I to III
Elective	3	3 x 4 =12	I to III
EDC	1	1 x 3 =3	II
Computer practical	1	1 x 2 = 2	I
Hospital Internship	3	3 x 3 = 9	I to III
Hospital Training	1	1 x 2 = 2	III
Project work	1	1 x 8 = 8	IV
<b>Total</b>	<b>24</b>	<b>92</b>	



**CURRICULUM**  
**M.Sc. HOSPITAL ADMINISTRATION**

Course Code	Course Category	Course Name	L	T	P	Exam (h)	Max Marks			Credits
							CIA	ESE	Total	
First Semester										
236HA2A1CA	Core – I	Management and Organisational Behaviour	4	1	-	3	25	75	100	4
236HA2A1CB	Core – II	Concept of Health and Epidemiology	4	-	-	3	25	75	100	4
236HA2A1CC	Core – III	Hospital Non-Clinical Operations Management	4	-	-	3	25	75	100	4
236HA2A1CD	Core- IV	Hospital Clinical Operations Management	4	-	-	3	25	75	100	4
236HA2A1CE	Core – V	Biostatistics and Operations Research	4	1	-	3	25	75	100	4
236HA2A1CP	Core Practical	Spreadsheet Management	-	-	4	3	40	60	100	2
236HA2A1CT	Hospital Internship- I	Hospital Supportive Services	-	-	-	3	40	60	100	3
236HA2A1DA	DSE -I	Total Quality Management-Tools and Techniques	4	-	-	3	25	75	100	4
236HA2A1DB		Entrepreneurship								
236HA2A1DC		Technology in Healthcare								
Total			24	2	4	-	-	-	800	29




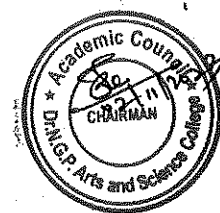


Course Code	Course Category	Course Name	L	T	P	Exam (h)	Max Marks			Credits
							CIA	ESE	Total	
Second Semester										
236HA2A2CA	Core - VI	Hospital Architecture, Planning, Design and Maintenance	4	1	-	3	25	75	100	4
236HA2A2CB	Core -VII	Healthcare Economics	4	-	-	3	25	75	100	4
236HA2A2CC	Core -VIII	Human Resource Management and Industrial Relations	4	1	-	3	25	75	100	4
236HA2A2CD	Core- IX	Materials Management	4	-	-	3	25	75	100	4
236HA2A2CE	Core -X	Healthcare Marketing and Strategic Management	4	1	-	3	25	75	100	3
236HA2A2CT	Hospital Internship II	Hospital Clinical Services	-	-	3	3	40	60	100	3
236HA2A2DA	DSE -II	Application of Quality in Healthcare	4	-	-	3	25	75	100	4
236HA2A2DB		Innovation in Entrepreneurship								
236HA2A2DC		Healthcare Data Management								
Total			24	3	3	-	-	-	700	26

812V

BoS Chairman/HoD  
Department of Hospital Administration  
Dr. N. G. P. Arts and Science College  
Coimbatore - 641 048

 <b>Dr.N.G.P. Arts and Science College</b>		
<b>APPROVED</b>		
BoS- 16 <sup>th</sup> 14/10/23	AC- 16 <sup>th</sup> 13/12/23	GP- 21 <sup>st</sup> 05/01/24




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Course Code	Course Category	Course Name	L	T	P	Exam (h)	Max Marks			Credits
							CIA	ESE	Total	
Third Semester										
236HA2A3CA	Core- XI	Quality Assurance in Healthcare	4	1	-	3	50	50	100	4
236HA2A3CB	Core -XII	Healthcare Laws	4	-	-	3	25	75	100	4
236HA2A3CC	Core- XIII	Hospital Information System	4	-	-	3	25	75	100	4
235CO2A3EA	EDC	Financial and Management Accounting	4	1	-	3	25	75	100	4
236HA2A3CD	Core -XIV	Research Methods for Management	4	1	-	3	25	75	100	4
236HA2A3CV	Hospital Internship- III	Minor Project	-	-	3	3	40	60	100	3
236HA2A3DA	DSE -III	Quality Accreditations in Healthcare	4	-	-	3	25	75	100	4
236HA2A3DB		Healthcare Entrepreneurship								
236HA2A3DC		Data Visualization								
236HA2A3CT	Hospital Training	Hospital Training (30 days) India or Abroad	-	-	-	3	40	60	100	2
Total			24	3	3	-	-	-	800	29

*Jma V*  
**BoS Chairman/HoD**  
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<b>APPROVED</b>		
BoS - 02.04.24	AC - 17.04.24	GB -



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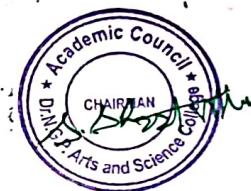


Course Code	Course Category	Course Name	L	T	P	Exam (h)	Max Marks			Credits
							CIA	ESE	Total	
Fourth Semester										
236HA2A4CV	Core -XV	Project and Viva voce	-	-	16	3	80	120	200	8
Total			-	-	16	3	80	120	200	8
*Grand Total									2500	92

*Hma.V*

**BoS Chairman/HoD**  
Department of Hospital Administration  
Dr. N. G. P. Arts and Science College  
Coimbatore – 641 048

 <b>Dr.N.G.P. Arts and Science College</b>		
<b>APPROVED</b>		
<b>BoS-</b> 8/11/2024	<b>AC -</b> 26/11/2024	<b>GB -</b>



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### DISCIPLINE SPECIFIC ELECTIVE

Students shall select the desired course of their choice in the listed elective course during Semesters I, II, III

#### Semester I (Elective I)

##### List of Elective Courses

S. No.	Course Code	Course Name
1	236HA2A1DA	Total Quality Management-Tools and Techniques
2	236HA2A1DB	Entrepreneurship
3	236HA2A1DC	Technology in Healthcare

#### Semester II (Elective II)

##### List of Elective Courses

S. No.	Course Code	Course Name
1	236HA2A2DA	Application of Quality in Healthcare
2	236HA2A2DB	Innovation in Entrepreneurship
3	236HA2A2DC	Healthcare Data Management

#### Semester III (Elective III)

##### List of Elective Courses

S. No.	Course Code	Course Name
1	236HA2A3DA	Quality Accreditations in Healthcare
2	236HA2A3DB	Healthcare Entrepreneurship
3	236HA2A3DC	Data Visualization





### EXTRA CREDIT COURSES

The following are the courses offered under self study to earn extra credits:

S. No.	Course Code	Course Name
1	236HA2ASSA	Innovation, IPR and Entrepreneurship
2	236HA2ASSB	Brand Management
3	236HA2ASSC	Hospital Hazards Management



**PG REGULATION (R5)**  
**(2023-24 and onwards)**  
**(OUTCOME BASED EDUCATION WITH CBCS)**

Effective from the academic year 2023-24 and applicable to the students admitted to the Degree of Master of Arts/Commerce/Management/Science.

**1. NOMENCLATURE**

**1.1 Faculty:** Refers to a group of programmes concerned with a major division of knowledge. Eg. Faculty of Computer Science consists of Programmes like Computer Science, Information Technology, Computer Technology, Computer Applications, Cognitive Systems, Artificial Intelligence and Machine Learning and Cyber Security and Data Analytics etc.

**1.2 Programme:** Refers to the Master of Arts/Management/Commerce/Science Stream that a student has chosen for study.

**1.3 Batch:** Refers to the starting and completion year of a programme of study. Eg. Batch of 2023-2025 refers to students belonging to a 2-year Degree programme admitted in 2023 and completing in 2025.

**1.4 Course:** Refers to component of a programme. A course may be designed to involve lectures / tutorials / laboratory work / seminar / project work/ practical training / report writing / Viva voce, etc or a combination of these, to effectively meet the teaching and learning needs and the credits may be assigned suitably.

**a) Core Courses** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

**b) Extra Departmental Course (EDC):** A course chosen generally from a related discipline/subject, with an intention to seek exposure in the discipline relating to the core domain of the student.





c) **Discipline Specific Elective Course (DSE):** Elective courses are offered under main discipline/ subject of study.

**d) Internship/Industrial Training (IT)**

Students must undertake industrial / institutional training for a minimum of 15 days during the II semester summer vacation. The students will submit the report for evaluation during III semester.

e) **Project Work:** It is considered as a special course involving application of knowledge in problem solving/analyzing/exploring a real-life situation. The Project work will be given in lieu of a Core paper.

f) **Extra credits** Extra credits will be awarded to a student for achievements in co-curricular activities carried out outside the regular class hours. The guidelines for the award of extra credits are given in section two, these credits are not mandatory for completing the programme.

g) **Advanced Learner Course (ALC):** ALC is doing work of a higher standard than usual for students at that stage in their education. Research work / internships carried out in University/ Research Institutions/ Industries of repute in India or abroad for a period of 15 to 30 days.

## 2. STRUCTURE OF PROGRAMME

- Core Course
- Extra Departmental Course (EDC)
- Discipline Specific Elective (DSE)
- Industrial Training (IT)
- Project

## 3. DURATION OF THE PROGRAMME

M.Sc. /M.Com. / M.A. Programme must be completed within 2 Years (4 semesters) and maximum of 4 Years (8 semesters) from the date of acceptance to the programme. If not, the candidate must enroll in the course determined to be an equivalent by BoS in the most recent curriculum recommended for the Programme.



#### 4. REQUIREMENTS FOR COMPLETION OF A SEMESTER

Every student shall ordinarily be allowed to keep terms for the given semester in a program of his/ her enrolment, only if he/ she fulfills at least seventy five percent (75%) of the attendance taken as an average of the total number of lectures, practicals, tutorials, etc. wherein short and/or long excursions/field visits/study tours organised by the college and supervised by the faculty as envisaged in the syllabus shall be credited to his attendance. Every student shall have a minimum of 75% as an overall attendance.

#### 5. EXAMINATIONS

The end semester examinations shall normally be conducted after completing 90 working days for each semester. The maximum marks for each theory and practical course as follows,

##### Mark distribution for Theory Courses

Continuous Internal Assessment (CIA): 25 Marks

End Semester Exams (ESE) : 75 Marks

Total : 100 Marks

##### i) Distribution of Internal Marks

S.No.	Particulars	Distribution of Marks
1	CIA I (2.5 Units) (On completion of 45 <sup>th</sup> working day)	5
2	Model ( All 5 Units) (On completion of 85 <sup>th</sup> working day)	5
3	Attendance	05
4	Library Usage	05
5	Skill Enhancement *	05
<b>Total</b>		<b>25</b>

##### Breakup for Attendance Marks:

S.No	Attendance Range	Marks Awarded
1	95% and Above	5
2	90% - 94%	4
3	85% - 89%	3
4	80% - 84%	2
5	75% - 79%	1





**Note:**

Special Cases such as NCC, NSS, Sports, Advanced Learner Course, Summer Fellowship and Medical Conditions etc. the attendance exemption may be given by principal and Mark may be awarded.

**Break up for Library Marks:**

S.No	Attendance Range	Marks Awarded
1	10h and above	5
2	9h- less than 10h	4
3	8h - less than 9h	3
4	7h - less than 8h	2
5	6h - less than 7h	1

**Note:**

In exception, the utilization of e-resources of library will be considered.

**\*Components for "Skill Enhancement" may include the following:**

Class Participation, Case Studies Presentation/Term paper, Field Study, Field Survey, Group Discussion, Term Paper, Presentation of Papers in Conferences, Industry Visit, Book Review, Journal Review, e-content Creation, Model Preparation, Seminar and Assignment.

**Components for Skill Enhancement**

Any one of the following should be selected by the course coordinator

S.No.	Skill Enhancement	Description
1	Class Participation	<ul style="list-style-type: none"> <li>Engagement in class</li> <li>Listening Skills</li> <li>Behaviour</li> </ul>
2	Case Study Presentation/ Term Paper	<ul style="list-style-type: none"> <li>Identification of the problem</li> <li>Case Analysis</li> <li>Effective Solution using creativity/imagination</li> </ul>
3	Field Study	<ul style="list-style-type: none"> <li>Selection of Topic</li> <li>Demonstration of Topic</li> <li>Analysis &amp; Conclusion</li> </ul>
4	Field Survey	<ul style="list-style-type: none"> <li>Chosen Problem</li> <li>Design and quality of survey</li> <li>Analysis of survey</li> </ul>



5	Group Discussion	<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Subject knowledge</li> <li>• Attitude and way of presentation</li> <li>• Confidence</li> <li>• Listening Skill</li> </ul>
6	Presentation of Papers in Conferences	<ul style="list-style-type: none"> <li>• Sponsored</li> <li>• International/National</li> <li>• Presentation</li> <li>• Report Submission</li> </ul>
7	Industry Visit	<ul style="list-style-type: none"> <li>• Chosen Domain</li> <li>• Quality of the work</li> <li>• Analysis of the Report</li> <li>• Presentation</li> </ul>
8	Book Review	<ul style="list-style-type: none"> <li>• Content</li> <li>• Interpretation and Inferences of the text</li> <li>• Supporting Details</li> <li>• Presentation</li> </ul>
9	Journal Review	<ul style="list-style-type: none"> <li>• Analytical Thinking</li> <li>• Interpretation and Inferences</li> <li>• Exploring the perception if chosen genre</li> <li>• Presentation</li> </ul>
10	e-content Creation	<ul style="list-style-type: none"> <li>• Logo/ Tagline</li> <li>• Purpose</li> <li>• Content (Writing, designing and posting in Social Media)</li> <li>• Presentation</li> </ul>
11	Model Preparation	<ul style="list-style-type: none"> <li>• Theme/ Topic</li> <li>• Depth of background Knowledge</li> <li>• Creativity</li> <li>• Presentation</li> </ul>
12	Seminar	<ul style="list-style-type: none"> <li>• Knowledge and Content</li> <li>• Organization</li> <li>• Understanding</li> <li>• Presentation</li> </ul>
13	Assignment	<ul style="list-style-type: none"> <li>• Content and Style</li> <li>• Spelling and Grammar</li> <li>• References</li> </ul>





## ii) Distribution of External Marks

Total	:	75
Written Exam	:	75

## Marks Distribution for Practical course

Total	:	100
Internal	:	40
External	:	60

## i) Distribution of Internals Marks

S. No.	Particulars	Distribution of Marks
1	Experiments/Exercises	15
2	Test 1	10
3	Test 2	10
4	Observation Notebook	05
Total		40

## ii) Distribution of External Marks

S.No.	Particulars	External Marks
1	Practical	40
2	Record	10
3	Viva- voce	10
Total		60

Practical examination shall be evaluated jointly by Internal and External Examiners.

## A) Mark Distribution for Project

Total	:	200
Internal	:	80
External	:	120

## i) Distribution of Internal Marks

S.No.	Particulars	Internal Marks
1	Review I	30
2	Review II	40
3	Attendance	10
Total		80



## ii) Distribution of External Marks

S.No	Particulars	External Marks
1	Project Work & Presentation	100
2	Viva -voce	20
<b>Total</b>		<b>120</b>

Evaluation of Project Work shall be done jointly by Internal and External Examiners.

## 6 . Credit Transfer

a. Upon successful completion of 1 NPTEL Course (4 Credit Course) recommended by the department, during Semester I to II, a student shall be eligible to get exemption of one 4 credit course during the 3<sup>rd</sup> semester. The proposed NPTEL course should cover content/syllabus of exempted core paper in 3<sup>rd</sup> semester.

S. No.	Course Code	Course Name	Proposed NPTEL Course	Credit
1			Option - 1 Paper title	4
			Option - 2 Paper title	
			Option - 3 Paper title	

b. Upon successful completion of 2 NPTEL Courses (2 Credit each) recommended by the department, during Semester I to II, a student shall be eligible to get exemption of one 4 credit course during the 3<sup>rd</sup> semester. Out of 2 NPTEL proposed courses, at least 1 course should cover content/syllabus of exempted core paper in 3<sup>rd</sup> semester.

Mandatory

The exempted core paper in the 3<sup>rd</sup> semester should be submitted by the students for approval before the end of 2<sup>nd</sup> semester

Credit transfer will be decided by equivalence committee



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S. No.	Course Code	Course Name	Proposed NPTEL Course	Credit
1			Option - 1 Paper title	2
			Option - 2 Paper title	
			Option - 3 Paper title	
2			Option - 1 Paper title	2
			Option - 2 Paper title	
			Option - 3 Paper title	

NPTEL Courses to be carried out during semester I – II.					
S. No.	Student Name	Class	Proposed NPTEL Course		Proposed Course for Exemption
			Course I	Option 1- Paper Title Option 2- Paper Title Option 3- Paper Title	Any one Core Paper in 3 <sup>rd</sup> Semester
			Course II	Option 1- Paper Title Option 2- Paper Title Option 3- Paper Title	
Class Advisor		HoD		Dean	

### 7. Internship/Industrial Training

#### Mark Distribution for Internship/ Industrial Training

Total	:	100
Internal	:	40
External	:	60

#### i) Distribution of Internal Marks

S.No.	Particulars	Internal Marks
1	Review I	15
2	Review II	20
3	Attendance	5
Total		40



## ii) Distribution of External Marks

S.No	Particulars	External Marks
1	Internship /Industrial training Presentation	40
2	Viva -voce	20
<b>Total</b>		<b>60</b>

Internship/ Industrial training shall be evaluated jointly by Internal and External Examiners.

## 9. Extra Credits: 10

Earning extra credit is not essential for programme completion. Student is entitled to earn extra credit for achievement in Curricular/Co-Curricular/ Extracurricular activities carried out other than the regular class hours.

A student is permitted to earn a maximum of 10 extra Credits during the programme period. A maximum of 1 credit under each category is permissible.

Category	Credit
Self study Course	1
CA/ICSI/CMA (Foundations)	1
CA/ICSI/CMA (Inter)	1
Sports and Games	1
Publications / Conference Presentations (Oral/Poster)/ Awards	1
Innovation / Incubation / Patent / Sponsored Projects / Consultancy	1
Representation in State / National level celebrations	1
Awards/Recognitions/Fellowships	1
<b>Advanced Learner Course (ALC)*</b>	<b>2</b>

Credit shall be awarded for achievements of the student during the period of study only.

## GUIDELINES

### Self study Course

A pass in the self study courses offered by the department.

The candidate should register the self study course offered by the department only in the III semester.



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**CA/ICSI/CMA(Foundations)**

Qualifying foundation in CA/ICSI/CMA / etc.

**CA/ICSI/CMA(Inter)**

Qualifying Inter in CA/ICSI/CMA / etc.

**Sports and Games**

The Student can earn extra credit based on their Achievement in sports in University/  
State / National/ International.

**Publications / Conference Presentations (Oral/Poster)**

Research Publications in Journals

Oral/Poster presentation in Conference

**Innovation / Incubation / Patent / Sponsored Projects / Consultancy**

Development of model/ Products /Prototype /Process/App/Registration of Patents/  
Copyrights/Trademarks/Sponsored Projects /Consultancy

**Representation in State/ National level celebrations**

State / National level celebrations such as Independence day, Republic day Parade,  
National Integration camp etc.

**Awards/Recognitions/Fellowships**

Regional/ State / National level awards/ Recognitions/Fellowships

**\*Advanced Learner Course (ALC):**

ALC is doing work of a higher standard than usual for students at that stage in their  
education.

Research work/internships carried out in University/ Research Institutions/ Industries  
of repute in India or abroad for a period of 15 to 30 days will be considered as  
Advanced Learners Course.



### QUESTION PAPER PATTERN

#### CIA Test I : [1½ Hours-2.5 Units] - 25 Marks

SECTION	MARKS	DESCRIPTION	TOTAL	Remarks
Section - A	8 x 0.5= 04 Marks	MCQ	25 Marks	Marks secured will be converted To 5 mark
Section - B	3 x 2 = 06 Marks	Answer ALL Questions Either or Type ALL Questions Carry Equal Marks		
Section - C	3 x 05 = 15 Marks			

#### CIA Test II/ Model [3 Hours-5 Units] - 75 Marks

SECTION	MARKS	DESCRIPTION	TOTAL	Remarks
Section - A	10 x 1 = 10 Marks	MCQ		
Section - B	5 x 3 = 15 Marks	Answer ALL Questions (Either or Type Questions) Each Questions Carry Equal Marks	75 Marks	Marks secured will be converted To 5 mark
Section - C	5 x 8 = 40 Marks			
Section - D	1 x 10 = 10 Marks	Compulsory Question		

#### End Semester Examination [3 Hours-5 Units] - 75 Marks

SECTION	MARKS	DESCRIPTION	TOTAL
Section - A	10 x 1 = 10 Marks	MCQ	75 Marks
Section - B	5 x 3 = 15 Marks	Answer ALL Questions (Either or Type Questions) Each Questions Carry Equal Marks	
Section - C	5 x 8 = 40 Marks		
Section - D	1 x 10 = 10 Marks	Compulsory Question	





Course Code	Course Name	Category	L	T	P	Credit
236HA2A1CA	MANAGEMENT AND ORGANISATIONAL BEHAVIOUR	CORE	4	1	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- a basic framework to apply management theories and organizational behavior techniques in various types of healthcare organizations
- the interpersonal and communication skills to be an effective leader
- conceptual and technical frameworks of leadership and the role of managers

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	Understand fundamental concepts of management	K3
CO2	Apply organizational planning systems and Decision making in health care	K3
CO3	Analyze functions of management, evaluate and develop organizational skills in health care management	K5
CO4	Analyze the principles of organizational behaviour dimensions in healthcare management	K5
CO5	Assess the effectiveness of healthcare administration skills using concepts of organizational climate	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓	✓	✓	
CO2		✓		✓	✓
CO3	✓			✓	✓
CO4			✓	✓	
CO5		✓			✓



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<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A1CA	MANAGEMENT AND ORGANISATIONAL BEHAVIOUR	SEMESTER I
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Total Credits: 4

Total Instruction Hours: 60 h

### Syllabus

#### Unit I Introduction to Management 12 h

Evolution of Management science: Definition- nature- principle and process of management -management as science or art – management as profession – Managerial Roles –Management Theories : Classical- Behavioral- Modern theory

#### Unit II Planning and Organising 12 h

Planning: Basics of planning- steps- types of plans – Strategic Management process. Organization: Meaning and definition - organization structure - delegation of authority- Decision making- Centralization - Decentralization.

#### Unit III Directing and Controlling 12 h

Staffing: Man power planning and resourcing - Direction: Principles- Motivation techniques - Hierarchy of needs theory – McClelland's theory – ERG theory – McGregor's Theory X and Theory Y - Control: process- quality- control techniques.

#### Unit IV Organisational Behaviour 12 h

Definition- Key elements - Need - Scope of Organisational Behaviour - models – Personality- Perception – Learning and Behaviour - Group dynamics- Leadership – Leader Vs Manager- styles- Theories

#### Unit V Organisational Dynamics 12 h

Organisational Climate – Power and Politics-Conflict- Organisational change - Resistance to change- Management of change- Organisational development- Organisational Communication- Principles- Channels- Barriers.

#### Note:

1. Case study on Managerial Roles
2. Case study on Decision Making
3. Case study on Staffing and Motivation
4. Case study on Teamwork, Perception, Personality and Leadership
5. Case study on Organizational change management, conflict management



**Text Books**

- 1 Ramasamy.T. 2013. Principles of Management. Himalaya Publishing House, Mumbai
- 2 L.M.Prasad. Edition 2014. Organisational Behaviour. Sultan and Chand sons, Delhi. Reprinted 2004

**References**

- 1 Prasad.L.M. 2016. Principles and practice of Management. Sultan Chand and sons, New Delhi. ( Ninth Edition)
- 2 Stephen.P.Robbins. 14th Edition. 2011. Organisational behaviour. PHI Publishers, New Delhi
- 3 David H. Holt. 1993. Management: principles and practices, Prentice Hall PTR, United States
- 4 <https://www.gurukpo.com/principles-and-practices-of-management>





Course Code	Course Name	Category	L	T	P	Credit
236HA2A1CB	CONCEPT OF HEALTH AND EPIDEMIOLOGY	CORE	4	-	-	4

**PREAMBLE**

This course has been designed for students to learn and understand

- implications of personal and societal behaviour on disease
- the broad view of epidemiological principles of disease
- the general aspects of health programmes

**COURSE OUTCOMES**

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

CO Number	CO Statement	Knowledge Level
CO1	Understand about concept of health, different types of disease causation, and demonstrate knowledge	K4
CO2	Understand the knowledge on basic anatomy, physiology and different functions of human body	K4
CO3	Understand various epidemiological principles and strategic models in conducting field studies	K5
CO4	Understand various aspects related to Infection control and Isolation	K4
CO5	Understand various health programmes in India and criticize their current progress on public health	K4

**MAPPING WITH PROGRAMME OUTCOMES**

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2	✓				
CO3		✓		✓	✓
CO4		✓			
CO5	✓	✓			✓



<input checked="" type="checkbox"/>	Skill Development	<input type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A1CB	CONCEPT OF HEALTH AND EPIDEMIOLOGY	SEMESTER I
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

**Unit I** Concept of Health and Diseases 8 h

Concept of health - Definition and dimensions of health - Spectrum of Health - Determinants of Health- Indicators of health- Concept of disease - Causation of Disease - Natural History of Disease - Disease classification - Concept of disease control - Concept of prevention.

**Unit II** Basic Anatomy and Physiology & Human System 10 h

Introduction -The Cell - The tissues - Organs and Systems - Skeletal system, Blood and Blood Components - Cardiovascular System - Excretory System - Respiratory System - Digestive System - Central Nervous System - Reproductive System

**Unit III** Epidemiology 12 h

Definition and basic concepts of epidemiology- Basic measurement of disease Frequency - Mortality and Morbidity - Infectious disease epidemiology - Epidemic outbreak Investigation

**Unit IV** Infection Control 9 h

Nosocomial infection- Asepsis- Reservoir- Carrier and mode of transmission of communicable diseases - Infection control measures - Host Defense - Immune response - Immunization agents - Hazards of Immunization - Disease Prevention and Control- Non communicable Disease- Barrier nursing- Isolation

**Unit V** National and International Health Programmes 9 h

Indian Health Policy - National Family welfare Programmes - Universal Immunization programme - Reproductive and Child Health Programme - National Tuberculosis Control Programme - National Leprosy Eradication Programme - National AIDS Control programme - National Cancer Control Programme - National Mental Health Programme - National Diabetic Control Programme-International Health Programmes- Rockfeller Foundation- Ford Foundation - World Bank Programme



**Note:**

1. Case study on Dimensions of Health
2. Case Study on Epidemiology
3. Case Study on Infection Control in Hospital
4. Case Study on Barrier Nursing
5. Case Study on Isolation

**Text Books**

- 1 K. Park. 2007. Preventive and Social Medicine, 19th edition. M/S Banarsidas Bhanot Publishers
- 2 N.Murugesh. 1999. Basic Anatomy and Physiology, 5th edition. Sathya Publishers, Madurai

**References**

- 1 Dr. B. Sridhar Rao. 2015. Principles of Community Medicine, 6th edition. AITBS Publishers, New Delhi
- 2 S.L. Goel. 2004. Healthcare Organization and structure. Deep and Deep Publications Pvt. Ltd, New Delhi
- 3 Ross and Wilson. 2006. Anatomy and Physiology in Health and illness, 19th edition. Churchill livingstone Elsevier
- 4 F.Douglas Scutchfield, C.William Keck, 2009. Public Health Practice . Cengage Learning India Private Limited, New Delhi
- 5 <http://aiihph.gov.in/departments-of-preventive-and-social-medicine/>





Course Code	Course Name	Category	L	T	P	Credit
236HA2A1CC	HOSPITAL NON- CLINICAL OPERATIONS MANAGEMENT	CORE	4	-	-	4

**PREAMBLE**

This course has been designed for students to learn and understand

- the important functions of management in Hospitals
- the Health Administration in India and Health Agencies
- the designing and maintenance of Hospital Supportive Services

**COURSE OUTCOMES**

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

CO Number	CO Statement	Knowledge Level
CO1	Understand, Compare and analyze the changing role of hospitals.	K4
CO2	Understand compare and analyze the various levels of Indian healthcare system	K4
CO3	Learn the different types of functions performed in the patient related supportive areas of the Hospital.	K5
CO4	Learn the different types of services performed in the other Supportive areas of the Hospital.	K4
CO5	Understand and analyze the various crisis and its management in health care management	K4

**MAPPING WITH PROGRAMME OUTCOMES**

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2	✓	✓			
CO3		✓		✓	
CO4	✓	✓			
CO5		✓	✓	✓	✓



<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A1CC	HOSPITAL NON- CLINICAL OPERATIONS MANAGEMENT	SEMESTER I
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Total Credits: 4

Total Instruction Hours: 48 h

## Syllabus

**Unit I** Introduction to Hospital 10 h

Meaning of hospital - Classification of Hospital - Functions of hospital - Modern Hospital - Hospital Organization and Structure -Hospital administration as a career - Changing system of hospital services.

**Unit II** Administrative Services 9 h

Human resources - Marketing - Guest Relations - Medical Value Tourism - Finance - Information Technology - Purchase - Stores

**Unit III** Supportive Services 9 h

Front Office - Housekeeping - Linen & Laundry - Transport - Security - Medical Records - Patient Counseling - Insurance

**Unit IV** Utility Services 10 h

Engineering - Civil, Electrical, Plumbing - Bio-Medical - Medical Gas supply - HVAC System - Communication system

**Unit V** Crisis Management 10 h

Fire safety - Disaster Risks - Mock drills - Maintenance - Safety - Hazard Identification and Risk Assessment

## Note:

1. Case study on ISBAR -Non-clinical staff scenario
2. Case study on Personnel staffing and scheduling in Hospitals
3. Case study on Non-clinical influences on clinical decision -making
4. Case study on Failure mode effective analysis in Hospitals
5. Case study on Hazard Identification and Risk Assessment



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**Text Books**

- 1 G.D.Kunders. 2004. Hospital and facilities planning and Design - Tata McGraw Hill Publishing Ltd, Delhi
- 2 Goel S L & Kumar R. 2004. Hospital Core Services: Hospital Administration of the 21st Century. Deep Deep Publications Pvt Ltd: New Delhi

**References**

- 1 S.K. Joshi. Quality Management in Hospitals. Jaypee Brothers Medical Publishers (P) Ltd, 2014, Delhi
- 2 S.L. Goel. 2004. Healthcare Organization and structure. Deep and Deep Publications Pvt. Ltd, New Delhi
- 3 James R. Langabeer. 2008. Health Care Operations Management: Jones & Bartlett Learning
- 4 <https://www.iihmr.edu.in/events/report-healthcare-operations-management.pdf>





Course Code	Course Name	Category	L	T	P	Credit
236HA2A1CD	HOSPITAL CLINICAL OPERATIONS MANAGEMENT	CORE	4	-	-	4

**PREAMBLE**

This course has been designed for students to learn and understand

- the specialties, sub specialties of medical field and various healthcare services
- the important clinical functions and its management in Hospitals
- the health policies of the nation and its impact on the Hospitals

**COURSE OUTCOMES**

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

CO Number	CO Statement	Knowledge Level
CO1	Understand, Compare and analyze the specialties of hospitals and various healthcare services	K4
CO2	Learn the different types of functions performed in the diagnostic areas and pharmacy of the Hospital.	K4
CO3	Learn the different types of services performed in the wards, ICU and OT areas of the Hospital.	K5
CO4	Learn the different types of services performed in the specialized clinical areas of the Hospital.	K4
CO5	Distinguish and analyze the various health policies and health committees	K5

**MAPPING WITH PROGRAMME OUTCOMES**

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2	✓	✓		✓	✓
CO3	✓	✓		✓	✓
CO4		✓		✓	
CO5		✓	✓		✓



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<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A1CD	HOSPITAL CLINICAL OPERATIONS MANAGEMENT	SEMESTER I
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

- Unit I** Overview of a Hospital 8 h  
 Hospital - Specialties and sub-specialties of a Healthcare Industry - AYUSH  
 Healthcare Services - Outpatient and Inpatient Department of a Hospital
- Unit II** Hospital Facilities 10 h  
 Laboratory- Blood Bank- Radiology and Imaging- Pharmacy- Nutrition and Dietary  
 Services - Rehabilitative Services
- Unit III** Clinical Services 10 h  
 Ward Services- Operation Theatre- Intensive Care Unit - Nursing Services-  
 Accident and Emergency- Quality Department - Clinical Trial
- Unit IV** Special Services 10 h  
 Central Sterile Supply Department - Nuclear Medicine - Dialysis - Mortuary - Tele  
 Medicine - Committees in Hospitals- functions - Safety codes followed in Hospitals
- Unit V** Health Policy 10 h  
 Health Planning in India - National Health Policy - Overview of health policy  
 (NHP-1986-2015-HFA2000) - National Housing Policy - National Nutritional Policy  
 - National Population Policy and five year plans - Health Committees and  
 recommendations - National Health Budget

#### Note:

1. Case study on AYUSH Healthcare Services
2. Case Study on Hospital Facilities
3. Case Study on Clinical Services
4. Case Study on Telemedicine
5. Case Study on Clinical Trial



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**Text Books**

- 1 G.D.Kunders. 2004. Hospital and facilities planning and Design - Tata McGraw Hill Publishing Ltd, Delhi
- 2 Goel S L & Kumar R. 2004. Hospital Core Services: Hospital Administration of the 21st Century. Deep Deep Publications Pvt Ltd: New Delhi

**References**

- 1 S.K. Joshi. Quality Management in Hospitals. Jaypee Brothers Medical Publishers (P) Ltd, 2014, Delhi
- 2 S.L. Goel. 2004. Healthcare Organization and structure. Deep and Deep Publications Pvt. Ltd, New Delhi
- 3 James R. Langabeer. 2008. Health Care Operations Management: Jones & Bartlett Learning
- 4 <https://www.iihmr.edu.in/events/report-healthcare-operations-management.pdf>





Course Code	Course Name	Category	L	T	P	Credit
236HA2A1CE	BIostatistics and Operations Research	Core	4	1	-	4

**PREAMBLE**

This course has been designed for students to learn and understand

- various concepts of Probability Distributions
- how to compare Means of variations of more than two populations using ANOVA
- the models of Transportation, Assignment and Queueing theory

**COURSE OUTCOMES**

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

CO Number	CO Statement	Knowledge Level
CO1	Demonstrate the concept of probability distribution	K2
CO2	Compare the relation between Correlation and Regression	K2
CO3	Apply chi-square test and Analysis of Variance.	K3
CO4	Apply the concept of transportation and Assignment problem	K3
CO5	Analyze the concept of project network scheduling	K4

**MAPPING WITH PROGRAMME OUTCOMES**

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			✓
CO2	✓	✓		✓	✓
CO3	✓	✓		✓	✓
CO4		✓		✓	✓
CO5		✓	✓		✓



<input checked="" type="checkbox"/>	Skill Development	<input type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A1CE	BIostatistics and Operations Research	Semester I
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Total Credits: 4

Total Instruction Hours: 60 h

## Syllabus

**Unit I** Probability Distributions 12 h

Probability distribution – Observed theoretical distributions - Binomial distribution - Pascal's Triangle - Multinomial Expression-Poisson distribution - Continuous probability distribution - Normal distribution - Standard Normal distribution - Measures of deviation from the Normal Distribution - Kurtosis

**Unit II** Correlation and Regression 12 h

Introduction- Correlation – significance of correlation – Bivariate and Multivariate Distribution – Types of Correlation – positive and negative correlation – Linear and Non-linear Correlation- Simple partial and multiple correlation- Measure of correlation – Objectives of Regression analysis- Regression coefficients- Difference between regression analysis and correlation analysis- Coefficient of determination

**Unit III** Chi – Square Test and Analysis of Variance 12 h

Formula for Determination of Chi – Square - Alternative formula - Chi – Square Distribution - Characteristics of Chi – Square Distribution - Working Rule for Chi – Square Test - 2x2 Contingency table - Calculation of Probability value - Assumptions of ANOVA - Test of ANOVA - Computation of Analysis of Variance ANOVA

**Unit IV** Transportation Problem and Assignment Model 12 h

Definition- To represent Transportation problem as Linear Programming Problem Transportation Algorithm- North West Corner Rule to obtain Initial Basic Feasible Solution -Inspection Method to obtain Initial Basic Feasible Solution - Vogel's Approximation Methods to obtain Initial Basic Feasible Solution - Assignment problems – Difference between transportation and Assignment Models -To represent Assignment problems and transportation problems - Hungarian Algorithm

**Unit V** Queueing theory and CPM, PERT 12 h

Introduction – Elements or Parameters of Queueing System -Steady state Balance Equation- Kendall's Notation for representing Queueing Models- Model 1: Single





Server Model. Project planning using Critical path method – Terms used in CPM and PERT – Critical path method – Program Evaluation Review techniques – Difference between PERT and CPM

**Note:** Theory 20% Problem 80%

### Text Books

- 1 Veer BalaRastogi., 2011,"Fundamentals of Bio-Statistics", 2nd Edition. Ane Books Pvt.Ltd, New Delhi
- 2 Rajagopal.K, 2012,"Operations Research" , First Edition, PHI Learning Pvt Ltd., New Delhi

### References

- 1 Annadurai, B., 2015, "A Text Book of Bio Statistics", 1st Edition, New Age International Pvt. Ltd, New Delhi
- 2 Prabhakaran, G.N., 2006, "BioStatistics", 1st Edition, Medical Publishers Pvt Ltd, New Delhi
- 3 KantiSwarup, Gupta. P. K. and Man Mohan., 2007," Operations Research", 5th Edition. S. Chand & Sons Education Publications, New Delhi
- 4 Hamdy A. Taha., 2014, "Operations Research: An Introduction" 9th Edition, Pearson Education Publishers Pvt Ltd, New Delhi



236HA2A1CP	SPREADSHEET MANAGEMENT	SEMESTER I
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Total Credits: 2

Total Instructions Hours: 48 h

S.No	Contents
	Prepare a Patient Record in Excel and perform the following:
1	i. Prepare the Bill for the patient including the consultation fee and the no. of Tests taken. Prepare an invoice excel sheet which consists of items, quantity and rate of the medicines purchased and do the following.
2	i. Using of Product Formula for Calculate Amount = Qty*Rate ii. How Many Items qty Greater Then > 20 and Less Then <20 iii. Calculate Item Qty, Rate and Amount using Sumif Formula.
3	Calculate patient bill amount based on patient ID using Vlookup functions.
4	Using nestedif allot grade for nurses based on their marks.
5	Compare patient's data in excel using countif() functions.
6	Using Filter option extract the patient disease wise data.
7	Apply multiple filtering criteria to extract the patient summary data.
8	Use pivot table option to summarize data in two or more sheets.
9	Prepare a disease wise report using pivot table.
10	Calculate mean, standard deviation and standard error of the mean.
11	i. Generate random numbers using random function. ii. Identify the relation among variables using regression.
12	Plot different types of charts to visualize the patient details.

**Note:** Any 10 experiments are mandatory.



## References

- 1 Lokesh Lalwani, 2019, Excel 2019 All-In-One, First Edition, BPB Publications, Noida (UP).
- 2 Kabir Das, 2021, Microsoft Excel: Shortcut keys and Formulas, First Edition, Notion Press, Chennai, Tamilnadu.
- 3 Wayne Winston, 2022, Microsoft Excel Data Analysis and Business Modeling, Seventh Edition, Microsoft Press, (US).





Course Code	Course Name	Category	L	T	P	Credit
236HA2A1DA	TOTAL QUALITY MANAGEMENT- TOOLS AND TECHNIQUES	DSE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the Fundamentals of Total Quality Management in a Hospital
- the various tools and techniques used in TQM
- the importance of documentation and role of auditing in TQM

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	understand the concept and origin of TQM	K3
CO2	analyze various strategies of TQM (TEI, GLP, WITs, GMP)	K4
CO3	evaluate the various role in continuous improvement in TQM	K5
CO4	create and evaluate the various documentation on Quality Manual and Procedure	K6
CO5	understand and analyze various Internal Auditing in ISO systems	K4

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓		✓	
CO2		✓	✓		✓
CO3		✓		✓	✓
CO4			✓	✓	✓
CO5	✓	✓			✓



<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



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236HA2A1DA	TOTAL QUALITY MANAGEMENT-TOOLS AND TECHNIQUES	SEMESTER I
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

**Unit I** Introduction to TQM 9 h

Concept of Quality in emerging scenario of TQM – Origin and Philosophy of TQM  
–Factors motivating introduction of TQM –Role of HRD in TQM – Role of Participatory culture in TQM - Importance of TQM

**Unit II** Role of Quality in Employee Involvement 10 h

TEI (Total Employee Involvement) Strategy in TQM – Role of TEI – small group activities in TQM – Role of Quality Circles and Work Improvement teams (WITs).  
Good Laboratory Practices (GLP) and Good Manufacturing Practices (GMP)

**Unit III** Continuous Improvement in Quality 10 h

Role of Continuous Improvement in TQM – Benchmarking and Business process reengineering – Quality costs and Planket Burman method – Kaizen – JIT, TAGUCHI, SMED, CEDAC.

**Unit IV** Documentation 9 h

Apex (Quality System) Manual / Procedure and Departmental manuals and work Instructions preparations- Policy amendment and documentation

**Unit V** Auditing 10 h

Auditing – Audit team and responsibilities - Audit protocol - Types of Auditing – Internal Auditing – Second and Third party auditing – Role of Internet Auditing in ISO Systems - Patient satisfaction survey

#### Note:

1. Case study on roles of HRD in TQM
2. Case study on total employee involvement
3. Case study on Benchmarking and Business Process
4. Case study on Non - Compliance in Documentation
5. Case study on Organizational change management, conflict management.



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M.Sc.(HA) (Students admitted during the A.Y.2023-24)



### Text Books

- 1 Bester field H. Dale. 2005. Total Quality Management. Pearson, London
- 2 S.K.Joshi. 2009. Quality Management in Hospitals. Jaypee Brother Medical Publishers (P) Ltd, Delhi

### References

- 1 Quality Management in Health Care, Principles and Methods, Donald Lighter and Douglas C Fair, Jones and Bartlett Publishers, 2004
- 2 Dr. R. Kiran. 2016 .Total Quality Management: Key Concepts and Case Studies. 1st edition. Butterworth-Heinemann
- 3 John S. Oakland. 2014. Total Quality Management and Operational Excellence, 4th edition. Routledge
- 4 <https://www.toolshero.com/quality-management/total-quality-management-tqm/>



Course Code	Course Name	Category	L	T	P	Credit
236HA2A1DB	ENTREPRENEURSHIP	DSE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the concept of Entrepreneurship
- the methods to create and start ventures
- the role of Institutional support to Entrepreneurship

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	understand the overview of Entrepreneurship	K3
CO2	Create ideas for venture planning and development	K4
CO3	evaluate feasibility for various business plan	K5
CO4	evaluate the financial aspects of new venture	K5
CO5	analyse the role of Institutional support to Entrepreneurship	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓		✓	
CO2	✓			✓	✓
CO3	✓	✓	✓	✓	✓
CO4			✓	✓	✓
CO5	✓	✓	✓		✓



<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A1DB	ENTREPRENEURSHIP	SEMESTER I
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

#### Unit I Introduction to Entrepreneurship 10 h

Entrepreneurship- Concepts and Overview- Evolution of Entrepreneurship in India- Entrepreneurial Traits- Models of Entrepreneurship- Entrepreneur vs. Manager- Opportunities for Entrepreneurs- women entrepreneurship- rural entrepreneurship

#### Unit II Creating and Starting the Venture 9 h

Entrepreneurial decision process- Sources of new Ideas- Methods of generating ideas- Problem solving- Venture planning and development process

#### Unit III Business Plan 10 h

Nature and scope of Business plan- Writing Business Plan- Evaluating Business plans- Implementing business plans- Market Feasibility- Technical Feasibility- Project Report Preparation- Launching formalities.

#### Unit IV Financing and Managing the new venture 10 h

Sources of capital-Financial viability and control- Marketing and sales controls- Joint ventures- Acquisitions- Mergers- Franchising- Public issues- Rights issues- Bonus issues and Stock splits.

#### Unit V Institutional support to Entrepreneurship 9 h

Role of Directorate of Industries- District Industries Centers (DICs)- Industrial Development Corporation (IDC)- State Financial corporation (SFCs)- Commercial banks Small Scale Industries Development Corporations (SSIDCs)- Khadi and village Industries Commission (KVIC)- National Small Industries Corporation (NSIC)- Small Industries Development Bank of India (SIDBI)

#### Note:

1. Case study on successful Women Entrepreneurs
2. Case study on venture planning
3. Case study on how to write a business plan



4. Case study on Mergers and acquisition
5. Case study on Role of Directorate of Entrepreneurship.

### Text Books

- 1 Robert D Hisrich, M P Peters, D A Shepherd. 2017. Entrepreneurship,, 10 edition, McGraw Hill
- 2 Rajeev Roy. 2011 Entrepreneurship, 2 nd edition, Oxford Higher Education.

### References

- 1 David H Holt, 2019, Entrepreneurship, New Venture Creation, Prentice Hall
- 2 Alexander Osterwalder & Yves Pigneur, 2010. Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers (The Strategyzer series), 1st edition), John Wiley and Sons
- 3 Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, 2018, "Entrepreneurship", 10th Edition, Tata McGraw Hill
- 4 [https://www.iare.ac.in/sites/default/files/lecture\\_notes/IARE\\_Entrepreneurial\\_Development\\_NOTES.pdf](https://www.iare.ac.in/sites/default/files/lecture_notes/IARE_Entrepreneurial_Development_NOTES.pdf)





Course Code	Course Name	Category	L	T	P	Credit
236HA2A1DC	TECHNOLOGY IN HEALTHCARE	DSE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the functionals of the office Automation Applications & Database Management System
- knowledge in IOT & Hospital Information System.
- the Development of Mobile Health Care Services.

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	Understand functionals of the office Automation Applications	K3
CO2	Obtain knowledge on database environment	K3
CO3	Know the functions of IOT in Health Care	K3
CO4	Learn the concepts of Hospital Information System	K4
CO5	Analyze the various Applications in Health Care.	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓			✓	✓
CO2		✓			✓
CO3	✓	✓		✓	✓
CO4			✓		
CO5	✓	✓			✓





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A1DC	TECHNOLOGY IN HEALTH CARE	SEMESTER I
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

#### Unit I Office Automation Applications 10 h

Office Automation Applications – Word Processor (MS - Word), Spreadsheet (MS-Excel), Graphics & Presentation (MS-Powerpoint); Database Management System (ACCESS)-Internet & Advanced Communication-Internet applications for Health care

#### Unit II Database Management System 8 h

Database – Definition, terms, common function, Basic data processing, Database and spreadsheet operations - Database Management System – Introduction to database management system, design, development, deployment, and evaluation of database systems, data integrity, security- Electronic Health Records

#### Unit III Introduction to IoT 10 h

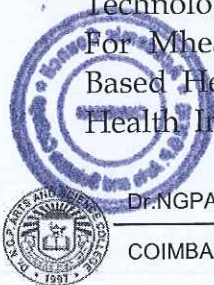
Introduction of Internet of Things (IoT): Physical Design of IoT, Logical Design of IoT, IoT Enabling Technologies, IoT Levels & Deployment Templates- IoT Design Methodology. IoT Physical Devices & Endpoints: Basic building blocks of an IoT device IoT Applications for Health & Lifestyle-IoT devices in health - Tele Health - Tele medicine

#### Unit IV Hospital Information System (HIS) 10 h

Hospital Information System (HIS)- Advantages- Structuring Medical Records - Automated Clinical Laboratory Systems & Radiology Information System- Role of Database in HIS- Need of Networking in HIS-Inventory Management Systems (IMS) -main purpose of inventory management- types of inventory management- essentials of a good Inventory Management Software- Benefits of an Inventory Management System in Healthcare

#### Unit V Mobile Health Services 10 h

Mobile Health Services-Medical Uses- Mobile Device Operating System Technology- Air Quality Sensing Technologies- Open Source Software Packages For Mhealth- Health Insurance Portals- Social Health Insurance- Community Based Health Insurance- Voluntary Health Insurance-Benefits- Key Features For Health Insurance Portals-Different Types Insurance Portal- Pros And Cons Of



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## Web Portals

### Note:

1. Case study on general Automation Office Applications.
2. Case study on Database Management System
3. Case study on IoT in Telemedicine
4. Hospital Information System Case Study on Process and Operations.
5. A case study of Mobile Health Units in Tamil Nadu

### Text Books

- 1 Andra Cable, Steven M. Freund, Ellen Monk, Susan L. Sebok, Joy L. Starks, and Misty E. Vermaat, 2019 "Microsoft Office 365 & Office (2019) Introductory
- 2 ElmasriRamez and NavatheShamkant.B,2017, "Fundamentals of Database Systems", (7th Edn.), Addison Wesley

### References


- 1 ArshdeepBahga, Vijay Madiseti, ,2015,"Internet of Things" – A hands-on approach Universities Press
- 2 Kelkar S.A, 2010 ,"Hospital Information Systems": A Concise Study, Prentice Hall India Learning Private Limited
- 3 Robert Istepanian , Swamy Laxminarayan , (2010),"M-Health: Emerging Mobile Health Systems"Springer
- 4 Dr. P. Rizwan Ahmed, 2016, "Office Automation" , Margham Publications
- 5 Elmasri Ramez, Navathe Shamkant, 2017 "Fundamentals of Database Systems", Pearson Education.
- 6 Olivier Hersent and David Boswarthick, 2015,"The Internet of Things", John Wiley & Sons Ltd.
- 7 Joydeep Das Gupta, 2015, "Hospital Administration and Management", Jaypee Brothers Medical Publishers

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 <b>Dr.N.G.P. Arts and Science College</b>		
<b>APPROVED</b>		
BoS - 8/6/23	AC - 14/7/23	GB - 5/8/23



M.Sc.(HA) (Students admitted during the A.Y.2023-24)



Course Code	Course Name	Category	L	T	P	Credit
236HA2A2CA	HOSPITAL ARCHITECTURE, PLANNING, DESIGN AND MAINTENANCE	CORE	4	1	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- planning and operations of hospitals.
- to develop concepts and strategies for quality architectural projects
- the design and maintenance of hospital systems

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	compare and analyze the changing roles of hospital	K4
CO2	assess the plan required to build a hospital	K4
CO3	analyse the various legal documents for hospital projects	K4
CO4	develop effective hospital standards and design	K5
CO5	design and create models of various departments of Hospitals	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓		✓	✓
CO2		✓	✓	✓	✓
CO3			✓	✓	✓
CO4				✓	✓
CO5			✓	✓	✓



## COURSE FOCUSES ON

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input checked="" type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A2CA	HOSPITAL ARCHITECTURE, PLANNING, DESIGN AND MAINTENANCE	SEMESTER II
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Total Credits: 4

Total Instruction Hours: 60 h

### Syllabus

#### Unit I Hospital as a System 12 h

Definition of hospital - History of hospitals - Various Departments in Hospital- Changing role of hospitals - Hospital as a system - Hospital Administrator - Roles and Functions

Case study on Change Management

#### Unit II Hospital Planning 12 h

Process of Hospital planning - Compliance- Expandability- Operational and functional planning - Planning team - Site selection - Master plan - Zonal distribution - Space requirement - construction & commissioning - Equipping a hospital- Budgeting

Case study on Hospital Layout

#### Unit III Hospital Design 12 h

Hospital Project management - Role of architect - Designing - Clinical services - Supportive services - Utility services - legal formalities - Contract Administration- Environment regulations - Equipment planning - Installation and Commissioning - Bed distribution - Space requirements and their relationships

Case study on Hospital Design plan strategy

#### Unit IV Hospital Standards 12 h

General standards for designing hospital facilities - Design parameters - Patient Centered Care, Optimization - Licensing and documentation - Mechanical standards - Electrical standards - Standard for centralized medical gas system - Standards for Biomedical waste - Engineering standards - Safety and Security - Disaster management

Case study on Indian Public Health Standards

#### Unit V Recent trends in Hospital Planning 12 h

Green Hospital Design - Healing Architecture - Value added services in hospital - Virtual healthcare - Smart Hospitals





## Case study on Technology in Healthcare

**Note:** Section C: Compulsory question for case study

### Text Books

- 1 M Shaharkar. 2009. Principles Hospital Administration and Planning, 2nd edition. Jaypee Brothers Medical Publishers (P) Ltd, New Delhi
- 2 Syed Amin Tabish. 2003. Hospitals and Nursing Homes Planning Organisations and Management Jaypee Brothers Medical Publishers (P) Ltd, Delhi

### References

- 1 G.D.Kunders. 2007. Hospital Facilities Planning and Management. Tata McGraw Hill Pvt Ltd, New Delhi)
- 2 S.Choudry - Project Management, Tata McGrawhill Education Pvt Ltd
- 3 S.L. Goel. 2004. Healthcare Organization and structure. Deep and Deep Publications Pvt. Ltd, New Delhi
- 4 Kumar, Gupta Shakti; Sunil, Kant; R, Chandrashekhar; Sidhartha, Satpathy. 2016. Modern Trends in Planning & Designing of Hospitals (Principles & Practice), , Jaypee Brothers Medical publishers (P) Ltd, New Delhi



Course Code	Course Name	Category	L	T	P	Credit
236HA2A2CB	HEALTHCARE ECONOMICS	CORE	4	-	-	4

**PREAMBLE**

This course has been designed for students to learn and understand

- concept of Economics in Healthcare.
- analyze healthcare and health insurance services
- healthcare and economic growth

**COURSE OUTCOMES**

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

CO Number	CO Statement	Knowledge Level
CO1	apply economic laws in healthcare	K3
CO2	assess production and cost in healthcare	K4
CO3	evaluate healthcare market services	K5
CO4	assess health insurance schemes	K4
CO5	analyze the impact of healthcare on economic growth	K4

**MAPPING WITH PROGRAMME OUTCOMES**

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓	✓		
CO2		✓			
CO3			✓	✓	✓
CO4			✓	✓	✓
CO5			✓	✓	✓



## COURSE FOCUSES ON

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input checked="" type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics







## Case study on Healthcare Industry Analysis

**Note:**Section C: Compulsory question for case study

### Text Books

- 1 N. K. Anand & Shikha Goel (2008), Health Economics, A.I.T.B.S. Publishers, India.
- 2 James W. Henderson (2005), Health Economics and Policy, Centage Learning India Pvt. Ltd., New Delhi.

### References

- 1 Haggard, Odeyar, D, Hospital Management, Mohit Publications, New Delhi.
- 2 Dutta Shuvendu Bikash (2013), Health Economics for Hospital Management, Jaypee Brothers Medical Publishers.
- 3 Sumitra Naha (Das) (2021), Introduction to the Economics of Health and Education, Abhijeet Publications.
- 4 D. Amutha (2018), A Textbook of Health Economics, Mangalam Publications.



Course Code	Course Name	Category	L	T	P	Credit
236HA2A2CC	HUMAN RESOURCE MANAGEMENT AND INDUSTRIAL RELATIONS	CORE	4	1	-	4

**PREAMBLE**

This course has been designed for students to learn and understand

- the functional areas of Human Resource Management in Healthcare industry
- the process of Human Resource Management in the Healthcare Industry
- the Performance Appraisal System and Employee Welfare Acts

**COURSE OUTCOMES**

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

CO Number	CO Statement	Knowledge Level
CO1	apply the concepts of HRM among the healthcare personnel.	K3
CO2	analyze the demand and supply forecast in HR management.	K4
CO3	evaluate the functions of HR in Healthcare Industry	K5
CO4	formulate the performance appraisal strategies used in the healthcare industries.	K5
CO5	assess various employee welfare acts related to healthcare industry.	K5

**MAPPING WITH PROGRAMME OUTCOMES**

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓	✓		
CO2	✓	✓		✓	
CO3			✓	✓	✓
CO4		✓	✓	✓	
CO5			✓	✓	✓





## COURSE FOCUSES ON

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input checked="" type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A2CC	HUMAN RESOURCE MANAGEMENT AND INDUSTRIAL RELATIONS	SEMESTER II
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Total Credits: 4

Total Instruction Hours: 60 h

### Syllabus

**Unit I** Concept of Human Resource Management 12 h

Evolution of HRM- Importance- Nature- Characteristics- Functions and Role of HRM - HR systems

Case study on HR in Healthcare services

**Unit II** Job Analysis, Career Planning and Development 12 h

Job design - Job analysis - Job description - Job specification - Manpower requirement Analysis - Job roles - Job Enrichment - Job Enlargement - Re-skilling - Up-skilling - Promotion - Transfer- Demotion - Employee engagement - Absenteeism- Labour turn over - Steps in Career Planning and Development

Case study on Integrated functions of HRM

**Unit III** Recruitment and Selection, Training 12 h

Objectives of Recruitment - Recruitment policy - Sources of recruitment - Traditional techniques- Modern techniques - Selection- Selection procedure - Placement - Induction - Training - Process - Need analysis - Training techniques- Training effectiveness.

Case study on Training and Development

**Unit IV** Performance Appraisal And Compensation Management 12 h

Definition - Purpose- Process - Performance Appraisal Indicators- Methods of appraisal- Traditional Method - Modern Methods- Compensation Management- Planning- Managing Employee Benefits - Fringe benefits- Retention, Replacement cost - Grievance Procedures, Redressal of Grievances- Role of HR in Safety management

Case study on Performance Evaluation

**Unit V** Employee's Welfare Acts 12 h

Factories Act, 1948 - Maternity Benefit Act, 1961 - Employee State Insurance Act, [ESI] 1948 - Employees' Provident Fund Scheme, 1952 - Payment of Bonus Act, 1965 - Workmen's Compensation Act, 1923 - Contract Labour Act (R&A), 1970 -



Payment of Gratuity Act 1972- Introduction to payment of wages act 1936 – KRA / KPA (with recent amendments)

Case study on Unfair labour practices

**Note:**Section C: Compulsory question for case study

### Text Books

- 1 R.C.Goyal. 2005. Hospital Administration and Human Resource Management. 4th Edition. Prentice hall of India Pvt Ltd, New Delhi
- 2 Subbarao. 2009. Personnel and Human resource Management Text and cases. , 4th Edition. Himalaya Publishing House Pvt Ltd, Mumbai

### References

- 1 R.S. Davar.1988. Reprinted 2010. Personnel Management and Industrial relations. 12th revised Edition. Vikas Publishing House Pvt Ltd, New Delhi
- 2 Dipak Kumar Bhattacharyya 2011. Performance Management System & Strategies. Dorling Kindersley (India) Pvt. Ltd , Noida
- 3 Gary Dessler, 2017. Human Resource Management. 15th Edition. Pearson Publications, New Delhi
- 4 <http://www.whatishumanresource.com/hrm-linkage-with-labour-laws>





Course Code	Course Name	Category	L	T	P	Credit
236HA2A2CD	MATERIALS MANAGEMENT	CORE	4	-	-	4

**PREAMBLE**

This course has been designed for students to learn and understand

- the process of integrated material management system
- the Stores and Inventory Management Techniques in Hospitals
- the application of Information Technology in Hospital stores

**COURSE OUTCOMES**

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

CO Number	CO Statement	Knowledge Level
CO1	classify different concepts of Integrated Materials Management in healthcare industry	K3
CO2	evaluate the system involved in purchase management	K5
CO3	analyze and develop store management techniques	K5
CO4	develop the strategic concepts of inventory management in Healthcare	K5
CO5	outline the application of Information Technology in stores	K4

**MAPPING WITH PROGRAMME OUTCOMES**

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2		✓		✓	
CO3		✓	✓	✓	✓
CO4		✓	✓	✓	✓
CO5			✓	✓	✓



## COURSE FOCUSES ON

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input checked="" type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A2CD	MATERIALS MANAGEMENT	SEMESTER II
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

#### Unit I Integrated Materials Management 8 h

Need for Integrated Concept - Definition and scope -Advantages in Integrated Material Management Concept- Organization Based on Commodities - Functions - Location - Interdepartmental Relationship - Warehousing - Functions- Types- Material Planning and Budgeting

Case study on Inventory management in Healthcare

#### Unit II Purchasing Management 10 h

Purchase System - Functions - Price Forecasting - Purchase of Capital Equipments - International Purchasing - EXIM Policy and Procedure- Buyer and Seller Relation and Ethics- Tendering Procedures- Purchase Vs Leasing Decision- Surplus and Scrap Management

Case study on Materials Requirement Planning

#### Unit III Stores and Inventory Management 10 h

Definition - Concept of Stores- Types of Stores- System and Procedures - Role and Functions of Store Manager- Hygiene Standards in Stores - Stores Accounting- LIFO -FIFO - Space Management

Case study on Inventory management using Matrix analysis

#### Unit IV Inventory Management and Techniques 10 h

Inventory Management - Different Types of Hospital Inventories - Techniques in Inventory Management - EOQ, ABC, VED, FSN Analysis-5S techniques in stores management - Card System and Use Of Bin Cards- Quality Control- Value Analysis, Condemnation & Disposal

Case study on Lead time in Drug Procurement

#### Unit V Information Technologies in Materials Management 10 h

Material Resource Planning System -MIS Reports in Material Management - Product Coding and Tracking - e- Procurement-Variou Purchase and Store Modules - Software in Materials Management





## Case study on User-driven need analysis of material management techniques

**Note:**Section C: Compulsory question for case study

### Text Books

- 1 P.Gopalakrishnan and Sundaresan. 2011. Materials Management an Integrated Approach. Prentice Hall of India Pvt. Ltd, New Delhi
- 2 M.M.Varma. 2010. Materials Management. 4th Edition. Sultan Chand & Sons New Delhi

### References

- 1 Shakthi Gupta. Sunil Kant. 2012. Hospital Stores Management an Integrated Approach. Jay pee Brothers medical publishers Pvt. Ltd, New Delhi
- 2 Rajendra Mishra. 2007. Materials Management, Excel Books Pvt. Ltd , New Delhi
- 3 P.Gopalakrishnan. 2006. Purchasing and Materials Management, Tata McGraw-Publishing Company Limited
- 4 <https://www.purchasing-procurement-center.com/hospital-materials-management.html>



Course Code	Course Name	Category	L	T	P	Credit
236HA2A2CE	HEALTHCARE MARKETING AND STRATEGIC MANAGEMENT	CORE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- service marketing from planning to pricing strategies including control and research
- the Nature of Business Policy and Strategic Management, Characteristics of Strategic Decisions and Business Ethics
- the creative problem analysis and evaluate the strategic alternatives

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	build and apply knowledge on general aspects of service marketing	K3
CO2	assess marketing mix variables and a practical application in context to marketing management	K4
CO3	analyze the Nature of Business Policy and Strategic Management, and Business Ethics	K4
CO4	explain in detail about Strategic Management process subjective to marketing management	K5
CO5	explain and develop detailed idea about the environmental analysis and its industrial applications	K6

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓		✓	
CO2		✓	✓	✓	
CO3		✓	✓	✓	
CO4		✓	✓	✓	
CO5		✓	✓	✓	✓



## COURSE FOCUSES ON

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A2CE	HEALTHCARE MARKETING AND STRATEGIC MANAGEMENT	SEMESTER II
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**Total Credits: 4**

**Total Instruction Hours: 60 h**

### Syllabus

**Unit I** Marketing Concept 12 h

Marketing concepts- Need- Principles- Services -Marketing environment- Five I's - Salient features- Classification of services - Dichotomous classification of services - Cross classification of Services - Schmenner's Classification

Case study on Marketing Environment

**Unit II** Dimensions of Marketing 12 h

Process - Elements - Service Expectations - Performance - Market Economic Dimensions - Service Style - Segmentation Variables - Market Targeting in Services - Customer loyalty - Customer Bonding

Case study on Service Marketing

**Unit III** Marketing Mix & Advertising 12 h

Elements of Marketing Mix - Service Marketing triangles - 4A's of Marketing- 7P's of Service Marketing - Collaborative Marketing - Media Relations - Branding - Advertisement -Promotion - Free Health Camps - Digital Marketing for Hospital

Case study on Digital Marketing in Hospitals

**Unit IV** Strategic Management 12 h

Introduction - Nature of Business Policy and Strategic Management - Strategic Management Process - Strategic Decision Making- Characteristics - Corporate Governance - Business Ethics - Strategic Change - Creative Problem Analysis

Case study on Corporate Governance

**Unit V** Market Analysis 12 h

SWOT Analysis - PESTLE Analysis- Porter's five force model- Blue ocean strategy - Strategic formulation - Generic Strategies - Functional Strategies -Evaluating Strategic Alternatives - Strategic Implementation - Corporate Social Responsibility

Case study on Corporate Social Responsibility

**Note:**Section C: Compulsory question for case study



### Text Books

- 1 Mr. Nimit Chowdhary and Mrs. Monika Chowdhary. 2015. Text Book of Marketing services. Macmillan India Limited. (Third Edition)
- 2 P.Subba Rao. 2011. Business Policy and Strategic Management. Himalaya Publishing House, (Fourth Edition)

### References

- 1 Philip Kotler and Gary Armstrong. 2012. Principles of Marketing. Pearson Education Pvt Ltd, (Twelfth Edition).
- 2 Philip Kotler, Joel Shalowitz and Robert J. Stevens. 2008. Strategic Marketing For Health Care Organizations: Building A Customer-Driven Health System. Jossey- Bass ( First Edition)
- 3 Peter.M. Ginter. 2013. Strategic Management of Healthcare Organization. Jossey- Bass Publication, (Seventh Edition)
- 4 <https://www.evariant.com/faq/what-is-healthcare-marketing>
- 5 G.D.Kunders. 1999. How To Market Your Hospital Without Selling Your Philosophy. Prism Books Pvt Ltd



Course Code	Course Name	Category	L	T	P	Credit
236HA2A2DA	APPLICATION OF QUALITY IN HEALTHCARE	DSE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- various benchmarking and process re-engineering in Quality system
- quality function deployment and statistical tools for quality
- the planning and implementation of quality management systems

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	analyze the concept of Benchmarking system	K3
CO2	asses the Quality Functional Deployment and Benefits.	K4
CO3	evaluate Organizational Re-engineering framework and impact assessment	K5
CO4	evaluate the statistical process control and its development	K5
CO5	design the Quality Management System in Healthcare	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2		✓		✓	✓
CO3			✓	✓	✓
CO4			✓	✓	✓
CO5		✓	✓	✓	✓





## COURSE FOCUSES ON

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A2DA	APPLICATION OF QUALITY IN HEALTHCARE	SEMESTER II
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

**Unit I** Benchmarking Process 8 h

Benchmarking - Introduction - Process of Benchmarking - Benefits - Pitfalls - Success Indicators - Gap Analysis process - Benchmarking template - Initiating the process of Benchmarking - Application

Case study on Benchmarking in Hospital Environment

**Unit II** Quality Function Deployment Concept 10 h

Quality Function deployment -QFD Concept - QFD process - QFD Team - Benefit of QFD - Patient feedback - House of Quality

Case study on Quality Evaluation in Health sector

**Unit III** Business Process Reengineering 12 h

Organizational Reengineering - Conceptual framework process - Process Re-engineering- BPR Philosophy - Possibilities and pitfalls - Opportunity assessment - Impact Assessment - Planning Implementation of the transition

Case study on Business Process Reengineering at Surgical work

**Unit IV** Statistical Process Control 10 h

History, Development, Statistical fundamentals, Pareto diagram, Process flow diagram, Cause and effect diagram, Check sheets, Histogram -Various Control charts - Different Control charts for Variable state of Control - Scatter Diagrams - Problems & Application

Case study on Statistical quality control methods in infection control

**Unit V** Quality Management System in Healthcare 10 h

Essentials of Quality Improvement in Healthcare - Implementation of Quality Management System in a Hospital - Evaluation of the success of QMS - Statistical approach - Medical Audit - Nursing Audit - Equipment Audit - Patient Satisfaction

Case study on Six Sigma in Hospitals

**Note:** Section C: Compulsory question for case study



**Text Books**

- 1 Bester field H. Dale. 2005. Total Quality Management, Pearson, London
- 2 S.K. Joshi. Quality Management in Hospitals. Jaypee Brothers Medical Publishers (P) Ltd, 2014, Delhi

**References**

- 1 John S. Oakland. 2014. Total Quality Management , 3rd edition. Butterworth-Heinemann Publications
- 2 S.Saravanavel & S.Balakumar .2015. Total Quality Management, Margham Publications
- 3 Subburaj Ramasamy . 2004. Total Quality Management, Tata McGraw Hill Publishing Company Limited
- 4 <http://www.fmshk.org/database/articles/06mbdrflkay.pdf>



Course Code	Course Name	Category	L	T	P	Credit
236HA2A2DB	INNOVATION IN ENTREPRENEURSHIP	DSE	4		-	4

**PREAMBLE**

This course has been designed for students to learn and understand

- the importance of Innovation in Entrepreneurship
- the different business models to generate innovative ideas.
- the concepts to create innovation and strategic development in entrepreneurship

**COURSE OUTCOMES**

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

CO Number	CO Statement	Knowledge Level
CO1	understand the concept of Innovation	K3
CO2	analyze the concept of creative thinking	K4
CO3	evaluate the various business models	K5
CO4	assess the technology innovation process for patent and copyright.	K5
CO5	analyze the strategic involvement for sustainable innovation and future market.	K4

**MAPPING WITH PROGRAMME OUTCOMES**

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓		✓	✓	
CO2	✓	✓	✓		✓
CO3	✓	✓		✓	✓
CO4		✓	✓		✓
CO5	✓	✓	✓	✓	





## COURSE FOCUSES ON

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input checked="" type="checkbox"/>	Intellectual Property Rights	<input checked="" type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input checked="" type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A2DB	INNOVATION IN ENTREPRENEURSHIP	SEMESTER II
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

#### Unit I Concept of Innovation 8 h

Innovation - Invention Vs Innovation - Innovation and Creativity - Innovation in Current Environment - Types of Innovation - Product innovation and process - Characteristics of innovation in different sectors

Case study on Start-Ups

#### Unit II Innovation Management 10 h

Experimentation in Innovation Management - Steps of Innovation Management - Innovation as a systematic practice - Idea Management System - Divergent V/s Convergent Thinking - Challenges of Innovation - Design Thinking - Idea Championship - Participation for Innovation - Co-creation for Innovation

Case study on Innovative Business Ideas

#### Unit III Business models and prototyping 10 h

Business Model - Creativity Business model Vs Classical Approach - Evolution of the business model - Generation of ideas: Brainstorming - Exploration of business models for material efficiency services - Proto typing to Incubation - Business Plan

Case study on Franchise model

#### Unit IV Patents and Copyrights 10 h

Marketing of Innovation - Technology Innovation Process - Technological Innovation Management Planning and strategies - Management of Innovation - creation of IPR - Types of IPR - Patents and Copyrights - Patents in India.

Case study on IPR infringements

#### Unit V Sustainable innovation and future markets 10 h

Sustainability Innovation and Entrepreneurship - Innovation Sustainable Conditions - Innovation: Context and Pattern - SME'S strategic involvement in sustainable development - Business Model Failure: Reasons and Remedies - Incubators: Business Vs Technology - Managing Investor for Innovation - Future markets and Innovation needs for India.



## Case study on Community Innovation

**Note:** Section C: Compulsory question for case study

### Text Books

- 1 Peter F Drucker (2006). Innovation and entrepreneurship. Harper Business
- 2 Osterwalder, A and Pigneur, Y (2009). Business Model Generation. (1stEdn.), Alexander Oster & Yves Pigneur Publishers

### References

- 1 Rishiksha T. Krishnan and Vinay Dabholkar . 8 Steps To Innovation : Going From Jugaad To Excellence)
- 2 John Bessant and Joe Tidd,,. (2008). , Innovation and Entrepreneurship. (1st Edn.) Wiley (2nd edition).
- 3 Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, 2018, "Entrepreneurship", 10th Edition, Tata McGraw Hill
- 4 [https://www.iare.ac.in/sites/default/files/lecture\\_notes/IARE\\_Entrepreneurial\\_Development\\_NOTES.pdf](https://www.iare.ac.in/sites/default/files/lecture_notes/IARE_Entrepreneurial_Development_NOTES.pdf)



Course Code	Course Name	Category	L	T	P	Credit
236HA2A2DC	HEALTHCARE DATA MANAGEMENT	DSE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- principles and practices in Healthcare Data Management
- processing and management of Electronic Health Records
- statistical measures and Information Security in Healthcare

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	understand the standards in Health Information Documentation	K3
CO2	appraise Health Information Management functions in health records	K4
CO3	compare the technologies in Electronic Health Record management	K4
CO4	analyze the various statistical measures used in healthcare data	K4
CO5	formulate the elements of Information Security	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓		✓		✓
CO2		✓	✓	✓	
CO3	✓	✓		✓	✓
CO4		✓	✓	✓	✓
CO5	✓	✓			✓





## COURSE FOCUSES ON

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input checked="" type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A2DC	HEALTHCARE DATA MANAGEMENT	SEMESTER II
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Total Credits: 4

Total Instruction Hours: 48 h

### Syllabus

#### Unit I Health Information Management 10 h

History of Health Information Management - Health Record : Purpose - Functions - Documentation Standards - Health Record Documentation: Acute Care Health Record Documentation - Principles and Practices - Format - Healthcare Data Sets : Data Sets- Types- Emerging Health Information Standards

Case Study on Data Analytics for Pervasive health

#### Unit II Health Information Functions and Data sources 10 h

HIM Functions and Services- Master Patient Index- HIM Functions in an Electronic Environment - Legal Health Record - Clinical Coding - Secondary Data Sources : Differences between Primary and Secondary Data Sources and Databases- Purposes and Users - Types - Processing and Maintenance of Secondary Databases

Case Study on Healthcare Fraud Detection

#### Unit III Electronic Health Record 10 h

Electronic Health Record : Introduction - The EHR System- EHR System Applications- Challenges in Implementation - Initiatives and Framework - Technologies -Databases and Data Storage - Hardware Infrastructure- Acquisition- Information Management- Future Directions

Case Study on Data Analytics for Pharmaceutical Discoveries

#### Unit IV Statistics in Healthcare 10 h

Introduction to measurement - Discrete Vs continuous Data - Statistical measures in healthcare - Statistical data used in healthcare - Patient care and clinical statistical data- Case- Mix statistical data- Presentation of Statistical Data - Descriptive Statistics

Case study on Clinical Prediction Models

#### Unit V Data Visualization 08 h

Handling Data - Formatting Data: Data formats- Formatting tools - Formatting with code-Ratios-Rates: - Visualizing Rates- Proportions and Percentages- Scatterplots - Regression and Trend Lines- The Timeline - Dashboards - Types of Dashboards -



## Building Exploratory Dashboards- Case study: Role of Social Media in Healthcare via Analytics

Case study on Models to predict survival outcomes

Note: Section C: Compulsory question for case study

### Text Books


- 1 Nanette B Sayles, Health Information Management Technology: An Applied Approach, 2012, 4th Edition, Ahima Press - Units I-IV
- 2 Ben Jones, Communication Data with Tableau, 2014, 1st Edition., O'Reilly Media - Unit V

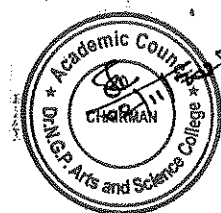
### References

- 1 Yang, Eva K.Lee, Healthcare Data Analytics : From Data to Knowledge to Healthcare Improvement, 2016, Wiley.
- 2 Horton L, Calculating and Reporting Healthcare Statistics, 5th Edition, 2017, AHIMA Press .
- 3 L B Madsen, Data-Driven Healthcare - How Analytics and BI are Transforming the Industry, 2014 , Wiley.
- 4 Chandan K Reddy, Charu C. Aggarwal, Healthcare Data Analytics, 2020, CRC Press
- 5 Biedermann S. & Dolezel D, Introduction to Healthcare Informatics, 2nd Edition, 2017, AHIMA Press Hui

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<b>APPROVED</b>		
BoS- 16 <sup>th</sup> 14/10/23	AC- 16 <sup>th</sup> 13/12/23	GB- 21 <sup>st</sup> 05-01-24



Dr.NGPASC  
COIMBATORE | INDIA

M.Sc.(HA) (Students admitted during the A.Y.2023-24)

Course Code	Course Name	Category	L	T	P	Credit
236HA2A3CA	QUALITY ASSURANCE IN HEALTHCARE	CORE	4	1	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the quality framework and different quality concepts and their influence in healthcare
- the use of several quality tools and techniques and implement various quality certification processes for healthcare industry
- and familiarize with quality management certifications for hospitals

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	Identify prerequisites of evolution of quality management and apply the concepts in the organizations	K3
CO2	Apply the principles of total quality management and peculiarities of their implementation	K3
CO3	Analyze statistical process control data to improve, production, processes & influence strategic decision making	K4
CO4	Distinguish, apply and compare various quality concepts, tools and techniques in process improvement	K4
CO5	Evaluate process capabilities & use quality management certification methods in solving problems of healthcare sector	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2		✓		✓	✓
CO3		✓	✓	✓	✓
CO4			✓	✓	✓
CO5			✓	✓	✓





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A3CA	QUALITY ASSURANCE IN HEALTHCARE	SEMESTER III
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**Total Credits: 4**

**Total Instruction Hours: 60 h**

### Syllabus

#### Unit I Aspects of Quality 12 h

Quality in healthcare – definition- evolution of quality, quality gurus, quality Indian & International scenario, awareness of quality, quality obstacles and benefits in healthcare

#### Unit II Total Quality Management 12 h

TQM Definition - Quality council- quality statements - ethics in quality improvement- customer perception of quality- customer feedback- service quality- translating needs into requirements- patient retention - errors in medication

#### Unit III Quality Assessment 12 h

Criteria and standards for evaluation- common criteria - patient care- workload- promptness of service- equipment management- facility management- performance of support services- HR Management- financial performance- safety management- legal compliance

#### Unit IV Evaluation of Quality Systems 12 h

Kaizen - Six sigma (DMAIC, DMADV) - Process mapping- PDCA cycle - Poka yoke- Kanban- FMEA- stages of FMEA- process & types

#### Unit V Accreditation / Certification 12 h

Accreditation- accreditation process -National committee for quality assurance - Organizational Nursing care standards – NABH- NABL - Introduction to ISO standards – Documentation of ISO standards JCI Accreditation, Quality awards

#### Note:

1. Case study on Quality in Healthcare
2. Case study on Patient retention
3. Case study on Hospital Legal Compliance
4. Case study on FMEA
5. Case study on Hospitals Quality Indicators





### Text Books

- 1 Bester field H. Dale. 2005. Total Quality Management. Pearson, London
- 2 S.K.Joshi. 2009. Quality Management in Hospitals. Jaypee Brother Medical Publishers (P) Ltd, Delhi

### References

- 1 Sridhar Bhat. 2002. Total Quality Management. Himalaya House Publication, Mumbai
- 2 Dr. R. Kiran. 2016 .Total Quality Management: Key Concepts and Case Studies. 1st edition. Butterworth-Heinemann
- 3 John S. Oakland. 2014. Total Quality Management and Operational Excellence, 4th edition. Routledge
- 4 <https://www.nabh.co/>



Course Code	Course Name	Category	L	T	P	Credit
236HA2A3CB	HEALTHCARE LAWS	CORE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the legal frame work and its importance in Indian Health care
- the role of government and law in promoting and protecting health care services
- the function of Courts, legislatures and administrative agencies in relation to health care law and policy

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	understand the concept of law in healthcare and explain its relevance information to all its stakeholders	K3
CO2	understand and evaluate the need for the law, and its relevance in healthcare industry and general public	K5
CO3	understand the necessary conditions for Laws related to functional areas of Hospital Administration	K5
CO4	understand the healthcare laws related to supportive functions and maximize effective healthcare services	K6
CO5	analyze pharmaceutical concepts of law and develop skills to meet the client needs and provide solutions	K6

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2		✓		✓	✓
CO3		✓		✓	✓
CO4		✓		✓	✓
CO5		✓	✓	✓	✓





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input checked="" type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A3CB	HEALTHCARE LAWS	SEMESTER III
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**Total Credits: 4**

**Total Instruction Hours: 48 h**

### Syllabus

#### **Unit I Introduction to Health Law 8 h**

Basic Concepts of Law - Legal System in Hospitals - Concept of Health Law - Duties and Responsibilities of a Doctor and Nurses - Hippocratic Oath, Medical Code of Ethics - Qualities of a Medical Professional - Patients rights and responsibilities.

#### **Unit II Laws related to Medical Practices 12 h**

The Indian Medical Council Act - Indian Nursing Council Act - The Clinical Establishments (Registration and Regulation) ACT, 2010 - Labour contract Act - Transplantation of Human Organs Act, 1994 - Registration of Births and Deaths Act, 1969 - Indian Mental Health Act 1987

#### **Unit III Laws related to Medico legal Aspects 12 h**

Patient and Consumer Protection Act, 1986 - Medical Negligence - Law of TORTS - Indian Evidence Act- Patient consent - Dying declaration - Euthanasia - Medical Termination of pregnancy Act - Pre-Natal Diagnostic Techniques Act - Sexual Harassment Act 2013 - Legal Aspects of Medical Records

#### **Unit IV Laws related to Support Services 10 h**

Prevention of Food and Adulteration Act 1954 - Bio-Medical Waste (Management and Handling) rules 2011 - Pollution Control Acts and Regulations of India 1981 - Indian Boilers Act 1923

#### **Unit V Laws related to Pharmacy 6 h**

Pharmacy Act 1948 - Drugs and Cosmetics Act 1940 - Narcotic Drugs and Psychotropic Substances Act 1985 - Poisons Act and Rules 1919

#### **Note:**

1. Case study on Medical Code of Ethics
2. Case study on Human Organ Transplantation
3. Case study on Medico Legal Cases
4. Case study on Food Adulteration
5. Case study on Medication Dispensing Error





### Text Books

- 1 Dr. S. Porkodi and Dr. AnsarulHaque. 2011. Health Laws and Health Care System. Global Academic Publishers and distributors, (First Edition)
- 2 D. Samuel Abraham. 2008. Laws on Hospital Administration. B.I. Publications Pvt. Ltd, (First Edition)

### References

- 1 VP Singh. 2021. Legal Issues In Medical Practice. Jaypee Medical Publisher(Second Edition)
- 2 S.S. Gulshan. 2006. Business Law. Excel Books, (Third Edition).
- 3 VP. Pillay. 2019.Text Book of Forensic Medicine & Toxicology. Jaypee Medical Publisher (Nineteenth Edition)
- 4 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6150915/>





Course Code	Course Name	Category	L	T	P	Credit
236HA2A3CC	HOSPITAL INFORMATION SYSTEM	CORE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the role and value of information technology in potentially revolutionizing healthcare
- the designing and maintenance of hospital information system
- analyze obstacles and success factors for implementation and integration of information, communication and decision technologies in healthcare

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	Understand and analyze various concepts and Prerequisites of hospital information system	K4
CO2	Understand and categorize the EHR and EMR and the barriers associated with it	K4
CO3	Understand, analyze and compare the information system modules in various clinical and supportive departments	K4
CO4	Learn , apply and criticize the changes happening in EMR and security aspects of the same	K5
CO5	Assess and compare latest administrative application of computer technology in healthcare	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2	✓	✓	✓		
CO3	✓	✓	✓	✓	
CO4			✓	✓	✓
CO5				✓	✓





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



236HA2A3CC	HOSPITAL INFORMATION SYSTEM	SEMESTER III
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**Total Credits: 4**

**Total Instruction Hours: 48 h**

### Syllabus

#### **Unit I** Hospital Information System 10 h

Information - Importance of Information - Impact of Information Technology on Healthcare- Rudimentary HIS - Modules of HIS

Hospital Information System - Introduction - Functions - Advantages - Types - Need assessment - Role of IT in Enterprise Resource Planning

#### **Unit II** E-Healthcare Applications 10 h

Functions- Electronic Health Record vs Electronic Medical Record - Implementation - Advantages - Disadvantages-Telehealth: Types - Initiatives - Advantages - Barriers - Future

Paperless Hospitals - Filmless Hospitals - Digital Convergence - Data warehousing - Data mining - Wireless devices

#### **Unit III** Clinical and Non-clinical Information System 10 h

Clinical Services - Radiology, Laboratory, Pharmacy, Intensive Care Unit, Operation Theatre - Role of IT in Clinical Audit - Medical Transcription - Practice and Professional Issues

Non-Clinical Services - Patient Registration & Admission, Billing, Maintenance, Transport Services

#### **Unit IV** Change in Information System 9 h

Impact of Automation - Costing - Ethical Issues

Securing the information: Privacy and confidentiality- Security - Law - HIPAA- Role of HealthCare Professionals in protecting the Information

#### **Unit V** Healthcare Trends 9 h

Recent Trends in Healthcare - Healthcare AI, Personalized Medicine, Healthcare Analytics - Cloud computing in Healthcare





**Note:**

1. Case study on ERP in Healthcare
2. Case study on Telehealth Medicine
3. Case study on Clinical Audit
4. Case study on Patient Data Security
5. Case study on Artificial Intelligence in Healthcare

**Text Books**

- 1 Kathleen M.Young. 2000. Informatics for Health Professionals. F.A Davis Company, United States
- 2 S.A Kelkar, 2010, Hospital Information Ssystem - A concise study, PHI Learning Pvt Ltd., New Delhi

**References**

- 1 A.V.Srinivasan. 2008. Managing a Modern Hospitals. Sage Publication, Delhi
- 2 Anil Kumar Saini. 2009. Management Information System (MIS) in Hospitals. Deep & Deep Publications Pvt. Ltd., New Delhi
- 3 James O'Brien , George Marakas , 2010. Management Information Systems, McGraw-Hill Education
- 4 <http://nhsrcindia.org/health-informatics>





Course Code	Course Name	Category	L	T	P	Credit
235CO2A3EA	FINANCIAL AND MANAGEMENT ACCOUNTING	EDC	5	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the fundamental aspects of financial accounting.
- about Marginal costing concept and preparation of Marginal Cost Statement.
- the basics of Management accounting and preparation of comparative and common size financial statements.

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	gain knowledge on the fundamental aspects of financial accounting.	K1
CO2	familiarize with preparation of Trial Balance.	K2
CO3	acquire knowledge on costing and cost sheet preparation.	K3
CO4	understand application of Marginal costing in decision making.	K4
CO5	understand the basics of Management accounting and preparation of comparative and common size financial statements.	K4

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓	✓		✓
CO2	✓	✓	✓	✓	✓
CO3	✓	✓		✓	✓
CO4	✓	✓	✓		✓
CO5	✓	✓	✓	✓	✓





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





235CO2A3EA	FINANCIAL AND MANAGEMENT ACCOUNTING	SEMESTER III
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**Total Credits: 4**

**Total Instruction Hours: 60 h**

### Syllabus

#### **Unit I** Financial Accounting and its activities 10 h

Financial Accounting: Meaning - Objectives, Accounting Concepts and Conventions- Golden rules of accounting. Recording financial Transactions in Journal - Preparation of accounts in Ledger - preparation of Trial balance.

Case study on Accounting conventions.

#### **Unit II** Preparation of Financial statements 15 h

Types of financial statements - Sole traders and Joint Stock Company (New Trust) Financial Statements - Final accounts - Trading a/c - Profit and loss a/ c for sole traders and Joint stock company (new format)-Profit and loss appropriation a/c - Balance sheet (New format) - Working out problems with simple adjustments.

Case study on Financial Statements.

#### **Unit III** Cost Accounting and Cost Sheets 12 h

Cost Accounting - Meaning - objectives - scope - Different types of Costs- Cost sheet-components of cost sheet - preparation of cost sheet - preparation of tenders and quotations.

Case study on Cost sheet.

#### **Unit IV** Marginal Costing 10 h

Marginal Costing - Meaning - Advantages - limitations - Cost volume profit analysis / Break even Analysis - Marginal or variable cost - fixed cost - contribution-Profit volume ratio - Break Even Point - margin of safety - expected sales for desired profit - Profit from given sales - Cost volume profit analysis / Break even Analysis -Margin of safety- desirable profit- Marginal Costing in Decision making.

Case study on Break Even Analysis.

#### **Unit V** Management Accounting and Accounting ratios 13 h

Management Accounting - Meaning - objectives - functions - Comparative and common size financial statements - Accounting Ratios: Balance sheet ratios, Profit and loss a/c ratios and combined ratios.

Case study on Comparative statement.

Note: Distribution of Marks: 20% Theory and 80% Problems.





Case Studies related to the above topics to be discussed. Examined externally.

(Section C : Compulsory question for case studies)

### Text Books

- 1 Periasamy. P, 2019, "A Textbook of Financial Cost and Management Accounting", Himalaya Publishing House, Chennai.
- 2 S.P. Jain and K.L. Narang, 2016. "Cost and Management Accounting", Kalyani Publishers, New Delhi.

### References

- 1 Arora. M.N., 2018, "Cost Accounting Principles and Practice", Vikas Publishing House, Noida
- 2 Bhattacharya S.K., and John Bearden 2016. " Accounting for Management", Vikas Publishing House Ltd, New Delhi.
- 3 R.S.N. PILLAI, 2016, "Fundamentals of Advanced Accounting: Financial Accounting Volume I, S. Chand & Co. Ltd., New Delhi.
- 4 Dr. S.N. Maheswari. 2014. "Management Accounting", Sultan Chand & Sons, New Delhi.



Course Code	Course Name	Category	L	T	P	Credit
236HA2A3CD	RESEARCH METHODS FOR MANAGEMENT	CORE	4	1	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- concepts, meaning, approach and types of research
- the application of the sampling, scaling techniques and data collection
- the process of data analysis, interpretation and report writing

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	Identify and understand the research approach, process, and design	K3
CO2	Evaluate the different sampling techniques	K3
CO3	Analyze the methods of data collection and techniques	K5
CO4	Distinguish, apply SPSS for data analysis	K5
CO5	Evaluate the data and report writing	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓	✓		
CO2	✓	✓	✓	✓	
CO3	✓	✓	✓	✓	
CO4	✓	✓	✓	✓	✓
CO5	✓	✓	✓	✓	





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A3CD	RESEARCH METHODS FOR MANAGEMENT	SEMESTER III
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Total Credits: 4

Total Instruction Hours: 60 h

## Syllabus

**Unit I** Introduction to Research Methodology 12 h

Meaning of Research - objectives of research -Types - Approaches of research - Research process - Formulation of Research problem - Techniques involved- Research design - meaning - need for research design - features of a good research design - different research design

**Unit II** Sampling Design 12 h

Sample - Steps in sampling design- criteria for selecting sampling procedure - characteristics of good sample design - Types of sample designs- probability - probability sampling - Non probability sampling -Sampling error

**Unit III** Data Collection 12 h

Meaning of Data Collection - Types of data - Primary Vs Secondary data - Sources of data - Methods of data collection- Scales - Techniques - Questionnaire construction -Validity -Reliability of Instruments

**Unit IV** Data Processing and Analysis 12 h

Data processing - Types of analysis - Qualitative Vs Quantitative data analyses - Hypothesis - concept -procedures - tests- limitations - Application of SPSS - non parametric - parametric tests -Research Format of the WHO, ICMR and the use of GRIPP (Getting Research into Policy & Planning)

**Unit V** Interpretation and Report Writing 12 h

Meaning - Techniques - precautions - Significance- steps - layout of research report- types of reports- Protocol in writing research reports -referencing style Plagiarism - Research and Publication Ethics

**Note:**

1. Case study on Research Problem Formulation
2. Case study on Sample Determination
3. Case study on Data Validation
4. Case study on Formulation of Hypothesis
5. Case study on Research Ethics





### Text Books

- 1 C.R.Kothari. 2004. Research Methodology (Methods & Techniques).New Age International Publishers, New Delhi. II revised edition
- 2 Cooper R Donald, Schindler S Pamela (2001) – Business Research Methods, Tata McGraw Hill Publications Ltd, New Delhi

### References

- 1 S.P.Gupta. 2011. Statistical Methods. Sultan Chand & Sons, New Delhi. 41st revised edition
- 2 Dr.Suresh K Sharma Stephen. 2011. Nursing Research and Statistics. Elsevier Publishers, New Delhi.
- 3 <https://www.free-ebooks.net/business-textbooks/Business-Research-Methodology>
- 4 <https://www.digipull.in/2017/12/ranjit-kumar-research-methodology-step>





Course Code	Course Name	Category	L	T	P	Credit
236HA2A3DA	QUALITY ACCREDITATIONS IN HEALTHCARE	DSE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the accreditations in healthcare
- the concept of Quality certification system
- the working of different accreditations in healthcare industry

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	understand the overview of Quality	K3
CO2	understand the concept of accreditation & Standards of Quality	K4
CO3	understand the Quality Certification System	K5
CO4	analyze the NABH Accreditation in hospital sectors	K5
CO5	analyze the JCI Accreditation in hospital sectors	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓	✓			
CO2	✓	✓			
CO3	✓	✓		✓	
CO4		✓	✓	✓	✓
CO5		✓	✓	✓	✓





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A3DA	QUALITY ACCREDITATIONS IN HEALTH CARE	SEMESTER III
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**Total Credits: 4**

**Total Instruction Hours: 48 h**

### Syllabus

**Unit I** Introduction to Accreditation 10 h

Quality Accreditation – Meaning - Need and importance – Evolution of Quality Accreditations – Role of Accreditations in healthcare – Vision – Mission Accreditations in Indian and International Scenario – Benefits and challenges

**Unit II** Accreditation and Standards 10 h

Hospital Accreditation, Accreditation Models, Patient centered standards, Health care organization management standards - QCI - ISO Certification- NABH - NABL - JCI- an overview

**Unit III** Quality Certification systems 10 h

ISO- Concepts and Elements of ISO – Areas of ISO – ISO 9001 - ISO 14001 - Environment Management Systems- Stages of Environmental Management Standards – Evaluation and Compliance.

**Unit IV** NABH 10 h

QCI - Overview of NABH accreditations – Importance and Benefits of NABH to Hospitals - NABH Accreditation Levels - Process – Standards – Documentations – Requirements

**Unit V** JCI 8 h

ISQua - JCI accreditations – overview – Objectives of JCI - Need and importance of JCI – Standards – Procedure – Documentations – JCI accredited hospitals in India

#### Note:

1. Case study on Importance of Accreditations in Healthcare
2. Case study on Patient Centered Standards
3. Case study on ISO Compliance
4. Case study on NABH Accreditation Process
5. Case study on Importance of JCI Accreditations





### Text Books

- 1 Brajkishore Rajoriya. 2017. Hospital & Healthcare Accreditation (As per the Guidelines of NABH,NABL,JCI). Jaypee Brother Medical Publishers (P) Ltd, Delhi
- 2 Raza Arif. 2016. Accreditation of Healthcare Organization. Jaypee Brother Medical Publishers (P) Ltd, Delhi

### References

- 1 S.K.Joshi. 2009. Quality Management in Hospitals. Jaypee Brother Medical Publishers (P) Ltd, Delhi
- 2 Arun.K.Agarwal. 2018. Standard Operating Procedure (SOP) for Hospitals in India. Atlantic Publisher & Distributor pvt.Ltd
- 3 Sharon Myers. 2011. Patient Safety & Hospital Accreditation: A Model for Ensuring Success. Springer Publishing Company pvt.Ltd
- 4 <https://www.nabh.co/>





Course Code	Course Name	Category	L	T	P	Credit
236HA2A3DB	HEALTHCARE ENTREPRENEURSHIP	DSE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the basics of healthcare entrepreneurship
- operations management and financial aspects of healthcare entrepreneurship
- the healthcare entrepreneurship hits the reality on establishment

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	understand the concept of entrepreneurship in healthcare	K1
CO2	Apply the concept finances and accounting in the healthcare organization	K3
CO3	Analyse the operations and the documentation processes required in the organization	K4
CO4	Analyze the new-gen innovations in technology to handle informatics better	K4
CO5	Evaluate the societal aspects and hardships faced in reality while dealing with healthcare	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓			✓	✓
CO2		✓			
CO3	✓	✓		✓	
CO4			✓		
CO5	✓	✓	✓		✓





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A3DB	HEALTHCARE ENTREPRENEURSHIP	SEMESTER III
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**Total Credits: 4**

**Total Instruction Hours: 48 h**

### Syllabus

**Unit I** Introduction to Healthcare Entrepreneurship 10 h

Introduction -Growth -Types - Resources- partners- overview healthcare associations- Human factors - Managing Innovation in Healthcare

**Unit II** Finances in Healthcare Entrepreneurship 10 h

Associated cost and financing-revenue models-value proposition- return on investment- cash flow- Partnership dividend calculation- Reinvestments

**Unit III** Management and Documentation 12 h

Operating models and infrastructure- importance of healthcare marketing - building and retaining patients panel - outsourcing: criteria - bond preparation - operational logistics and healthcare supply chain management- decision process- quality improvement

**Unit IV** Technology and Innovations 8 h

Healthcare technology and - medical informatics- data science- new payment models

**Unit V** Societal Aspects 8 h

Challenges and opportunities for healthcare entrepreneurship -customer segments - customer relationship

#### Note:

1. Case study on Innovation in Healthcare
2. Case study on Cash flow Management
3. Case study on Operating models and finance
4. Case study on Technology in Healthcare
5. Case study on Social Entrepreneurship





## Text Books

- 1 Chris Ehiobuche Ph. D, 2022, "Health-Care Entrepreneurship: Embracing the Mindset and Skills for Competitive and Sustainable Healthcare Entrepreneurship", Revised Edition, Xlibris US
- 2 Ralf Wilden, Massimo Garbuio, F. Angeli, Daniele Mascia, 2018 "Entrepreneurship in healthcare", Routledge

## References

- 1 Ralf Wilden, 2020, Entrepreneurship in Healthcare - Routledge)
- 2 Dr. T. Rajesh, 2023, Fundamentals of Entrepreneurship and Project Planning- Sahitya Bhawan Publications, Agra
- 3 Dr. Jayshree Suresh, 2009, Entrepreneurial Development- Margham Publication
- 4 [https://unctad.org/system/files/official-document/diae2022d2\\_en.pdf](https://unctad.org/system/files/official-document/diae2022d2_en.pdf)





Course Code	Course Name	Category	L	T	P	Credit
236HA2A3DC	DATA VISUALIZATION	DSE	4	-	-	4

#### PREAMBLE

This course has been designed for students to learn and understand

- the methodologies used to visualize data effectively
- the types and techniques of creating charts
- the features and types of dashboards for data visualization

#### COURSE OUTCOMES

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

CO Number	CO Statement	Knowledge Level
CO1	Understand the principles of communicating data	K2
CO2	Apply ratios and proportions in visualizing data	K3
CO3	Apply variations and multiple quantities in creating charts.	K3
CO4	Design Interactive charts based on time and location	K4
CO5	Design and Implement Dashboard for real time problems	K5

#### MAPPING WITH PROGRAMME OUTCOMES

COs/POs	PO1	PO2	PO3	PO4	PO5
CO1	✓		✓		✓
CO2		✓			✓
CO3		✓	✓	✓	
CO4		✓	✓		✓
CO5		✓			✓





<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





236HA2A3DC	DATA VISUALIZATION	SEMESTER III
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**Total Credits: 4**

**Total Instruction Hours: 48 h**

### Syllabus

#### **Unit I      Communicating Data      8 h**

Introduction- A Step in the process - A Model of Communication - Three Types of Communication Problems - Six Principles of Communicating Data - Handling Data- Gathering data : Finding sources- Data scraping- Formatting Data: Data formats- Formatting tools - Formatting with code.

#### **Unit II      Ratios and Proportions      10 h**

Ratios – Rates: Blending Data Source - Visualizing Rates - Proportions and Percentages: Introduction Filters and Quick Filters - Introducing Table Calculations - Proportions as waterfall charts using Gantt - Current-to-Historical - Actual-to- Target - Mean and Median: The Normal Distribution.

#### **Unit III      Variations and Multiple Quantities      10 h**

Respecting Variation: Visualizing Variation over Time: Control Charts – Anatomy of a control Chart – Creating a control chart - Understanding Uncertainty - Multiple Quantities: Scatterplots - Stacked Bars - Regression and Trend Lines - The Quadrant Charts.

#### **Unit IV      Time charts and Map Location      10 h**

The Origin of Time charts - The Line charts - The Dual Axis Line chart - The Connected Scatterplots - The Date Filed Type - The Timeline - The Slope graph - Maps and Locations: Special Map - Circle Maps - Filled Maps - Dual Encoded Maps - A Dual Encoded Circle Maps.

#### **Unit V      Dashboards      10 h**

Dashboards - Types of Dashboards - Building and Exploratory Dashboards - Advanced Dashboards Features: Animating Dashboards - Showing Multiple Tabs - Adding Navigation with Filters - Custom Header Images - Adding Google Maps to Dashboards.

#### **Note:**

1. Case Study : Web Scraping for Sentiment Analysis
2. Case Study : Supply Chain Data Visualization
3. Case Study : Stock Market Data Analytics
4. Case Study : Website Data Analytics of Food brand
5. Case Study. Case Study : Healthcare Data Visualization





### Text Books

- 1 Ben Jones, 2014, "Communication Data with Tableau", First Edition, O'Reilly Media (Unit I).
- 2 Nathan Yau, 2011, "Visualize This : The Flowing Data guide to Design , Visualization and Statistics", First Edition Wiley (Unit II-V).

### References

- 1 Steve Wexler , Jeffrey Shaffer, et al, 2017, "The Big Book of Dashboards: Visualizing Your Data Using Real-World Business Scenarios", Wiley..
- 2 Cole NussbaumerKnafllic, 2015, " Storytelling with Data: A Data Visualization Guide for Business Professionals", John Wiley & Sons.
- 3 Few, Stephen, 2012,"Show Me the Numbers. Designing Tables and Graphs to Enlighten", Second Edition, Analytics Press.
- 4 Stephen Few, 2019, "The Data Loom: Weaving Understanding by Thinking Critically and Scientifically with Data", Analytics Press





236HA2ASSA	SELF STUDY : INNOVATION, IPR AND ENTREPRENEURSHIP	SEMESTER III
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Total Credit: 1

### Syllabus

#### Unit I Intellectual Property and World Trade Organization (WTO)

Introduction: Definition of Intellectual Property - Introduction of WTO. Agreement on TRIPS (Trade Related Intellectual Property Rights): General Provisions and Basic Principles of TRIPS - Scope and Use of Intellectual Property Rights - Enforcement of Intellectual Property Rights - Dispute Prevention and Settlement

#### Unit II Patent

Fundamentals of Patent: Definition - Conditions for Grant of Patent - Process and Product Patent - Procedure for Grant of Patent - e-Filing of Patent Application - Opposition to Grant of Patent - Rights of Patentee - Patent Office and Register of Patents - Transfer and Infringement of Patent Rights.

#### Unit III Copyright

Copyright: Definition - Meaning of Publication - Copyright Office and Copyright Board - Ownership of Copyright - The Rights of the Owner - Term of Copyright - Registration of Copyright - Infringement of Copyright - Remedies against Copyright Infringement - Internet and Copyright Issue.

#### Unit IV Trade Marks

Trade Marks: Definition - Developing a Trade Mark - Conditions for Trade Mark Registration - Register of Trade Marks - Trends in Trade Marks Applications - Procedure for Trade Mark Registration in India - Term of Trade Mark - Certification Trade Mark - Infringement of Trade Mark - Remedies against Trade Mark Infringement.

#### Unit V Innovations

Digital Innovations and Developments as Knowledge Assets - IP Laws, Cyber Law and Digital Content Protection - Unfair Competition - Meaning and Relationship between Unfair Competition and IP Laws.





### Text Books

- 1 NeerajPandey, KhushdeepDharani, 2014, "Intellectual Property Rights", PHI Learning Pvt. Ltd.
- 2 PrabuddhaGanguli, "Intellectual Property Rights: Unleashing the Knowledge Economy", McGraw Hill Education, 2011.

### References

- 1 Deborah. E. Bouchoux, 2018, "Intellectual Property Right" 5th edition, Cengage Learning.
  - 2 Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, 2018, "Entrepreneurship", 10th Edition, Tata McGraw Hill.
  - 3 V. ScopleVinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012.
- S. V. Satakar, "Intellectual Property Rights and Copy Rights, EssEss Publications, New Delhi, 2002





236HA2ASSB	SELF STUDY : BRAND MANAGEMENT	SEMESTER III
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Total Credit: 1

### Syllabus

#### Unit I Concept of Branding

Basics Understanding of Brand – Definition - Branding Concepts – Functions of Brand - Significance of Brands – Different Types of Brands – Co branding – Store brands.

#### Unit II Strategic Brand Management

Strategic Brand Management process – Building a strong brand – Brand positioning – Establishing Brand values – Brand vision – Brand Elements – Branding for Global Markets – Competing with foreign brands.

#### Unit III Branding Image

Brand image Building – Brand Loyalty programmes – Brand Promotion Methods – Role of Brand ambassadors, celebrities – On line Brand Promotions.

#### Unit IV Brand Extension

Brand Adoption Practices – Different type of brand extension – Factors influencing Decisions for brand extension – Re-branding and re-launching – brand rejuvenation.

#### Unit V Branding strategies

Branding strategies - Measuring Brand Performance – Brand Equity Management - Brand Equity Measurement – Brand Leverage - Global Brand Audit – Role of Brand Managers- Branding challenges & opportunities – Case Studies.





### Text Books

- 1 Kevin Lane Keller, Strategic Brand Management: Building, Measuring and Managing, Prentice Hall, 3rd Edition, 2007.
- 2 Mathew, Brand Management – Text & cases, MacMillan, 2008.

### References

- 1 Paul Tmepoal, Branding in Asia, John Willy, 2000..
- 2 Ramesh Kumar, Managing Indian Brands, Vikas Publication, India, 2002
- 3 Tyboust and Kotter, Kellogg on Branding, Wiley, 2008
- 4 <https://www.managementstudyguide.com/brand-management.htm>





236HA2ASSC	SELF STUDY : HOSPITAL HAZARDS MANAGEMENT	SEMESTER III
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Total Credit: 1

### Syllabus

#### Unit I Introduction to Hospital Hazards

Hospital Hazards: Meaning - Types - Physical - Biological Mechanical Psychological - Its impact on employees- Preventive measures. Hospital Hazards Management: Meaning - Need - Principles - Purpose.

#### Unit II Hospital Infection Control

Control of Hospital Acquired infection: Types of infection - Common Nosocomial infection and their Causative Agents - Prevention of hospital acquired infection - Role of central sterile supply department - Infection control committee - Monitoring and control of cross infection- Staff health.

#### Unit III Biomedical Waste Management

Biomedical Waste Management :Meaning - Categories of biomedical wastes - Disposal of biomedical waste products - Incineration and its importance - Indian Medical Association - TNPCB Rules and Schedules - Standards for Waste autoclaving, micro waving and deep burial - Segregation - Packaging - Transportation - Storage

#### Unit IV Waste Disposal Management

Human Waste Disposal and Sewage Disposal: Diseases carried from excreta - Sanitation barrier - Methods of excreta disposal - Sewage wastes: Meaning - Composition - Aims of Sewage disposal - Decomposition of organic matter - Modern sewage treatment - Drawbacks of improper disposal of wastes - Solid and liquid.

#### Unit V Medical Insurance

Medical Insurance: National Insurance companies - Paramount health Care Services - Third party insurance - Payment terms and conditions - limitations of liability and indemnity.






## Text Books

- 1 Park.K, (2013) Text Book on preventive and Social Medicine, 23rd Edition, Banarsidas Bhanot
- 2 James T.Tweedy Healthcare Hazard Control and Safety Management, Kindle Edition

## References

- 1 [https://www.hsa.ie/eng/Your\\_Industry/Healthcare\\_Sector/Occupational\\_Hazards\\_in\\_Hospital\\_Departments/](https://www.hsa.ie/eng/Your_Industry/Healthcare_Sector/Occupational_Hazards_in_Hospital_Departments/).
- 2 [https://www.cdc.gov/cpr/readiness/healthcare/documents/hah\\_508\\_compliant\\_final.pdf](https://www.cdc.gov/cpr/readiness/healthcare/documents/hah_508_compliant_final.pdf).
- 3 [https://aohp.org/aohp/Portals/0/Documents/ToolsForYourWork/free\\_publications/Health%20Hazards%20Hospital%20Workers.pdf](https://aohp.org/aohp/Portals/0/Documents/ToolsForYourWork/free_publications/Health%20Hazards%20Hospital%20Workers.pdf)
- 4 <https://www.ishn.com/articles/82284-healthcare-hazards>

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