

**REGULATIONS AND SYLLABUS
FOR
POST GRADUATE DIPLOMA IN ENDOSCOPY ASSISTANT CARE
MANAGEMENT**

Offered by

**BHARATHIAR UNIVERSITY, COIMBATORE
FROM 2009-2010**

Under The

**CENTRE FOR COLLABORATION OF
INDUSTRY AND INSTITUTIONS (CCII)
COLLABORATIVE PROGRAMME**

POST GRADUATE DIPLOMA IN ENDOSCOPIC ASSISTANT CARE MANAGEMENT

Course Title and Summary

The course shall be called the “**POST GRADUATE DIPLOMA IN ENDOSCOPIC ASSISTANT CARE MANAGEMENT**”. It will be an intensive full time course, which will include mainly practical training in the Endoscopic room, ERCP suite, Operation theatre, ICU, HDU, OPD clinics - apart from bedside classes and lectures.

At the end of the course the candidate will be fully trained in managing routine diagnostic endoscopic and complex therapeutic endoscopic and colonoscopic procedural cases. They will acquire enough knowledge about pathology of the GI disorders, know about various equipments and instruments used, and the trouble shooting and their sterilisation technique. They will also get trained in ICU care of such patients.

The programme will be conducted in a hospital recognized by the Bharathiar University under the CCII collaborative programme. Candidates shall abide by the stipulated timings, discipline, rules and regulations of the hospital to which they will be assigned for the entire course.

REGULATIONS

1) Eligibility for admission:

The candidates those who have passed 3 years Diploma in Nursing after +2 examination or B. Sc Nursing of recognized university or equivalent be eligible for admission to Post Graduate Diploma in Endoscopic Assistant Care Management course.

2) Course Duration:

The duration shall be 12 months Full Time. The candidates admitted to this course would spend at least six hours a day and 30 hours per week in the Bharathiar University Recognized Hospitals.

3) Course of study and scheme of Examinations:

The period of certified study for the POST GRADUATE DIPLOMA IN ENDOSCOPIC ASSISTANT CARE MANAGEMENT shall be a full time course and its duration shall extend over a period of one academic year (non- semester). There shall be one examination at the end of the course, which will consist of theory, practical and oral components.

SCHEME OF EXAMINATION

Paper No.	Subject	Credit Hours	Max Marks	
			Int	Ext
01	Applied Basic Sciences	6	60	90
02	Pathology and Microbiology	6	60	90
03	Diagnostic & therapeutic endoscopy	6	60	90
04	Diagnostic & therapeutic ERCP	6	60	90
05	Diagnostic & therapeutic endoscopy - Practical	6	60	90
06	Diagnostic and Therapeutic Ercp Nursing Care – Practical	6	60	90

4) **Practical Training:**

The candidate admitted to the course shall be put through a total of 900 hours of intensive practical and clinical training in the hospital Endoscopy room, ERCP suite ,OT and ICU/HDU, in order to gain a thorough understanding of the functioning of the various endoscopic and colonoscopic instruments and knowledge of various procedures being performed apart from knowing about the room setup and sterilization.

5) **Requirement to appear for the examination:**

A candidate should put in a minimum of 90% attendance to be eligible to appear for the examinations.

6) **Medium of instruction:**

The medium of instruction throughout the course and the examinations shall be conducted in English only.

7) **Passing Minimum:**

To pass, a candidate shall secure a minimum of 50% percent marks individually in the practical and Theory Examinations. A candidate failing in any one component will have to reappear for that particular component in the semester examination.

8) **Classification of successful candidates**

A candidate securing 75% and above, aggregate in the theory and practical examinations, in the first attempt, shall be deemed to have passed the examination with distinction.

A candidate securing 60% and above aggregate in the theory and practical examinations, in the first attempt, shall be deemed to have passed the examination with first class.

Other successful candidates shall be declared to have passed the examination in Second Class.

9) **Conferment of degree:**

A candidate, who has passed all the examinations as prescribed, shall be eligible to receive the degree of “Post Graduate Diploma in Endoscopy Assistant Care Management” from the Bharathiar University.

10) Ranking:

Candidates who have passed all the examinations in the very first attempt and securing the first position in aggregate marks for every 10 candidates appearing in the examinations ranking (with the maximum of 10 positions) will be awarded university ranks.

11) Revision of regulations and syllabus:

The syllabus and regulations of the course are subject to modification by the concerned board every year.

12) Question paper pattern.

Theory examination will be for 90 marks with the following components.

- Multiple choice / one word answers : $15 \times 1 = 15$ marks (no choice)
- Short notes (100 words/ one paragraph) : $5 \times 5 = 25$ marks (either/or type)
- Elaborate (300 words or 1½ paper) : $5 \times 10 = 50$ marks (either/or type)

13. Award of Internal Assessment Marks

Internal assessment marks for theory will be awarded based on the Marks obtained in the three Internal Assessment Tests and based on the candidate's regular performance in the practical area and one practical exam marks.

PAPER 1
APPLIED BASIC SCIENCES

Aim: At the end of the course, the candidate should have a thorough knowledge of the structural and functional aspects of the human gastrointestinal systems.

Unit: 1

Applied GIT anatomy I: Anatomy of the esophagus, stomach, duodenum, small bowel.

Unit: 2

Applied GIT anatomy II: Anatomy of abdomen, omentum, colon, rectum and anal canal.

Unit: 3

Applied GIT Physiology I: Mechanism of stomach and intestinal secretion. Function of stomach, duodenum and gallbladder.

Unit: 4

Applied GIT physiology II: function of liver, spleen, colon and rectum. Physiology of defecation.

REFERENCE BOOKS:

1. Williams PL, Warwick R, Dyson M, Bannister LH (eds) Gray's Anatomy. 36th edition. Churchill Living stone, New York, 1980.
2. Human anatomy Regional and applied Volume – 1 - B.D Chaurasia's, 3rd CBS Publishers and distributions New Delhi, 1995.
3. Text book of Medical Physiology - Arthur C. Guyton, John E. Hall, 9th edition W.B.
4. Saunders Company U.S.A 1996.
5. Essentials of Medical physiology - Anil Baran singha mahapatra, 1st edition current Books international Mumbai. 1998.
6. Clinical Anatomy for Medical students - Richard s. Snell, 5th edition Little, Brown and
7. company. U.S.A 1992.

PAPER 2
PATHOLOGY AND MICROBIOLOGY

Aim: At the end of the course, the student should know about the pathogenesis and detailed pathology of the various diseases affecting the gastro intestinal systems. The students should also know about the various types of organisms affecting the gastrointestinal tract and in the ER set up.

Unit: 1

General lectures on micro-organisms- Classification/ shapes/

Unit: 2

Sterilisation and asepsis.

Unit: 3

Infection- source of infection, , spread of infection, various pathogenic bacteria, viruses and diseases caused by them (gastritis, enteritis, enterocolitis,colitis, etc)

Unit: 4

Pathology – General- Cell injury and adaptation, inflammation and repair, fluid and hemodynamic derangement in vomiting and diarrhoea.

Unit: 5

Pathology of the gastrointestinal tract and genital system. IBS, IBD, Koch's abdomen.

REFERENCE BOOKS:

1. Fletcher: Diagnostic Histopathology of Tumours – Christopher DM Fletcher 2007 (3rd edition)
2. Lakhani: Basic Pathology: An Introduction to the Mechanisms of Disease – Sunil R
3. Lakhani, Susan A Dilly, Caroline J Finalyson and Ahmet Dogen 2003 (3rd ed),
4. Appleton & Lange's Review of Microbiology & Immunology – Dr William W Yotis,
5. Tadayo Hashimoto, Harnold J. Blumenthal – 1997.
6. Medical Microbiology – Michael A. P Faller, Patrick R.Murray, Ken S. Rosenthal – 2005.

PAPER 3

DIAGNOSTIC AND THERAPEUTIC ENDOSCOPIC NURSING CARE

OVERALL OBJECTIVE: At the end of the course the students will be able to acquire knowledge on the basic concepts of endoscopic room and ERCP suite arrangement and develop desirable skill and attitude in providing necessary care to the patient before, during and immediately after diagnostic and therapeutic endoscopic and colonoscopic procedures. They will also acquire enough knowledge and skill to handle patients of upper and lower GI bleed at ICU/HDU

SPECIFIC OBJECTIVES:

The students will be able to

1. Classify various diagnostic and therapeutic endoscopic and colonoscopic procedures
2. Prepare endoscopic room for the procedure
3. Identify the instruments and equipments used for various endoscopic procedures
4. Assist the endoscopist
5. Follow standard precaution and waste management protocols in endoscopy room
6. Monitor the patient in recovery room
7. Maintain clean and sterile environment in endoscopic suite along with sterilisation of the endoscopy and colonoscopy

Unit: 1

Introduction to endoscopy room Management: Organisation of Hospital - Organisation of endoscopy rooms - Single and Multiple endoscopy units - Elective and emergency procedures.

Unit: 2

Principles of Surgical Asepsis and Hygienic endoscopy Room: Carbolization and fumigation - Scrubbing, gowning, gloving - Preparation of sterile field. - Preparation of tables, equipments, instruments for the procedure - Care of endoscopy room – before, during & after the procedure –Special Precaution in handling patients with sepsis, blood borne infection – Hep.B, HCV, HIV etc - Cleaning and disinfection of the articles and endoscopy room (with special reference to HIV, HBV & HCV)Terminal disinfection of endoscopy room.

Unit: 3

Endoscopy Room equipments, Instruments and Maintenance: Basic endoscopy unit – forward viewing, single channel and double channel endoscopy and Specific instruments used in endoscopic and colonoscopic procedures.

Unit: 4

Diagnostic endoscopic procedure- giving oral anaesthetic agent, preparation of patient including transfer & positioning of the patient. Diagnostic colonoscopic procedure- Assisting the anesthesiologist for induction of anaesthesia and positioning the patient.

Unit: 5

Therapeutic endoscopic and colonoscopic procedure- initial resuscitation of the patient- knowing about EVL and EST and assisting the endoscopist . assisting the endoscopist in endoscopic and colonoscopic polypectomy, APC and FB removal. Maintaining Patient Safety and Comfort in ER: Prevention of physical, electrical, chemical injuries/hazards to patient - Maintenance of interpersonal relationship, Orientation to legal & ethical issues involved in endoscopic room technique

REFERENCE BOOKS:

1. Practical gastrointestinal endoscopy the fundamentals – Peter B Cotton
2. Introduction to Operating room Technique - Kandaswami
3. Theatre Technique - Dixon Eileen
4. Fundamentals of Operation Theatre Service - T.K.Datta
5. SAGES manual perioperative care in minimally invasive surgery. Richard I. Whelan, James w. fleshman, Dennis L. fowler. Springer edition

PAPER 4

DIAGNOSTIC AND THERAPEUTIC ERCP NURSING CARE;

Aim: At the end of the course the students will be able to acquire knowledge on the basic concepts of ERCP suite arrangement and develop desirable skill and attitude in providing necessity care to the patient before, during and immediately after diagnostic and therapeutic ERCP procedures.

Unit: 1

Introduction to ERCP suite Management: Organisation of Hospital - Organisation of ERCP rooms - Single and Multiple units - Elective and emergency procedures.

Unit: 2

Principles of Surgical Asepsis and ERCP Room: - Preparation of tables, equipments, instruments for the procedure - Care of ERCP room – before, during & after the procedure –Special Precaution in handlings patients with sepsis, blood borne infection – Hep.B, HCV, HIV etc - Cleaning and disinfection of the articles and ERCP room (with special reference to HIV, HBV & HCV).

Unit: 3

ERCP Room equipments, Instruments and Maintenance: Basic ERCP unit – side viewing scope. C-arm facility- recording and documentation of interesting procedure. Specific instruments used diagnostic and therapeutic procedures- various sphincterotomes, guide wires, balloon dilators, baskets, lithotripsy handling,- various types of stents- plastic and metal.

Unit: 4

. Diagnostic ERCP procedures- preparation of patient including transfer & positioning of the patient. Assisting the anesthesiologist for induction of anaesthesia and positioning the patient. Assisting the endoscopist in various diagnostic ERCP procedures.

Unit: 5

Therapeutic ERCP procedures- Assisting endoscopist for CBD stone removal, CBD and CHD stricture management, plastic and metal stent placement, getting tissue biopsy and brush cytology. Pancreatic stent placement. Maintaining Patient Safety and Comfort in ERCP room: Prevention of physical, electrical, chemical injuries/hazards to patient - Maintenance of interpersonal relationship.

REFERENCE BOOKS:

1. Practical gastrointestinal endoscopy the fundamentals – Peter B Cotton
2. Introduction to Operating room Technique - Kandaswami
3. Theatre Technique - Dixon Eileen
4. Fundamentals of Operation Theatre Service - T.K.Datta
5. SAGES manual perioperative care in minimally invasive surgery. Richard I. Whelan, James w. fleshman, Dennis L. fowler. Springer edition

PAPER 5

PRACTICAL: DIAGNOSTIC AND THERAPEUTIC ENDOSCOPIC NURSING CARE

Clinical Postings in:

Endoscopy room

Operation theatre

Procedure to be completed

- Fumigation of the ER
- Cleaning & disinfection of articles.
 - Packing articles for sterilization
 - Sterilization of equipments
- Setting up of table for various diagnostic and therapeutic procedures
- Assisting the endoscopist in various endoscopic and colonoscopic procedures
- Positioning the patients
- Assisting with anaesthesiologist
- Observation & monitoring the patient in recovery room
- Terminal disinfection

PAPER 6

PRACTICAL: DIAGNOSTIC AND THERAPEUTIC ERCP NURSING CARE;

Clinical Postings in:

ERCP suite
Operation theatre

Procedure to be completed

Setting up table for various diag and therapeutic ERCP procedures
Assisting the endoscopist in diagnostic ERCPs
Assisting the endoscopist in therapeutic ERCPs
Assisting the endoscopist in various stent placements
Maintaing and sterilizing various special instruments and equipments

At the end of the course student will be able to understand the basic concepts of all the endoscopic and ERCP procedures and the instruments /equipments and will be able to assist all diagnostic and therapeutic procedures.