

COURSE	FACULTY OF PHYSIOTHERAPY
PROGRAM	BACHELOR OF PHYSIOTHERAPY
SEMESTER	3
COURSE TITLE	SURGERY
COURSE CODE	17PT0303
COURSE CREDITS	8

Course Outcomes: After completion of this course, student will be able to:

- 1 Able to describe preoperative evaluation, surgical indications and various surgical approaches in various abdominal, neurological & cardiothoracic conditions.
- 2 To remember surgical approaches in the form of line diagram and will be able to describe the components of soft tissue, cut to reach the target tissue and possible post operative complications in the movement & posture.
- 3 Describe the management of head injury, spinal surgeries, intracranial tumors, peripheral nerve injury, pain, wound, ulcer, burns.
- 4 Describe the normal and abnormal physiological events during puberty, labour, postnatal stage and menopause.
- 5 Discuss the various complications during pregnancy and management.
- 6 Acquire the skill of examination of pelvic floor muscles and also a pregnant woman.

Pre-requisite of course: To learn surgeries related to gynac, plastic surgery, general surgery etc.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
160	0	0	50	30	20	0	0

Contents : Unit	Topics	Tutorial Hours
1	Acute infections Acute infections: Inflammatory fever, bacteremia, septicemia, pyemia, toxemia. Specific types - Cellulitis - sites lymphangitis, abscess with special reference to hand infection, carbuncle.	6
2	Specific types Specific types continued: Tetanus, gas gangrene, hospital infection, cross-infection with modes of spread and prevention, General survey of chronic inflammations, Syphilis (reference to other venereal diseases) leprosy, actinomycosis.	6
3	General survey of trauma, pathology and clinical features of wound repair General survey of trauma, pathology and clinical features of wound repair: primary, secondary and tertiary wound healing, Clean wounds, contaminated wounds and infectious wounds, Principles of treatment, survey of factors affecting wound healing, Ulcers and gangrene, Post-operative complications of abdominal surgery specifically chest, wound infection, oedema.	6
4	Burns as a specific type of severe trauma	6

	Burns as a specific type of severe trauma: classification, early and late complications, management & reconstructive surgery - skin grafting as an example of the plastic procedure.	
5	Types of skin grafting Types of skin grafting: take of grafting - healing of grafting, Post-operative care of plastic surgery with the specific role of physiotherapy.	6
6	Outline of surgical disorders of brain-head injuries Outline of surgical disorders of brain-head injuries: A general survey of surgical disorders of the spine and spinal cord problem of paraplegia, malignancy - spread and its behaviour, various abdominal incisions, abdominal drainage tubes, catheters and nasogastric tubes, ward demonstration for an hour a day for one week.	6
7	Anesthesia Anesthesia, O.T. demonstrations.	6
8	Neck, skin contractures and correction. Neck, skin contractures and correction.	6
9	Problems of trauma to hand and their management. Problems of trauma to hand and their management.	6
10	Principles of cineplasty Principles of cineplasty: tendon transplant, cosmetic surgery types of grafts, surgery of hands with emphasis on management of traumatic and leprosy hand.	6
11	Breast – Surgery Breast – Surgery	6
12	Neurophysiology- Neurophysiology, basis of tone, disorders of tone and posture, bladder control, muscle contraction, movement and pain with clinical features and management Congenital and childhood disorders - hydrocephalus spina bifida, Trauma - Broad localization, first aid and management of squal of head injury and spinal cord injury., Diseases of the Spinal Cord - Craniovertebral junction anomalies, syringomyelia, cervical and lumbar disc disease, tumors., Peripheral nerve disorders - Peripheral nerve injuries, localization & management., Entrapment neuropathies., Intracranial tumors - Broad classification, signs and symptoms., Pre-operative Assessment and indications and contraindication for neurosurgery in intracranial tumors., Management of pain, electrical stimulation of the brain and spinal cord., Miscellaneous.	6
13	Basic anatomy chest wall, trachea and bronchial tree, lungs and bronchopulmonary segments, pleura and mediastinum. Basic anatomy chest wall, trachea and bronchial tree, lungs and bronchopulmonary segments, pleura and mediastinum.	3
14	Physiology and mechanics of breathing and use of mechanical breathing - ventilator: (respirators). Physiology and mechanics of breathing and use of mechanical breathing - ventilator: (respirators).	3
15	Investigation of lung diseases including endoscopies. Investigation of lung diseases including endoscopies.	3
16	Chest injury. Chest injury.	3
17	Common suppurative diseases of lung - Bronchiectasis, lung abscess. Common suppurative diseases of lung - Bronchiectasis, lung	3

	abscess.	
18	Bronchogenic carcinoma. Bronchogenic carcinoma.	3
19	Common surgeries of the chest Common surgeries of the chest: Thoracoplasty, Pulmonary dissections, Thoracotomy, Pneumothorax, Hydrothorax- Pneumothorax, Empyema.	3
20	Common diseases of the oesophagus and related conditions causing dysphagia Common diseases of the oesophagus and related conditions causing dysphagia: Cholecystectomy, Colostomy, Ileostomy, Gastrectomy, Hernias, Appendicectomy, Mastectomy, Nephrectomy, Prostatectomy.	3
21	Surgery of portal hypertension. Surgery of portal hypertension.	2
22	Surgery of pulmonary tuberculosis. Surgery of pulmonary tuberculosis.	2
23	Surgery of heart and great vessels. Surgery of heart and great vessels.	2
24	Investigation of a patient undergoing cardiac surgery. Investigation of a patient undergoing cardiac surgery.	2
25	Basic principles of open-heart Surgery, Heart-lung bypass (Extra Co-portal circulation). Basic principles of open-heart Surgery, Heart-lung bypass (Extra Co-portal circulation).	2
26	Common diseases of the heart requiring surgery both congenital and acquired including open-heart surgery. Common diseases of the heart requiring surgery both congenital and acquired including open-heart surgery.	2
27	Common drugs used in cardiac surgery, their uses, side effects. Common drugs used in cardiac surgery, their uses, side effects.	2
28	Common vascular surgery Common vascular surgery: Embolectomy, Vascular reconstructive surgery, (Thrombosis, Embolism, atherosclerotic and occlusive vascular diseases including coronary artery bypass).	2
29	Examination of patients as regards chest & heart diseases. Examination of patients as regards chest & heart diseases.	3
30	Demonstration - Acquaintances with C.T. Surgery. Demonstration - Acquaintances with C.T. Surgery.	3
31	Equipments, I.C.C.U., O.T. Equipments, I.C.C.U., O.T.	3
32	Radiology - X-ray studies - X-ray chest in various lung diseases. Radiology - X-ray studies - X-ray chest in various lung diseases.	3
33	Anatomy and physiology of the female reproductive organs. Puberty dynamics. Anatomy and physiology of the female reproductive organs. Puberty dynamics.	2
34	Physiology of menstrual cycle-ovulation cycle, uterine cycle, Duration, amount. Physiology of menstrual cycle-ovulation cycle, uterine cycle, Duration, amount.	2
35	Hormonal regulation of menstruation. Hormonal regulation of menstruation.	2

36	Diagnosis of pregnancy Diagnosis of pregnancy.	2
37	Abortion. Abortion.	2
38	Physiological changes during pregnancy Physiological changes during pregnancy.	2
39	Antenatal care. Antenatal care.	2
40	High-risk pregnancy High-risk pregnancy.	2
41	Normal labor. Normal labor.	2
42	Normal puerperium and postnatal. Normal puerperium and postnatal.	2
43	Family planning. Family planning.	2
44	Medical Termination of Pregnancy (MTP). Medical Termination of Pregnancy (MTP).	2
45	Infection of the female genital tract including sexually transmitted diseases, low backache. Infection of the female genital tract including sexually transmitted diseases, low backache.	2
46	Prolapse of uterus and vagina. Prolapse of uterus and vagina.	2
47	Principles of common gynecological operations: Hysterectomy. Principles of common gynecological operations: Hysterectomy.	2
48	Menopause and its effects. Menopause and its effects.	2
49	Sterility. Sterility.	2
50	Incontinence. Incontinence.	2
Total Hours		160

References:

- 1 A manual on Clinical Surgery, S Das
- 2 Neurology and neurosurgery illustrated, Lindsay
- 3 Short practice of surgery, Bailey and Love
- 4 Physiotherapy in Obstetrics and Gynaecology, Margaret Polden
- 5 DC Dutta's textbook of Gynaecology