

Branch Name:	BACHELOR OF PHYSIOTHERAPY
Program Code:	PT101
Course Title:	SURGERY (General Surgery & Cardiothoracic surgery & Neurosurgery & Plastic surgery) & OBSTETRICS AND GYNECOLOGY
Course Code:	2PT1010303
Pre-requisite Course:	Human Anatomy, Human Physiology

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)			Credit	Evaluation Scheme (Marks)					
Lecture	Tutorial	Practical		Theory(T)		Practical(P)		Total Marks	
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	Theory	Practical
3.5+1	-	-	7+2	80 (55+25)	20 (15+5)	-	-	100	-

GENERAL SURGERY

COURSE OUTCOMES:

At the end of the course, the student will be able to

1. Describe the effects of surgical trauma and anesthesia in general.
2. Classify, clinically evaluate and describe the surgical management in brief in wounds-ulcers b) burns
3. Describe pre-operative evaluation, surgical indications and various surgical approaches in various abdominal conditions and peripheral vascular conditions.
4. Recall the surgical approaches in the form of line diagram and will be able to describe the components of soft tissues cut to reach the target tissue, and the possible post-operative complications in movement.
5. Clinically evaluate post-operative abdominal conditions with special reference to the cardio-vascular and pulmonary function, describe post-operative management in brief.
6. Describe the management of head injury, spinal surgeries, intracranial tumors, peripheral nerve lesions and pain.

Subject Contents:

Sr. No.	Topic	Hours
1	Acute infections: Inflammatory fever, bacteremia, septicemia, pyeremia, toxemia.	04
2	Specific types: Cellulitis-sites, lymphangitis, abcess with special reference to hand infection, carbuncle.	04
3	Specific Types Contd.: Tetanus, Gas gangrene, hospital infection, cross infection with modes of spread and prevention	03
4	General survey of chronic inflammation: syphilis (reference to other venereal diseases),* leprosy and actinomycosis	05
5	Clean and contaminated wounds and infectious wound, principles of treatment, survey of factors affecting wound healing, ulcers and gangrene,	04
6	Post operative complications of abdominal surgery, specifically chest, wound infection, edema	05
7	Malignancy – spread and its behaviour	06
8	Various abdominal incisions, abdominal drainage tubes, catheters and nasogastric tubes Ward demonstration for an hour a day for a period of one week	06
9	Anaesthesia and OT Demonstrations	02

10	Urinary tract infections	01
11	Problems of trauma to the hand and their management	05
12	Breast Surgeries	05

CARDIOTHORACIC SURGERY

COURSE OUTCOMES:

At the end of the course, the student will be able to

1. Describe types of incision, pre and post-operative assessment and complications of cardiothoracic surgery and their management.
2. Clinically evaluate post-operative cardio-vascular and pulmonary function status.
3. Read and interpret investigations including findings of the x-ray chest, CT scan and MRI scan.

Subject Contents:

Sr. No.	Topic	Hours
1	Basic anatomy of chest wall, trachea and bronchial tree, lungs and bronchopulmonary segments, pleura and mediastinum.	02
2	Physiology and mechanics of breathing and use of mechanical breathing - ventilator: (respirators).	02
3	Pulmonary function tests	02
4	Investigation of lung diseases including endoscopies.	02
5	Chest injury.	02
6	Common suppurative diseases of lung - Bronchiectasis, lung abscess.	02
7	Bronchogenic carcinoma	02
8	Common surgeries of chest Thoracoplasty, pulmonary dissections, thoracotomy. Pneumothorax, hydrothorax-Pneumothorax, empyema.	05
9	Common diseases of oesophagus and related conditions causing dysphagia.	02
10	Surgery of portal hypertension.	02
11	Surgery of pulmonary tuberculosis.	02
12	Surgery of heart and great vessels.	02
13	Basic anatomy of heart, great vessels.	01
14	Investigation of patient undergoing cardiac surgery.	01
15	Cardiac arrest, its management	02
16	Basic principles of open heart Surgery, Heart lung bypass (Extra Coportal circulation)	02
17	Common diseases of heart requiring surgery both congenital and acquired including open heart surgery	02
18	Common drugs used in cardiac surgery, its uses, side effects.	01
19	Common vascular surgery, Embolectomy, vascular reconstructive surgery, (Thrombosis, Embolism, atherosclerotic and occlusive vascular diseases including coronary artery bypass)	02

Clinical:

Examination of patients as regards chest & heart diseases.

1. Demonstration - Acquaintances with C.T. Surgery,
2. Equipments, I.C.C.U.O.T.
3. Radiology - X-ray studies - X-ray chest in various lung diseases.

PLASTIC SURGERY

Subject Contents:

Sr. No.	Topic	Hours
1	Burns as a specific types of severe trauma, classification, early and late complications, management and reconstructive surgery – skin as an example of plastic procedure.	05
2	Types of skin grafting – take up of a graft – healing of a graft, post operative care of plastic surgery with specific role of physiotherapy.	05
3	Principles of cineplasty, tendon transplant, cosmetic surgery, types of graft, surgery of hands with emphasis on a management of traumatic and leprosy hand	05
4	Neck, skin contractures and management	01
5	Problems of trauma to hand and their management	03

NEUROSURGERY

Subject Contents:

Sr. No.	Topic	Hours
1	Neuro Physiology- Neurophysiology, basis of tone, disorders of tone and posture, bladder control, muscle contraction, movement and pain with clinical features and management of the following a) Congenital and childhood disorders - hydrocephalus spina bifida b) Trauma - Broad localization, first aid and management of squeal of head injury and spinal cord injury. c) Diseases of the Spinal Cord - Craniovertebral junction anomalies, syringomyelia, cervical and lumbar disc disease, tumors. d) Peripheral nerve disorders - Peripheral nerve injuries, localization 10 Page 78 of 106 & management. Entrapment neuropathies. e) Intracranial tumors - Broad classification, signs and symptoms. f) Pre-operative Assessment and indications and contra - indication for neurosurgery in intracranial tumors g) Management of pain, electrical stimulation of brain and spinal cord. h) Miscellaneous	10
2	Outline of surgical disorders of brain - head injuries. General survey of surgical disorders of spine and spinal cord problem of paraplegia, malignancy.	09

Clinical: Operation Theater (O.T.) Visit

List of References:

Text Books:

1. A Manual Clinical Surgery. Das, Somen-12th Edition.
2. A Concise Textbook of Surgery. Dr. Somen, Das. 10th Edition.
3. Bailey's & Love's Short Practice of Surgery Vol 1 & 2 (3 Sets). Williams, Norman. 27th Edition.

Reference Books:

1. Policies, Protocols & Procedures in ICU. Ahmed, Moied. S. 2nd Edition.

List of Open Source Software/learning website:

- [k-hub.in e library/A single platform for all e resources](#) (K-hub, E Resource)
 - User Name- KB4605VNG
 - Password- BL@69BX!

- knowledgegainer.delnet.in (Delnet, E Resource)
 - User Name-gjspum
 - Password- spu10924

OBSTETRICS AND GYNAECOLOGY

COURSE OUTCOMES:

At the end of the course, the student will be able to

1. Describe the normal and abnormal physiological events during the puberty, labor, puerperium, post-natal stage and menopause.
2. Discuss various complications during pregnancy, labor, puerperium and postnatal stage, pre- and post-menopausal stage and various aspects of urogenital dysfunction and the management in brief.
3. Acquire knowledge in brief about intrauterine development of the fetus.
4. Acquire the skill of clinical examination of the pelvic floor.
5. Acquire the skill of the clinical examination of pregnant women.

Subject Contents:

Sr. No.	Topic	Hours
1	Anatomy and physiology of the female reproductive organs. Puberty dynamics.	02
2	Physiology of menstrual cycle-ovulation cycle, uterine cycle Cx. cycle, Duration, amount.	02
3	Hormonal regulation of menstruation.	01
4	Diagnosis of pregnancy.	01
5	Abortion.	01
6	Physiological changes during pregnancy.	02
7	Antenatal care.	04
8	High risk pregnancy., prenatal, common complications – investigation and management	02
9	Musculoskeletal disorders during pregnancy	02
10	Normal labour.	01
11	Multiple Child birth	01
12	Child birth complications, investigations and management	02
13	Normal puerperium, lactation and postnatal.	03
14	Family planning.	01
15	Medical Termination of pregnancy (MTP).	01
16	Infection of female genital tract including sexually transmitted diseases, low backache.	02
17	Prolapse of uterus and vagina.	03
18	Principles of common gynaecological operations Hysterectomy,D&C, D&E, PEP Smear	01
19	Menopause and its effects	02
20	Sterility- Pathophysiology, investigations, management	01
21	Urogenital dysfunction – pre and post natal condition	02
22	Carcinoma of female reproductive organs – surgical management in brief	01

List of References:

Text Books:

1. DC Dutta's Textbook of Obstetrics (Including Perinatology & Contraception).Hiralal Konar. 8th Edition.
2. DC Dutta's Textbook of Gynecology.Hiralal Konar. 7th Edition.

List of Open Source Software/learning website:

- k-hub.in e library/A single platform for all e resources (K-hub, E Resource)
 - User Name- KB4605VNG
 - Password- BL@69BX!
- knowledgegainer.delnet.in (Delnet, E Resource)
 - User Name-gjspum
 - Password- spu10924

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Understand and Describe the effects of surgical trauma and anesthesia in general.	1 Remembering 2 Understanding 3 Applying
CLO2	Understand the management of head injury, spinal surgeries, intracranial tumors, peripheral nerve lesions and pain.	1 Remembering 2 Understanding 3 Applying 4 Analyzing 5 Evaluating
CLO3	Able to interpret investigations including findings of the x-ray chest, CT scan and MRI scan.	1 Remembering 2 Understanding 4 Analyzing
CLO4	Evaluate post-operative abdominal conditions with special reference to the cardio-vascular and pulmonary function, describe post-operative management in brief.	1 Remembering 2 Understanding 3 Applying
CLO5	Acquire knowledge about intrauterine development of the fetus.	1 Remembering 2 Understanding
CLO6	Elaborate the normal and abnormal physiological events of the reproductive and urogenital system during the puberty, labor, puerperium, pre-natal and post-natal stage, and menopause.	1 Remembering 2 Understanding

Mapping of CLOs with Pos & PSOs

Course Learning Outcomes	Program Outcomes (POs)								Program Specific Outcomes (PSOs)							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CLO1	H			M				M	M		M		L			M
CLO2		M	M				M		M		H			M		
CLO3	M		H		M					M			H	M		M
CLO4			M	M			M			M		M				
CLO5	L		M			M		L	M					L	M	
CLO6	M			M		L					M					L

H= High M=Medium L=Low