Paragraph **Page**

SYLLABUS

SCHEDULES OF KNOWLEDGE AND OPERATIVE SKILLS

Schedule 1	Emergency surgery	1
Schedule 2	Critical care	2
Schedule 3	Breast surgery	3
Schedule 4	Coloproctology	4
Schedule 5	Endocrine surgery	5
Schedule 6	Endoscopic surgery	6
Schedule 7	General paediatric surgery	7
Schedule 8	Transplantation	8
Schedule 9	Upper GI/HPB surgery	9
Schedule 10	Professionalism and Leadership	10

Schedule 1 Emergency Surgery

Training required for all general surgeons to enable them to manage the emergency "take" (to be taken in conjunction with the schedule for critical care)	Advanced modules (especially applicable to military surgery)
Trainees, by the end of training, shall be expected to have knowledge and experience of the assessment and management of the following groups of conditions and of the relevant basic science:-	Trainees with a particular interest in trauma may develop expertise in one or more of the following topics:-
Assessment of the acute abdomen Appendicitis and right iliac fossa pain Peritonitis Acute intestinal obstruction Intestinal pseudo-obstruction Biliary tract emergencies Acute pancreatitis Strangulated hernia Intestinal ischaemia Swallowed foreign bodies Gastrointestinal bleeding Toxic megacolon Superficial sepsis and abscesses Acute ano-rectal sepsis Ruptured aortic aneurysm Acutely ischaemic limb Acute presentations of urological disease Acute presentations of gynaecological disease <u>Trauma</u> Assessment of the multiply injured patient Closed abdominal injuries, especially splenic, hepatic and pancreatic injuries Closed chest injuries Stab and gunshot wounds Arterial injuries Injuries of the urinary tract Initial management of head injuries and interpretation of CT scans Initial management of severe burns	Triage (major accidents) Battle triage Field hospitals *or obtain* The Diploma in Disaster Medicine and Surgery <u>Head injuries</u> Some general surgeons will be required to take primary responsibility for the initial management of head injuries. Appropriate training should be available for those who will have this responsibility

This training is exemplified by the following procedures, *competence* at which should be achieved by the following stages of higher surgical training (though often sooner):-

By completion of year 1	By completion of higher surgical training	
	Usually by mid-training	Usually later in training
* Appendicectomy Drainage of superficial abscesses Drainage of ano-rectal sepsis Urethral catheterisation Suprapubic cystostomy Exploration of scrotum for torsion Reduction of paraphimosis Diagnostic peritoneal lavage	Diagnostic laparoscopy • Closure of perforated peptic ulcer Endoscopy for upper GI Bleeding; haemostasis • Suture of bleeding peptic ulcer * Emergency hernia repair • Laparotomy for small bowel obstruction • Hartmann's operation Ileostomy Colostomy • Splenectomy for trauma Embolectomy Fasciotomy Tracheostomy Ultrasound for emergency surgical conditions: -Emergency hepatobiliary conditions -Abdominal trauma -Free fluid inside abdomen -Abdominal aortic aneurysm -Acute appendicitis -Pleural effusion and pericardial effusion	• Gastrectomy for bleeding • Laparotomy for large bowel obstruction • Laparotomy for perforated colon • Emergency cholecystectomy • Laparotomy for abdominal injury • Splenic repair • Operation for ruptured liver • Pancreatic debridement /drainage of pancreatic abscess • Laparotomy for post operative complications Lateral thoracotomy Median sternotomy Rectal injuries

* Individual index procedures

• These items are grouped as the index procedure of "emergency laparotomy"

Revised by GS Board in Sep 2025, endorsed by E&EC and Council in Oct 2025

Schedule 2 Critical Care

Trainees must have an understanding of the disturbances of normal physiology and of the bacteriological, pathological and immunological changes that affect the seriously ill patient.

They should have a knowledge of the following topics, including the relevant basic science, to enable them to recognize and institute the management of life threatening conditions and to make appropriate referrals for intensive care:-

Hypotension
Haemorrhage
Haemorrhagic and thrombotic disorders
Blood transfusion and blood component therapy
Septicaemia and the sepsis syndrome
Antibiotic therapy and the management of opportunist infection
Gastro-intestinal fluid losses and fluid balance
Nutritional failure and nutritional support
Respiratory failure
Renal failure
Fluid overload and cardiac failure
Myocardial ischaemia
Cardiac arrhythmias
Multiple organ failure
Pain control
Cardiac arrest, respiratory arrest and brain death
Organ donation

A detailed knowledge of the methods and results of invasive monitoring will *not* be required.

[Emergency surgery is the subject of schedule 1]

The following practical skills are required:-

Current cardio-pulmonary resuscitation techniques
Chest drain insertion
Central venous pressure line insertion

Trainees should have an understanding of the value and limitations of ITU care, and the social and ethical consequences of choosing not to institute or continue treatment

Schedule 3 Sub-specialty: Breast Surgery

General surgery	**Sub-specialty**	
	Essential sub-specialty training	Advanced sub-specialty training
Trainees, by the end of training, shall be expected to have a knowledge of the diagnosis and surgical management of the following groups of conditions, and of the relevant basic science:-	In addition to a greater depth of knowledge, trainees should have an understanding of the following topics related to breast disease:- In addition trainees should have a	knowledge of the following topics in relation to breast disease:-
Carcinoma of the breast Benign breast disease and of:- Hormone therapy for benign and malignant breast disease	Epidemiology Screening programme Histo/cytopathology Mammography Ultrasound Stereotaxis Adjuvant chemotherapy: Chemotherapy for advanced disease Radiotherapy Counselling Hospice care Appropriate referral to oncologists, Radiotherapists or orthopaedic surgery and have attended a Breast Training Course	Genetics related to surgery Immunocyto-chemistry Clinical trials Neo-adjuvant therapy and related surgery
This training is exemplified by *competence* to perform the following operations:-		
Treatment of breast abscess FNA Trucut biopsy Excision of breast lump * Mastectomy	* Wide excision of breast tumours Needle localization Mammary duct fistula * Breast duct excision * Microdochectomy Axillary dissection	<u>Reconstruction module</u> Myocutaneous flaps Tissue expanders Complications and re-operation Breast reduction
Be familiar with (have assisted at) the procedures in column 2	Be familiar with (have assisted at) the procedures in column 3	

* Index procedures

Schedule 4 Sub-specialty: Coloproctology

General surgery	Sub-specialty	
	Essential sub-specialty training	Advanced sub-specialty training
Trainees, by the end of training shall be expected to have a knowledge of the diagnosis and surgical management of the following conditions, and of the relevant basic science:-	In addition to a greater depth of knowledge, trainees should have an understanding of the following topics:-	
Neoplasms of large bowel Inflammatory bowel disease (inc.medical management) Diverticular disease Irritable bowel syndrome Haemorrhoids Anal fissure Rectal prolapse Acute appendicitis/RIF pain Intestinal obstruction Intestinal pseudo-obstruction Intestinal ischaemia Peritonitis Large bowel injuries	Anal tumours Pelvic autonomic nerves Screening for colorectal cancer Genetics of colorectal cancer Place of radiotherapy and chemotherapy in treatment Anorectal physiology Anorectal ultrasound Faecal incontinence Chronic constipation Intestinal fistulae Colonic bleeding Radiation enterocolitis Other small bowel conditions	
This training is exemplified by *competence* to perform the following operations:-		
Proctoscopy/rigid sigmoidoscopy Flexible sigmoidoscopy Outpatient haemorrhoid treatment Haemorrhoidectomy Fissure-in-ano Acute anorectal sepsis Small bowel resection Right hemicolectomy Left hemicolectomy Sub-total colectomy Colonic obstruction Colonic perforation Hartmann's procedure Colostomy Ileostomy Appendicectomy Diagnostic Laparoscopy Inguinal herniorrhaphy Femoral herniorrhaphy Repair of recurrent groin hernia Umbilical and para umbilical hernia repair Incisional and para-stomal hernia repair The use of staplers	Diagnostic colonoscopy * Therapeutic colonoscopy * Fistula-in-ano * Anterior resection of rectum AP resection of rectum Ileorectal anastomosis Panproctocolectomy Closure of Hartmann's * Prolapse surgery Diverticular disease/fistula Colostomy complications Ileostomy complications Must also have achieved competence at the full range of procedures in column 1 of the Upper GI schedule	Incontinence surgery Sphincter repair Recto-vaginal fistula Ileo-anal and colonic pouch Colo-anal anastomosis Re-operation for pelvic malignancy Re-operation for inflammatory bowel disease Operation for intestinal fistula Complex fistula-in-ano Posterior approach to rectum Transanal microsurgery Posterior pelvic clearance Laparoscopy: advanced Block dissection of groin Rectal injuries
Be familiar with (have assisted at) procedures in column 2	Be familiar with (have assisted at) procedures in column 3	

* Index procedures

Schedule 5 Sub-specialty: Endocrine Surgery

General surgery	**Subspecialty**	
	Essential sub-specialty training	Advanced sub-specialty training
Trainees, by the end of training shall be expected to have a knowledge of the patho-physiology, diagnosis and surgical management of the diseases of the following endocrine organs, and of the relevant basic science:-	In addition to a greater depth of knowledge, trainees should have an understanding of the following topics in relation to endocrine disease:-	
Thyroid Parathyroid Pituitary Adrenal cortex Adrenal medulla Gut as endocrine organ Endocrine pancreas and the management of :- Thyrotoxicosis Adrenal insufficiency Hyper/hypo thyroidism Carcinoid syndrome	Counselling and screening in familial disease Anaesthetic and pharma-cological problems Radio-immuno assays Imaging techniques Histo/cyto pathology	
This training is exemplified by *competence* to perform the following operations:-		
	* Thyroid lobectomy Thyroidectomy – toxic goitre Total thyroidectomy Retrosternal goitre Thyroglossal cystectomy	<u>At least three of the modules</u>:- Re-operative thyroid surgery, Including nodal dissection * Parathyroidectomy Reoperative parathyroidectomy Endocrine pancreatic tumours Adrenalectomy (inc.laparoscopic) <u>Optional extras</u>:- Block dissection of neck Pituitary surgery Some surgeons, in addition to training in endocrine surgery, may also train in salivary gland surgery:- Submandibular gland excision Parotidectomy
Be familiar with (have assisted at) the procedures in column 2	Be familiar with (have assisted at) the procedures in column 3	

*Index procedures

Schedule 6: Technical Sub-specialty: Endoscopic Surgery		
General surgery	**Subspecialty**	
	Essential sub-specialty training	Advanced sub-specialty training
Trainees, by the end of training, shall be expected to have a knowledge of the following topics, and of the relevant basic science:-	In addition to a greater depth of knowledge, trainees should have an understanding of the following topics:-	Trainees should, additionally, have a knowledge of the following topics:-
Laparoscopic anatomy of the abdomen Physiology of pneumo-peritoneum Dangers of pneumoperitoneum Principles of diathermy Informed consent for laparo-scopic procedures <u>Course</u>: Basic laparoscopy /cholecystectomy	Pre and post operative management of laparoscopic cases Port complications Technology of video imaging, cameras, insufflator etc. The methods of manipulation of images Laparoscopic instruments, clips, staplers and port types Management of equipment failure Ultrasound interpretation, internal and external techniques Recognition and management of laparoscopic complications Use and dangers of diathermy Anaesthetic problems in laparoscopic surgery Medico-legal implications of video-endoscopic surgery <u>Course</u>: Cholecystectomy and appendicectomy techniques	Theory and pracice of choledochoscopy Theory of different forms of diathermy Laparoscopic ultrasound Advanced instrumentations and equipment Endoscopic suturing devices Theory, uses and dangers of lasers and other energy sources e.g. harmonic scalpel Creation and maintenance of new endoscopic spaces Uses of assistance robots and robotic instruments Minilaparoscopy <u>Courses</u> in the relevant advanced endoscopic techniques ERCP skills are advantageous
This training is exemplified by *competence* to perform the following operations:-		
Diagnostic laparoscopy:- Closed and open techniques Inserion of one port and Veress needle Induction of pneumo-peritoneum Laparoscopic biopsy Be familiar with (have assisted at) the procedures in column 2	* Laparoscopic cholecystectomy[1] Conversion to open cholecystectomy Operative cholangiography Laparoscopic appendicectomy * Laparoscopic hernia repair[2] Laparoscopic adhesiolysis Thoracoscopy Laparoscopy in acute emergencies Other advanced laparoscopic procedures, as appropriate and have the following skills:- Placement of secondary ports Laparoscopic suturing and knotting Control of laparoscopic bleeding Use of retrieval bags Stone retrieval	Many advanced endoscopic procedures are still experimental and others are developing, but an advanced trainee should be aware of them and have assessed their potential, e.g. * Laparoscopic anti-reflux procedures Laparoscopic splenectomy Laparoscopic large bowel resection Laparoscopic rectopexy Laparoscopic exploration of CBD Laparoscopic closure of perforated duodenal ulcer

*Index procedures; the *total* number of laparoscopic procedures should also be recorded

(1) A surgeon who is to practice Laparoscopic cholecystectomy as a consultant must have spent a minimum of 6 months with a recognized endoscopic trainer.
(2) Laparoscopic hernia repair is included subject to approval by SERNIP.

Schedule 7 Sub-specialty: General Paediatric Surgery		
General surgery	**Subspecialty**	
Trainees, by the end of training, shall be expected to have a knowledge of the diagnosis and surgical management of the following groups of conditions in children, and of the relevant basic science:-	In addition to a greater depth of knowledge, trainees should have an understanding of the following topics so as to facilitate appropriate referral to specialist units:-	
RIF pain Testicular pain Paediatric trauma Burns Intussusception Pyloric stenosis Hirschprung's disease Ano-rectal anomalies Tracheo-oesophageal fistula Spina bifida	Congenital small bowel obstruction Intestinal malrotation Associated anomalies Paediatric oncology Management of less complex abdominal trauma	
This training is exemplified by *competence* to perform the following operations:-		
Appendicectomy * Herniotomy Circumcision Reduction of paraphimosis Exploration for testicular torsion	* Orchidopexy Repair of incarcerated inguinal hernia * Pyloromyotomy Reduction of intussusception Thyroglossal cyst Central venous access	Neonatal and complicated cases should be transferred to a Specialist Paediatric Unit
Be familiar with (have assisted at) the procedures in column 2	Be familiar with (have assisted) at the procedures in column 3	

Schedule 8 Sub-specialty: Transplantation

General surgery	**Subspecialty**	
	Essential sub-specialty training	Advanced sub-specialty training
Trainees, by the end of training, shall be expected to have a knowledge of the following topics, and of the relevant basic science:-	In addition to a greater depth of knowledge, trainees should have an understanding of the following topics:-	
Pathology of renal and hepatic disease Patho-physiology of renal and hepatic failure Peritoneal-and haemo-dialysis Management of fluid and electrolyte disorders	Selection of patients for transplantation Post-operative management Immuno-pathology of rejection Management of rejection Immunosuppression Opportunist infections Immunosuppression and cancer Transmission of viral and fungal diseases Tissue typing The HLA system Bladder dysfunction In vitro preservation of organs	
This training is exemplified by *competence* to perform the following operations:-		
Arterial & venous anastomosis Harvesting saphenous vein In addition there will be opportunities for:- Appendicectomy Herniorrhaphy Intestinal resection and anastomosis Laparotomy for acute abdomen Splenectomy Attendance at organ retrievals provides unique experience of retroperitoneal dissection and trainees should take advantage of such opportunities throughout HST	• Donor nephrectomy Donor hepatectomy • Renal transplantation • Uretero-neocystostomy • Uretero-ureterostomy • Renal biopsy • Transplant nephrectomy * Vascular access * Peritoneal access Parathyroidectomy Adrenalectomy • Drainage of intra- and extraperitoneal collections Live donor transplantation Arterial thrombectomy	<u>Renal procedures</u>:- Work bench preparation of the kidney Ileal and colonic conduits Uretero-pyelostomy Bladder (psoas) hitch Boari flap Partial nephrectomy Bilateral nephrectomy Secondary vascular access Renal artery reconstruction Renal vein reconstruction <u>Pancreatic module</u>:- Donor pancreatectomy Pancreatic transplantation <u>Hepatic module</u>:- Liver transplantation Recipient hepatectomy Roux loop construction
Participate in the procedures in column 2 when possible	Be familiar with (have assisted at) the procedures in column 3	

* Index procedures

- These items are grouped as the index procedure "Exploration of renal transplant (for biopsy, revision of ureteric drainage, sepsis or nephrectomy)"

Schedule 9 Sub-specialty: Upper GI Surgery

General surgery	Subspecialty	
	Essential sub-specialty training	Advanced sub-specialty training
Trainees, by the end of training, shall be expected to have a knowledge of the diagnosis and surgical management of the following groups of conditions, and of the relevant basic science:-	In addition to a greater depth of knowledge, trainees should have an understanding of the following topics:-	This training is exemplified by *competence* to perform the following operations:- (A trainee will not generally attain competence in all modules)
Neoplasms of the upper GI tract Management of perforations of the upper GI tract Management of intestinal obstruction Management of GI bleeding Gallstone disease Jaundice Gastro-oesophageal reflux and its complications Peptic ulceration and its complications Radiation enteritis Acute and chronic pancreatitis and their complications Abdominal trauma	Epidemiology and aetiology of oesophago-gastric, pancreato-biliary and liver cancer Principles of screening for caner The use and limitations of multimodality treatment for upper GI cancer Oesphageal motility disorders Chronic pancreatitis Crohn's disease Other small bowel conditions	<u>Upper GI</u>:- * Oesophagectomy * Total and subtotal gastrectomy Extended lymphadenectomy * Laparoscopic anti-reflux surgery and conversion Collis-Nissen procedure * Redo gastric surgery Redo anti-reflux surgery Laparoscopic Heller's myotomy and conversion Long oesophageal myotomy Pharyngeal pouch Operations for morbid obesity <u>Endoscopic procedures</u>:- • Oesophageal stenting • Laser recanalization • Mucosal resection • Variceal banding /sclerotherapy <u>HPB</u>:- Repair of biliary stricture Whipple's procedure Pancreatectomy (distal and total) Drainage of infected pancreatitis Drainage of pancreatic pseudo-cyst Liver injuries Hydatid disease Liver transplantation Porto-systemic shunt <u>Endoscopic procedures</u>:- ERCP • Endoscopic sphincterotomy • Biliary stenting • Pancreatic stenting
This training is exemplified by *competence* to perform the following operations:-		
Inguinal herniorrhaphy Femoral herniorrhaphy Repair of recurrent groinhernia Umbilical and para umbilical hernia repair Incisional and para-stomal hernia repair Hydrocoele Epididymal cyst Small bowel resection Sutured and stapled anastomoses Diagnostic laparoscopy Diagnostic upper GI endoscopy Appendicectomy Closure of perforated ulcer Control of upper GI bleeding	• Endoscopic control of upper GI bleeding • Oesophageal dilatation Operations for upper GI Bleeding * Laparoscopic cholecystectomy Conversion to open cholecystectomy Exploration of common bile duct * Biliary bypass * Gastrectomy Formation of Roux-en-Y loop Splenectomy Plus a minimum of one of the following from column 3:- Oesophagectomy/total gastrectomy Laparoscopic anti-reflux surgery and conversion Pancreatectomy Liver resection Must also have achieved competence at the full range of procedures in column 1 of the coloproctology schedule	
Be familiar with (have assisted at) the procedures in column 2	Be familiar with (have assisted at) the procedures in column 3	

* Index procedures

- These items are grouped as the index procedure of "therapeutic upper GI endoscopy"

(1) A surgeon who is to practice Laparoscopic cholecystectomy as a consultant must have spent a minimum of 6 months with a recognized endoscopic trainer.

Schedule 10 Professionalism and leadership

1. Good Clinical Care

Knowledge:	Core Skills:

1. Patient assessment
2. Clinical reasoning
3. Record keeping
4. Time management
5. Patient safety
6. Infection control
	1. Patient assessment
	  1. Accurate history and physical examination
	  2. Interpret investigations and vital signs
	  3. Respond promptly to patient questions
	  4. Know when to ask senior for help
	  5. Respectful to patients
	2. Clinical reasoning
	  1. Develop a provisional diagnosis and a list of differential diagnoses
	  2. Order appropriate investigations and formulates a treatment plan
	3. Record keeping
	  1. Format notes logically and legibly
	  2. Keep and borrow notes in orderly and traceable manner
	  3. Observe patient data privacy ordinance
	4. Time management
	  1. Prioritise tasks
	  2. Communicate with senior and other team members on progress of tasks
	5. Patient safety
	  1. Participate in M&M meetings
	  2. Keep up to date of treatment guidelines
	  3. Ensure safe use of equipment
	  4. Act promptly when patient deteriorates
	  5. Pay attention to medication safety and drug allergy
	6. Infection control
	  1. Hand hygiene
	  2. Maintain full aseptic technique when performing procedure
	  3. Follow local infection control protocols

2. Communication

Knowledge:	Core Skills:

1. Communication with patients
2. Breaking bad news
3. Communication and working with colleagues
	1. Communication with patients
	  1. Establish rapport with patients and relatives
	  2. Provide appropriate information or referral
	  3. Address emotional needs
	2. Breaking bad news
	  1. Recognise the impact of bad news on patient and relatives
	  2. Act with empathy, honesty and sensitivity, avoiding undue optimism or pessimism
	3. Communication with colleagues
	  1. Communicate with colleagues accurately, clearly and promptly
	  2. Utilise the expertise of the whole multidisciplinary team
	  3. Resolve conflict and enhance collaboration

3. Teaching

Knowledge:	Core skills:
1. Education theory 2. Appraisal methods 3. Counselling and debriefing skills 4. Presentation techniques	1. Prepare appropriate teaching material 2. Supervise medical students, nurse, interns or basic trainees 3. Interpret feedback during teaching 4. Lead journal clubs