# College of Surgeons of East, Central & Southern Africa



# Regulations and Syllabus relating to Fellowship Examination In General Surgery

FCSgen(ECSA)

2016 edition

# COLLEGE OF SURGEONS OF EAST, CENTRAL AND SOUTHERN AFRICA

Regulations and Syllabus for Fellowship Examination in General Surgery leading to the qualification of FCSgen(ECSA)

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#### 1. Introduction

The College of Surgeons of East Central and Southern Africa awards Membership (MCS(ECSA)) and Fellowship (FCS(ECSA)) qualifications. Approved trainee surgeons shall be trained in the hospitals of the region with guidance and support provided by the College.

The Fellowship examination in General Surgery leads to the qualification of Fellow of the College of Surgeons of East, Central and Southern Africa, FCSgen(ECSA). This fellowship is recognition that the candidate has reached the level of knowledge, understanding and practice of surgery sufficient to practice independently at a consultant or specialist level. It should be recognised, however, that surgery is not a static art and fellows should continue to increase knowledge and skills by means of research, conferences, meetings and reading.

The information given in this document is intended as a guide to persons sitting the College examinations and shall not be deemed to constitute a contract or the terms thereof between the College and a candidate or any third party, or representations concerning same.

The College is not responsible and shall not be bound by errors in, or omissions from these regulations; the College reserves the right to revise, amend alter or delete academic regulations at any time by giving such notice as may be determined by COSECSA Council in relation to such changes.

#### 2. Registration as a Trainee

Applications to register as a trainee must be made online on the COSECSA website. In order to register you will need an electronic copy of your primary medical qualification, your medical council (or equivalent) registration, a passport-style photo, and, if applicable, copies of any other surgical qualifications you may have. Applications will only be accepted online. Applications will be assessed by COSECSA, and if found suitable, applicants will be accepted to the training programme provisional upon payment of the programme entry fee.

The programme entry fee can be paid online, by bank transfer to the COSECSA Secretariat bank account in Arusha, Tanzania or to the COSECSA Country Representative. Please see the COSECSA website for details of all fees.

On receipt of the registration fee, the Secretariat will send the candidate:

- Personal login details, which will allow access to the COSECSA Electronic Logbook and e-learning platform (School for Surgeons)
- Assessment forms to be filled in at the end of every training post by the trainee and the supervising consultant.
- A registration number, which remains unique to the candidate.

### 3. Training Requirements

All requirements below will need to be fulfilled without exception.

- 3.1. Before being eligible to sit for the fellowship examination in general surgery, candidates will be required to be registered with the College (see Section 2 above).
- 3.2. Candidates must be registered in the FCS General Surgery training programme for at least three years before appearing in the FCSgen Examination. Registration by the end of February in a given year allows that year to count as a full year of training and will enable the candidate to sit the Clinical/Oral examination at the end of the following year.

- 3.3. Candidates for the fellowship examination in general surgery should normally have passed the membership examination of this College and possess the qualification MCS(ECSA).
- 3.4. Candidates are required to have spent three years in supervised COSECSA accredited training posts. Of these three years, one and a half years must be spent in a general surgical unit dealing mainly with adult abdominal surgery. The remainder of the time can be spent in units specialising in other branches of surgery, for example: thoracic, urology, trauma, paediatric surgery and plastic surgery, provided that these units deal with emergencies on a regular basis.
- 3.5. Of the three years, up to six months may be spent outside the region in a post that has been prospectively agreed with the COSECSA Examinations and Credentials Committee. This post may be in an elective unit.
- 3.6. Candidates are reminded that it is in their interest to experience a wide spectrum of surgical disciplines.
- 3.7. Exemption to the requirement of possessing the MCS(ECSA) qualification may be given to those who have passed an equivalent examination. In order to obtain an exemption, applicants must either:
  - Have completed an MMed(Surgery) qualification in one of the constituent COSECSA countries or in a COSECSA accredited training centre outside the COSECSA region, and provide evidence of three years of specialty training in general surgery as described in section 3.4. For applicants completing a four year MMed(Surgery) programme the minimum further requirement is one year in a COSECSA accredited training programme. For candidates completing a four year MMed(Surgery) programme the minimum further requirement is two years in a COSECSA accredited training programme.
  - Have completed FRCS, FCS(SA) or another similar specialist qualification and be working as a specialist in a COSECSA country. The basic surgical training examinations of other colleges and institutions may also be acceptable but each one will have to be reviewed by the Examination and Training Committee of the College before exemption can be given.
  - Candidates who are granted exemptions will be required to register with COSECSA by the end of February in the year in which they intend to sit the examination.
- 3.8. Candidates will be required to complete at least 6 (out of a total of 10) FCS General Surgery cases on www.schoolforsurgeons.net in each year of their training.

#### 4. Logbook

COSECSA is transitioning from the use of a paper-based logbook to an electronic logbook. FCSgen candidates for the examination in 2017 and in all subsequent years are required to use the COSECSA electronic logbook. Candidates for the 2016 examination may use the paper based logbook as used in previous years.

Paper based Logbook (for candidates for the 2016 FCSgen examination)

During the training period candidates must keep a logbook recording all of their training experience. The book should be available for inspection at any time by the Country Representatives. Consolidation sheets should be filled in every 6 months and a final consolidating sheet filled in to cover the whole training period. The logbook should also contain details of all courses attended and the trainee and post assessment forms for the whole training period.

More detail on completing logbooks is provided in the logbook itself.

Before submission to the examination the Country Representatives should check the logbook for completion, fill in and sign a checklist which remains at the front of the logbook.

At the August council meeting of each year, the Country Representatives will hand over to the Examinations and Credentials Committee Panel head, a copy of the checklist together with copies of the Training post assessment form, Trainee assessment form and the final consolidation sheet (up to August) of all the candidates taking the examination that year.

Before the start of the clinical and oral examinations, the logbook should be handed to the examination administration secretary. Proof of attendance at an approved Basic Surgical Skills course, Basic Surgical Science course and Critical Care or Trauma Course should be brought to the oral examination. Candidates will not be allowed to sit for the examination if this is not done.

Electronic Logbook (for candidates for the 2017 FCSgen examination, and all subsequent examinations)

Candidates are required to log all operations for the duration of their training period in the electronic logbook. In advance of the examinations, details from each candidate's electronic logbook will be made available to their Country Representatives and the COSECSA Examinations and Credentials Committee. At the examinations details from each logbook will be provided to the relevant oral examiners. Only operative experience logged in the electronic logbook will be taken into account and candidates will not be allowed to sit for the examination if operative experience is not adequately recorded.

At the August council meeting of each year, the Country Representatives will hand over to the Examinations and Credentials Committee Panel head, a copy of the Training post assessment form and Trainee assessment form.

Before the start of the clinical and oral examinations, a print out of the electronic logbook operations list (signed by the trainee's supervisor) and consolidation sheet should be handed to the examination administration secretary. Proof of attendance at an approved Basic Surgical Skills course, Basic Surgical Science course and Critical Care or Trauma Course should be brought to the oral examination.

#### 5. Application to Sit Examinations

- 5.1. Candidates should submit the examination fee by the end of July in the year of their exam. Please see the COSECSA website for details of all fees. Examination fees can be paid online, by bank transfer to the COSECSA Secretariat bank account in Arusha, Tanzania or to the COSECSA Country Representative.
- 5.2. On receipt of the examination fee, candidates will be informed of the precise times, dates and places for the exams.
- 5.3. By applying to the examination a candidate agrees to be bound by the rules and regulations of the College.
- 5.4. If a candidate withdraws from an exam not less than 12 weeks before the exam is due, then the fee can be transferred to the next exam date. Fees will not normally be returned if the candidate withdraws permanently, unless due to special circumstances as determined by the College Council.
- 5.5. Candidates must pass the examination within four years of their first attempt. After this they will not be allowed to re-sit. A total of four attempts only will be allowed.
- 5.6. Candidates who pass the written examination but fail the oral and clinical examinations, may attempt the oral and clinical examinations for a maximum of two more years without having to rewrite the written examination, all within a period of four years in total.

#### 6. Examination Format and Conduct

6.1. The standards of the examination will be set by the Examinations and Credentials Committee of the College, which will recommend to Council those standards required by both examiners and candidates. A panel of

examiners will be chosen by the Examinations and Credentials Committee from amongst Fellows of the College for each examination. A register of examiners will be kept by the chairman of the Examinations and Credentials Committee. An examination board will be constituted for each diet of examinations, comprising the chairman of the examination committee, two members from each examination panel and at least one external examiner who will be appointed by Council on recommendation of ECC. The role of the external examiner(s) is to:

- Moderate the written question papers
- Assist with the examination of candidates
- o Provide external independent assessment of the examination
- o Report on the conduct of the examination to the College Council.
- 6.2. The written FCSgen (ECSA) examination will be comprised of 2 papers. The first paper will consist of single best answer multiple-choice questions. The second paper will consist of extended matching and/or short answer questions and/or single best answer multiple-choice questions.
- 6.3. Candidates who pass the written examination will be invited by the Chair of the Examinations and Credentials Committee to the clinical and oral examination. Candidates who do not pass the MCQ section will not be invited to the clinical and oral examination.
- 6.4. Candidates who pass the written examination will be invited by the Chair of the Examinations and Credentials Committee to the clinical and oral examination. Candidates who do not pass the MCQ section will not be invited to the clinical and oral examination.
- 6.5. There will be two 30 minute orals. A clinical examination takes place at the same time and at the same site as the oral. This will be comprised of six 20 minute cases.
- 6.6. Candidates have to pass the written examination and the clinical and oral examination in order to pass overall. The written examination may be held in any of the countries of the region. In exceptional circumstances the examination committee may approve an examination site outside the region. The written examinations are held simultaneously on the first Wednesday of September, at a recognised examination centre with impartial invigilation. The COSECSA Country Representative shall be the Chief Examiner.
- 6.7. The examination papers will be set by members of the examination committee and independently moderated by an external examiner.
- 6.8. No details of marks will be issued to Country Representatives or candidates. Candidates should bring proof of identity. As discussed in Section 4, candidates using paper logbooks should bring these, and candidate using the COSECSA electronic logbook should bring signed printouts of these.

- 6.9. If a candidate fails their clinical examination then they may attempt the clinical examination for a maximum of 2 more years without having to rewrite the written examination.
- 6.10. The chairman of the examination panel will endeavour to minimise the chance of a candidate being examined by an examiner from their own training institution.
- 6.11. The panel of examiners will give the results to the Examination Board who will meet on the day of examination. The Board will then approve the results on behalf of Council and publish them.
- 6.12. For each candidate who fails the exam, the Board will allocate a Fellow of the College (usually a member of the panel of examiners) who will communicate with the candidate and offer advice as may be indicated. Details of marks will not be given.
- 6.13. Appeals against results must be made in writing to the Council within 60 days of the completion of the examination. The President of the College will then appoint an impartial Appeals Committee to investigate the appeal, and require a written report to be filed by the Chairmen of the panel of examiners and the Examination Board. The Appeals Committee will then take all considerations and its own findings into account and recommend a decision which will remain final and binding.

## 7. Syllabus

The fellowship examination in general surgery of the College is an examination aimed at assessing competence in general surgery at a consultant or specialist level. The syllabus below is an outline of what the candidate will be expected to know. It is not exhaustive, but provides a guideline to the topics candidates should understand and operative procedures with which they should be familiar. It should be noted that section 7.15 includes topics that are not always included in the term "general surgery." This section is included because in this region of Africa many surgeons practice in areas where they might be the only surgeon available or might be covering at night for colleagues in other surgical disciplines. The level of competence expected in the topics of section 7.15 will not be at a specialist level, but the candidate should have a sufficient understanding and skills necessary to provide adequate emergency care.

Topics and practical procedures in italics are not practised widely in this region so the candidates will not be expected to know about them in detail, or to have practical experience

TOPICS	PRACTICAL PROCEDURES
7.1 Non Trauma Emergency Surgery Assessment of the acute abdomen Biliary tract emergencies Acute pancreatitis Swallowed foreign bodies Gastrointestinal bleeding Appendicitis and right iliac fossa pain Abdominal pain in children Peritonitis Acute intestinal obstruction Intestinal pseudo-obstruction Strangulated hernia Intestinal ischaemia Toxic megacolon Acute ano-rectal sepsis Ruptured aortic aneurysm Acutely ischaemic limb Acute presentations of urological disease Acute presentations of gynaecological disease Scrotal emergencies in all age groups Diagnostic laparoscopy	Closure of perforated peptic ulcer, open and laparoscopic Endoscopy for upper GI bleeding Operations for GI bleeding including partial gastrectomy Emergency cholecystectomy Emergency hernia repair Laparotomy for small bowel obstruction Small bowel resection Ileostomy Laparotomy for large bowel obstruction Laparotomy for perforated colon Hartmann's operation Colostomy Appendicectomy Drainage of ano-rectal sepsis Laparotomy for post operative complications Urethral catheterisation Suprapubic cystostomy Exploration of scrotum Reduction of paraphimosis Embolectomy Fasciotomy Organ retrieval for transplantation
7.2 Trauma Surgery Assessment of the multiple injured patient including children Closed abdominal injuries, especially splenic, hepatic and pancreatic injuries Closed chest injuries Stab and gunshot wounds Arterial injuries  7.3 Surgical sepsis	Injuries of the urinary tract Initial management of head injuries and interpretation of CT scans Initial management of severe burns Tracheostomy Emergency thoracotomy Splenectomy for trauma Laparotomy for abdominal injury Tuberculous disease of the chest and abdomen
Superficial sepsis and abscesses Pyomyositis Abdomenal sepsis Empyaema and thoracic sepsis Intracranial sepsis	Drainage of superficial abscesses Laparotomy for sepsis Chest drainage for sepsis Thoracotomy for sepsis Burr holes and craniotomy for intracranial abscess
7.4 Critical 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, including in children Nutritional failure and nutritional support Respiratory failure Renal failure and principles of dialysis Fluid overload and cardiac failure Myocardial ischaemia Cardiac arrythmias Multiple organ failure	Pain control Cardiac arrest, respiratory arrest and brain death Organ donation Hypo and hyperthermia Diagnosis of brain death Legal & ethical aspect of transplantation Tracheal Intubation Tracheostomy Surgical airway Cardio-pulmonary resuscitation Chest drain insertion Central venous line insertion Insertion of peritoneal dialysis catheter Primary vascular access for haemodialysis  A detailed knowledge of the methods and results of invasive monitoring will not be required

7.5 Gastrointestinal surgery	Diagnostic upper GI endoscopy
Neoplasms of the upper GI tract	Laparoscopic cholecystectomy
Gallstone disease	Conversion to open cholecystectomy
Jaundice	Exploration of common bile duct
Gastro-oesophageal reflux and its complications	Biliary bypass Gastrectomy
Hiatus hernia	Splenectomy
Peptic ulceration and its complications	Proctoscopy/rigid sigmoidoscopy
Radiation enteritis Neoplasms of large bowel	Flexible sigmoidoscopy & colonoscopy, diagnostic and
Diverticular disease	therapeutic
Irritable bowel syndrome	Outpatient haemorrhoid treatment
Haemorrhoids	Haemorrhoidectomy Procedures for fistula in ano
Anal fissure	Right hemicolectomy
Rectal prolapse	Left hemicolectomy
Fistula in ano	Sub-total colectomy
Diverticular disease/fistula Colostomy complications	Resections for rectal cancer, restorative and excisional
lleostomy complications	Illeorectal anastomosis
Inflammatory bowel disease (inc medical management)	Panproctocolectomy
3	Closure of Hartmann's procedure
	Rectal injuries
7.6 Surgery of the skin & integument	Excision of skin lesions
Pathology, diagnosis and management of skin lesions, benign	Excision of skin tumours
and malignant	Split and full thickness skin grafting
Basal and squamous cell carcinoma	Node biopsy
Malignant melanoma	Block dissection of axilla and groin
Other skin cancers	Surgery for soft tissue tumours including sarcomas
7.7 Endocrine surgery / neck surgery	Thyroid lobectomy
Diagnosis & management of neck lumps	Retrosternal goitre
g	Thyroglossal cystectomy
Physiology & pathology of:	Submandibular salivary gland excision Parotidectomy
Thryoid	Approach and exploration of adrenal glands
Parathyroid	Approach and exploration of adjenial glands
Adrenal cortex	
Adrenal medulla	
Management of:	
Thyrotoxicosis	
Adrenal insufficiency	
Hyper and hypo thyroidism	
Carcinoid syndrome	
Anaesthetic and pharmacological problems	
Imaging techniques for endocrine organs	Treatment of breast abscess
7.8 Breast surgery	Fine needle aspiration cytology
Carcinoma of the breast	Trucut biopsy
Benign breast disease	Excision of breast lump
Hormone therapy for benign and malignant breast disease Histo-/cytopathology	Mastectomy
Mammography	Wide excision of breast tumours
Ultrasound	Axillary dissection with other breast operations
Adjuvant chemotherapy:	
Chemotherapy for advanced disease	
Radiotherapy	
Counselling	
Hospice care	Surgery for all abdominal herniae, using open and
7.9 Hernias	laparoscopic techniques
External and internal abdominal herniae. Anatomy,	Repair of childrens' herniae
presentation, complications	,
Hernia in childhood	
	Openstions for hydrogenic and distance in the control of the contr
7.10 Urology	Operations for hydrocoele, epididymal cyst and varicocoele
Undescended testicle	Adult circumcision Vasectomy
Development and natural history of the prepuce	Vascotoniy
Pathology of the scrotum and its contents	
Male sterilization, including counselling and informed consent	
7.11 Paediatric surgery	Ramstedt's procedure
Infantile pyloric stenosis	Orchidopexy Circumcision in children
Childrens tumours eg Wilms	On Garricolori in Grindi GH
Congenital abnormalities of bladder and abdominal wall	

Anorectal anomalies	
Tracheoesophageal abnormalities	
7.12 Vascular surgery Atherosclerosis Ischaemic limb Aneurysmal disease Venous thrombosis & embolism Hyper-hypo coagulable state Chronic venous insufficiency Arteriography Vascular CT scanning Magnetic Resonance Angiography Vascular ultrasound Varicose veins Mesenteric ischaemia	Vascular suture/anastomosis Approach to/control of infra-renal aortic, iliac and femoral arteries Control of venous bleeding Balloon thrombo-embolectomy Amputations of the lower limb Fasciotomy Primary operation for varicose veins Abdominal aortic aneurysm repair, elective and ruptured Femoro-popliteal bypass Femoro-femoral bypass
7.13 Research and ethics	
Critical appraisal of the surgical literature Scientific method & statistics as applied to surgery Informed consent Ethical aspects of surgical practice Genetic aspects of surgical disease	
7.14 Minimal Access surgery  Physiology of pneumo-peritoneum Informed consent for laparoscopic procedures Pre and post operative management of laparoscopic cases Port complications Technology of video imaging, cameras, insufflator etc Laparoscopic instruments, clips, staplers and port types Management of equipment failure Recognition and management of laparoscopic complications Use and dangers of diathermy Anaesthetic problems in laparoscopic surgery	Diagnostic laparoscopy Closed and open techniques of port insertion Laparoscopic biopsy Laparoscopic appendicectomy Laparoscopic adhesiolysis Thoracoscopy Laparoscopic suturing and knotting Control of laparoscopic bleeding
7.15 Other surgical specialties limb trauma Open and closed Fractures Dislocation of joints Nerve injuries Flexor and extensor tendon repairs Acute septic arthritis	Open and closed reduction of dislocations Manipulation and POP splintage of fractures Skin and skeletal traction Open fracture debridement and external fixation Nerve repair Flexor and extensor tendon repair Surgical approaches to the joints and arthrotomy
Spinal injury	Emergency management of spinal injury
Head injury	Emergency management of closed and open head injury Burr holes and craniotomy
Open and closed Chest injuries	Insertion and mangement of chest drains Thoracotomy and post operative management
Obstetric and gynaecological emergencies	Approaches to the female pelvis Episiotomy Caesarian section Surgery for rupturesd ectopic pregnancy
Anaesthesia	Use of local anaesthesia Digital block Axillary block Spinal anaesthesia Use of ketamine Simple general anaesthesia