

# MFSRH Part One Handbook

This document includes all the key information for candidates interested in taking the Faculty of Sexual and Reproductive Healthcare (FSRH) membership examination (MFSRH) Part One.

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## Key Information for the MFSRH Part One

The Part One MFSRH Exam consists of 60 questions of the “single best answer” (SBA) format. Candidates are given 90 minutes to answer these. The questions are testing applied knowledge. Most of them are presented as clinical vignettes.

Examples of these questions can be found under [‘Example Questions for MFSRH Part One’](#) section of this document.

The exam is a gateway exam designed to assess trainees at ST3 level. The MFSRH Part One must be achieved before proceeding on to intermediate training. It is likely that candidates may want to attempt the exam before ST3 level, but must be aware that the exam is pitched at ST3 level. We would advise potential candidates in their foundation years against sitting the exam.

Candidates are eligible to enter for the Part One examination when they have obtained their medical degree and may do so either before or after submitting the Evidence Based Commentary. Candidates must pass the Part One examination before applying to sit the Part Two examination.

Modules assessed by the exam are:

- ▶ Module 2: Contraception
- ▶ Module 3: Unplanned pregnancy and Abortion Care
- ▶ Module 4: Gynaecology (Medical and Surgical)
- ▶ Module 5: Specialist Gynaecology
- ▶ Module 6: Pregnancy
- ▶ Module 7: Menopause and PMS
- ▶ Module 8: Genitourinary Medicine
- ▶ Module 13: Information Technology, Audit and Research

Further information on expected knowledge for these Modules can be found in the [‘Syllabus for MFSRH Part One’](#) section of this document.

Candidates should be advised that though they may be at ST3 level in the curriculum, they might not have had clinical exposure to some aspects of the syllabus. However, the exam may test theoretical knowledge within the scope of the syllabus in these areas, eg PMS and Menopause.

The Pass Mark is determined for each examination by applying a modified Angoff standard setting method. The Pass Mark will vary from year to year depending on the degree of difficulty of the questions that are set.

There is no limit to the number of attempts at the Part One examination.

## Syllabus for MFSRH Part One

### Module 1: Clinical Skills

Not examined by the Part One MFSRH Examination.

### Module 2: Contraception

You will be expected to have detailed knowledge of all methods of fertility control, their indications, contraindications and complications and their mode of action and efficacy. You will be also be expected to know about the physiology, endocrinology, epidemiology and pharmacology of contraception. You should understand the development of the oocyte and sperm and the control of spermatogenesis and oogenesis.

### Module 3: Unplanned pregnancy and Abortion Care

You will be expected to know about development of the embryo and fetus and about the legal and ethical aspects of abortion. You will need to know the principles of surgical and medical methods of termination of pregnancy, including relevant investigations and screening tests and details of the pharmacological agents used and their mode of action.

### Module 4: Gynaecology (Medical and Surgical)

You will be expected to know the anatomy, physiology and histopathology of the pituitary gland and female reproductive tract. This will include an understanding of the changes at puberty, the menopause and during the menstrual cycle including ovulation. You will need to know the microbiology of the organisms present in and introduced into the reproductive tract, the associated disorders and the appropriate treatment. The principles of medical and surgical management of gynaecological problems should be understood.

### Module 5: Specialist Gynaecology

#### ► Subfertility

You will need to know about the structure (anatomy and development) and function (physiology and cell biology) of the organs of the male and female reproductive tract in the context of their relevance to fertility and its disorders. You will be expected to understand the epidemiology, aetiology, pathogenesis, clinical treatment and prognosis of all aspects of male and female fertility problems. Your knowledge will include indications, limitations and interpretation of relevant investigations and treatments in relation to both male and female subfertility including disorders of development and endometriosis.

#### ► Urogynaecology

You should know the structure of the bladder and pelvic floor and their innervation. You should understand the mechanisms of continence and micturition. You should understand how congenital anomalies, pregnancy and childbirth, disease, infection and oestrogen deficiency affect these mechanisms and the impact of drugs on bladder function. You will be expected to understand the management of urinary and faecal incontinence, benign bladder conditions and urogenital prolapse.

## ▶ Gynaecological Oncology

You should know the epidemiology of cancers affecting women and you will be expected to have full knowledge of the aetiological factors, including the role of the Human Papillomavirus, the pathology and classification of gynaecological cancer and pre-malignant conditions as well as that used for cervical cytology. You should be aware of the principles of radiotherapy and the properties and actions of drugs used in the treatment of gynaecological cancer as well as the effects of chemotherapy on gonadal function.

## Module 6: Pregnancy

### ▶ Early Pregnancy Care

You will be expected to have a good understanding of the applied sciences pertaining to early pregnancy and pregnancy loss. You should be familiar with the diagnostic features of ultrasound used in early pregnancy, and the medical agents used to manage miscarriage, ectopic pregnancy and trophoblastic disease.

### ▶ Antenatal Care

You should know details of the physiological changes in pregnancy including CVS, respiratory, renal, endocrine and GIT. You will be expected to know haematological changes in pregnancy including types of anaemia, clotting and pro-thrombotic states. You will be expected to know the drugs used in and related to pregnancy, as well as known teratogens.

### ▶ Labour

You will be expected to know the mechanism of normal and abnormal labour and the mechanism of spontaneous vaginal birth.

### ▶ Post-partum care

You should be aware of the physiological changes of the puerperium. You should know the effects of common drugs on breast feeding.

## Module 7: Menopause and PMS

### ▶ Menopause

You will be expected to have detailed knowledge of the physiology, epidemiology and demography of the menopause including premature and surgical menopause and to understand the short, intermediate and long term consequences of ovarian failure. You will be expected to know the structure of bone, including histological features. You will be expected to know pharmacological details of hormone replacement regimens including tibolone and SERMs.

### ▶ Premenstrual Syndrome

You will be expected to know about the reproductive physiology and possible aetiologies of PMS and the hormonal and non-hormonal treatments, including alternative and complimentary therapies.

### **Module 8: Genitourinary Medicine**

You will be expected to know the epidemiology, aetiology, microbiology and natural history of genital tract infections and infestations and to be able to recognise, diagnose and manage these conditions in both men and women. You will also be expected to have an understanding of the epidemiology, transmission, clinical features, management and prevention of blood-borne viruses, including hepatitis and HIV/AIDS and to have knowledge of hepatitis A and B, and HPV vaccination.

### **Module 9: Public Health**

Not examined by the Part One MFSRH Examination.

### **Module 10: Teaching, Appraisal and Assessment**

Not examined by the Part One MFSRH Examination.

### **Module 11: Ethics and Legal Issues**

Not examined by the Part One MFSRH Examination.

### **Module 12: Leadership, Management and Governance**

Not examined by the Part One MFSRH Examination.

### **Module 13: Information Technology, Audit and Research**

The examiners will expect you to demonstrate a full understanding of all common usage of computing systems including the principles of data collection, storage, retrieval, analysis and presentation.

You will be expected to understand the principles of screening, clinical trial design and audit and the statistical methods used in clinical research. You should know about levels of evidence, quantification of risk, informed consent and ethical and regulatory approvals in research. You should understand summary measures for therapy (RR, OR, RD, NNT); summary measures for accuracy (sensitivity, specificity, predictive values, likelihood values); descriptive statistics (mean, median etc) and common statistical tests used in reproductive health care research.

### **Module 14: Sexual Assault**

Not examined by the Part One MFSRH Examination.

### **Module 15: Sexual Problems**

Not examined by the Part One MFSRH Examination

## Reading List for the MFSRH Part 1

The following list of educational resources **is for guidance only** and is not compulsory reading. Where possible we list electronic resources. There are other books and websites not listed here that are suitable for study purposes for this examination; this simply details a selection of information found helpful by previous successful candidates.

**Up to date guidelines can be found on the following websites:**

- ▶ [Faculty of Sexual and Reproductive Healthcare](#)
- ▶ [British Association for Sexual Health & HIV](#)
- ▶ [Royal College of Obstetricians and Gynaecologists](#)
- ▶ [British Menopause Society](#)
- ▶ [NICE](#)
- ▶ [NHS Cervical Screening Programme](#)
- ▶ [British National Formulary \(BNF\)](#)

To avoid confusion, please note that other guidelines, both local and international (e.g. [WHOMECC](#)) are of great interest but the exam will be based on the FSRH guidance as above.

**e-learning resources:**

[NHS e-learning](#)

**Examples of critical appraisal texts:**

The Doctor's Guide to Critical Appraisal (4th ed)

- ▶ N Gosall, G Gosall
- ▶ ISBN: 978-1905635979

How to read a paper. The Basics of Evidence-Based Medicine (5th ed)

- ▶ Trisha Greenhaugh
- ▶ ISBN: 978-1118800966

**Examples of basic science and general clinical texts that may be useful for reference:**

Basic Science in Obstetrics and Gynaecology – A textbook for MRCOG Part 1 (4th ed)

- ▶ P. Bennett and C. Williamson
- ▶ ISBN: 978-0443102813

Basic Sciences for Obstetrics and Gynaecology (5th ed)

- ▶ Tim Chard and Richard Lilford
- ▶ ISBN 978-3540761884

MRCOG Part 1: 400 SBAs, Second Edition 2016

- ▶ Katherine Andersen and Tara Woodward
- ▶ ISBN 190983646X

**Journals:**

- ▶ The Journal of Family Planning and Reproductive Health Care (now relaunched as BMJ Sexual and Reproductive Health).
- ▶ The Obstetrician and Gynaecologist

There is no absolute need to read basic science textbooks on for this exam. Candidates should revise based only on curriculum and syllabus requirements pertaining to the exam.

In particular, the level of embryology required for the part 1 exam is:

1. The development of the early embryo up to 8 weeks (by which organogenesis is complete)
2. The development of the male / female reproductive tract and the associated anomalies

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## Example Questions for the MFSRH Part One

### Module .2: Contraception

A 27-year-old woman had a SDI fitted two years ago. Prior to this she had used condoms for contraception. She had a previously regular menstrual cycle with five days of moderately heavy bleeding per month, no IMB or PCB. Since her implant her bleed pattern had been infrequent; light but unpredictable. However, recently she has been bleeding on a daily basis for the last six weeks; sometimes heavy, sometimes light, sometimes bright red loss, sometimes sludgy brown. She hates it. PT is negative and recent Chlamydia screening was clear. She had her first cytology screening two years ago, which was normal, routine three year recall advised. You give her the COC to see if things improve. She returns after a further month saying it has made no difference at all.

What is the most appropriate course of action for you to take?

- A. Prescribe Norethisterone 5 mg tds for three weeks
- B. Repeat the dual NAAT for Chlamydia and Gonorrhoea as false negatives can occur
- C. Offer to remove the implant immediately and continue with the COC alone
- D. Perform a vaginal speculum examination before deciding on further management
- E. Be reassured that she is participating and up to date in the National Cervical Screening programme and suggest trying adjuvant POP

**Correct Response:** D

**References:** Ref: CEU Guidance on management of problematic bleeding with hormonal contraception 2015.

## Module .2: Contraception

A 30-year-old woman, non-smoker with a BMI of 22 kg/m<sup>2</sup> has been on a levonorgestrel containing CHC for one year. She attends the clinic having read a newspaper article regarding a case of fatal pulmonary embolism attributed to the pill. She is concerned about the safety of her pill but finds it beneficial for her acne. If she wishes to continue using a CHC, what is the most appropriate management?

- A. Change her to a drospirenone containing CHC
- B. Change her to an estradiol valerate containing CHC
- C. Continue with her current preparation
- D. Change to a CVR
- E. Change her to a CTP

**Correct Response:** C

**References:** Option A - Despite evidence of more favourable effects on lipid profiles and carbohydrate metabolism, there is no evidence to suggest that the newer, less androgenic progestogens are any safer in terms of arterial thrombosis risk than older progestogens.

Option B - Newer synthetic hormones such as estradiol valerate, estradiol hemihydrate, dienogest, and norgestrel acetate are being incorporated into COC products. Long-term safety data for these new formulations are not yet available. Therefore, the risks and benefits of use must be assumed to be as for other CHCs.

Option C - The risk of VTE is highest in the four months following initiation of CHC

Option D - or when restarting after a break of at least one month.

Option E - Some observational studies of the transdermal patch have reported a similar level of venous thromboembolism (VTE) risk to COCs containing second generation progestogens, whereas other studies have suggested an increased risk. Cohort study of new users from the United States and five European countries, reported an incidence rate for the vaginal ring of 8.3 per 10,000 woman-years (risk of VTE with use of CHC reported to range from 5-12 per 10,000 women years)

Faculty of Sexual & Reproductive Healthcare Statement

Venous Thromboembolism (VTE) and Hormonal Contraception

November 2014

**Module .2: Contraception**

A 13-year-old epileptic on carbamazepine is brought to the clinic by her mother. When seen alone the girl states she had consensual unprotected sex four days ago at a party with an 18-year-old man she met in town recently. Her LMP was 16 days ago. What is the single most effective method of emergency contraception in this situation?

- A. Cu-IUD
- B. Levonorgestrel 1.5 mg
- C. Levonorgestrel 3.0 mg
- D. Ulipristal acetate 30 mg
- E. Ulipristal acetate 60 mg

**Correct Response:** A

**Module .3: Abortion Care**

Which of the following investigations would give the most accurate assessment of gestational age in the first trimester?

- A. Rise in human chorionic gonadotrophin levels
- B. Transvaginal ultrasound measurement of femur length
- C. Menstrual history
- D. Ultrasound measurement of crown rump length
- E. Ultrasound measurement of nuchal thickness

**Correct Response:** D

**Module .3: Abortion Care**

An 18-year-old woman has recently undergone a medical abortion. She was eight weeks and two days gestation by scan. She presents to your clinic complaining of abdominal pain and offensive vaginal discharge. An ultrasound scan is performed which shows an empty uterus, with no masses or free fluid.

What is the single most likely diagnosis?

- A. Ectopic pregnancy
- B. Endometritis
- C. Failed abortion
- D. Haemorrhage
- E. Uterine perforation

**Correct Response: B**

## Module .4: Gynaecology

A 20-year-old college student attends the GP surgery. She has not had a period for the past five months. She is not sexually active. Her menarche was at 12 years of age. She has normal secondary sexual characteristics. She is 170 cm tall and weighs 45 kg with a BMI of 15.6 kg/m<sup>2</sup>. A pelvic ultrasound is normal.

Which of the following is the most likely cause of her secondary amenorrhoea?

- A. Anorexia nervosa
- B. Asherman's syndrome
- C. Hyperthyroidism
- D. Polycystic ovarian syndrome
- E. Turner's syndrome

**Correct Response:** A

**References:** Option A - For this patient with secondary amenorrhoea, the height/weight discordance suggests anorexia nervosa. (Option A).

Option B - Asherman's syndrome arises from intrauterine synechiae following overzealous curettage.

Option C - Hypogonadotropic hypogonadism is associated with absence of secondary sexual characteristics.

Option D - Patients with PCOS are usually overweight.

Option E - Turner's syndrome is associated with short stature and primary amenorrhoea.

1. Clinical Gynaecology: 2006 by Bieber, Sanfillipo & Horowitz.

2. Comprehensive Gynaecology: 5th edition: Katz, Lentz, Lobo, Gershenson

## Module .5: Specialist Gynaecology

A 48-year-old woman Para 2+0 undergoes a hysteroscopy and biopsy for persistent intermenstrual bleeding over the past 6 months. She has a BMI of 35 kg/m<sup>2</sup> and takes metformin for type 2 Diabetes Mellitus. She is currently not in a relationship and has completed her family. The histology report is suggestive of endometrial hyperplasia with atypia.

Which of the following is most likely to represent the best management option?

- A. Continuous oral progestogens for 6 months
- B. Cyclical oral progestogens for 12 months
- C. Endometrial ablation
- D. Insertion of LNG-IUS
- E. Total hysterectomy

**Correct Response:** E

**References:** SBA QS based on syllabus requirement: 'You should know the epidemiology of cancers affecting women and you will be expected to have full knowledge of the aetiological factors, including the role of the Human Papillomavirus, the pathology and classification of gynaecological cancer and pre-malignant conditions as well as that used for cervical cytology.'

Explanation:

Green-top Guideline No. 67:

Both continuous (not cyclical) oral and local intrauterine (levonorgestrel-releasing intrauterine system [LNG-IUS]) progestogens are effective in achieving regression of endometrial hyperplasia without atypia.

Endometrial ablation is not recommended in atypia because complete and persistent endometrial destruction cannot be ensured and intrauterine adhesion formation may preclude endometrial histological surveillance. Women with atypical hyperplasia should undergo a total hysterectomy because of the risk of underlying malignancy (up to 40%) or progression to cancer (30%).

1. Green-top Guideline No. 67.RCOG/BSGE Joint Guideline, February 2016.
2. Comprehensive Gynaecology: 5th edition: Katz, Lentz, Lobo, Gershenson.

## Module .6: Pregnancy

A 32-year-old woman gravida 3 para 2+0 attends the antenatal clinic for counselling. She is 20 weeks' pregnant, fit and well, and has a BMI of 25 kg/m<sup>2</sup>. In her first pregnancy as the baby was breech presentation at term, she had an elective caesarean section. Subsequently she had a successful vaginal birth in her second pregnancy and is hoping for a vaginal delivery this time too. She wants to know from the doctor what factors improve her chances of this.

Which of the following is most likely to predict her chances of a successful vaginal delivery in this pregnancy?

- A. Age below 35 years
- B. BMI below 26 kg/m<sup>2</sup>
- C. Caesarean section for previous breech presentation
- D. Maternal motivation
- E. Previous successful vaginal delivery after caesarean

**Correct Response:** E

**References:** SBA QS based on curriculum requirement: "Discuss mode of delivery following previous CS. This features in the skills criteria of module 6 and also in the knowledge criteria "

Explanation:

A number of factors are associated with successful VBAC. Previous vaginal birth, particularly previous VBAC, is the single best predictor for successful VBAC and is associated with an approximately 87-90% planned VBAC success rate.

Risk factors for unsuccessful VBAC are:

Induced labour, no previous vaginal birth, body mass index greater than 30, 24-26 previous caesarean section for dystocia. When all these factors are present, successful VBAC is achieved in only 40% of cases.

BIRTH AFTER PREVIOUS CAESAREAN BIRTH. RCOG Green-top Guideline No. 45. February 2007

**Module .6: Pregnancy**

At 38 weeks' gestation, a mother is found to have an unengaged fetal head in her first pregnancy. The baby is born with oesophageal atresia.

What is the most likely cause of the head not engaging?

- A. Abruptio placentae
- B. Braxton Hicks contractions
- C. Multiparity
- D. Placenta praevia
- E. Polyhydramnios

**Correct Response:** E

**Module .7: Menopause and PMS**

A FSH level is generally considered to be in the postmenopausal range when it is:

- A. greater than 10 IU/l
- B. greater than 15 IU/l
- C. greater than 20 IU/l
- D. greater than 25 IU/l
- E. greater than 30 IU/l

**Correct Response: E**

**Module .8: Genitourinary Medicine**

Five days following unprotected sex with another European holiday-maker whilst away in Ibiza, a 19-year-old heterosexual man experienced gradual onset of intense dysuria and a urethral discharge. Clinical examination showed a profuse, green urethral discharge and meatal oedema.

What is the likely cause of the symptoms?

- A. Candidal urethritis
- B. Chlamydial urethritis
- C. Gonococcal urethritis
- D. Herpetic urethritis
- E. Trichomonal urethritis

**Correct Response:** C

**References:** The incubation period and severity of clinical presentation suggests gonorrhoea over the others; TV urethritis is usually asymptomatic and candida and HSV urethritis usually have accompanying rash.

**Module .8: Genitourinary Medicine**

A 22-year-old woman comes to see you in your clinic. Over the last two months she has developed "lumps" around her vulva. She is on the oral contraceptive pill. She has had two partners in the last three months and does not use condoms. She is worried she may have an infection.

The most likely causative organism is:

- A. *Candida albicans*
- B. Herpes simplex virus
- C. Human papilloma virus
- D. *Molluscum contagiosum*
- E. *Varicella zoster virus*

**Correct Response: C**

**Module .13: Information Technology and Research**

You are planning to perform an audit project looking at the proportion of women in your service or surgery who had their blood pressure recorded and medical history updated at the time of repeat prescription of the COC.

Which of the following actions is the most important prerequisite before starting the audit project?

- A. Advice on most appropriate statistical analysis of data.
- B. Determination of required standards of care.
- C. Documented consent of patients to access their records.
- D. Modified ethics committee approval.
- E. Sample size calculation.

**Correct Response: B**