

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 test basic clinical and applied knowledge. Many 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 CSRH speciality trainees proceed on to intermediate training. It is likely that candidates may want to attempt the exam before ST3 level they 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 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, e.g. PMS and Menopause.

With recent changes to the conduct and structure of MFSRH exams, candidates for the Part I exams are advised that from October 2020 the Part I exam will have a higher proportion of questions testing basic science knowledge. Candidates should revise based only on curriculum and syllabus requirements pertaining to the exam. The reading list below is a guide only and the list is not exhaustive.

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. Clinical guidelines used for examinations will be those in force at the date when applications close.

Candidates must pass the Part One Examination and the Evidence Based Commentary (EBC) 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.

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.

To complete all three parts of the MFSRH Examination within seven years. The seven year period commences from the date of passing either the Part I or the Evidence Based Commentary, whichever is first. For any individual part of the examination (Part I, Evidence Based Commentary and Part II) six attempts are allowed.

Syllabus for MFSRH Part One

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 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.

Please note the follow modules are not examined in the Part I, however will be examined in the Part II

- ▶ Module 1: Clinical Skills
- ▶ Module 9: Public Health
- ▶ Module 10: Teaching, Appraisal and Assessment
- ▶ Module 11: Ethics and Legal issues
- ▶ Module 12: Leadership and Management
- ▶ Module 14: Sexual Assault
- ▶ Module 15: Sexual Problems

Reading List for the MFSRH Part I

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.

The guidelines used will be those in force on the day that applications for the relevant sitting of the exam close (in other words, changes to guidelines made just before the exam will not be examined)

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: 9781905635979

How to read a paper. The Basics of Evidence-Based Medicine and healthcare (6th ed)

- ▶ Trisha Greenhaugh
- ▶ ISBN: 9781119484745

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 I (4th ed)

- ▶ P. Bennett and C. Williamson
- ▶ ISBN: 9780443102813

Basic Sciences for Obstetrics and Gynaecology (5th ed)

- ▶ Tim Chard and Richard Lilford
- ▶ ISBN 9783540761884

MRCOG Part I: 400 SBAs, (2nd ed)

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

Journals:

- ▶ BMJ Sexual and Reproductive Health
- ▶ The Obstetrician and Gynaecologist

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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 daily 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

A 30-year-old woman, non-smoker with a BMI of 22 kg/m² 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

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

A 25-year-old woman who is a PhD student attends to discuss contraception. She is in a mutually monogamous heterosexual relationship and is generally healthy. She has never been pregnant. She is not happy to use hormonal contraception because she is concerned about excretion of hormones into the water supply, so she decides to use a copper IUD. In the course of counselling she asks if she can continue to use her Mooncup.®

What is the best advice for her?

- A. No as her periods will be too heavy to use a Mooncup®
- B. No as there is an increased risk of pelvic infection
- C. No as there is always an increased risk of toxic shock syndrome
- D. Yes, if specific instructions are followed carefully
- E. Yes, no concerns

Correct Response D

All currently marketed combined oral contraceptives are made from synthetic steroids. There are two major classes of synthetic progestins: C19-nortestosterone progestins (structurally related to testosterone) and C21 acetoxy progestins (structurally related to progesterone).

Which of the following represents a C21 acetoxy progestin?

- A. Ethynodiol diacetate
- B. Medroxyprogesterone acetate
- C. Norethisterone
- D. Norethynodrel
- E. Norgestimate

Correct Response: B

A 30-year-old woman, Para 0, had an IUS fitted for very heavy periods. She is sexually active. She has lost all her paperwork, and cannot remember the name of the clinic, but knows the IUS was fitted 2 years and 11 months ago. The fitting was very difficult, but her periods have reduced to a light bleed each month. She is not sure when it should be changed.

What is the best advice for her?

- A. She can keep it until it has been fitted for 5 years
- B. She needs an abdominal Xray as a first line assessment
- C. She needs a pelvic ultrasound as a first line assessment
- D. She should get it changed with her next period
- E. She should try to write to the clinic that fitted it

Correct Response: C

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

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

After completion of a MVA (manual vacuum aspiration) procedure, the surgeon floats the products of conception in water. An intact gestational sac with chorionic villi on its periphery is seen corresponding to 7 gestational weeks.

What is the most likely origin of chorionic villi?

- A. Ectoderm
- B. Endoderm
- C. Extraembryonic mesoderm
- D. Intraembryonic mesoderm
- E. Primitive streak

Correct Response: C

A 36-year-old woman, Para 1+0 with a BMI of 25 kg/m² finds herself to be accidentally pregnant due to a condom accident. She has been recently treated with oral prednisolone 40 mg/day for an unknown autoimmune vesiculo-papulous disorder of the skin (awaiting investigations). Treatment has been given for 2 months and she has completed the treatment 7 days ago. An ultrasound scan confirms an intrauterine pregnancy at 7 gestational weeks. She opts to have a medical termination of pregnancy. Same day treatment is planned to use 200mg of mifepristone and 800 µg of misoprostol.

Which of the following statements accurately reflects the use of mifepristone in this case?

- A. A single dose of 200 mg of mifepristone carries with it a significant risk of inducing adrenal insufficiency
- B. Antiprogestin activity of mifepristone is apparent at much lower doses as opposed to its antigluccorticoid activity
- C. Medium term steroid treatment is an absolute contraindication to mifepristone use
- D. Steroids block the action of mifepristone on progesterin receptors.
- E. There is no pharmacologic interaction between mifepristone and ongoing steroid treatment

Correct Response: B

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/m². 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

A 18-year-old girl is seen in the emergency gynaecological department. She has finished a period 2 days ago and uses tampons whilst having a period. Over the past 4 days she has felt feverish, dizzy and nauseous. Clinical examination reveals a temperature of 38°C, a systolic blood pressure of 90 mm Hg and diffuse macular erythematous rash. Vaginal examination reveals tenderness; however, there is no discharge or a retained tampon. A working diagnosis of Toxic shock syndrome (TSS) is made.

Which of the following bacteria is most frequently associated with Toxic shock syndrome?

- A. *Staphylococcus aureus*
- B. *Cutibacterium acnes*
- C. *Lactobacillus rhamnosus*
- D. *Micrococcus luteus*
- E. *Ureaplasma urealyticum*

Correct Response: A

An ST3 SRH trainee is witnessing a laparoscopic salpingectomy being performed for a ruptured ectopic pregnancy in a 28-year-old woman. There is a copious collection of blood behind the uterus. Suction irrigation of the pelvis at the end of the procedure brings the entire Pouch of Douglas into view. The consultant asks the trainee about the anatomical significance of the pouch.

Which of the following is an accurate description of the Pouch of Douglas?

- A. It represents the caudal most part of the parietal peritoneum
- B. It represents the visceral peritoneum covering the posterior surface of the uterus
- C. It represents the visceral peritoneum covering the anterior surface of the rectum
- D. It represents the visceral peritoneum covering the posterior surface of the bladder
- E. It represents the visceral peritoneum covering the paracervical ligaments

Correct Response: A

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/m² 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

A 9-year-old girl is seen in the adolescent gynaecological clinic along with her mother. Her mother is worried about her daughter getting pigmentation of the breast areolae, enlargement of the breasts, and pubic hair growth. An endocrinological profile is normal; however, serum oestradiol levels are high. An MRI scan suggests a complex left sided ovarian mass measuring 5 by 5 cm by 6 cm in dimension.

Which of the following tumours is most likely to present as above?

- A. Dysgerminoma
- B. Immature teratoma
- C. Juvenile granulosa cell tumour
- D. Mature teratoma
- E. Yolk sac tumour

Correct Response: C

A 42-year-old man with type 2 diabetes mellitus is assessed in the neurological clinic. He reports a new symptom i.e. he can sustain a penile erection but cannot ejaculate.

Which of the following is the spinal centre for ejaculation in humans?

In this question the capital L denotes Lumbar and the capital S denotes Sacral.

- A. L1
- B. L2-4
- C. L5
- D. S1
- E. S2-4

Correct Response: A

A 30-year-old woman is seen in clinic following an early pregnancy ultrasound. She has not had a period for 2 months. She has had irregular bleeding per vaginum and hyperemesis. The ultrasound scan shows features suggestive of a molar pregnancy. She undergoes a suction curettage under a general anaesthetic. Histopathology report confirms a complete mole.

Genotypic analysis of a complete molar pregnancy is most likely to reveal which of the following?

- A. 46 XX
- B. 46 XY
- C. 46XYY
- D. 69XXY
- E. 92XXXXY

Correct Response: A

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/m². 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/m²
- C. Caesarean section for previous breech presentation
- D. Maternal motivation
- E. Previous successful vaginal delivery after caesarean

Correct Response: E

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

A 30-year-old woman delivers her first baby at 38 weeks. She has a pre-existing mental health condition and is known to the mental health team. Three days after birth she shows features of severe mania along with presence of delusions and hallucinations. The perinatal psychiatric team diagnoses puerperal psychosis.

Which of the following pre-existing mental illnesses is most likely to be associated with an attack of puerperal psychosis?

- A. Bipolar affective disorder
- B. Bulimia
- C. Moderate depression
- D. Obsessive compulsive disorder
- E. Recurrent severe anxiety

Correct Response: A

An 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

A 37-year-old woman is referred by her GP for management of ongoing symptoms of severe PMS. She has tried a few forms of alternative therapy which have not brought much benefit. The GP has initially tried full dose luteal phase fluoxetine (60mg/day) for 6 months with no improvement in her symptoms. He has then tried another six-month treatment with sertraline. The woman's symptoms remain the same.

A change over to which of the following luteal phase SSRI's/SNRI's is most likely to be beneficial in this case?

- A. Duloxetine
- B. Escitalopram
- C. Paroxetine
- D. Raboxetine
- E. Venlafaxine

Correct Response: B

A 52-year-old woman complains of severe hot flushes which stop her sleeping and affect her ability to concentrate during the day. She had her last period 18 months ago. She has tried various alternative therapies with no relief. She has a BMI of 35kg /m² but is otherwise fit and well.

Which of the HRT options below is the first choice for her?

- A. Combined sequential oral HRT
- B. Combined continuous transdermal HRT
- C. Combined cyclical oral HRT
- D. Estrogen only HRT
- E. Tibolone

Correct Response: B

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

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

A 35-year-old Latvian woman is referred by her GP to a sexual health clinic for treatment of genital warts.

In the referral letter you also note that the patient has had the following blood tests performed three weeks previously:

- HIV antibody - negative
- Syphilis EIA - negative
- Hepatitis B surface antibody - >100
- Hepatitis B core antibody - negative
- Hepatitis B surface antigen - negative
- Hepatitis C antibody - positive
- Hepatitis C RNA - negative
- Liver Function Tests - all in normal range

She gives a history of injecting drug use aged 20 but has not injected any drugs since then. She was last sexually active six months ago with an ex-partner of four years.

What statement best describes the action needed regarding her management?

- A. She has active Hepatitis C and will require urgent treatment with ribavirin and interferon
- B. She has active Hepatitis C but as her LFTs are normal she may defer treatment and will require regular monitoring only
- C. She has evidence of previous Hepatitis C which has resolved and does not require any treatment or monitoring
- D. She has evidence of previous Hepatitis B only which has now resolved
- E. She has evidence of Hepatitis B infection and Hepatitis C infection, and will require treatment for both

Correct Response: C

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

Researchers are studying the relative ability of a new drug to lower diastolic blood pressure in three groups of age and ethnicity matched female patients. One group receives a well-established drug at a standard dose. The other two groups receive the new drug at different doses. At the end of six months, the diastolic blood pressure of each group was determined and the significance of the difference in mean values was tested statistically.

Which of the following statistical tests is most likely to yield results with the highest confidence?

- A. Analysis of variance
- B. Chi-squared test
- C. Correlation coefficient
- D. Logistic regression
- E. Student's *t*-test

Correct Response: A

Drug X, an antimalarial drug was administered to 500 persons out of a total of 2000. In the treatment group 30 had fever and 470 did not have fever. In the non-treatment group 120 had fever and 1380 persons did not have fever. In total 150 persons had whether they received treatment or not and 1380 persons did not have fever whether they received treatment or not. Researchers ask the question: Is drug X effective in the treatment of falciparum resistant malaria?

From the options below, choose the single most appropriate statistical test that is most likely to yield results with the highest confidence.

- A. Analysis of variance
- B. Chi-squared test
- C. Mann Whitney test
- D. Mc Nemar's test
- E. Student's t-test

Correct Response: B

The efficacy of low dose aspirin to prevent recurrent pre-eclampsia in pregnant women was investigated in a double blind randomized controlled trial (RCT). To ensure allocation concealment; the allocation sequence was randomly generated on computer by someone independent of the trial.

Which is the single most appropriate statement regarding the design feature of an RCT?

- A. Concealed Allocation is done after subjects and researchers have been blinded in a trial
- B. Concealed Allocation seeks to eliminate selection bias
- C. Concealed Allocation seeks to eliminate observation bias
- D. Randomisation is similar to random sampling
- E. Randomisation means that interventions in different arms of the study are kept secret

Correct Response: B