

SAMPLE QUESTIONS

Explanation of Best of 5

In an attempt to simulate the challenge of making clinical decisions all questions offer candidates five options from which they must identify the single best option.

Each question comprises:

- a. A few lines of text explaining the clinical scenario (the stem) including, in some cases, investigation results;
- b. A single line stating the question itself (the lead in); and
- c. A list of 5 options (one preferred correct answer and 4 distractors).

The 5 options are all plausible and realistic and the 4 distractors are closely related to the preferred option but less correct. The task of the candidate is to identify which of the 5 options is most likely to be correct, given the particular circumstances set out in the clinical scenario. Therefore, there may appear to be more than one possible answer but only one that is the best or preferred option.

N.B. These are intended to illustrate the format, and are drawn from the past so may not reflect current guidelines. For an explanatory note about the guidelines used in the examination, refer to the Guide to the Diploma under "National Guidelines". These questions may not necessarily reflect the range of difficulty, which will vary.

Best of five (BO5)

Example 1

A 24-year-old MSM reports a small sore near his anus for 1 week. The sore is painless and is not healing up despite applications of Anusol® ointment. He had unprotected anal sex with a casual partner 3 weeks ago.

What is the most likely causative organism?

- A. Candida albicans
- B. Herpes simplex virus
- C. Human papilloma virus
- D. Neisseria gonorrhoeae
- E. Treponema pallidum

Answer: E Treponema pallidum

Example 2

A 32-year-old HIV-positive woman is diagnosed with Hodgkin lymphoma. She is taking tenofovir, emtricitabine (Truvada™) and raltegravir ART and aciclovir for herpes simplex virus (HSV) prophylaxis. She is about to start chemotherapy.

Investigations:

CD4 count	550 cells/ μ L (430-1690)
HIV viral load	< 50 copies/mL
Hepatitis B cAb	positive
Hepatitis B Sag	negative

What additional medication would you advise for opportunistic infection prophylaxis?

- A. Azithromycin
- B. Ciprofloxacin
- C. Cotrimoxazole
- D. Doxycycline
- E. None

Answer E: None

Example 3

A 17-year-old woman who is a commercial sex worker attends clinic for a check-up. She has recently arrived in the UK from Poland. She asks about the risk of acquiring HIV infection through different types of sex.

Which unprotected sexual activity would put her at greatest risk of acquiring HIV from a male HIV-positive partner who is not taking antiretroviral therapy (ART)?

- A. Performing oral sex on uncircumcised man
- B. Receptive anal sex
- C. Receptive oral sex with ejaculation
- D. Receptive vaginal sex
- E. Shared use of sex toys

Answer B: Receptive anal sex

Example 4

A 24-year-old woman is found to be HIV-positive in the antenatal clinic. She starts antiretroviral therapy (ART) and by the time of delivery her HIV viral load is undetectable (< 40 copies/mL), despite variable adherence to her ART. The baby is clinically well and is prescribed zidovudine monotherapy for 4 weeks. The mother has not disclosed her HIV status to her partner or family and now wishes to breastfeed.

What is the correct advice to give, in line with current UK guidelines on breastfeeding?

- A. Breastfeed for as long as she wants to
- B. Breastfeed for 3 months then stop
- C. Breastfeed for 6 months then stop
- D. Do not breastfeed
- E. Do not breastfeed until the baby has completed 4 weeks of zidovudine treatment

Answer D: Do not breastfeed

Example 5

A 22-year-old African man presents to the Emergency Department complaining of shortness of breath for 6 weeks. He is usually well, a non-smoker and not asthmatic. His oxygen saturation at rest is 92%. A chest X-ray is performed.

What feature on his chest X-ray would suggest a diagnosis of Pneumocystis jirovecii pneumonia?

- A. Bilateral lower zone shadowing
- B. Bilateral upper zone shadowing
- C. Unilateral hilar lymphadenopathy
- D. Unilateral lower zone shadowing
- E. Unilateral upper zone shadowing

Answer A: Bilateral lower zone shadowing

Example 6

A 24-year-old man presents to clinic because he has been losing his hair for 3 months. He had oral sex with a female sex worker during a trip to Thailand 5 months earlier. On examination he has patchy alopecia.

What is the most likely explanation for his alopecia?

- A. Disseminated gonococcal infection
- B. Herpes simplex virus (HSV)
- C. Primary HIV infection (PHI)
- D. Scabies
- E. Secondary syphilis

Answer E: Secondary syphilis

Example 7

A 27-year-old woman presents with severe vulval ulceration at 8 weeks of pregnancy. A clinical diagnosis of primary genital herpes simplex virus infection is made.

What is the most appropriate management option?

- A. Aciclovir 200 mg 5 times daily for 5 days
- B. Aciclovir 400 mg 5 times daily until second trimester
- C. Aciclovir 400 mg twice daily until delivery
- D. Aciclovir topically only
- E. No treatment because she is pregnant

Answer A: Aciclovir 200 mg 5 times daily for 5 days

Example 8

A 19-year-old woman gives a 2-week history of "lumps around the vagina". She last had sex 2 weeks ago and her last menstrual period, which was normal, was 3 weeks ago. She sometimes uses condoms for contraception. She has no significant past medical or drug history. A diagnosis of molluscum contagiosum is made and it is explained to her that treatment is mainly for cosmetic reasons.

What is the most appropriate treatment?

- A. Cryotherapy
- B. Imiquimod 5% cream
- C. Podophyllin 10% solution
- D. Podophyllotoxin 0.15% cream
- E. Podophyllotoxin 0.5% liquid

Answer A: Cryotherapy

Example 9

A 19-year-old woman requests an HIV test because of a persistent skin rash for 6 months.

What dermatological disorder is most likely to indicate HIV infection?

- A. Campbell de Morgan spots
- B. Hutchinson's lentigo
- C. Lichen planus
- D. Seborrhoeic dermatitis
- E. Vitiligo

Answer D: Seborrhoeic dermatitis

Example 10

A 31-year-old woman presents with a 2-week history of an increased vaginal discharge associated with an offensive smell. She takes a standard combined contraceptive pill and has one regular partner with whom she has unprotected sex.

What test result would most support a diagnosis of bacterial vaginosis?

- A. Gram-negative diplococci on a Gram-stained smear
- B. Increased numbers of lactobacilli on a Gram-stained smear
- C. Negative amine test of vaginal secretions
- D. Vaginal fluid pH < 4.5
- E. Vaginal fluid pH = 6.0

Answer E: Vaginal fluid pH = 6.0

Example 11

A point-of-care test (POCT) for *Trichomonas vaginalis*, has a sensitivity of 90% and a specificity of 90%. The efficiency of this test for detecting infection is being assessed in a population with a 10% prevalence of trichomoniasis.

What is the probability of a positive test being a true positive?

- A. 50%
- B. 60%
- C. 70%
- D. 80%
- E. 90%

Answer A: 50%

OSCE (Objective Structured Clinical Exam)

Example 1

Candidate instructions

This station lasts 10 minutes and is in 2 parts.

You are a doctor in a genitourinary medicine clinic.

Mr SA, a 27-year-old attends clinic. He is concerned that he may have acquired a STI following a casual sexual encounter a month ago. This was unprotected vaginal sex only. He has developed a urethral discharge and pain passing urine over the last seven days.

Tasks: You are **NOT** required to take a full history.

Part One (up to 6 minutes)

- Explain to Mr SA that you will need to examine his genitals and to take specimens from the end of his penis.
- Carry out a full external genital examination on the model and take relevant specimens from the urethra on the model.
- Describe what you are looking for to the examiner as you examine the patient, and explain to the patient what you are doing as you take the specimens.

There is no need to write anything down but you may do so if you wish.

Part Two (up to 4 minutes)

You will be given a photograph of Mr SA's Gram-stained urethral smear results.

- Explain the diagnosis and management to him.

Please note that marks are only awarded for how you perform with the tasks you have been set. Please stick to these tasks. Marks will not be awarded to your performance outside of these.

Example 2

Candidate instructions

This station lasts 10 minutes.

You are a doctor in a genitourinary medicine clinic.

Katie is 15 and is attending the department for the first time requesting a sexual health check-up. She has no genital symptoms and is taking the combined oral contraception pill reliably.

She has been seen by one of the nurses who has concerns and has passed her to you for further assessment. The nurse has taken the STI screen.

Task:

You are required to:

1. Take a concise and relevant history.
2. Discuss immediate management with the patient

There is no need to write anything down, but you may do so if you wish.

Please note that marks are only awarded for how you perform with the tasks you have been set. Please stick to these tasks. Marks will not be awarded to your performance outside of these.

Example 3

Candidate instructions

This station lasts 10 minutes and is in two parts.

Tasks:

Part One (5 minutes)

You are a doctor working in a genitourinary medicine clinic. You have been asked to collect specimens for dark field microscopy.

- Please explain and demonstrate the procedure of taking a specimen from the vulval ulcer for dark field microscopy to the examiner.
- Please select the materials you wish to use from those on the table. Prepare the specimens as though you were doing this in a clinic and explain to the examiner what you are doing at each stage.

Part Two (5 minutes)

- Please examine this Gram-stained slide under the light microscope and tell the examiner what you see. PLEASE USE A REPRESENTATIVE FIELD TO DEMONSTRATE YOUR FINDINGS. You will be given marks for your microscopy technique as well as for your findings.
- Please then provide the examiner with a diagnosis.

There is no need to write anything down, but you may do so if you wish.

Please note that marks are only awarded for how you perform with the tasks you have been set. Please stick to these tasks. Marks will not be awarded to your performance outside of these.