1. Which of the following stages of syphilis is non-infectious?
   (a) Primary syphilis
   (b) Early latent syphilis
   (c) Congenital syphilis
   (d) Tertiary syphilis
   (e) Secondary syphilis

2. A pregnant woman had blood sampling for routine syphilis serology at her antenatal clinic booking appointment. The results were: treponemal enzyme immunoassay-positive, rapid plasma reagin test (RPR) 1 in 1, *Treponema pallidum* particle agglutination assay-positive. Her last syphilis serology was negative at the three-month screen during her previous pregnancy. Her child was now 2½ years old. Which of the following statements is true?
   (a) The results are not consistent with treated syphilis
   (b) She cannot have early latent syphilis because her RPR is positive
   (c) She could have infectious syphilis
   (d) There is no need to check the syphilis serology of her previous child
   (e) She does not require treatment now as she was treated for possible primary syphilis after the birth of her first child with a single dose of benzylpenicillin (benzathine penicillin), but failed to attend for follow-up

3. Which of the following agents is suitable treatment for primary syphilis?
   (a) Amoxicillin 500 mg qds orally for five days
   (b) Benzylpenicillin 2.4 Mu intramuscularly (im)
   (c) Doxycycline 100 mg twice daily orally for five days
   (d) Procaine penicillin 600,000 units im daily for five days
   (e) Co-trimoxazole 960 mg daily orally for 10 days

4. A 42-year-old HIV-positive man presented with a six-day history of worsening anal pain, tenesmus, constipation and blood-stained anal discharge. He also had fever and cramping lower abdominal pain. His sexual history included receptive anal sexual intercourse with several casual male partners over the past three months. His HIV disease was stable on antiretroviral therapy and his most recent CD4 count was 564 cells/mm³. At the time of the examination he had no abnormal abdominal signs but examination per rectum was not possible due to pain. What is the most likely diagnosis?
   (a) Ulcerative colitis
   (b) Cytomegalovirus colitis
   (c) Lymphogranuloma venereum proctitis
   (d) Gonococcal proctitis
   (e) Perianal abscess

5. A 27-year-old gay man presented with a four-day history of painful inguinal swellings. On examination he had bilateral inguinal lymphadenopathy, the largest of which was 3 x 4 cm, tender and fluctuant with overlying skin inflammation. There
was a small, dry healing penile ulcer. What is the next most appropriate step in management?
(a) Commence oral flucloxacillin and review in three days
(b) Refer for ultrasound-guided drainage
(c) Perform fine-needle aspiration biopsy and forward for cytology
(d) Refer to genitourinary medicine for diagnostic aspiration and further assessment
(e) Perform syphilis serology and treat empirically with benzylpenicillin

6 A 32-year-old female practice nurse presented to accident and emergency (A&E) having sustained a needlestick injury from a known HIV-positive patient. Which of the following features in the history of the incident would be associated with a lower risk of HIV transmission?
(a) The patient was receiving effective antiretroviral therapy
(b) A deep injury
(c) Visible blood on the outside of the needle
(d) The patient was acutely unwell
(e) The needle was used for venesection

7 A 54-year-old surgeon experienced a needlestick injury from a known HIV-positive individual during a routine gall bladder operation and subsequently commenced a course of post-exposure prophylaxis (PEP). Which of the following statements regarding his management is correct?
(a) He can discontinue PEP if it is established that the 'source' patient has an undetectable HIV viral load
(b) He must refrain from operating until he has proven to be HIV-negative after completion of PEP
(c) If he has successfully completed a course of PEP, there is no requirement for him to have a subsequent HIV antibody test
(d) He cannot be considered HIV-negative until he tests HIV antibody-negative at three months post-PEP
(e) He cannot be considered HIV negative until he tests HIV antibody-negative at six months post-PEP

8 A 26-year-old female FY2 trainee doctor working in A&E experienced a needlestick injury from an intravenous drug user of unknown HIV status who subsequently deteriorated and was now on a ventilator in intensive care. Which of the following statements regarding determination of the 'source' HIV status is correct?
(a) The trainee should have requested consent to determine the HIV status from the 'source' at the time of the incident
(b) A new blood specimen can be taken from the unconscious patient to determine whether the trainee needs to take PEP
(c) An existing blood specimen from the 'source' can be tested for HIV to determine whether the trainee needs to take PEP
(d) The patient cannot be tested for HIV until they regain consciousness and can provide consent
(e) A specimen of blood can be taken from the unconscious patient and tested for HIV if this may be of importance to their current medical care

9 A 49-year-old HIV-positive man attended for his routine outpatient appointment. His HIV disease management is correct?
(a) He can discontinue PEP if it is established that the 'source' patient has an undetectable HIV viral load
(b) He must refrain from operating until he has proven to be HIV-negative after completion of PEP
(c) If he has successfully completed a course of PEP, there is no requirement for him to have a subsequent HIV antibody test
(d) He cannot be considered HIV-negative until he tests HIV antibody-negative at three months post-PEP
(e) He cannot be considered HIV negative until he tests HIV antibody-negative at six months post-PEP

10 A 54-year-old man recently diagnosed with HIV attended for his initial HIV consultation. He had a history of hypercholesterolaemia and had a myocardial infarction (MI) four years previously. His cholesterol was currently well controlled with atorvastatin. His CD4 count was 190 cells/mm³ and he needed to commence highly active antiretroviral therapy (HAART). What is the most appropriate advice when counselling him on the effect of HAART on his cholesterol and cardiovascular risk?
(a) The metabolic impact of HAART is more important than traditional risk factors when assessing cardiovascular risk
(b) PIs have a lower potential to induce metabolic abnormalities than other drug classes
(c) After adjusting for confounding factors, HAART does not appear to increase the relative risk of MI
(d) The dose of atorvastatin will need to be reviewed due to potential important drug interactions with HAART
(e) An association has been found between non-nucleoside reverse transcriptase inhibitors and MI risk