



Diploma in Global Health

Sample Questions

Please note that the following Diploma in Global Health (DGH) knowledge-based assessment (KBA) sample questions are designed to provide an insight into some of the blueprint areas that are used to select questions for a KBA. It is also designed to show the structure of questions in the KBA, and to help candidates familiarise themselves with how questions are presented in a question paper.

Publishing of these sample questions should not be seen as an indicator as to the content of historical and/or forthcoming DGH KBAs.

1. A 32-year-old man is admitted to a rural hospital in Uganda with cough, fever and shortness of breath for the last eight days.

On examination, he has oral thrush and a scaly rash around his hairline, arms and legs. His temperature is 38.9°C, his pulse is 110 beats per minute and his blood pressure is 100/60 mmHg and his respiratory rate is 36 breaths per minute. Widespread inspiratory crackles can be heard over his right lung.

He is diagnosed with pneumonia and started on intravenous benzylpenicillin 1.8g four times per day.

Over the next 48 hours his temperature settles and his respiratory rate and pulse lower. However, seven days after treatment he continues to cough, producing purulent sputum. He has anorexia and remains bed bound.

What is the most appropriate immediate course of action?

- A. change his antibiotic therapy to a cephalosporin and assess his response as he has features of penicillin-resistant pneumococcal disease
- B. refer him to the district hospital for chest X-ray as he appears to be developing a post-pneumonic empyema
- C. request a sputum smear test for acid- and alcohol-fast bacilli as they are present in 10% of people with community-acquired pneumonia
- D. start him on fluconazole therapy as the oral thrush will now be causing tracheal infection leading to the persistent cough
- E. test him for HIV and start him on combination anti-retroviral therapy as he has features consistent with clinic stage 3 disease, an indication for treatment under national guidelines

Correct answer: C

2. A 5-year-old boy in Cameroon is brought to a hospital by his mother with a 2-week history of a painful left upper arm and fever. He has regularly been unwell and has always tired easily.

On examination, his temperature is 38.8°C and he has pale conjunctivae and tenderness over the left upper arm.

Investigations:

	Results	Reference range
haemoglobin	71 g/L	130–180
white cell count	$10.8 \times 10^9/\text{L}$	4.0–11.0
blood cultures	Gram-negative rods	
X-ray of left humerus	see image	



Which is the most likely infection?

- A. *Brucella melitensis*
- B. *Clostridium perfringens*
- C. *Escherichia coli*
- D. *Salmonella typhimurium*
- E. *Shigella flexneri*

Correct answer: D

3. A livestock herder from Turkey goes to a local clinic with sudden onset of fever, myalgia, headache and vomiting. He then develops a petechial rash and bruising.

He is diagnosed with diagnosis of Crimean–Congo haemorrhagic fever (CCHF).

Which statement regarding CCHF infection is most accurate?

- A. can be prevented by vaccination
- B. has a survival rate of over 90%
- C. infection in domestic animals is usually asymptomatic
- D. is only rarely transmitted human-to-human
- E. is primarily transmitted by mosquitoes

Correct answer: C

4. A doctor is working in the regional office of the government health service in a country in southeast Asia. The health ministry assigned new funds to strengthen HIV testing. A recent anonymous, unlinked survey had found that the local HIV rate is 8%. This is similar to the positive test rate in the antenatal testing programme. The two HIV testing facilities, one in each major town of the district, are reporting positive testing rates of 14% and 19%.

What is the most appropriate use for the new funds?

- A. enable HIV testing by traditional birth attenders
- B. repeat the survey with a larger sample
- C. strengthen testing of tuberculosis cases for HIV
- D. target new outreach testing towards men
- E. use a more specific HIV testing algorithm

Correct answer: B

5. A 14-year-old boy from Kabul, Afghanistan goes to a local hospital with a 6-month history of lesions on his face (see image). He is otherwise well.



Which is the most likely causative organism?

- A. *Leishmania donovani*
- B. *Leishmania infantum*
- C. *Leishmania killicki*
- D. *Leishmania major*
- E. *Leishmania tropica*

Correct answer: E

6. Under which circumstances does WHO recommend the use of bedaquiline to treat multidrug-resistant tuberculosis (TB)?
- A. when a regimen shows signs of failing
 - B. when an effective treatment regimen containing five second-line drugs from different classes of drugs cannot be designed
 - C. when the patient has a contact who has received the BPALM regimen
 - D. when the patient has confirmed MDR-TB or pre-XDR TB
 - E. when the patient refuses/cannot tolerate injectable medications

Correct answer: D

7. A doctor stationed in the Republic of Congo had a public health responsibility for prevention and control of the spread of Ebola virus in an outbreak zone.

Which is the most important measure required in controlling the virus in healthcare settings?

- A. equipment to reduce risk of splashing, safe injection practices and safe burial practices
- B. measures are important when even vague undifferentiating symptoms are present and protective measures should include hand hygiene, respiratory hygiene, use of personal
- C. measures are most important when the bleeding becomes apparent when protective measures should include hand hygiene, respiratory hygiene, use of personal protective
- D. protective equipment to reduce risk of splashing, safe injection practices and safe burial practices
- E. when touching patients or their bodily fluids, protection should include goggles, face protection/shield or medical mask, a clean non-sterile long-sleeved gown and gloves

Correct answer: B

8. A healthy woman gives birth to her first child in a rural health centre in Senegal, 16 hours after the amniotic membranes ruptured. At delivery, the baby makes no respiratory effort for 10 seconds before crying vigorously after drying. The infant began breastfeeding immediately.

What is the most appropriate treatment for the baby?

- A. ampicillin and gentamicin
- B. benzylpenicillin only
- C. chloramphenicol only
- D. chlorhexidine bath
- E. no treatment required

Correct answer: E

9. Which is most likely to be associated with advanced HIV?

- A. extensive molluscum contagiosum
- B. extrapulmonary TB
- C. moderate unexplained weight loss (<10% of presumed/ measured body weight)
- D. oral candidiasis
- E. recurrent respiratory tract infections

Correct answer: B