

## **USMLE-STEP-1**<sup>Q&As</sup>

United States Medical Licensing Step 1

# Pass USMLE USMLE-STEP-1 Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

https://www.pass4itsure.com/usmle-step-1.html

### 100% Passing Guarantee 100% Money Back Assurance

Following Questions and Answers are all new published by USMLE Official Exam Center

Instant Download After Purchase

- 100% Money Back Guarantee
- 😳 365 Days Free Update
- 800,000+ Satisfied Customers





#### **QUESTION 1**

A retired policeman who received a kidney transplant developed a generalized infection by an enveloped doublestranded DNA virus. This organism formed owl\\'s eye inclusions in cells found in urinary sediments. Which of the following viruses is the most likely etiological agent?

- A. adenovirus
- B. coronavirus
- C. cytomegalovirus
- D. papillomavirus
- E. variola virus
- Correct Answer: C

Section: Microbiology/Immunology Cytomegalovirus (CMV) is an enveloped, double-stranded DNA virus, which causes formation of giant cells with intranuclear inclusion bodies that have an oval owl\\'s eye shape. CMV can cause a generalized infection, which is associated with immunosuppression. This can occur with organ transplantation or AIDS and result in central nervous system involvement, pneumonia, retinitis, colitis, and organ rejection. Adenoviruses (choice A) are also double-stranded DNA viruses but do not have an envelope. Coronaviruses (choice B) contain an RNA genome and do have an envelope. Papillomaviruses (choice D) contain doublestranded DNA and have no envelope. Variola virus (choice E) is a poxvirus, having doublestranded DNA. The largest virus group by size, poxviruses, does contain an "envelope" but it is constructed of multiple membranes closely attached to the virions, unlike lipid envelopes seen in herpes viruses, for example.

#### **QUESTION 2**

Which of the following antifungal drugs is strongly associated with drug interactions resulting from inhibition of CYP 3A4?

- A. amphotericin B
- B. caspofungin
- C. fluconazole
- D. ketoconazole
- E. flucytosine
- Correct Answer: D

Section: Pharmacology Ketoconazole is a potent inhibitor of the cytochrome P450 enzyme, CYP 3A4. Because CYP 3A4 is involved in the metabolism of almost 50% of the drugs in use, ketoconazole is implicated in many pharmacokinetic drug interactions. Amphotericin B (choice A) causes nephrotoxicity and may therefore interfere with the excretion of other drugs. Caspofungin (choice B) appears to be free of most drug interactions. Fluconazole (choice C), although a member of the same (azole) group as ketoconazole, is much less potent as a CYP 3A4 inhibitor and is associated with far fewer drug interactions. Flucytosine (choice E) is associated with few pharmacokinetic drug interactions, but by metabolism to fluorouracil it is toxic to the bone marrow and other rapidly dividing cells.



#### **QUESTION 3**

Amedical student was bitten by infected ticks. In a week, he developed a high fever, headache, muscular aches, nausea, and splenomegaly. Five days later his symptoms subsided. However, 1 week later all his previous symptoms returned. During the next 9 days he went through a recovery and another relapse followed by a final recovery. The overall temperature curve of his illness is shown in below figure. Which of the following is the most likely etiological agent?



- A. Borrelia burgdorferi
- B. B. recurrentis
- C. Leptospira interrogans
- D. T. carateum
- E. T. pertenue

#### Correct Answer: B

Section: Microbiology/Immunology The endemic form of relapsing fever is transmitted by ticks infected by B. recurrentis. Relapsing fever begins with headache, high fever, muscle aches, and splenomegaly. It has a unique fever curve due to the emergence of various antigenic types of B. recurrentis. B. burgdorferi (choice A) causes a distinct spreading circular rash with a clear center, which is called erythema chronicum migrans. L. interrogans (choice C) is transmitted by rat urine and causes leptospirosis. This disease is associated with jaundice, uremia, and aseptic meningitis. T. carateum (choice D) is the cause of pinta, which is characterized by hyperpigmentation of the skin. T. pertenue (choice E) is transmitted by contact with infected persons and is characterized by the development of cauliflowerlike skin lesions.

#### **QUESTION 4**

Referring to following figure what is the most likely source of this epithelium?





- A. gall bladder
- B. salivary duct
- C. thick skin
- D. trachea
- E. urinary bladder
- Correct Answer: E

Section: Anatomy The appearance of this epithelium reveals it to be transitional epithelium. It is stratified with a scalloped surface outline. The cells at the bottom layer are cuboidal in appearance and stained darkly; cells in the intermediate layer are polygonal. Cells at the surface of the epithelium are pale-stained, rounded, and large. Transitional epithelium is characteristic of organs of the urinary system, such as the urinary bladder. The gall bladder (choice A) is characterized by simple columnar epithelium. The epithelium of the salivary gland (choice B) is simple cuboidal epithelium. Thick skin (choice C) is made up of stratified squamous epithelium and the trachea (choice D) is lined with pseudostratified columnar epithelium.

#### **QUESTION 5**

Your young female patient has a large bulge on the anterior thigh below the inguinal ligament. You suspect an abdominal hernia that has passed through the femoral ring into the femoral sheath and then through the saphenous hiatus into the subcutaneous layer of the upper thigh. In addition to the hernia sac, you would expect the femoral canal to contain which of the following?

- A. connective tissue and lymph nodes
- B. femoral artery
- C. femoral nerve



D. femoral vein

E. great saphenous vein

Correct Answer: A

Section: Anatomy The femoral canal, the medial compartment of the femoral sheath, contains only a slight amount of loose connective tissue and one or two lymphatic vessels and nodes. The femoral artery (choice B) is found in the lateral compartment of the femoral sheath with the genital branch of the genitofemoral nerve. The femoral nerve (choice C) is the most lateral structure in the femoral triangle, but it does not lie within the femoral sheath. The femoral vein (choice D) occupies the intermediate compartment of the femoral sheath. The saphenous vein (choice E) is a superficial vein that passes through the saphenous hiatus to end in the femoral vein. It does not lie within the femoral canal.

USMLE-STEP-1 PDF Dumps USMLE-STEP-1 VCE Dumps

USMLE-STEP-1 Braindumps