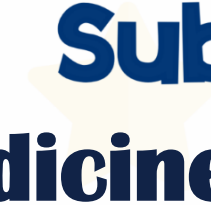




# Test Bank



**Subject:  
Medicine-Infectious**



**Rotation  
Collected by:  
Abdurrahman Jabr**

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The following topics should be studied very well as most of the questions are about them:

- 1) Brucellosis.
- 2) TB.
- 3) Side effects and uses of levofloxacin, Metronidazole, Ciprofloxacin, vancomycin and ceftriaxone.
- 4) HIV.
- 5) Vaccines: which of them are safe in pregnancy, flu and hepatitis vaccines.
- 6) C. difficile.
- 7) There are some questions on parasitic and worm infections: tinea, enterobius, ascaris.
- 8) Memorize SIRS criteria: there are some questions about it from 2012-2014 exams, you also have to memorize it for other systems like GI.
- 9) PPD test positive criteria, rule of 3, and AIDS-defining illnesses: see the last page.

**1) A 32-year-old woman was just diagnosed with HIV, which of the following is the most appropriate action?**

- A) give treatment only if her viral load above 50,000 copies /ml
- B) Give treatment only if she's not pregnant
- C) Await 2 months and then start treatment
- D) Start antiretroviral treatment
- E) Give treatment only if her CD4 count is below 200 cells/mL

Answer: D

**2) A patient said that he noticed smooth brown worms around 40 cm in length coming out of his anus. This worm is most likely?**

- A) *Ascaris lumbricoides*
- B) *Trichuris trichuria*
- C) *Ankylostoma duodenale*
- D) *Necator americanus*
- E) *Enterobius vermicularis*

Answer: A

**3) Which of the following is FALSE about brucellosis?**

- A) The most common focal complication is osteoarticular infections
- B) It is commonly transmitted from human to human
- C) *Brucella abortus* is the most virulent brucella species
- D) It should be treated for several weeks
- E) B+C

Answer: E

**4) which of the following antibiotics has been particularly associated with hemolytic reactions in patients with G6PD deficiency?**

- A) Dapsone
- B) Clindamycin
- C) Cloxacillin
- D) Piperacillin
- E) Vancomycin

Answer: A

**5) The highest risk of needle stick injury is related to which of the following viruses?**

- A) Hepatitis A
- B) HIV
- C) Hepatitis C
- D) Hepatitis B
- E) Hepatitis E

Answer: D

**6) Most common cause of viral meningitis:**

- A) Herpesviruses
- B) Enteroviruses
- C) Lymphocytic choriomeningitis virus (LCMV)
- D) Mumps
- E) JC virus

Answer: B

**7) Negative PPD for latent TB:**

- A) 6 mm in a patient on long-term steroids
- B) 12 mm in an immigrant from endemic/high prevalence country in the last 5 years
- C) 7 mm in person with recent contact with active TB patient
- D) 10 mm in a 60-year-old healthy woman
- E) 13 mm in a mycobacteriology laboratory professional

Answer: D

**8) Treatment for brucellosis in children:**

- A) Doxycycline only for 6 weeks
- B) Rifampin only for 6 weeks
- C) Doxycycline and Rifampin for 6 weeks
- D) rifampin and TMP-SMX for 6 weeks

Answer: D

**9) Sepsis is not associated with:**

- A) Dysesthesias in gloves-and-stocking distribution
- B) Absent or reduced reflexes
- C) ARDS
- D) Metabolic alkalosis
- E) Hypotension

Answer: D

**10) Wrong about IM influenza vaccine**

- A) Contraindicated in pregnancy
- B) Contraindicated in immunocompromised patients
- C) Contraindicated in bone marrow transplant patients
- D) A +B
- E) A + B +C

Answer: E

**11) Drug that causes arthropathy:**

- A) Clindamycin
- B) Levofloxacin
- C) Amoxicillin
- D) Metronidazole
- E) Azithromycin

Answer: B

**12) Severe external ear pain and discharge, most likely organism:**

- A) klebsiella
- B) staphylococcus aureus
- C) pseudomonas aeruginosa
- D) GAS
- E) GBS

Answer: C

**13) Which of the following is NOT considered anti-pseudomonal antibiotic?**

- A) Gentamycin
- B) Cefepime
- C) Ciprofloxacin
- D) Ceftriaxone
- E) Ceftazidime

Answer: D

**14) Which of the following vaccines is contraindicated in persons with underlying immunodeficiency?**

- A) Influenza vaccine
- B) Conjugated Pneumococcal vaccine
- C) Measles-mumps-rubella (MMR) vaccine
- D) Hepatitis B vaccine
- E) Tetanus vaccine

Answer: C

**15) 60-year-old man comes with productive cough, hemoptysis, weight loss, night sweats. His chest X-ray shows a right upper lobe cavity. You suspect that he has tuberculosis. His HIV test is negative. His sputum Acid Fast Bacillus was negative on three occasions. The best next step in his management is:**

- A) Repeat sputum AFB after one month
- B) Do blood culture for mycobacteria
- C) Do bronchoscopy
- D) Treat empirically for TB
- E) Do PPD test

Answer: C

**16) All the followings are true about Clostridium difficile disease EXCEPT:**

- A) It is diagnosed by detection of serum antibodies to toxin A and B
- B) It is caused by Gram-positive bacilli
- C) Recurrence rate can reach 20%
- D) It is the most common cause of hospital-acquired diarrhea
- E) It is treated by metronidazole

Answer: A

**17) Which of the following pathogens most commonly complicate H1N1 influenza:**

- A) H. influenza
- B) Streptococcus pneumonia
- C) Legionella pneumophila
- D) Anaerobic bacteria
- E) Mycoplasma pneumonia

Answer: B

**18) All of the following are true about influenza vaccine EXCEPT:**

- A) It's given annually
- B) It is contraindicated in patients with Guillain-Barre syndrome
- C) It is composed of three strains of influenza virus
- D) It is contraindicated in immunocompromised patients
- E) It is safe in pregnancy

Answer: D

**19) All the following is true about Brucella except:**

- A) Brucella melitensis is more virulent than Brucella abortus
- B) Treatment is at least for 6 weeks
- C) Endocarditis is the most common cause of death
- D) Sacroiliitis is a rare focal complication
- E) It is a Gram-negative, facultative intracellular bacillus

Answer: **D**

**19) All the following cutoffs for the PPD in the corresponding population are considered positive except:**

- A) 3 mm in an AIDS patient
- B) 10 mm in a household contact of active TB case
- C) 17 mm in healthy person
- D) 8 mm in a patient with a kidney transplant
- E) 13 mm in an IV drug abuser

Answer: A

**20) Which of the following isn't a side effect to vancomycin?**

- A) red man syndrome
- B) neutropenia
- C) phlebitis
- D) neuropathy
- E) nephrotoxicity

Answer: D

**21) A patient with recurrent abscesses, pneumonia, and high IgE:**

- A) Defect in phagocytosis
- B) Defect in chemotaxis
- C) Mixed defect

Answer: B

**22) ESBL (extended spectrum beta lactamase) bacteria defining feature is resistance to:**

- A) Imipenem
- B) Meropenem
- C) Ceftriaxone
- D) Cefuroxime

Answer: C

**23) which Schistosoma causes bladder cancer?**

- A) S. haematobium
- B) S. mansoni
- C) S. japonicum

Answer: A

**24) Which vaccine of the following is safe to give in pregnancy?**

- A) Injectable influenza
- B) MMR
- C) Human Papilloma Virus vaccine

Answer: A

**25) Which test of the following is diagnostic to syphilis?**

- A) RPR
- B) VDRL
- C) Biopsy

Answer: C



**26) MCC of acute endocarditis:**

- A) *S. viridans*
- B) *S. epidermidis*
- C) *E. faecalis*
- D) *S. aureus*

Answer: D

**27) HVC antibody was positive: what's the best next step?**

- A) LFT
- B) Viral load by PCR
- C) Liver biopsy

Answer: B

**28) Patient complaining of perianal itching mainly during night and then he was diagnosed with enterobius vermicularis infection. Which of the following is wrong?**

- A) It occurs mostly in children
- B) It is a pinworm
- C) Eggs are invisible in stool
- D) Anemia is commonly associated with this infection

Answer: D

**29) Which of the following is the diagnostic test for active TB?**

- A) 3 Sputum samples
- B) Chest CT scan
- C) Tuberculin skin test

Answer: A

**30) Which of the following TB infections is the most infectious?**

- A) CNS
- B) Larynx
- C) Spine
- D) Calcified lung
- E) GIT

Answer: B

**31) What's the most common cause of death in patients with brucellosis?**

- A) Sacroiliitis
- B) Endocarditis
- C) Osteomyelitis
- D) Liver failure

Answer: B

**32) Wrong about *Ascaris lumbricoides*:**

- A) Diagnosed by detection of eggs in stool
- B) Most common helminth worldwide
- C) May cause Loeffler syndrome
- D) May cause periorbital edema

Answer: D

**33) Wrong about *C. difficile*:**

- A) High risk antibiotics are clindamycin, cephalosporins, and fluoroquinolones
- B) Causes pseudomembranous colitis
- C) It's a gram-negative bacillus
- D) One of the risk factors to develop infection is taking PPIs
- E) It can cause toxic megacolon

Answer: C

**34) Peak age of HIV in Jordan:**

- A) 5-15
- B) 15-25
- C) 25-35
- D) 35-45
- E) 45-55

Answer: C

**35) Cannot be acquired from unpasteurized milk:**

- A) *Mycobacterium bovis*
- B) *Listeria monocytogenes*
- C) *Brucella*
- D) *Bacillus anthrax*

Answer: D

**36) Most common congenital immunodeficiency disorder:**

- A) Severe combined immunodeficiency
- B) Common variable immunodeficiency
- C) Bruton agammaglobulinemia
- D) IgA immunodeficiency

Answer: D

**37) Which of the following is true about HAV?**

- A) Viral shed in feces at onset of symptoms
- B) It tends to be a chronic infection
- C) Its vaccine is safe in pregnancy
- D) It causes splenomegaly

Answer: C

**38) Follicular tonsillitis is caused by:**

- A) GBS
- B) GAS
- C) Staph aureus
- D) S. pneumonia
- E) Viridans streptococcus

Answer: B

**39) Which of the following best describes the starting criteria for antiretroviral therapy in patients with HIV infection?**

- A) Treatment is started if CD4 count is less than 300 cells/mL
- B) Treatment is started if patient is losing weight
- C) Treatment is started once patient is diagnosed with HIV
- D) Treatment is started if an opportunistic infection appears
- E) Treatment is started if viral load is more than 50,000

Answer: C

**40) Which of the following vaccines contains live attenuated pathogen?**

- A) Injectable tetanus vaccine
- B) Injectable MMR vaccine
- C) Injectable influenza vaccine
- D) Injectable hepatitis B vaccine
- E) Injectable polysaccharide pneumococcal vaccine

Answer: B

**41) A 42-year-old woman presents to the emergency department with right-sided flank pain. She has a history of CKD stage 4 due to ADPKD. The pain has steadily worsened over the last 2 weeks. Associated symptoms are fever, nausea, and vomiting, but no dysuria or hematuria. Physical examination reveals blood pressure of 108/60 mm Hg, heart rate of 98/min, and temperature of 39 degrees, and right costophrenic angle tenderness. Serum creatinine is 2.8 mg/dL (0.6-1.1), which is unchanged from 3 months ago. Urinalysis is unremarkable. Blood cultures are obtained. A computed tomography scan without intravenous contrast reveals multiple fluid-filled cysts in both kidneys, as well as cysts in her liver. Which one of the following is the MOST appropriate treatment?**

- A) Vancomycin
- B) Ciprofloxacin
- C) Linezolid
- D) Gentamicin
- E) Piperacillin

Answer: B

**42) true about tinea:**

- A) Cysticercosis is caused by tinea saginata
- B) Tinea solium is found in pork
- C) Tinea saginata is found in pork

Answer: B

**43) which of the following is NOT a side effect of Metronidazole?**

- A) Red man syndrome
- B) Headache
- C) Disulfiram-like reaction
- D) Metallic taste

Answer: A

**44) 90% of congenital rubella syndrome occurs if mother get infected in:**

- A) first trimester
- B) Second trimester
- C) Third trimester

Answer: A

**45) A CSF sample showed: low glucose, high protein, lymphocytes, the least likely etiology is:**

- A) TB
- B) HSV
- C) Sarcoidosis

Answer: B

**46) Wrong about chylothorax:**

- A) TG more than 110
- B) Cholesterol more than 200
- C) Exudative effusion

Answer: B

**47) Which of the following doesn't trigger G6PDD hemolysis?**

- A) Dapsone
- B) Nitrofurantoin
- C) Levofloxacin
- D) TMP-SMZ

Answer: C

**48) The percentage of transmitting HIV from the mother to the child is:**

- A) 5%
- B) 10%
- C) 25%
- D) 50%
- E) 70%

Answer: C

**49) Not in the management of common cold:**

- A) Antibacterial drug administration
- B) Decongestant administration
- C) NSAID
- D) Hydration

Answer: A

**50) TRUE regarding brucellosis:**

- A) *B. canis* commonly infects goats and sheep
- B) *B. suis* is associated with suppurative destructive lesions
- C) *B. suis* is the most common one in humans
- D) It's more common in females

Answer: B

**51) Which of the following needs only contact isolation?**

- A) TB
- B) MRSA
- C) Measles
- D) Influenza

Answer: B

**52) Which of the following is NOT an AIDS-defining illness?**

- A) Kaposi sarcoma
- B) cryptosporidiosis
- C) Oral candidiasis
- D) TB
- E) CMV retinitis

Answer: C

**53) What's the most common cause of diarrhea in adults?**

- A) Norovirus
- B) Rotavirus
- C) *E. coli*
- D) Adenovirus

Answer: A

**54) Which of the following causes erysipelas?**

- A) Exotoxin of *S. aureus*
- B) GBS
- C) GAS
- D) *P. aeruginosa*

Answer: C

**55) 70-year-old patient started complaining of cough, SOB and weakness of 3 days duration. He was suspected to have been infected with H1N1 influenza A strain. All of the following are applicable EXCEPT?**

- A) He should be given oseltamivir
- B) He should be started on prophylactic antibiotics
- C) His household contacts should be started on oseltamivir
- D) H1N1 diagnosis can be confirmed with nasopharyngeal swab PCR

(Note: oseltamivir is used only if the exposure was in less than 48 hours)

Answer: A

**56) Man went to India and now has bloody diarrhea; all of these are possible etiologies EXCEPT:**

- A) *Shigella*
- B) *Salmonella*
- C) Cholera
- D) *Campylobacter*

Answer: C

**57) Which of the following antibiotics causes tendinitis in the rotator cuff muscles?**

- A) Ciprofloxacin
- B) Doxycycline
- C) Sulfatrim
- D) Ampicillin

Answer: A

**58) Common variable immune deficiency, which is true?**

- A) Recurrent infections in childhood
- B) Low IgA and IgG
- C) Decreased B lymphocytes

Answer: B

**59) Most common cause of viral encephalitis:**

- A) HSV
- B) CMV
- C) VZV
- D) EBV
- E) West Nile virus

Answer: A

**60) Which of the following is an AIDS-defining disease?**

- A) CD4 less than 300
- B) Viral load more than 10000
- C) TB
- D) VZV

Answer: C

**61) What is the risk of being infected with HIV after needle stick injury?**

- A) 0.3 %
- B) 3%
- C) 30%

Answer: A

**62) Not a side effect of vancomycin:**

- A Red man
- B) Phlebitis
- C) Renal toxicity
- D) Seizures

Answer: D

**63) A case of infective endocarditis, patient 45 y/o, healthy, she did a root extraction at dentist clinic, started to have new murmur, which is the most likely organism:**

- A) Staph aureus
- B) Alpha hemolytic strep
- C) E. coli
- D) Bacteroides
- E) Staph epidermidis



Answer: B

**64) A patient with VZV shingles, which is wrong?**

- A) Observe
- B) Give ganciclovir
- C) Give acyclovir
- D) Give levofloxacin
- E) Do HIV test if it was bilateral

Answer: D

**65) About amoeba histolytica found in feces, which of the following is NOT true?**

- A) Treatment for 7-10 days
- B) Elevated alkaline phosphatase means liver abscess
- C) Blood comes from colon ulcers
- D) Metronidazole is the treatment of choice

Answer: D

**66) All of the following indicate SIRS EXCEPT:**

- A) RR 23
- B) WBC 10000
- C) Temp 39
- D) Bands 13%

Answer: B

**67) All true about C. difficile EXCEPT:**

- A) Most antibiotic-induced diarrhea are not caused by CD
- B) Most cases of pseudo membranous colitis are caused by CD
- C) May be found in healthy people
- D) Immune complex mediated
- E) Metronidazole is DOC

Answer: D

**68) All true about staph. Aureus food poisoning EXCEPT:**

- A) Fever
- B) Nausea and vomiting
- C) Diarrhea in less than 24 Hours
- D) Abdominal cramping

**69) Which of the following may cause lupus?**

- A) Isoniazid
- B) Rifampicin
- C) Pyrazinamide
- D) Ethambutol
- E) Streptomycin

Answer: A

**70) A patient susceptible to parasitic infections, mostly due to:**

- A) B cell deficiency
- B) T cell deficiency

Answer: B

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More questions but with no choices:

1) Patient testing for HIV after 7 days from intercourse with HIV infected patient, best tool:

PCR testing for viral load

2) Most sensitive test for typhoid fever:

In the past paper file, it's blood culture but the true answer is bone marrow culture

3) Immediate action after needle stick injury? – wash your hands with water and soap

4) Needle stick injury with Hep B in an individual not previously vaccinated, what to do? – give the vaccine and Hep B immunoglobulins

5) True about sepsis – Tachypnea can be the first presenting sign (not sure)

6) A case of upper respiratory tract infection, prescribed amoxicillin by a physician, what to do? - May be to stop the antibiotic because it's most probably a viral infection (although guidelines say you should complete the course).

7) Most infectious TB? Cavitating pulmonary TB (also the laryngeal TB is very contagious, and it was the answer in another question (there was not cavitating pulmonary TB in the other choices)

8) Epigastric pain 4 hours after eating custard: *S. aureus*

9) Most common cause of cellulitis – *Staphylococcus aureus* (*Streptococcus pyogenes* is more common but it was not a choice)

10) An antibiotic contraindicated in pregnancy – doxycycline

11) Not in the management of common cold – antibacterial drug administration

12) True about *C. difficile* – diagnosed via stool toxin

- 13) True about sepsis? Hypothermia is a poor prognostic sign
  - 14) Doesn't cause severe diarrhea? Bacillus cereus
  - 15) A female who went to a restaurant and presented with vomiting after 5 hours, Dx: Staph (remember: S. aureus and B. cereus have pre-formed toxins that cause diarrhea in 30 mins to 6 hours)
  - 16) True about Hepatitis B vaccine > protective against hepatitis D
  - 17) Most serious type of malaria; P. Falciparum.
  - 18) Disorder of phagocytosis? chronic granulomatous disease
  - 19) PCP pneumonia: CD4 < 200
  - 20) Which is false about sepsis: blood culture is positive in 80% of case
  - 21) Which on the following is true about SIRS Bands more than 10%
  - 22) Enterohemorrhagic E. coli: antibiotics are contraindicated (they increase the risk of HUS)
- 

\*\* To diagnose AIDS, you need either CD4 less than 200 or an AIDS-defining illness (anyone in the table except the first group as they are not considered AIDS-defining)

Note: Dr. Fares considered Kaposi as an AIDS-defining illness.

PATHOGEN	PRESENTATION	FINDINGS
<b>CD4+ cell count &lt; 500/mm<sup>3</sup></b>		
<i>Candida albicans</i>	Oral thrush	Scrapable white plaque, pseudohyphae on microscopy
EBV	Oral hairy leukoplakia	Unscrapable white plaque on lateral tongue
HHV-8	Kaposi sarcoma	Perivascular spindle cells invading and forming vascular tumors on histology
HPV	Squamous cell carcinoma at site(s) of sexual contact (most commonly anus, cervix, oropharynx)	
<b>CD4+ cell count &lt; 200/mm<sup>3</sup></b>		
<i>Histoplasma capsulatum</i>	Fever, weight loss, fatigue, cough, dyspnea, nausea, vomiting, diarrhea	Oval yeast cells within macrophages
HIV	Dementia	Cerebral atrophy on neuroimaging
JC virus (reactivation)	Progressive multifocal leukoencephalopathy	Nonenhancing areas of demyelination on MRI
<i>Pneumocystis jirovecii</i>	<i>Pneumocystis pneumonia</i>	"Ground-glass" opacities on chest imaging
<b>CD4+ cell count &lt; 100/mm<sup>3</sup></b>		
<i>Aspergillus fumigatus</i>	Hemoptysis, pleuritic pain	Cavitation or infiltrates on chest imaging
<i>Bartonella</i> spp	Bacillary angiomatosis	Multiple red to purple papules or nodules Biopsy with neutrophilic inflammation
<i>Candida albicans</i>	Esophagitis	White plaques on endoscopy; yeast and pseudohyphae on biopsy
CMV	Colitis, Retinitis, Esophagitis, Encephalitis, Pneumonitis (CREEP)	Linear ulcers on endoscopy, cotton-wool spots on fundoscopy Biopsy reveals cells with intranuclear (owl eye) inclusion bodies
<i>Cryptococcus neoformans</i>	Meningitis	Encapsulated yeast on India ink stain or capsular antigen ⊕
<i>Cryptosporidium</i> spp	Chronic, watery diarrhea	Acid-fast oocysts in stool
EBV	B-cell lymphoma (eg, non-Hodgkin lymphoma, CNS lymphoma)	CNS lymphoma—ring enhancing, may be solitary (vs <i>Toxoplasma</i> )
<i>Mycobacterium avium-intracellulare</i> , <i>Mycobacterium avium</i> complex	Nonspecific systemic symptoms (fever, night sweats, weight loss) or focal lymphadenitis	Most common if CD4+ cell count < 50/mm <sup>3</sup>
<i>Toxoplasma gondii</i>	Brain abscesses	Multiple ring-enhancing lesions on MRI

\*\*Rule of 3: risk of infection after a needle stick injury: HIV: 0.3%, HCV: 3%, HBV: 30%.

\*\*PPD +ve:

*Induration of 5 mm and more is considered positive in:*

- Immunosuppressed individuals (For example, long term steroids receiving the equivalent of prednisone  $\geq 15$  mg/day for  $\geq 1$  month, immunosuppressant drugs, etc.)
- HIV infected individuals.
- Recent contact with active TB patients.
- Prior tuberculosis signs on chest radiograph such as fibrotic changes.
- Organ transplant patients

*An induration of 10 mm or more is considered positive in:*

- Immigrants from endemic/high prevalence countries in the last 5 years.
- High-risk area employees and residents. For example, prisons, nursing homes, and homeless shelters.
- Injection drug abusers.
- Mycobacteriology laboratory professional
- Children less than four years of age.
- Chronic medical conditions that increase the risk of tuberculosis include diabetes, kidney failure, malignancy, etc.
- Infants/Children/adolescents exposed to high-risk categories.

*An induration of 15 mm or more is considered positive in:*

- Always considered positive in any person. Healthy individuals without any risk factors for TB.
- Patients who do not meet any of the above criteria<sup>[8]</sup>

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