

**FARC Inc., *Fast and Furious* Quick Test Questions by [www.PodiatryPrep.com](http://www.PodiatryPrep.com)**



**“PML Part I - FAST AND FURIOUS”  
RADIOLOGY SAFETY QUESTIONS & ANSWERS**

**QUESTIONS AND ANSWERS:**

**Q-1:** In conventional [non-digital] radiology, what force controls the milli-ampereage?

**ANS:** X-ray tube current

**Q-2:** In conventional [non-digital] radiology, decreasing the voltage has what effect on image contrast?

**ANS:** Increases contrast

**Q-3:** In conventional [non-digital] radiology, the four parameters of subject contrast are:

**ANS:** Atomic number, density, kilovolts and thickness.

**Q-4:** In conventional [non-digital] radiology, 100 REMS is equal to what unit?

**ANS:** One Sievert [Sv]

**Q-5:** In conventional [non-digital] radiology, the Wimberger halo ring is associated with what illness?

**ANS:** Scurvy or Barlow's disease.

**Q-6:** What drugs are usually associated with AVN?

**ANS:** Alcohol, Steroids, Indocin and Phenylbutazone

**Q-7:** Features of Stage I Eichenholz Charcot joint bone disease?

**ANS:** Subluxation and minute peri-articular fragmentation and fracture.

**Q-8:** The cardinal body plane usually not seen in pedal CT scans of the foot?

**ANS:** Sagittal plane

**Q-9:** Radiographic studies show “H” vertebrae in this disease?

**ANS:** Sickle cell disease

**Q-10:** What is X-ray *film fog*?

**ANS:** Silver halide crystals

**Q-11:** In conventional [non-digital] radiology which collimation techniques increase patient radiation exposure and dosage?

**ANS:** Using grids and decreasing kilovoltage

**Q-12:** In conventional [non-digital] radiology what is the annual “whole man” occupational exposure to radiation dose limits?

**ANS:** 5,000 mrem or 5.0 rem or 50 mSv

**Q-13:** In conventional [non-digital] radiology what is the “feet, skin and hands” occupational exposure to radiation dose limits?

**ANS:** 50,000 mrem or 50.0 rem or 500 mSv

**Q-14:** In conventional [non-digital] radiology what is the lifetime “whole man” occupational exposure to radiation dose limits?

**ANS:** 1.0 rem X Age of patient [10mSv X Age]

**Q-15:** A spin-echo radiology image with long TE and long TR is?

**ANS:** T2 weighted

**Q-16:** A traditional spin-echo radiology image with short TE and long TR is?

**ANS:** Balanced or proton density driven.

**Q-17:** A traditional spin-echo radiology image - with infected or inflamed images - presents how?

**ANS:** With long and lengthened T2 and T1 relaxation times

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## Podiatry Board Preparation Software





**“PML Part I - FAST AND FURIOUS”  
IMMUNOLOGY - BLOOD DISORDER QUESTIONS**

1. Ms. X is diagnosed with acquired immunodeficiency syndrome (AIDS). Your nurse caring for this patient is aware that for a patient to be diagnosed with HIV she should have which condition?
  - a. Infection of HIV, have a CD4+ T-cell count of 500 cells/microliter, history of acute HIV infection
  - b. Infection with Tuberculosis, HIV and cytomegalovirus
  - c. Infection of HIV, have a CD4+ T-cell count of >200 cells/microliter, history of acute HIV infection
  - d. Infection with HIV, history of HIV infection and T-cell count below 200 cells/microliter
2. Your nurse observes precaution in caring for Mr. X as HIV is most easily transmitted in:
  - a. Vaginal secretions and urine
  - b. Breast milk and tears
  - c. Feces and saliva
  - d. Blood and semen
3. Nurse Jaja is giving an injection to Ms. X from your orders. After giving an injection, the nurse accidentally stuck her finger with the needle when the client became very agitated. To determine if the nurse became infected with HIV, when is the best time for you to test her for HIV antibodies?
  - a. Immediately and repeat the test after 12 weeks
  - b. Immediately and repeat the test after 4 weeks
  - c. After a week and repeat the test in 4 months
  - d. After a weeks and repeat the test in 6 months
4. The blood test first used to identify a response to HIV infection is:
  - a. Western blot
  - b. ELISA test
  - c. CD4+ T-cell count
  - d. CBC
5. What is the main reason why it is difficult to develop a vaccine against HIV?
  - a. HIV is still unknown to human
  - b. HIV mutates easily
  - c. HIV spreads rapidly throughout the body
  - d. HIV matures easily

6. Human Immunodeficiency virus belongs to which classifications?
- Rhabdovirus
  - Rhinovirus
  - Retrovirus
  - Rotavirus
7. Which organ is responsible for stimulating the production of red blood cells?
- Yellow marrow
  - Red marrow
  - Spleen
  - Kidney
8. In anemia, which of the following blood components is decreased?
- Erythrocytes
  - Granulocytes
  - Leukocytes
  - Platelets
9. The precursor of red blood cells is called:
- T cells
  - B cells
  - Stem cells
  - Macrophage
10. In erythropoiesis, the sequence of erythrocyte formation is chronologically described in which option?
- Stem cells, erythroblast, reticulocyte, erythrocytes
  - Stem cells, reticulocyte, erythroblast, erythrocytes
  - Erythroblast, stem cells, reticulocyte, erythrocytes
  - Erythroblast, reticulocyte, stem cells, erythrocytes
11. Which of the following is true of red blood cell?
- It is nucleated.
  - It has a lifespan of 100 days
  - It's production and formation depends on the action of the kidney
  - It is produced in the yellow marrow
12. Which type of immunoglobulin passes or crosses the placenta starting at the first trimester of pregnancy?
- IgG
  - IgA
  - IgM
  - All of these

13. The first immunoglobulin produced by the body when the neonate is distressed, has acquired an infection or is challenged is:

- a. IgG
- b. IgA
- c. IgM
- d. All of these

14. Which of the following is essential for the hemoglobin synthesis during RBC production?

- a. Folic Acid
- b. Iron
- c. Vitamin B12
- d. All of these

15. The age group most at risk for developing anemia is:

- a. 20-25 years old
- b. 26-32 years old
- c. 40-50 years old
- d. >65 years old

16. Decreased number of platelets is called:

- a. Thrombectomy
- b. Thrombocytopenia
- c. Thrombocytopathy
- d. Thrombocytosis

17. To improve the platelet count of a patient with an idiopathic thrombocytopenic purpura, this medication should be given:

- a. Vitamin K
- b. Methotrexate
- c. Corticosteroid
- d. Acetylsalicylic Acid

18. B-cells are involved in which of the following types of immunity?

- a. Humoral immunity
- b. Cell-mediated immunity
- c. Antigen-mediated immunity
- d. All of these

19. What is the life span of normal platelets?

- a. 3-4 months
- b. 1-2 months
- c. 1-3 days
- d. 7-10 days

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