



Institute of Health Management Research

MBA Hospital and Health Management

Batch-23 (2018-2020)

Hospital Management

Organisation and Management of Support Services

Term Examination

October 2019

Time - 3 Hour

MM-70

The question paper contains 5 printed pages.

Question 1. What is the importance of Blood Transfusion service in modern medicine? Discuss the planning and design considerations for a Blood Bank. Discuss the operational policies and procedures that you would implement to ensure good quality Transfusion services.

Marks 4+8+8 = 20

Question 2. Write Short Notes (about 250 words) on any three of the following

Marks 5 X 3= 15

- Internal and external Quality control in Path lab
- Control of Infections and other hazards in a Path lab.
- Management of Needle Stick Injury cases
- Prosthetic and Orthotic Devices

Question 3. Write Short Notes (up to about 250 words) on any three

Marks 5 X 3= 15

- Radiation hazards and Radiation Safety measures.
- Techniques of Sterilisation of stores and equipment
- Components of Centralised Gas & Vacuum Supply service
- Universal Precautions

Question 4. Multiple choice questions

Marks 1 X 20=20

Q 1. Mark the correct statement

The norm for authorization of staff in a pathology lab is :

- (a) 1000 tests/ month / per technician Or
- (b) 9000 -12000 tests / year / technician Or
- © 20000 tests /year / technician if the lab is automated
- (d) All of the above

Q 2. Mark the correct answer.

Air Conditioning of the bacteriology / virology laboratory. Should have :

- (a) Terminal filters outside, negative pressure inside and no recirculation of air
- (b) Terminal filters inside, negative pressure inside and no recirculation of air
- (c) Terminal filters outside, negative pressure inside and total recirculation of air
- (d) Terminal filters inside, positive pressure inside and no recirculation of air

Q 3. Mark the incorrect answer

Quality control of analytical activities in Path lab depends upon

- (a) Method reliability
- (b) Equipment dependability
- © Reagents/ material's quality
- (d) Method of sampling by the nurse

Q 4. Which of the following is not correct ?

- (a) Computed tomography is based on X-ray beams
- (b) Ultrasonography is based on Echo effects of high frequency sound waves
- © MRI is based on Magnetic resonant imaging and has dangerous levels of radioactivity
- (d) PET is Positron Emission Tomography based on gamma rays

Q 5. Which of the following statements is not correct ?

- (a) Half-life ($t_{1/2}$) is the time required, for half of the unstable, radioactive atoms in a sample to undergo radioactive decay.
- (b) Radioactive waste can safely be disposed off after 2 half lifes.
- (c) The isotopes used in Nuclear Medicine are generally those with short half life ranging from a few minutes to a few days.
- (d) Half-lives for various radioisotopes can range from a few microseconds to billions of years.

Q 6. Which of the following statements is not correct ?

- (a) Orthotic device is used to enhance a person's limb,
- (b) A prosthetic device is used to replace a limb entirely.
- © Joint replacement is the best example of orthotic devices
- (d) Jaipur foot is an example of prosthetic devices

Q 7. Which of the following is not the correct statement ?

- (a) The concept of CSSD was started by BG Underwood of American College of Surgeons in 1928
- (b) In India, AIIMS Delhi and PGI Chandigarh were the first to establish the CSSD during 1957-1960
- © During the 2nd world war the British started a CSSD in Cairo in 1942
- (d) In USA the first CSSD was established in 1945

Q 8. Which of the following is the correct statement ?

- (a) The ultrasound emits high frequency (1-5 Megahertz) sound pulses into the patient's body using a transducer prob.
- (b) Ultrasound means sound with frequency lesser than 20,000 cycles/ second (20 kHz)
- © Frequency and wave length are directly related.
- (d) The higher the frequency, the more the penetration

Q 9. Which of the following is correct ?

The correct temperature, pressure and time requirement for steam sterilization in autoclave is :

- (a) Temperature- 134 °C, Pressure- 30 PSI and Time- 3 Minutes
- (b) Temperature -126 °C, Pressure- 20 PSI and Time- 10 minutes
- © Temperature- 121 °C, Pressure-15 PSI and Time-15 Minutes
- (d) All of the above

Q 10. The role of regulators in the piped gas supply system is to reduce the line pressure

- (a) from 140 KG/cm² to 4.22 Kg/cm²
- (b) from 40 Kg/cm² to 4.22 Kg/cm²
- © from 14 Kg /cm² to 2.22 Kg/cm²
- (d) from 40 Kg/cm² to 2.22 Kg/cm²

Q 11. Which of the following is the correct statement ?

- (a) Overall space of about 400 Sq M / X-Ray machine can be a rough guide in radiology dept
- (b) Overall space of about 200 Sq M / X-Ray machine can be a rough guide in radiology dept
- © Overall space of about 100 Sq M / X-Ray machine can be a rough guide in radiology dept
- (d) Overall space of about 800 Sq M / X-Ray machine can be a rough guide in radiology dept

Q 12. The colour code for medical gases as per (IS-2379-1963-IS S & C) is :

- (a) Oxygen (Blue), Nitrous Oxide (White) , Compressed air (Black and White), Vacuum (Yellow)
- (b) Oxygen (White) , Nitrous Oxide(Black and White),Compressed air (Blue), Vacuum (Yellow)
- © Oxygen (White) , Nitrous Oxide (Blue), Compressed air (Black and White), Vacuum (Yellow)
- (d) Oxygen (White) , Nitrous Oxide (Blue), Compressed air(Yellow), Vacuum (Black and White)

Q 13. Which of the following is used for measuring the ionizing radiation ?

- (a) The Geiger–Müller counter
- (b) Sterimeter
- © TLD Badge
- (d) Piezoelectric cell

Q 14. Which of the following is not correct ?

- (a) MUGA is an abbreviation of Multiple Gated Acquisition Scan
- (b) PEP is an abbreviation of Post Exposure Prophylaxis
- © CSSD is an abbreviation of Central Stores Supplies Department
- (d) MRI is an abbreviation of Magnetic Resonance Imaging

Q 15. Which of the following statements is correct ?

Every unit of collected blood is to be tested for five transfusion transmissible infections (TTI), namely :

- (a) HIV, Hepatitis B, Hepatitis C, Malaria and Dengue,
- (b) HIV, Hepatitis B, Hepatitis C, Malaria and Syphilis,
- © HIV, Hepatitis B, Hepatitis C, Japanese encephalitis, and Syphilis,
- (d) HIV, Hepatitis B, Leptospirosis, Malaria and Syphilis,

Q 16. Which of the following statements is not correct ?

- (a) One Hz means 1 wave per second
- (b) One Kilohertz (kHz) means 1,000 waves per second
- © One Megahertz (MHz) is 1 million waves per second.
- (d) One Gigahertz (GHz) is 100 million waves per second

Q 17. Which of the following is correct?

- (a) Gamma radiation- a technique for sterilisation, is not suitable for hospitals
- (b) Flash Sterilization is often done in the OT by direct flame produced by burning a volatile substance,
- © Bovine Dick test is a test for assurance of sterilisation of contents in steam sterilisation
- (d) All of the above

Q 18. The strategy for improvement of standard of transfusion services under the National Blood Policy 2000, includes all of the following, except :

- (a) Promotion of Trading in blood i.e. Sale & purchase of blood.
- (b) Gradually phasing out the practice of replacement donors to achieve 100% voluntary non-remunerated blood donation program.
- (c) An External Quality Assessment Scheme (EQAS) through the referral laboratories approved by the National Blood Transfusion Council
- (d) Discontinue grant of Fresh licenses to stand-alone blood banks in private sector

Q 19. The accepted shelf life of paper wrapped packs steam sterilized in CSSD and stored under proper conditions, is generally:

- (a) One month
- (b) one week,
- © two weeks
- (d) one year

Q 20. Which of the following is not correct?

- (a) RBC count in an Adult Male is 4.5-6.5 Mil/mcl
 - (b) RBC count in an adult female is 4-5.5 Mil/ mcl
 - (c) WBC count in an adult human being is 4,000 to 11,000/mcl
 - (d) Platelets count in an adult human being is 1,50,000 to 4,00,000/ml
 - (e) None of these
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