

B.Sc. Allied Health Sciences Second Year (Semester-IV)

December 2013 Examination

B.Sc. Operation Theater Technology (OTT)

Time : 3 Hrs.

Paper – I

Max. Marks : 100]

Applied Pathology & Microbiology

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

(Use separate answer booklet for Section A & B)

Section – A

Applied Pathology (50 Marks)

Q.P Code : AHS-114

LONG ESSAY

2 X 10 = 20 Marks

1. Define Hypertension. Write the Clinical classification and describe its etiopathogenesis
2. Define Ischemic heart disease. Describe its pathophysiology and complications

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Obstructive uropathy
4. Complications of aneurysms
5. Describe the pathophysiology of heart failure
6. Enumerate the risk factors for atherosclerosis
7. Lab diagnosis of acute renal failure

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. Types of cardiomyopathy
9. Lab diagnosis of chronic heart failure
10. Ventricular Septal Defect
11. Benign Nephrosclerosis
12. Loeffler's endocarditis
13. Renal stones types
14. Mention three complications of artificial valves

Section – B

Applied Microbiology (50 Marks)

Q.P Code : AHS-115

(Use separate answer booklet for Section-B)

LONG ESSAY

2 X 10 = 20 Marks

1. What is Microbiological surveillance? Discuss in brief sampling methods applied in an outbreak of MRSA in a hospital ward.
2. What are blood borne infections? Write in short its prevention.

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Disinfection of operation theatre.
4. HAI
5. Diseases to spread by oro faecal route.
6. Mycobacterium tuberculosis-lab diagnosis.
7. Discuss sample collection methods.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. Hepatitis B vaccination.
9. Vibrio cholera.
10. Polio vaccine.
11. Post exposure prophylaxis of HIV.
12. Use of sodium hypo chloride
13. Difference between hepatitis A and B
14. Montoux test.

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Describe the different positions used during surgery with examples. How do you position a patient in lithotomy and what are the complications of this position.
2. Describe the various patient parameters monitored during a laparotomy done under general anaesthesia.

SHORT ESSAY (Answer any Ten)

10X 5 = 50 Marks

3. What instruction and equipment would you keep ready for arrest of haemorrhage from an open wound?
4. What are the complications of blood transfusion?
5. Describe the operation theatre waste is segregated?
6. What are the different surgical procedures done as day care?
7. Enumerate the pre-operative check list done before the surgical procedure.
8. What is manifold room? What types of cylinders are maintained in manifold room?
9. What is soda lime? Describe the advantages of using soda lime?
10. What are the advantages of Bain's circuit?
11. What is vaporizer? What are the safety features of vaporizers?
12. Describe the instrument planning for a case of emergency laparotomy?
13. How do you clean and sterilize sharp surgical instruments
14. What are the essential items which have to be kept in the operation theatre stores?

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

15. What is pulse oximetry? How is it useful?
16. How do you take care of microsurgical and titanium instruments?
17. Uses and maintenance of lead apron.
18. What are needle stick injuries?
19. Indenting for the operation theatre stores.
20. Colour coding of gas pipe lines.
21. What is consent for surgery?
22. What is Bodock's seal? describe it.
23. What are the essential details which have to be checked before blood transfusion?
24. Enumerate the surgical procedures done in the lateral position.
25. What precautions should be taken when applying cautery pads?
26. Patient record keeping in the operation theatre.

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year (Semester-IV)

December 2013 Examination

B.Sc. Operation Theater Technology (OTT)

Time : 3 Hrs.

Paper – III

Max. Marks : 80]

Pharmacology

Q.P Code : AHS-117

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Classify drugs used in Peptic Ulcer. Explain the Mechanism of action, uses and adverse effects of H₂ receptor antagonists.
2. Classify oral antidiabetic drugs. Explain the mechanism of action, and adverse effects of sulfonylureas.

SHORT ESSAY (Answer any Six)

6X 5 = 30 Marks

3. Explain mechanism of action, uses and adverse effects of Pethidine.
4. Explain mechanism of action, uses and adverse effects of aspirin
5. Explain mechanism of action and uses of diazepam
6. List the bronchodilators and write their mechanism of action and uses
7. List second generation antihistamines and write their mechanism of action and uses
8. List the prokinetic agents and explain their mechanism of action with uses .
9. List the advantages and disadvantages of nitrous oxide
10. Mention five antimicrobial combinations with one clinical use for each

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

11. Define Chemoprophylaxis and give two examples.
12. List three intravenous anaesthetic agents.
13. Three indications for ringer lactate
14. Oxidizing agents
15. List three clinical uses of metronidazole
16. List three adverse effects of tobramycin
17. Explain mechanism of action and one use of ceftriaxone
18. Benzathaine penicillin
19. Hyoscine
20. List three uses and adverse effects of prednisolone
21. Flumazenil
22. List three beta lactamase inhibitors

B.Sc. Allied Health Sciences Second Year (Semester-IV)

December 2013 Examination

B.Sc. Operation Theater Technology (OTT)

Time : 3 Hrs.

Paper – IV

Max. Marks : 80]

Medicine Relevant to OT Technology

Q.P Code : AHS-118

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Define and classify shock. How do you manage anaphylactic shock?
2. Discuss the composition of extracellular and intracellular fluids. How does the body maintain sodium balance?

SHORT ESSAY (Answer any Six)

6X 5 = 30 Marks

3. What is Ringer's lactate? What is its composition?
4. What is the etiopathogenesis of chronic renal failure?
5. How do you arrange the anaesthesia table for a 3 years old child coming for inguinal hernia repair surgery?
6. Describe chest compressions during resuscitation of a newborn?
7. What is epilepsy? classify it
8. What is hydroxyethyl starch? Enumerate the indications for its usage
9. How do you manage hemorrhagic shock
10. Mention briefly the management of a patient with cerebrovascular accident

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

11. What is furosemide? What is it used for?
12. Hydrocortisone hemisuccinate
13. Phenobarbitone
14. Dopamine
15. What are the uses of normal saline?
16. What are the parts of the Ambu bag
17. What are the parts of a laryngoscope?
18. What are different airway equipment required for anaesthetizing an infant coming for circumcision?
19. What is haemodialysis
20. What is hyperkalemia? What are its complications?
21. What are common causes for septic shock
22. Dextran 40