Sikkim Public Service Commission

Main Written Examination for the Post of Operation Theatre Technician under Sikkim State Subordinate Allied and Healthcare Service

PAPER -II

Time allowed: 3.00 Hrs | Maximum Marks: 100

INSTRUCTIONS TO CANDIDATES

Read the instructions carefully before answering the questions: -

1. **IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.**
2. **Use only Black Ball Point Pen to fill the OMR Sheet.**
3. Do not write anything else on the OMR Answer Sheet except the required information.
4. **This Test Booklet contains 50 questions in MCQ Mode in Part I to be marked in OMR Sheet. Part II and Part III are Subjective Questions which have to be written on separate answer sheet provided to you.**
5. Before you proceed to mark in the Answer Sheet (OMR), you have to fill in some particulars in the Answer Sheet (OMR) as per given instructions.
6. After you have completed filling in all your responses on the Answer Sheet (OMR) and the examination has concluded, you should hand over the Answer Sheet (OMR) and separate answer sheet to the Invigilator only. You are permitted to take with you the Test Booklet.
7. **Marking Scheme**

   THERE WIL BE NEGATIVE MARKING FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBECTVE TYPE QUESTION PAPERS

   i. There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-third of the marks assigned to the question will be deducted as penalty.

   ii. If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to the question.

   iii. If a question is left blank. i.e., no answer is given by the candidate, there will be no penalty for that question.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

PART -I

Choose the correct answer for the following questions: **(1x50=50)**

1. Anesthesia machine contains how many pressure systems?

A. Two (High and low)
B. Three (High, Intermediate and low)
C. Four. (High, intermediate, low and very low)
D. One (High)

2. Magill's breathing circuit is best suited for?

A. Spontaneous ventilation
B. Controlled ventilation.
C. Spontaneous and controlled both.
D. Pediatric patient ventilation.

3. Pressure inside a full Oxygen cylinder is?

A. 2000-2200 psig.
B. 1000 psig.
C. 750 psig.
D. 1800 psig.

4. Entonox is the mixture of?

A. Carbon dioxide and oxygen.
B. Air and Nitrous oxide
C. Oxygen and Nitrous Oxide.
D. Oxygen and air.

5. Amsorb a newer soda lime absorbs how much of Co2 per 100 gm?

A. 10.2 L
B. 8.4 L.
C. 5.6L.
D. 15.5L

6. AMBU stands for?

A. Anesthesia machine breathing unit.
B. Artificial mandatory breathing unit.
C. Automated machine and breathing unit.
D. Automated manual breathing unit

7. Route of drug administration most commonly used in OT?

A. Intraosseous route.
B. Intramuscular.
C. Subcutaneous route.
D. Intravenous route.

8. Rendell Baker Sauces (RBS) mask is used for?

A. Old patients.
B. Pediatric patients.
C. Obese patients
D. Adult patients.

9. PIN index safety system is used in anesthesia machine.

A. To attach any gas cylinder in any york assembly
B. To hold cylinder securely.
C. To prevent incorrect cylinder attachment
D. To release cylinder when needed.

10. In head injury patient's mannitol is given to?

A. To stop bleeding.
B. For protection of brain.
C. For protection of spinal cord.
D. To reduce intra cranial pressure (ICP)

11. Lignocaine 2% is a?

A. Anticholinergic agent
B. Sedative.
C. Muscle relaxant.
D. Local anesthetic.

12. Bupivacaine Heavy is used in?

A. Epidural anesthesia.
B. Spinal anesthesia.
C. Nerve block anesthesia.
D. General anesthesia.

13. The cylinder most commonly used on anesthesia machines?

A. Type A.
B. Type B.
C. Type D.
D. Type E.

14. Size of endotracheal tube required for a female adult patient is?

A. 7.5 mm.
B. 8.5 mm.
C. 6.0 mm
D. 6.5 mm.

15. Cardiac failure is defined as

A. When heart is not able to maintain sufficient circulation in body
B. When heart is not beating very fast.
C. When heart beat is very slow.
D. When heart stopped working.

16. Autoclaving (steam sterilization) is not good for

A. Surgical instruments.
B. Linen.
C. Glass syringes.
D. Disposable PVC items.

17. Cidex is

A. 10% Povidine Iodine.
B. 2% Glutaraldehyde.
C. 4% Sodium Hypochlorite.
D. 2% Bleaching Powder

18. In autoclaving sterilization is done by?

A. Saturated steam.
B. Dry steam
C. Dry heat
D. Hot water

19. Tourniquet time for upper limb is:

A. 100 minutes.
B. 120 minutes
C. 180 minutes
D. 90 minutes

20. Disinfection of an endoscope after use is done by

A. By dipping in Cidex for 30 minutes.
B. By autoclaving.
C. In EO gas sterilizer.
D. By radiation.

21. Artificial prosthesis are sterilized by

A. Boiling.
B. In Cidex.
C. Supplied sterile.
D. Chemical sterilization

22. Deaver's retractor is used in

A. In minor surgeries.
B. Surgeries on head and neck.
C. In nasal surgery.
D. Abdominal surgeries.

23. Metal implants are sterilized by?

A. By dipping in Cidex for 30 minutes
B. By autoclaving.
C. In EO gas sterilizer.
D. By radiation.

24. Which of the following term describe the amount of blood effected per heart beat?

A. Stroke volume.
B. After load.
C. Cardiac output.
D. Vital volume.

25. Protamine sulphate is antidote of?

A. Insulin.
B. Heparin
C. Cefizol.
D. Aspirin.

26. The Negative pressure in suction machine is

A. 200-300 mm of Hg.
B. 1000 mm of Hg.
C. 400-700 mm of Hg.
D. 50-100 mm of Hg.

27. In ventricular fibrillation first treatment is?

A. Cardiac massage.
B. I.V infusion.
C. Drugs
D. Defibrillation if defibrillator is available

28. Jackson Rees (JR) circuit is

A. Modification of Mapleson "D".
B. Modification of Mapleson "A".
C. Modification of Mapleson "B".
D. Modification of Mapleson "F".

29. What is the service pressure of a cylinder?

A. Minimum pressure of the cylinder when full
B. Maximum pressure of cylinder when transported
C. Maximum pressure to which the cylinder may be filled at 70-degree F
D. Pressure of cylinder when in service phase

30. Circuit best suited for controlled ventilation is

A. Mapleson "A"
B. Mapleson "D"
C. Mapleson "E"
D. Mapleson "F"

31. Temperature of operating room should be

A. 24-38 degree centigrade.
B. 22-24 degree centigrade
C. 16-18 degree centigrade.
D. 18-20 degree centigrade.

32. PIN index for Nitrous Oxide is?

A. 3,5
B. 2,5
C. 3,6
D. 1,5

33. Pipeline pressure of gases in OT is

A. 65-70 PSI
B. 55-60 PSI
C. 40-45 PSI
D. 70-75 PSI

34. In Double Lumen endotracheal tube bronchial cuff is inflated with the volume of air?

A. 5 ML
B. 10 ML
C. 2 ML
D. 20 ML

35. Minimum effective concentration of Cidex solution is

A. 2%.
B. 1%.
C. 0.5%.
D. 1.5%

36. Position used for nephrectomy is?

A. Lithotomy.
B. Supine.
C. Lateral.
D. Trendelenburg.

37. For Laparoscopic cholecystectomy patient is positioned on OT table in

A. Reverse Trendelenburg
B. Supine position.
C. Prone position.
D. Trendelenburg position

38. Which is the most common complication of spinal anesthesia?

A. High spinal
B. Hypotension
C. Nausea and vomiting
D. Shivering

39. An endotracheal tube has F-29, Z-79 or ASTM written on it. What does it mean?

A. ET tube is made of PVC.
B. ET tube is meant for single use only.
C. ET tube has passed the tissue reactivity test.
D. ET tube is made of red rubber.

40. Which of the following is not a contraindication for giving spinal anesthesia?

A. Head injury
B. Coagulopathy
C. Patient refusal
D. Old age

41. Minimum alveolar concentration (MAC) of Desflurane is

A. 6%
B. 1.15%
C. 1.7%
D. 4.5%

42. Which is the following is not an adverse effect of Thiopentone

A. Hypotension
B. Raised intracranial pressure (ICP)
C. Hyperthermia
D. Bronchospasm

43. Muscle relaxant of choice in renal failure patients is

A. Pancuronium
B. Atracurium
C. Vecuronium
D. Scoline

44. Ringer Lactate (RL) is contraindicated in patients with

A. Blunt Trauma abdomen
B. Renal failure
C. Coagulopathy
D. Head injury

45. Platelets before transfusion are stored at

A. 22 degree centigrade
B. 37 degree centigrade
C. 4 degree centigrade
D. -20 degree centigrade

46. Scoline is not given to

A. Burn patients
B. Obese patients
C. Elderly patients
D. Patients with difficult airway

47. Most commonly used temperature and time combination in autoclaving is

A. 115 degree centigrade for 25 minutes
B. 145 degree centigrade for 45 minutes
C. 121 degree centigrade for 30 minutes
D. 138 degree centigrade for 30 minutes

48. Ideal length of epidural catheter inserted in epidural space is

A. 2 cm
B. 12 cm
C. 8 cm
D. 5 cm

49. Color of carbon dioxide cylinder is

A. Black
B. Grey
C. Pink
D. Green

50. In anesthesia machine pipeline pressure gauzes are part of?

A. Intermediate pressure system
B. High pressure system
C. Low pressure system
D. Very low-pressure system

PART – II

Write short note on ANY FOUR of the following: **(5 x 4 =20)**

1. Importance of premedication in anesthesia and drugs used in premedication.

2. Write a short note on informed consent and its importance?

3. Explain pre transfusion checks before blood transfusion.

4. Write a short note on safety features of electro cautery.

5. Draw a labeled diagram of PVC endotracheal tube giving the names of all the parts.

6. Write about safety features of anesthesia machine.

PART - III

Attempt ANY TWO questions: **(15 x 2 = 30)**

1. Explain in detail various positions used in surgery with their common complications and safety precautions taken in each.

2. Explain about spinal anesthesia, its indications, contraindications, technique and monitoring during spinal anesthesia.

3. Explain in detail about Mapleson Breathing system and its commonly used types.

4. Classify local anesthetic drugs and explain about Lignocaine in detail i.e. its uses, doses, indications, contraindications, side effects etc.

PART - II

Write short notes on ANY FOURof the following: **(5x4= 20)**

1. InterferenceTheory
2. Attribution
3. Mental deficiency
4. Occupational interest measurement
5. Psychology of corruption
6. Roles & functions of clinical psychology

PART - III

Attempt ANY TWOof the following questions: **(15x2= 30)**

1. What is forgetting?Explain the theories of forgetting in detail.

2. Write an essay on current trends in social psychology.

3. Describe the classification of neurotic disorder.

4. What do you mean by Disability and Rehabilitation?Explain disability with an example.