

BABA FARID UNIVERSITY OF HEALTH SCIENCES, FARIDKOT

ANAESTHESIA TECHNICIAN (Under PILBS, Mohali)								
QUESTION BOOKLET:	<div></div>	OF THE CANDIDATE						
OMR ANSWER SHEET NO:	<div></div>							
ROLL NO:	<table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>							FULL SIGNATURE OF THE CANDIDATE
<div></div> FULL SIGNATURE OF INVIGILATOR		<div></div> FULL SIGNATURE OBSERVER						

Time Allowed: 2.00 Hours (12.00 noon to 2.00 PM)

Maximum Marks: 100

1. Use BLACK FINE TIP BALL PEN only. Use of pencil is not allowed.
2. Write your Roll number on the OMR answer-sheet and also on the question-booklet only in the space provided for the purpose and at no other place in the question booklets and Answer-sheet
3. Enter the Question Booklet Set and Number on the OMR Answer-sheet and also darken the corresponding bubbles with BLACK FINE TIP BALL PEN.
4. Do not put any marks anywhere in the Question booklet /on the OMR Answer-sheet.
5. **There are 100 objective type questions in all of 1 Mark each.** Before attempting the questions, check that the Question-booklet is complete. In case any question/part of question or page is missing, inform the Centre Superintendent within 5 minutes of the start of the examination. After that no claim will be entertained.
6. **Each question is followed by four alternative responses listed as A), B), C) and D) out of which only one is correct / most correct. In case, all the ovals are left blank, there will be deduction of marks @ 0.25 marks for each such unattempted question. Fifth oval 'E' (introduced for security purpose) is to be darkened in case you do not want to attempt the question to avoid negative marking.**
7. To open the question booklet, remove the seal gently when asked to do so. Handover the OMR Answer-sheet to the officer on duty on the completion of the time before you leave the examination hall.
8. **The candidates are permitted to carry his/her question booklet after completion of the examination but OMR Sheets are compulsory required to be deposited with the invigilator.**
9. A candidate who create disturbance of any kind or changes his/her seat or is found in possession of any paper possibility of any assistance to him/her or unfair means will be expelled from the examination by the Centre superintendent/Observer, whose decision shall be final. ("Expulsion" for this purpose would mean cancellation of the entire examination of the candidate).
10. **THE CANDIDATES ARE NOT PERMITTED TO CARRY ANY TELECOMMUNICATION EQUIPMENT SUCH AS WATCH, CELLULAR PHONE, WIRELESS SET, SCANNER ETC. INSIDE THE EXAMINATION HALL.**
11. For rough work, use only the blank space of the Question booklet.
12. The candidates will not be allowed to leave the examination hall during the examination.
13. Borrowing any material is not allowed.
14. The answer-sheet is designed for Computer evaluation. If the instructions are not followed properly, the candidate alone shall be responsible for the resultant loss.
15. Smoking/Refreshment shall not be allowed in the Entrance Test Centre/Hall.
16. Male candidates shall affix their Left Thumb Impression (LTI) while Female candidates shall affix Right Thumb Impression (RTI) at the prescribed place on the OMR answer sheet, Question Booklet and attendance sheet. The Centre superintendent shall also obtain and retain it for record.
17. The candidate must fill both the question booklet number and OMR answer sheet number on the attendance sheet.
18. No candidate shall be allowed to leave the centre before **2.00 PM**.

- 1) Which of the following organs contains the 'Bundle of His'?
 - (a) Pancreas
 - (b) Brain
 - (c) Kidney
 - (d) Heart
- 2) Intercostal muscles are attached with
 - (a) Diaphragm
 - (b) Ribs
 - (c) Thigh
 - (d) Abdomen
- 3) The basic functional unit of a human kidney is known as
 - (a) Nephron
 - (b) Pyramid
 - (c) Henle's loop nephron
 - (d) Nephridia
- 4) Which of the following parts of the brain controls body temperature and hunger?
 - (a) Thalamus
 - (b) Pons
 - (c) Cerebellum
 - (d) Hypothalamus
- 5) Which of the following is the vestigial bony part of the human skeleton?
 - a) Cranium
 - b) Coccyx
 - c) Cervical
 - d) Clavicle
- 6) Which of the following is the structural and functional unit of the human nervous system?
 - a) Brain
 - b) Axon
 - c) Dendron
 - d) Neuron
- 7) What is a human heart made up of?
 - a) Tissues
 - b) Muscle
 - c) Skin
 - d) Bone
- 8) Which of the following instrument is used to listen to the internal sounds of the human body?
 - a) Sphygmomanometer
 - b) Suction device
 - c) Stethoscope
 - d) Reflex hammer
- 9) Which of the following blood group is considered a universal donor?
 - a) A
 - b) B
 - c) AB
 - d) O

10) **What are the two blood tests?**

- a) Rh and ABB
- b) ABO and Rh
- c) ABO and Rn
- d) ABC and Rh

11) **Blood pressure is measured in terms of _____**

- a) mm Hg
- b) mm
- c) cm Hg
- d) Hg

12) **Heart beat initiates from _____**

- a) Purkinjiefibers
- b) SA node
- c) Bundle of HIS
- d) AV node

13) **Kwashiorkor disease occurs due to deficiency of _____**

- a) lipids
- b) sugars
- c) hormones
- d) proteins

14) **What is the definition of the cardiac cycle?**

- a) The contraction of the atria
- b) Circulation of the blood in the heart
- c) The contraction and relaxation of the ventricles
- d) It is a sequence of event that occurs during one complete heartbeat

15) **_____ controls the voluntary functions of the body.**

- a) PNS
- b) CNS
- c) Neurons
- d) ANS

16) **Anaphylactic shock is _____**

- a) Mild local reaction to an allergen
- b) Severe local reaction
- c) The severe reaction of the whole body
- d) The mild reaction of the whole body

17) **Migration of cancerous cells from the site of origin to other part of the body forming secondary tumors is called _____**

- a) Proliferation
- b) Diapedesis
- c) Apoptosis
- d) Metastasis

18) Glucose tolerance is decreased in one of the following disease:

- A. Diabetics insipidus
- B. Addison's disease
- C. Hypopituitarism
- D. Diabetes mellitus

19) Factors affecting enzyme activity is

- A. Temperature
- B. pH
- C. Concentration
- D. All of the these

20) Diminished delivery of oxygen to tissues is termed as _____

- a) Hypoxia
- b) Ischemia
- c) Homeostasis
- d) Metabolism

21) Which of the following is a fat-soluble vitamin?

- (a) Vitamin B
- (b) Vitamin C
- (c) Vitamin B₁₂
- (d) Vitamin K

22) Which of the following vitamins is also known as cobalamin?

- (a) Vitamin B11
- (b) Vitamin B2
- (c) Vitamin B6
- (d) Vitamin B12

23) Hypertrophy is -

- (a) increase in cell size
- (b) decrease in cell size
- (c) increase in cell number
- (d) decrease in cell number

(24) An acute inflammation would attract _____?

- (a). Monocytes
- (b). Plasma cells
- (c). Neutrophils
- (d). Eosinophils

(25) Which of the following is not a mediator of inflammation _____?

- (a). Interferon
- (b). Prostaglandins
- (c). TNF
- (d). Myeloperoxidase

(26) The most common cause of infarction of an organ or tissue is:

- (a). Venous occlusion due to twisting of the organ
- (b). Trapped viscus under peritoneal adhesions
- (c). Thromboembolism
- (d). Compression of organ in the hernial sac.

(27) A culture medium the exact composition of which is not known was called as

- (a) Simple
- (b) Complex
- (c) Defined
- (d) Natural

(28) What is Microbiology?

- a) Study of molecules that are visible to human eyes
- b) Study of animals and their family
- c) Study of organisms that are not visible to naked eyes
- d) Study of microscope

(29) Which of the following apparatus is used to provide steam under regulated pressure?

- a) autoclave
- b) laminar air flow
- c) incubator
- d) hot oven

(30) The general pressure at which the autoclave is operated is _____

- a) 5 Psi
- b) 20 Psi
- c) 15 Psi
- d) 40 Psi

(31) A chemical agent that kills the microorganisms and is commonly applied to substances used on inanimate objects are _____

- a) Antiseptics
- b) Sanitizer
- c) Disinfectants
- d) Antibiotics

(32) An agent that prevents the growth of bacteria are known as _____

- a) Bactericide
- b) Bacteriostatic
- c) Antimicrobial
- d) Antibiotic

(33) Which of the following is not a chemical agent for microbial control?

- a) Radiations
- b) Antibiotics
- c) Antiseptics
- d) Germicide

(34) The antibiotic penicillin was discovered by which of the following researchers?

- a) Emmerich and Low
- b) Gratia and Dath
- c) Alexander Flemming
- d) Robert Koch

(35) A disease that can be transmitted by an infectious agent from one individual to another was called

- (a) Epidemic
- (b) Pandemic
- (c) Communicable
- (d) Comma

(36) Which of the following is not a subfield of microbiology?

- (a) bacteriology
- (b) botany
- (c) clinical microbiology
- (d) virology

(37) Which of the following is the recommended heat temperature and time period for the moist heat sterilization process conducted in an autoclave?

- a) 180 degree C for 5 minutes
- b) 121 degree C for 15 minutes
- c) 126 degree C for 3 minutes
- d) 160 degree C for 45 minutes

(38) What is the correct meaning of the term known as the 'terminal sterilization process'?

- a) The initial sterilization of the raw materials for the product
- b) The final sterilization of the healthcare products and medical devices
- c) The decontamination of the environmental bioburden
- d) The aseptic technique used during the manufacturing process of the product

(39) Name the chemical in a 'bleach' (a disinfectant) used to eliminate bacteria, fungi, and viruses?

- a) Sodium chloride
- b) Ethylene oxide
- c) Sodium hypochlorite
- d) Ethyl alcohol

(40) Which of the following is a recommended method for sterilizing surgical instruments?

- a) Wiping with alcohol
- b) Cleaning with soap and water
- c) Autoclaving
- d) Soaking in disinfectant solution

(41) What is the minimum recommended concentration of bleach for disinfection purposes in healthcare facilities, home spaces and public places?

- a) 5%
- b) 10%
- c) 50%
- d) 100%

(42) **Oxytocin is used to:**

- (a) Induce labor
- (b) Raise B.P
- (c)Prevent conception
- {d) None of above

(43) **Opium is used as:**

- a) Sedative
- b) Stimulant
- c) Narcotic analgesic
- d) Diaphoretic

(44) **Teratogenic drug causes toxicity to:**

- a) Liver
- b) Kidney
- c) Foetus
- d)Brain

(45) **The major organ responsible for drug detoxification:**

- a) Lung
- b) Liver
- c) Muscular tissue
- d) Intestine

(46) **Diuretic does**

- a) Cause vomiting
- b) Cause water retention
- c) Increase the outflow of urine
- d) Decrease the outflow of urine

(47) **Nitroglycerin is used in...**

- a) Leprosy
- b) General anaesthetic
- c) Local anaesthetic
- d) Angina Pectoris

(48) **Anaemia is treated with**

- a) Chloroquine
- b) Hetrazan DES
- c) Ferrous sulphate
- d) Metronidazole

(49) **An increase in lung ventilation rate is caused by which of the following conditions?**

- (a) Increase of CO₂ content in inhaled air
- (b) Increase of CO₂ content in exhaled air
- (c) Decrease of O₂ content in inhaled air
- (d) Decrease of O₂ content in exhaled air

(50) **There will be a right shift in the oxygen-haemoglobin dissociation curve in the case of?**

- (a) high pCO₂
- (b) high pO₂
- (c) low pCO₂
- (d) less H⁺ concentration

(51) How can the combination of haemoglobin and O₂ in lungs be improved?

- (a) decreasing O₂ concentration in blood
- (b) increasing O₂ concentration in blood
- (c) increasing CO₂ concentration in blood
- (d) introducing CO into the blood.

(52) What transports oxygenated blood from the lungs to the heart?

- (a) Pulmonary artery
- (b) Pulmonary vein
- (c) Coronary vein
- (d) Superior venecava

(53) What infection do antibiotics treat?

- a) Bacterial infections
- b) Viral infection
- c) Fungal infection
- d) Parasitic infection

(54) In a spinal anaesthesia, where all is the anaesthetic injected?

- a) 1st and 2nd thoracic space, 11th and 12th thoracic space
- b) 3rd and 4th Lumbar space, 5th lumbar and 1st sacral space
- c) 7th cervical and 1st thoracic space, 12th thoracic and 1st lumbar space
- d) 1st and 2nd lumbar space, 4th and 5th lumbar space

(55) What is the correct rate of chest compressions per minute while doing CPR?

- a) 40
- b) 80
- c) 100
- d) 60

(56) You are giving compressions on an adult at a rate of at least 100 compressions per minute. What is the correct depth for these compressions?

- a) At least 1 inch
- b) At least 2 inches
- c) At least 3 inches
- d) At least 4 inches

(57) During CPR on an adult victim, the compression-to-breath ratio is:

- a) Give 2 breaths after every 30 compressions
- b) Give 1 breath after every 5 compressions
- c) Give 3 Breaths after every 15 compressions
- d) Give 2 breaths after every 100 compressions

(58) High quality CPR is achieved by doing which of the following?

- a) Starting CPR within 10 seconds of recognizing cardiac arrest
- b) Push hard and fast
- c) Minimizing interruptions
- d) All of the above

(59) Where should you palpate for a pulse on an unconscious adult during CPR?

- a) carotid pulse
- b) radial pulse
- c) femoral pulse
- d) brachial pulse

(60) How long should you check for a carotid pulse on an adult?

- a) for at least 30 seconds
- b) for at least a full minute
- c) 10-15 seconds
- d) 5-10 seconds

(61) What is the primary goal of CPR?

- a) To keep oxygenated blood moving to the brain and other vital organs
- b) To deliver a fresh supply of oxygen into the person's lungs
- c) To deliver a fresh supply of carbon dioxide into the person's lungs
- d) To compress the heart between the breastbone and spine

(62) What is the purpose of the head tilt/chin lift manoeuvre when giving rescue breaths?

- a) Prevent choking
- b) Open the airway
- c) Prevent vomiting
- d) Prevent neck injury

(63) Who can use an Automated External Defibrillator?

- a) Medical professionals
- b) Police officers
- c) Nurses
- d) Anyone can use an AED

(64) The common acronym in BLS to guide providers through CPR is?

- a) CABD - Circulation, Airway, Breathing, Defibrillate
- b) ABCD - Airway, Breathing, Circulation, Differential diagnosis
- c) ABCD - Appearance, Breathing, Circulation, Defibrillate
- d) CABD - Circulation, Appearance, Breathing, Defibrillate

(65) What is the function of a nebulizer?

- a) To supply moisture in the form of droplets
- b) To maintain temperature
- c) To maintain the gas levels of individual gases
- d) To check the safety of valves

(66) Which of the following is known as laughing gas?

- a) CO₂
- b) N₂O
- c) NO₂
- d) B₂O

(67) In which of these sub cutaneous infiltration with a desensitizing agent is done?

- a) Saddle Blocks
- b) Epidural Blocks
- c) Local Blocks
- d) General Anaesthesia

(68) The pump used to pump air mechanically into the respiratory tract _____

- a) Mechanical Pump
- b) Ventilator
- c) Ambulatory Bag
- d) CPR

(69) Which of the following drug is used in day care surgery ?

- a) Ketamine
- b) Propofol
- c) Diazepam
- d) Sodium thiopental

(70) The main controlling agent for respiratory drive is which of the following -

- a) CO₂
- b) Oxygen
- c) NO
- d) HB03

(71) Spinal anaesthesia is given at which of the following levels:

- a) L1-2
- b) L2-4
- c) Midline of thorax
- d) Below L5 (caudal)

(72) Which of the following anaesthetic agents is contraindicated in patients with hypertension?

- a) Ketamine
- b) Propofol
- c) Etomidate
- d) Diazepam

(73) Infant circuit used for anaesthesia?

- a) Bains circuit
- b) Magill circuit
- c) Ayres t piece
- d) Water's circuit

(74) True about ketamine is

- a) Bronchodilator
- b) Depressed airway reflexes
- c) Causes hypotension
- d) Decreases ICT

(75) DISS is used for

- a) Correct application of cylinder to anaesthesia machine
- b) To provide analgesia
- c) To monitor BP
- d) To monitor CVP

(76) Most reliable indicator to prevent oesophageal intubation?

- a) Oxygen saturation on pulse oximeter
- b) Measurement of CO₂ in exhaled air (EtCO₂)
- c) Direct visualization of passing tube beneath vocal cords
- d) Auscultation over chest

(77) Which of the following skeletal muscle relaxants undergo Hoffman's elimination?

- a) Atracurium
- b) Succinylcholine
- c) Mivacurium
- d) Vecuronium

(78) MAC stands for

- a) Minimum alveolar concentration
- b) Minimal analgesic concentration
- c) Minimal anaesthetic concentration
- d) Maximum alveolar concentration

(79) American Society of Anesthesiologists' (ASA) classification of physical status of patient is done for?

- a) Pre operative risk assessment
- b) Post operative risk assessment
- c) Airway assessment
- d) Assessment of organ donor

(80) Colour of oxygen cylinder is:

- a) Black with white collar
- b) Blue with white collar
- c) Yellow with white collar
- d) White

(81) Anaesthesia of choice for induction of anaesthesia in children is?

- a) Desflurane
- b) Enflurane
- c) Sevoflurane
- d) Isoflurane

(82) Agent causing malignant hyperthermia?

- a) Succinylcholine
- b) N₂O
- c) Ether
- d) Verapamil

(83) Fixed oxygen delivery device is?

- a) Venturi mask
- b) Nasal cannula
- c) Nasal mask
- d) Non breathing mask

(84) True about laryngeal mask airway (LMA) is?

- a) Prevents aspiration
- b) Used in oral surgeries
- c) Used in laryngeal surgeries
- d) Maintains airway

(85) All of the following are example of definite airways except:

- a) Nasotracheal tube intubation
- b) Orotracheal tube intubation
- c) Laryngeal mask airway
- d) Cricothyroidotomy

(86) The state of "general anesthesia" usually includes:

- a) Analgesia
- b) Loss of consciousness, inhibition of sensory and autonomic reflexes
- c) Amnesia
- d) All of the above

(87) The anaesthetic agent, which is an inhibitor of NMDA glutamate receptors is :

- a) Thiopental
- b) Halothane
- c) Ketamine
- d) Sevoflurane

(88) An ideal anaesthetic drug would:

- a) Induces anaesthesia smoothly and rapidly and secure rapid recovery
- b) Posses a wide margin of safety
- c) Has a minimal adverse effects
- d) All of the above

(89) Which of the following general anaesthetics belongs to inhalational anaesthetic agents?

- a) Thiopental
- b) Desflurane
- c) Ketamine
- d) Propofol

(90) The anaesthetic agent, which is used intravenously is :

- a) Propofol
- b) Halothanes
- c) Desflurane
- d) Nitrous oxide

91. Practice of anaesthesia has evolved from the first public demonstration of Ether anesthesia on 16th october 1846 by

- a. Joseph Priestley
- b. John Snow
- c. Horace Wells
- d. WTG Morton

92. The first spinal anaesthesia on man was performed by

- a. August Bier(1898)
- b. Curblo(1949)
- c. Cathelin and sicard(1901)
- d. Nils Lofgren and Lundquist(1943)

93. 21 years old spontaneous breathing patient undergoing incision and drainage under GA, which is the breathing circuit of choice?

- a. Mapleson A
- b. Mapleson B
- c. Mapleson E
- d. Mapelson F

94. An eye surgery was performed using propofol as intravenous agent and succinylcholine as muscle relaxant. Recovery from anesthesia was uneventful. However after 8 hours of surgery, patient complains of pain in the muscles. Which of the following is the likely reason for this condition?

- a. Propofol
- b. Due to surgery
- c. Early mobilization
- d. Succinylcholine

95. Which of the following drug is used in day care surgery ?

- a. Ketamine
- b. Propofol
- c. Diazepam
- d. Sodium thiopental

96. Which is the critical temperature of N₂O -

- a. 118°C
- b. 88°C
- c. 26°C
- d. 36.5°C

97. The main controlling agent for respiratory drive is which of the following-

- a. CO₂
- b. Oxygen
- c. NO
- d. HB03

98. Individual intraoperative awareness is evaluated by;

- a. Pulse oximetry
- b. Colour Doppler
- c. Bispectral imaging
- d. End tidal CO₂

99. Which of the following statements about Anesthetic Machine is true:

- a. Temperature of Desflurane Vaporizer chamber is 39°C
- b. Flow – meters (Rotameters are interchangeable)
- c. Oxygen sensors are placed on the expiratory limb of the anesthesia circuit
- d. All of the above

100. Spinal anesthesia is given at which of the following levels:

- a. L1-2
- b. L2-4
- c. Midline of thorax
- d. Below L5 (caudal)

