CENTRAL BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, ESTABLISHED IN 1952 BY PLANNING COMMISSION, GOVT. OF INDIA

CENTRAL BOARD OF EXAMINATIONS

BSS NATIONAL VOCATIONAL EDUCATION MISSION

AHE063-BSS DIPLOMA IN ANESTHESIA TECHNICIAN

ONE YEAR EXAMINATION NOVEMBER-2025

AHE063-02 FUNDAMENTALS OF ANESTHESIA

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) _____ intra-aortic balloon pump setup, operating and monitoring.
2) _____ should have an inspiratory time of one second.
3) All nurses who work in primary care could be required to perform CPR and some could be expected to use _____.
4) _____ is critical in determining the extent of injuries and what will be needed to manage an injury, and treating immediate life threats.
5) _____ injury occurs to protect against further damage and starts the healing process.
6) _____ are visible within and around the shattered patella, distal femur and proximal tibia.
7) FAST full form of_____
8) The decision whether to perform surgery is determined by the extent of the damage and the _____.
9) The valve is made of bronze or brass and is most fragile part of cylinder, therefore provided with a _____ to protect
10) A ring of _____ is cut from the cylinder and divided into strips.
11) Secretion Clearance Coughing is important to clear out secretions from _____.
12) The technique of _____ measures flow by pressure drop across a resistance in the gas flow pathway.
13) Approximate remaining in hours = _____ in psi/200 × O2 flow rate per minute. But this gives only a rough estimate.
14) The pressure will remain same till all the liquid is converted to gas, after which the pressure falls until the cylinder is _____.
15) The cylinder should be inspected endoscopically for cracks and defects on their inner side and can also be _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Chest compressions?
2) The care of acutely injured people?
3) The majority of the gases?
4) What happens if I miss a dose?
5) What should I avoid?
6) Continue taking magnesium?
7) The critical temperature ?
8) Vapour pressures ?
9) The standard boiling point ?
10) Cylinder shoulder colours?
11) Aspiration ?
12) The bobbin weight?
13) The gas flow ?
14) How does MRI work?
15) Cold sterilization ?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Automated external defibrillation?
2) How did Trauma occurs all pregnancies?
3) Cylinder valve?
4) Handling and installation?
5) Trial design and participants?
6) Types of Supraglottic Airways?
7) Temperature monitoring?
8) What is MRI?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Principles of resuscitation- Basic life support for adults?
2) Explain Components of cylinder?
3) CEM System - Continuous Emission Monitoring?
4) Complete NIBP systems for human research -NMT (neuromuscular transmission)?
5) Describe about Thermometers?

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ONE YEAR EXAMINATION NOVEMBER-2025

AHE063-03 ANATOMY AND PHYSIOLOGY

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) _____ assigns literal meaning to statements

2) _____was improved in 14 eyes of 13 patients (15.9%) within both complementary methods

3) _____were asked which of the listed suggestions they currently considered might have an important effect on treatment response

4) Neurological disease should be ruled out when the _____ is asymmetric in direction, unilateral by nature, or when its characteristics have changed over time.

5) Heart is divided in to _____chamber

6) Zang, fu means _____

7) Deviated tongue indicates _____

8) Weight of the brain is _____

9) Study of cells is _____

10) _____ organ helps in digestion.

11) _____ is a disorder of blood.

12) _____ organ helps in circulation

13) Total number of bones in the human body is _____

14) Weight of the brain is ----------

15) Bile is produced in ----------.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) What is the placebo effect?
2) Write short notes on overall patterns of expectation?
3) What is the cluster analysis?
4) Write short notes on obesity and smoking?
5) What is the History of acupuncture?
6) Define Fire needling?
7) Define Auriculotherapy?
8) Define Mycobacterium?
9) Define High pain tolerance ?
10) Write notes on The acupuncture points st36 (zusanli) and st37 (shangjuxu) ?
11) Define Digestive system ?
12) Define Muscular system?
13) What are an Importance of lysosome ?
14) What are 3 parts of small intestine ?
15) Define local anesthesia?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Explain about Laser Acupuncture Research: China, Austria, and Other Countries?
2) Write detail about Treatment Methods in acupuncture ?
3) Describe about Theories of Pain?
4) Write the locations of small intestine and stomach with draw diagram?
5) Define blood and briefly explain about the composition of cellular elements of blood?
6) Explain Flow of engery in organs is physiology ?
7) Write about ECG and placement of electrodes on the patient?
8) Enumerate the parts of human heart and what is the normal cardiac output?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Write the functions of the Water element?
2) Define excretory system. Draw a neat diagram of kidney and explain the parts and functions of excretory system?
3) Explain about the functions of pituitary, thyroid and adrenal endocrine glands in detail?
4) Briefly explain the functions of the skin and tongue?
5) Explain the cycle of events in a cardiac cycle and discuss Cardiopulmonary resuscitation?

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AHE063-BSS DIPLOMA IN ANESTHESIA TECHNICIAN

ONE YEAR EXAMINATION NOVEMBER-2025

AHE063-04 ICU MANAGEMENT

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) _____ should be checked on admission and when Fio2 reduced to target.

2) If FiO2 cannot be reduced to <0.6 whilst achieving target Spo2 then PEEP may need to be _____.

3) Diabetic ketoacidosis- use Saline until _____

4) The _____ may need to be restarted if the blood sugar is elevated

5) Trainees are expected to identify and manage the co-existing medical conditions relevant to anaesthesia, which _____

6) Indications and contraindications of peripheral and central blocks, _____

7) Peripheral blocks of _____ (single shot and catheter techniques), Including intravenous, axillary and interscalene blocks

8) Applies organizational knowledge to provide a _____ organization

9) Human error research, relevant for the _____ setting

10) Legal principles and _____ defining medical practice and the use of patient data

11) To appropriately and respectfully care for _____ of race, culture, gender, sexual orientation, and socio-economic status

12) Spinal anaesthesia for _____ with more than 90% success

13) Failure to _____ in obstetrics

14) The resident should be aware of _____ (consent, foetal vs maternal rights, maternal/paternal conflicts)

15) _____ is the primary goal of vasoactive infusions?

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) ICU TPN administration?
2) Re-feeding syndrome?
3) Treatment of above-mentioned diseases, in order to optimize patients before anaesthesia and surgery in cooperation with other physicians?
4) Clinical skills?
5) Specific attitudes?
6) Respiratory complications?
7) Analyzing the problem?
8) Tackling the problem?
9) Principles of communication with colleagues?
10) Critical appraisal?
11) Complications of regional anaesthesia?
12) Frequent or particular comorbid conditions associated to thoracic surgery?
13) What is the difference between TPN and enteral nutrition?
14) What is the purpose of antibiotic therapy, and when is it used?
15) What are additional precautions in infection control?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) The anaesthesia staff act?
2) Disease Management, Patient Assessment and Preoperative Preparation?
3) Professional Attributes?
4) Methods of analgesia during labour?
5) Technical skills for Performance of lung separation techniques?
6) Paediatric Anaesthesiology?
7) Describe the different types of vasoactive infusions and their uses.
8) Describe the importance of antibiotic therapy in ICU

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Titration of ventilator settings?
2) Fluid increments- Normal Saline?
3) Practical anaesthetic procedures / Invasive and Imaging techniques / Regional blocks?
4) Thoracic and Cardiovascular Anaesthesiology?
5) Describe the importance of renal failure protocol and traumatic brain injury protocol in ICU. Explain how these protocols are implemented and monitored?