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

AHE030-BSS DIPLOMA IN ANESTHESIA TECHNOLOGY

TWO YEARS (FIRST YEAR) EXAMINATION NOVEMBER-2025

AHE030-01 COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS

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) Get up _____

2) Let the door _____ opened.

3) Word pad is an _____

4) _____ is a folder, stores the deleted files

5) UG I means _____

6) The tool bar contains _____ related to the _____

7) Basic working platform of the computer is _____

8) The short cut for Italic is _____

9) _____ is used to click and drag to create duplicate.

10) The expansion of WAN is _____

11) _____ was the first web browser

12) Rama was _____ ideal student

13) Shortcut Key for Cut is _____

14) He _____ studying in our Institute

15) Mr.ram is _____ teacher

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

1) Define indefinite Article?
2) Define vowels?
3) What is meant by neuter Gender?
4) Hardware
5) Backup
6) Taskbar
7) Define Mouse
8) Save use
9) Chart elements
10) Object
11) Adjectives
12) View
13) Auto text
14) Define Subject
15) What are Question tags?

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

1) Explain 'WH' type question words?
2) Explain few sentences using "behind, beneath"?
3) Explain Arithmetic logic unit
4) Explain any five functions in MS Excel
5) Print preview
6) What are the characteritics of computer?
7) List out classification of nouns and their functions?
8) Write about Memory device?

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

1) Explain how you write a resignation letter
2) Briefly explain storage unit
3) Explain 'slide presentation creating' in MS Power Point
4) Explain the classification of computer
5) Explain in detail about MS Word?

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AHE030-BSS DIPLOMA IN ANESTHESIA TECHNOLOGY

TWO YEARS (FIRST YEAR) EXAMINATION NOVEMBER-2025

AHE030-02 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) The Oxygen cylinder is _____ colored.
2) (N2O) Nitrous Oxide is a _____ smelling.
3) Mortality is lowest where surgery is carried out within _____ of admission.
4) If the patient is _____, send someone to alert the emergency services (if alone, do this yourself) and then start CPR
5) Adopt a system of _____ to two ventilations (a 30:2 ratio), allowing more time for chest compressions at a rate of 100/minute (Chamberlain, 2005);
6) _____ is any injury that has the potential to cause prolonged disability or death.
7) _____ was one of the most important developments in the field of medical practice.
8) Pin index cylinders require a seal between cylinder valve outlet and yoke. The seal is called as _____.
9) Approximate remaining in hours = _____ in psi/200 × O2 flow rate per minute. But this gives only a rough estimate.
10) The pressure will remain same till all the liquid is converted to gas, after which the pressure falls until the cylinder is _____.
11) Three of each, longitudinal and transverse stripes are taken from a finished cylinder and struck by _____.
12) Entonoxis 50.50 mixtures of _____ and oxygen
13) After the oxygen and other free components are collected _____ which allows nitrogen to desorb.
14) The critical temperature is defined as the temperature above which a substance cannot exist in _____.
15) _____ the material which most endotracheal tubes are made of, does not absorb x-rays.

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

1) Spinal Anesthesia
2) General Anesthesia
3) Chest compressions?
4) The majority of the gases?
5) Flattening test?
6) Pipe Sizes?
7) PSA technology?
8) Continue taking magnesium?
9) Aspiration ?
10) Laryngoscopes?
11) The bevel ?
12) Cuff design ?
13) Devices for managing the difficult Airway?
14) The noninvasive blood pressure system?
15) Operating room fires?

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

1) Uses of Laryngoscope.
2) Different types of Ventilators
3) Write about LMA uses
4) Laminectomy?
5) Intravenous fluids?
6) Bullnose and handwheel valve?
7) What other drugs will affect magnesium?
8) What are the following six procedural rules for the correct use of the system?

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

1) Describe about Major trauma?
2) Describe about Clinical anatomy?
3) Explain Components of cylinder?
4) Anesthestic gases and vapours?
5) Supraglottic airway devices?

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TWO YEARS (FIRST YEAR) EXAMINATION NOVEMBER-2025

AHE030-03 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) Acupuncture seems to be more effective than _____ in treating myopia

2) _____ were observed before and after treatment with acupuncture or moxibustion

3) _____for the acupuncturists/TCM practitioners, chiropractors and other professionals who completed the survey were very similar(52, IQR46–58).

4) Surveys may produce more informative results if _____in length and complexity.

5) _____ suggested the existence of two primary feeling clusters, "Relaxation" and "Alertness".

6) _____ is drawn to a treatment with acupuncture

7) A con?rmatory cluster analysis was then undertaken on the basis of these groupings, but did _____ results

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

9) Deviated tongue indicates _____

10) Weight of the brain is _____

11) Normal temperature of human body is _____

12) _____ organ helps in vision.

13) There are _____ sense organs.

14) Total volume of blood in the body is about _____liters.

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

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

1) What is the cluster analysis?
2) What is the theory of traditional chinese medicine?
3) Define Moxabustion?
4) Define Mycobacterium?
5) Define Stone probe?
6) Define Veterinary acupuncture?
7) Write abbreviation of and define CGRP?
8) Define Respiratory system ?
9) Define Muscular system?
10) Define Skeletal system?
11) What are an Importance of lysosome ?
12) Define Conversion of food into energy ?
13) Define Blood and lymphatic system?
14) What are Root words for size, quality ?
15) What are Root words for positon ?

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

1) Describe about Questions Requiring "Yes" or "No" Responses-An Overview?
2) Write the locations of small intestine and stomach with draw diagram?
3) Write the locations of wood element organs with draw diagram?
4) Explain five words from medical terminology?
5) Define cells and tissue. Draw a neat diagram and mention its parts?
6) Explain Flow of engery in organs is physiology ?
7) Explain Internal Energy – External?
8) Write Functionalites of Earth Elements ?

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

1) Explain about the Effect of Acupuncture on Visual Function in Patients with Congenital and Acquired Nystagmus?
2) Explain about Acupuncture and Neural Mechanism in the Management of Low Back Pain?
3) Write the functions at the wood element?
4) Write the functions of the Water element?
5) Write the functions of the AIR element?

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AHE030-BSS DIPLOMA IN ANESTHESIA TECHNOLOGY

TWO YEARS (FIRST YEAR) EXAMINATION NOVEMBER-2025

AHE030-04 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) ICU _____

2) Hypertension _____

3) AED _____

4) The Intensive Care Unit at _____ as an Open Unit

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

6) Diabetic ketoacidosis- use Saline until _____

7) Team work: working together with _____ to ensure smooth patient care and safety.

8) Regional anaesthesia and analgesia in _____

9) Hemodynamic complications: _____ aetiologies, sepsis, hypertension

10) Human error research, relevant for the _____ setting

11) To be aware and act according to medico-legal obligations related to _____

12) Epidural catheter placement for _____ with a 80% success

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

14) The resident must be able to discuss _____ with the patient including risks and alternatives

15) Anaesthesia for major _____ involving prolonged anaesthesia, major blood loss, hypothermia and multiple procedures

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

1) Stillet uses
2) How many types of Intubation's.
3) Pressure Area Care?
4) The nasogastric tube?
5) An infusion of actrapid insulin?
6) Epidural analgesia and patient controlled analgesia(PCA)?
7) Knowledge and experience of the aetiology, natural history, diagnosis, treatment and complications?
8) Prevention of complications?
9) Airway: anatomy?
10) Tackling the problem?
11) Crisis resource management?
12) Skills (Aberdeen)?
13) Principles of medical ethics?
14) Medical disease and pregnancy?
15) Anaesthetic management of complications?

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

1) Breathing systems
2) Pre operative chick list
3) Define A, B, C in CPR?
4) General principles of ICU management?
5) Aetiology, pathophysiology, diagnosis and treatment plans according to international standards of specific critical conditions?
6) Which are following performs regional anaesthetic techniques?
7) Professional Attributes?
8) Securing the difficult airway?

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

1) Fluid increments- Normal Saline?
2) Intraoperative patient care and Anaesthetic techniques?
3) Emergency medicine: management of critical conditions including trauma and initial burn management?
4) Education, Self-directed Learning, Research?
5) Thoracic and Cardiovascular Anaesthesiology?

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AHE030-BSS DIPLOMA IN ANESTHESIA TECHNOLOGY

TWO YEARS (FINAL YEAR) EXAMINATION NOVEMBER-2025

AHE030-09 CARE OF PATIENT UNDERGOING SURGERY

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) Disease causing organisms are called _____
2) Antiseptic surgery introduced by _____
3) First hospital in India was probably built in _____
4) IPR means _____
5) _____is used to dilate a hole in the skull.
6) _____is used to cut a bones and leg.
7) Bacteria produce_____
8) Heat is more reliable method of _____
9) _____ management is the primary concern for many patients having surgery.
10) A consent form must be signed by the patient or guardian and witnessed by a staff member as well as _____.
11) The _____ is referred to as the postoperative period and includes the recovery and convalescence phases.
12) _____, you'll need to stay in the hospital overnight to continue receiving postoperative care.
13) Confirm that _____, electrocardiographic leads, blood pressure cuff, pulse oximeter probe and intravenous line are in place
14) Spinal anaesthesia is induced by injecting small amounts of local anaesthetic into the _____
15) Intravenous fluid, vitamins are given if _____ and to keep adequate fluid and electrolyte balance.

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

1) What is the TIVA?
2) Write about the Drugs causing hypotension during induction
3) Define Disinfection?
4) Define Asepsis?
5) Define Infection?
6) Define Autoclaving?
7) Principles of intensive care?
8) Principles of medical asepsis?
9) Fluid & electrolyte replacement?
10) Bronchoscope examination?
11) Pulmonary Function Test?
12) Classification of pleural effusion?
13) Write about Bronchiectasis?
14) Hepatic coma?
15) Prevention and control of oral cancer?

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

1) Explain the Awake intubation.
2) Explain the Crystalloids.
3) Explain the Hypertension.
4) Explain the Hypovolemia.
5) Write pre & intra operative care of patient under going neck surgery?
6) Write pre & intra operative care of ophthalmic surgery?
7) Explain about Intake/Output chart?
8) Explain the pathophysiology of tuberculosis?

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

1) Explain the orthopaedic surgery?
2) Explain the Home Health Nursing Roles?
3) Explain the concept of disease?
4) Explain about cell injury?
5) Explain about any two type of shock?

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AHE030-BSS DIPLOMA IN ANESTHESIA TECHNOLOGY

TWO YEARS (FINAL YEAR) EXAMINATION NOVEMBER-2025

AHE030-10 ANESTHESIA PROCEDURES AND MONITOR IN OPERATION

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) If responsibility for _____ is to be shared with other physicians, the patient should be informed about any such arrangement.
2) Anesthesiologists should provide appropriate _____ to their patients.
3) Anesthesiologists should provide timely medical consultation when requested and should _____ in seeking consultation when the need arises.
4) Anesthesiologists should co-operate with _____, effectiveness and efficiency of healthcare services.
5) Administers anesthesia with the best of skills and care, observing the protocols of the specialty and the medical profession to ensure _____ and _____
6) Proper sterilization of OT in specified conditions as per _____
7) Writes objective _____ of subordinate staff.
8) Performs outreach duties to _____ as and when required.
9) The Pre-Anesthetic assessment may even be carried out prior to admission in case of _____ if required
10) An anesthesia plan for the patient is prepared on the basis of _____ assessment and the same is documented.
11) Surgeon should be informed of _____ for patient after conducting Pre Anesthesia assessment.
12) _____ who may either be an individual or an agency can sign the consent document.
13) Continual monitoring for _____ shall be performed unless invalidated by the nature of the patient, procedure or equipment.
14) PACU full form_____
15) Medical record of a particular patient is confidential and his/her right to privacy must be respected at _____.

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

1) Deifne the Saddle block.
2) What is the Mallampatti scoring?
3) What is the Preoxygenation?
4) Define sterilization and disinfection?
5) Gastroscopy?
6) Universal precautions?
7) Thermal injuries during anaesthesia?
8) Oxygen toxicity?
9) Pethadine?
10) Flow meters?
11) Why is it necessary to inquire about a patient's respiratory health before anesthesia?
12) Difference between crystalloids and colloids?
13) Failed intubation drill?
14) Classifying equipment for sterilization?
15) List the crystalloids?

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

1) Explain the Color coding.
2) Explain types of hernia?
3) Surgical gloving?
4) Classify hazards in Operation theatre?
5) Pulse oxymetry?
6) Causes for intra operative Bronchospasm and its treatment?
7) Dobutamine?
8) How surgical instruments are disinfected and sterilized after it is used on a HIV patient?

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

1) Write about the Intravenous anesthesia.
2) Explain briefly the Circle system.
3) Discuss the peripheral support areas in operating room with diagrams?
4) Describe anesthetic concerns while planning for deep and superficial peripheral regional blocks in a patient on anticoagulants?
5) Discuss anesthetic management in a adult female patient with a prior renal transplant scheduled for an abdominal hysterectomy with bilateral salpingo-oophorectomy?

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TWO YEARS (FINAL YEAR) EXAMINATION NOVEMBER-2025

AHE030-11 ROLE OF ANESTHESIA TECHNICIAN

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) _____ is one produced by friction.

2) _____ is one made by a sharp cutting instrument.

3) Example for Local anaesthesia _____

4) Types of anaesthesia is _____ and_____

5) _____anaesthesia given in renal transplantation surgeries.

6) _____is used for operations on the perineum.

7) _____is used to remove stone in the kidney.

8) Communicating with the patient when they arrive into _____

9) _____ includes a set of maneuvers and medical procedures performed to prevent and relieve airway obstruction.

10) _____ of the balloon itself is also a risk which entails vascular surgery to remove under that circumstance

11) _____ wished his new discovery to be used for amputations, but for this surgeons preferred general anesthesia.

12) _____ currently in use meets all these requirements, nor can any anaesthetic agent be considered completely safe.

13) _____, an agent introduced in the 1950s, has been almost completely replaced in modern anesthesia practice by newer agents because of its shortcomings.

14) Atracurium besilate, also known as _____, is a medication used in addition to other medications to provide skeletal muscle relaxation during surgery or mechanical ventilation.

15) Low-dose, slow subcutaneous flumazenil administration is a safe procedure for patients withdrawing from long-term, _____ dependency.

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

1) Which medication is associated with increased muscle rigidity?
2) What test is used to assess collateral circulation in the extremities prior to arterial cannulation?
3) What is NOT a condition that presents as a fixed cardiac output state?
4) What is a common symptom of mitral stenosis?
5) Define Regional Anaesthesia
6) Write about Intra venous anaesthesia.
7) Define Sterilisation.
8) Define Auto claving.
9) Define isolation technique.
10) Write physical method of boiling.
11) Write about purpose of operation bed.
12) Femaral Artery Cannulation
13) ETCO2 monitoring
14) Soda lime
15) Disadvantages of Double Lumen Tube

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

1) Write about the role of the theatre assistant?
2) Write about Lithotomy position?
3) Explain about breast surgical?
4) What are water soluble vitamins? Write sources, daily requirement, deficiency manifestations of Vitamin D?
5) Desflurane?
6) Bupivacaine?
7) Nitrous oxide?
8) Role of a technician in Radial Artery Cannulation?

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

1) Briefly explain about thoracic surgery?
2) Describe the anatomy of Larynx?
3) How do you arrange and assist for Spinal Anaesthesia?
4) Describe central gas pipeline?
5) Describe post Anesthetic Management after general Anaesthesia in the ward?