



BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Sc.(OTT)-2021/B.Sc.(OTT)-2022

Course Name – Basics of Surgical Procedures

Course Code - BOTT501

(Semester V)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Select who has been credited with discovering the ABO blood group system?
 - a) Karl Landsteiner
 - b) Louis Pasteur
 - c) Robert Hooke
 - d) Alexander Fleming
- (ii) Select the full form of PRBCs.
 - a) Plasma red blood ceels
 - b) Packed red blood cells
 - c) Pure red blood cells
 - d) packed red body cells
- (iii) Select at what temperature platelets collected for transfusion are stored.
 - a) Room temperature
 - b) Refrigerated
 - c) Freezer temperature
 - d) Boiling temperature
- (iv) Select the normal range for blood pH in the human body.
 - a) 6.0 - 6.5
 - b) 7.0 - 7.5
 - c) 7.35 - 7.45
 - d) 8.0 - 8.5
- (v) Select the percentage of the human body that is composed of water.
 - a) 10-20%
 - b) 12-30%
 - c) 50-60%
 - d) 90-100%
- (vi) Select which of the following is an example of a crystalloid solution.
 - a) Albumin
 - b) Dextran
 - c) Lactated Ringer's solution
 - d) Hydroxyethyl starch (HES)
- (vii) State the purpose of maintenance on operating tables.
 - a) Replacing tyres daily
 - b) Lubricating moving parts of operation table
 - c) Disinfecting table with bleach
 - d) Painting the frame everyday
- (viii) State the purpose of a remote control for operating tables?

- a) To operate the table from a distance b) To adjust the room's lighting
c) To monitor the patient's vital signs d) To open and close the operating room doors
- (ix) Select the primary advantage of bipolar diathermy over monopolar diathermy.
a) Lower cost b) Reduced risk of burns to the patient
c) Higher power output d) Compatibility with all surgical instruments
- (x) Identify in which surgical purpose ligasure is commonly used.
a) Skin suturing b) Tissue retraction
c) Bone cutting d) Vessel sealing
- (xi) CUSA is commonly used for what surgical purpose?
a) Skin incision b) Brain tissue dissection
c) Vessel sealing d) Bone cutting
- (xii) Select which approach is commonly used for total thyroidectomy surgery.
a) Transoral approach b) Transcervical approach
c) Transnasal approach d) Transcutaneous approach
- (xiii) Choose the common indication for transthoracic esophagectomy.
a) Appendicitis b) Esophageal cancer
c) Gallstones d) Hernia
- (xiv) Select in which surgical position is the patient lying face down with the head turned to one side?
a) Prone b) Supine
c) Trendelenburg d) Fowler's
- (xv) Choose in which surgical position is the patient seated with their legs and feet elevated higher than their head?
a) Fowler's position b) Lithotomy position
c) Lateral recumbent position d) Trendelenburg position

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain Lower Anterior Resection (LAR) surgery and its indications. (3)
3. Enumerate different types of transfusion reactions. (3)
4. Define crystalloid and colloid solutions with examples. (3)
5. Explain the key features of the operation theatre table. (3)
6. Explain Nephrectomy and its types. (3)

OR

Explain Breast surgery and its types. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain blood transfusion reactions. (5)
8. Explain crystalloids and their composition. (5)
9. Describe the process of sterilization of the operation theatre. (5)
10. Explain Surgical Induced Hypothermia and Indications. (5)
11. Explain Hypothermia and its Causes and Complications during surgery. (5)
12. Explain Incisions and steps of procedure for Breast Surgery (5)

OR

Explain why Surgical Positions are necessary for the surgery. (5)