



15333

LIBRARY
Brainware University
Gerasat, Kolkata -700125



BRAINWARE UNIVERSITY

Term End Examination 2024-2025

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

Course Name – Procedural Skills for Critical Care Technology

Course Code - BCCTC602

(Semester VI)

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 Full form of BLS.

- | | |
|-----------------------|-------------------------|
| a) Basic Life Style | b) Brain Like structure |
| c) Basic Life Support | d) Benign lung Spot |

(ii) Define gastric lavage

- | | |
|--|---|
| a) A procedure involving washing out the stomach to remove ingested toxins | b) A method of administering medication directly into the stomach |
| c) A surgical procedure to repair stomach ulcers | d) A diagnostic test for stomach cancer |

(iii) Describe a potential complication of gastric lavage

- | | |
|--|--|
| a) Perforation of the stomach lining | b) Increased absorption of toxins |
| c) Normalization of electrolyte levels | d) Improvement of respiratory function |

(iv) Predict a common side effect of opioid analgesics.

- | | |
|-------------------------------|---------------------|
| a) Constipation | b) Hypertension |
| c) Increased respiratory rate | d) Reduced sedation |

(v) Select a benefit of using non-opioid analgesics

- | | |
|--------------------------------|---------------------------|
| a) High risk of addiction | b) Respiratory depression |
| c) Reduced nausea and vomiting | d) Slow onset of action |

(vi) Define plasmapheresis

- | | |
|--|---|
| a) Removal of excess iron from the bloodstream | b) Separation of blood cells from plasma, with plasma being returned to the patient |
| c) Transfusion of packed red blood cells to increase oxygen delivery | d) Infusion of concentrated clotting factors |

(vii) Select a potential complication of exchange transfusion in neonates

- | | |
|-------------------------------------|----------------------------|
| a) Increased risk of blood clotting | b) Hypovolemia |
| c) Allergic reaction to donor blood | d) Elevated platelet count |

(viii) Describe the mechanism of injury in a blunt trauma

- a) Penetrating object pierces the skin
- b) Direct impact to the body from a sharp object
- c) Forceful collision with a blunt object
- d) Exposure to extreme temperatures
- (ix) Select a common environmental injury in extreme cold conditions
 - a) Heat stroke
 - b) Frostbite
 - c) Sunburn
 - d) Dehydration
- (x) Write a common environmental injury prevention strategy during outdoor activities
 - a) Wear heavy clothing in hot weather
 - b) Stay hydrated
 - c) Avoid using sunscreen
 - d) Ignore weather forecasts
- (xi) Choose a factor that influences the severity of a traumatic injury
 - a) Clothing color
 - b) Time of day
 - c) Speed of impact
 - d) Recent meal
- (xii) Identify a common type of surgical wound classification
 - a) Superficial wound
 - b) Muscular wound
 - c) Deep wound
 - d) Subcutaneous wound
- (xiii) Describe the primary goal of perioperative care
 - a) Ensuring patient comfort during surgery
 - b) Preventing surgical site infections
 - c) Maximizing patient safety before, during, and after surgery
 - d) Minimizing healthcare costs
- (xiv) Select a risk factor for perioperative complications
 - a) Regular exercise
 - b) Adequate hydration
 - c) Advanced age
 - d) Healthy diet
- (xv) choose the correct site of lumbar puncture
 - a) L1-L2
 - b) L2-L3
 - c) L4-L5
 - d) S1-S2

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Define procedure and clinical applications of Sengstaken-Blakemore tube. (3)
3. Discuss the steps involved in inserting an NG tube. (3)
4. Define gastric lavage and its role in the management of acute poisoning. (3)
5. Discuss the potential complications associated with spinal anesthesia. (3)
6. Differentiate between various airway management devices such as endotracheal tubes and supraglottic airways. (3)

OR

Classify the types of injuries that require immediate intervention in trauma patients. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Compare nasogastric (NG) tubes and gastrostomy tubes in terms of their placement and indications for use. (5)
8. Compare and contrast lumbar puncture and intracranial pressure monitoring devices in terms of their diagnostic utility and associated risks. (5)
9. Discuss the key principles for providing post-procedural care for patients who have undergone epidural or spinal anesthesia, and write down its key differences from general anesthesia. (5)
10. Justify the use of analgesia and sedation in the emergency department for painful procedures, such as fracture reduction or wound debridement, emphasizing patient comfort and procedural success. (5)
11. Discuss the various types of burns, and write about "Wallace rule of nines" in adult burn injury patients. (5)

12. Explain steps should be taken to prepare for performing gastric lavage in the emergency department. (5)

OR

Compare cervical neck collars versus manual immobilization techniques in the management of suspected cervical spine injuries. (5)

LIBRARY
Brainware University
Barasat, Kolkata -700125