BRAINWARE UNIVERSITY

Term End Examination 2023-2024
Programme – B.Sc.(CCT)-2021
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) Identify NG tube use.

a) Eenteral feeding
b) Aspirate suction
c) Enter normotonic saline
d) All of the these

(ii) Identify the correct sequence of steps in the BLS algorithm.

a) Check for responsiveness, call for help, open airway, check breathing, start compressions
b) Check for responsiveness, start compressions, call for help, open airway, check breathing
c) Call for help, open airway, check for responsiveness, check breathing, start compressions
d) Start compressions, check for responsiveness, open airway, call for help, check breathing

(iii) Identify the correct sequence of actions in the BLS algorithm.

a) Airway, Breathing, Circulation, Defibrillation
b) Circulation, Airway, Breathing, Defibrillation
c) Breathing, Circulation, Airway, Defibrillation
d) Circulation, Airway, Defibrillation, Breathing

(iv) Choose the preferred treatment for symptomatic bradycardia during ACLS.

a) Atropine
b) Amiodarone
c) Adenosine
d) Epinephrine

(v) Identify the structure that connects the kidneys to the bladder, allowing urine to flow from the kidneys to the bladder.

a) Urethra
b) Ureter
c) Renal artery
d) Renal vein

(vi) Discover the function of the small intestine in the gastrointestinal system.

a) Absorption of nutrients
b) Production of bile
c) Storage of bile
d) Regulation of blood sugar levels

(vii) Select the organ where urine is temporarily stored before being eliminated from the body.

a) Urethra
b) Kidneys

c) Bladder
d) Ureter

(viii) Identify the function of an enteral feeding tube.

a) To administer medications directly into the bloodstream
b) To deliver nutrition directly into the gastrointestinal tract
c) To assist in respiratory support during surgeries
d) To monitor blood glucose levels continuously.

(ix) Identify the purpose of an intracranial pressure monitoring device.

a) To measure blood pressure in the brain
b) To assess cardiac function
c) To monitor fluid intake
d) To measure pressure within the skull

(x) Define the purpose of a cervical neck collar.

a) To provide warmth to the neck region
b) To improve posture
c) To support the cervical spine and restrict movement
d) To facilitate neck rotation

(xi) Write the significance of intracranial pressure monitoring in traumatic brain injury.

a) It helps in assessing kidney function
b) It aids in detecting heart rate abnormalities
c) It guides treatment by indicating the severity of brain swelling
d) It measures respiratory rate

(xii) Select the primary benefit of patient-controlled analgesia (PCA).

a) Reduced risk of medication overdose
b) Increased likelihood of respiratory depression
c) Limited patient autonomy
d) Slower onset of pain relief

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

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

(xiv) Predict a possible effect of epidural anesthesia on mobility.

a) Increased mobility due to pain relief
b) No effect on mobility
c) Temporary paralysis of lower limbs
d) Decreased mobility due to numbness

(xv) Define exchange transfusion.

a) Removal of a patient's blood and replacement with donor blood
b) Administration of blood products to increase hemoglobin levels
c) Filtering of plasma to remove toxins
d) Transfusion of platelets to improve clotting function

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Define Basic Life Support (BLS) and its primary objectives. (3)
3. Differentiate between nasogastric (NG) tube and orogastric tube. (3)
4. Define lumbar puncture and its diagnostic purposes. (3)
5. Summarize the advantages of epidural anesthesia over other forms of anesthesia. (3)
6. Analyze the benefits of patient-controlled analgesia in pain management. (3)

OR

Classify the different modes of administering patient-controlled analgesia (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Define ACLS and outline its key components. (5)
8. Compare and contrast BLS and ACLS protocols in emergency care. (5)
9. Disover nasogastric (NG) tube, and what medical purposes does it serve. (5)
10. Justify the use of the Sengstaken-Blakemore tube in the management of esophageal and gastric variceal bleeding. (5)

11. Explain toxicology contribute to the diagnosis and management of poisoning cases in emergency medicine. (5)
12. Explain patient-controlled analgesia (PCA) work, and what are the benefits of using this method for pain management in hospitalized patients. (5)

OR

Compare and contrast plasmapheresis and exchange transfusion as therapeutic interventions for removing toxins or abnormal substances from the blood. (5)

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