



## **BRAINWARE UNIVERSITY**

## Term End Examination 2023-2024 Programme – B.Sc.(CCT)-2021 Course Name – Basic Administration and Equipment Maintenance Course Code - BCCTC603 (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) Choose the primary purpose of maintaining consumables stock in the ICU?
  - a) To reduce costs

- b) To ensure patient safety and care
- c) To increase hospital revenue
- d) To fulfill administrative requirements
- (ii) Write a inventory management technique commonly used for consumables in the ICU?
  - a) LIFO (Last In, First Out)

b) FIFO (First In, First Out)

c) JIT (Just In Time)

- d) EOQ (Economic Order Quantity)
- (iii) Choose the right answer In the context of ICU consumables, what does "par level" refer to?
  - a) The maximum level of stock allowed
- b) The minimum level of stock required
- c) The optimal level of stock to be maintained
- d) The average level of stock historically consumed
- (iv) Write a crucial step to prevent ventilator-associated pneumonia (VAP) during ventilator maintenance?
  - a) Regularly changing the ventilator circuit every 24 hours
- b) Maintaining a closed-suction system for airway clearance
- c) Minimizing sedation to promote spontaneous breathing
- d) Allowing condensation to accumulate in the ventilator tubing
- (v) Select the proper intervals ventilator filters be changed?
  - a) Every 24 hours

b) Every 48 hours

c) Every week

- d) Every month
- (vi) Select the proper intervals you perform a routine check on the defibrillator in the ICU?
  - a) Once a day

b) Once a week

c) Once a month

- d) Once a year
- (vii) During a code situation, the defibrillator's "Charge" button fails to activate. Write the proper actions should be taken.
  - a) Electrode pad connection

b) Device's battery charge level

(viii)	<ul> <li>c) Presence of artifact interference</li> <li>Select the proper intervals electrodes be replace quality?</li> </ul>	d) Defibrillator's software versioned to maintain optimal ECG signal	
(ix)	<ul><li>a) Monthly</li><li>c) Annually</li><li>Select a cause the ECG monitor to display "Lead</li></ul>	b) Quarterly d) As needed Off" or "Check Electrodes" warning.	
(x)	<ul><li>a) Electrode gel depletion</li><li>c) Machine malfunction</li><li>Choose NOT a common method for verifying BiF</li></ul>	b) Loose electrode connections d) Low battery AP machine pressure output?	
(xi)	<ul><li>a) Manometer</li><li>c) Visual inspection</li><li>Choose a common cause of inaccurate drug deli</li></ul>	b) Pressure gauge d) Machine settings very by syringe pumps?	
(xii)	<ul><li>a) Air bubbles in the syringe</li><li>c) Loose connections</li><li>Identify the recommended method for cleaning</li></ul>	b) Incorrect syringe size d) All of this syringe pump exterior surfaces?	
	<ul><li>a) Wipe with a damp cloth</li><li>c) Spray with alcohol-based cleaner</li><li>) Identify a possible reason for a syringe pump to operation?</li></ul>	b) Use disinfectant wipes d) Immerse in water for thorough cleani	ng
(xiv	<ul><li>a) Loose components inside the pump</li><li>c) Improper calibration</li><li>Select the right answer - How should syringe put</li></ul>	b) Air bubbles in the syringe d) None of this mp batteries be disposed of properly?	
	a) Dispose of them in regular trash bins	b) Recycle them at designated battery d facilities	isposal
	c) Recharge and reuse them to minimize waste	d) Bury them in the ground	
(xv)	Select a cause of over-infusion when using a syr	inge pump?	
	<ul><li>a) Incorrect syringe size selection</li><li>c) Blockage in the infusion line</li></ul>	b) Loose connections d) All of this	
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	(Short Answer Ty		3 x 5=15
<ul><li>2. If a patient experiences dryness or irritation in the nose or throat during therapy, Explain adjustments can be made to alleviate these symptoms?</li><li>3. Explain safety measures should be taken when performing maintenance on an infusion</li></ul>			(3)
5. E.	ump?	forming maintenance on an infusion	(3)
5. D	xplain steps should be taken if an infusion pump of escribe the process for testing the energy deliver Irite the key components of a defibrillator that re OR	y of a defibrillator to ensure its efficacy. quire regular inspection?	(3) (3) (3)
W	rite common indicators of a malfunctioning defit	orillator, and how can they be addressed	? (3)
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	(Long Answer Ty	pe Questions)	5 x 6=30
7. \	Write the ways a clinicians should handle situation malfunctions.	ns where the pump displays error codes	(5)
8. \ 9. \	Write the steps can be taken to troubleshoot poo Write the some common issues or malfunctions to	hat may arise with defibrillators in	(5) (5)

- 10. Why is it crucial to check air and oxygen filters in ventilators, and how should this be done? (5) Illustrate it.
- 11. Illustrate the ways to estimate the physical integrity of a BiPAP unit during visual inspections? (5)
- 12. Write the common causes of inadequate pressure delivery in BiPAP machines, and how can (5) they be resolved?

OR

Write, how can clinician education significantly reduce the need for repairs in infusion pumps? (5)

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