



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Sc.(OTT)-2021

Course Name – Basic Administration and Equipment Maintenance

Course Code - BOTTE603

(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 from following is NOT a fundamental aspect of basic administration in an operating theatre:
 - a) Scheduling surgeries
 - b) Managing inventory
 - c) Patient diagnosis
 - d) Staff scheduling
 - (ii) Select Which document typically outlines the terms and conditions of a purchase agreement in healthcare?
 - a) Invoice
 - b) Receipt
 - c) Purchase order
 - d) Billing statement
 - (iii) Select Who is typically responsible for troubleshooting equipment issues in a healthcare setting
 - a) Janitorial staff
 - b) Administrative assistants
 - c) Biomedical technicians
 - d) Human resources managers
 - (iv) Predict which of the following is NOT typically included in a purchase order?
 - a) Quantity and description of items
 - b) Supplier's contact information
 - c) Payment terms
 - d) Employee payroll information
 - (v) Tell the main purpose of maintaining consumables stock in an operating theatre is to:
 - a) Minimize waste
 - b) Maximize profits
 - c) Reduce patient waiting times
 - d) Improve staff morale
 - (vi) Choose Which of the following is NOT a factor to consider when prioritizing equipment for maintenance
 - a) Age of the equipment
 - b) Frequency of use
 - c) Manufacturer's reputation
 - d) Color of the equipment
 - (vii) Tell Which of the following statements about equipment downtime is true
 - a) Equipment downtime has no impact on patient care
 - b) Equipment downtime should be minimized to ensure patient safety

- c) Equipment downtime has no financial implications for healthcare facilities
- d) Equipment downtime does not affect regulatory compliance
- (viii) Tell, What does ECG stand for
- a) Electrocardiogram
- b) Electrochemical Generator
- c) External Cardiovascular Graph
- d) Electromagnetic Cardiac Gauge
- (ix) Select Which of the following leads is known as the "gold standard" for diagnosing myocardial infarction
- a) Lead I
- b) Lead II
- c) Lead III
- d) Lead V1
- (x) Tell What is the purpose of the ECG paper speed control on the ECG machine
- a) To adjust the gain of the signal
- b) To change the sensitivity of the electrodes
- c) To control the speed at which the paper moves
- d) To regulate the frequency response of the machine
- (xi) Write the significance of the Allen's test before arterial blood sampling?
- a) To assess renal function
- b) To evaluate liver function
- c) To ensure collateral circulation
- d) To determine coagulation status
- (xii) Select What is the primary advantage of using a multiparameter monitor
- a) Simplicity
- b) Cost-effectiveness
- c) Comprehensive monitoring
- d) Portability
- (xiii) Recall Which lead configuration is commonly used for a standard 12-lead ECG
- a) Einthoven's triangle
- b) Frank lead system
- c) Wilson's central terminal
- d) Hexaxial reference system
- (xiv) Tell What is the primary safety feature of infusion pumps
- a) Audible alarms for occlusions or errors
- b) Automated dose calculation
- c) Continuous monitoring of patient vital signs
- d) Wireless connectivity for remote control
- (xv) Select Which method is used to assess the financial health of a company
- a) Ratio analysis
- b) Trend analysis
- c) Benchmarking
- d) Cash flow forecasting

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Discuss what are the measures can healthcare administrators take to prevent equipment theft or misuse? (3)
3. Describe how do you prioritize which medical equipment requires regular monitoring? (3)
4. Describe how temperature affect the accuracy of ABG machine readings, and what measures can be taken to minimize its impact? (3)
5. Explain the difference between invasive and non-invasive methods for arterial blood gas sampling, highlighting advantages and limitations of each. (3)
6. Evaluate the importance of regularly checking and cleaning the filters in ventilators and CPAP machines for ensuring optimal air quality and device performance. (3)

OR

- Summarize the potential risks associated with improper maintenance of infusion pump battery packs and propose strategies for ensuring battery longevity and performance. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain what safety precautions should be followed when using an ECG machine in proximity to other medical equipment or during specific surgical procedures? (5)
8. Explain the role of basic accounting skills in managing purchase orders and equipment maintenance in healthcare. (5)

9. Explain the key objectives of monitoring medical equipment in an operating theater, and how do they contribute to patient safety and care quality. (5)
10. Evaluate the role does risk assessment play in determining the monitoring approach for different types of medical equipment in an operating theater? (5)
11. Design the procedure for setting up and calibrating an ECG machine before its use in an operating theater? (5)
12. Illustrate What training is necessary for staff involved in purchase order administration and equipment maintenance in healthcare. (5)

OR

Explain How do you handle discrepancies or errors in purchase orders in a healthcare setting. (5)
