

Code No: 56050

Set No. 1

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

III B.Tech. II Sem., II Mid-Term Examinations, April – 2014

BIOMEDICAL EQUIPMENT

Objective Exam

Name: _____ **Hall Ticket No.**

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I Choose the correct alternative:

1. The internal pacemaker that sets biological rhythms []
a) Is located in the brain b) Is located in the heart c) A and B d) None of the all
2. The electrode arrangements for use with cardiac pacemakers can be in the form of []
a) Unipolar b) Bipolar c) A and B d) None of the all
3. Automated defibrillators that advise the EMT-Basic to press a button that delivers the defibrillation shock are called. []
a) Fully automatic b) Semi-manual c) Manual d) Semiautomatic
4. Pump that can provide the necessary pressures and flow rates required by modern liquid chromatography. []
a) Suction pump b) Syringe pump c) Infusion pump d) all
5. The frequency of currents used in surgical diathermy units is in the range of-----MHz []
a) 0.4 to 1.5 b) 1 to 2 c) 1 to 3 d) 1 to 10
6. What is the average glomerular filtration rate per day []
a) 90 b) 120 c) 150 d) 180
7. The _____ electrode area is 50-200 cm² in surgical diathermy []
a) Active b) Different c) Indifferent d) Bipolar
8. The current higher than _____ current is holding on accident []
a) Let go b) Hold on c) Leakage d) Micro
9. The _____ hazards in the operation theaters is due to the presence of anesthetic gases and cleaning agents []
a) Short circuit b) Exposure c) Micro shock d) Leakage
10. Haemodialysis machine also controls the cycling of the _____ from the patient through the artificial kidney & back to the patient. []
a) Oxygen b) Water c) Urine d) Blood

Cont.....2

II Fill in the blanks

11. Each kidney consists of a million individual units all similar in structure & function called _____
12. The gas exchanges in the lungs are called _____ respiration & those in the tissues are called _____ respiration.
13. Most of the defibrillators deliver between _____ percent of the stored energy to a 50 Ω load
14. _____ refers to superficial tissue destruction without affecting deep seated tissues.
15. The trapezoidal and rectangular waveforms are required for the effective trans-thoracic _____
16. _____ pump infuses fluids, medication or nutrients into a patient's circulatory system.
17. Heart lung machine was built by _____
18. RF sine wave used in electro surgical devices range from _____
19. The _____ play important role in maintaining acid-base balance in body.
20. The _____ pressure ventilator is used for patients with wide range of pulmonary disorders.

Name: _____ Hall Ticket No.

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.**I Choose the correct alternative:**

1. Pump that can provide the necessary pressures and flow rates required by modern liquid chromatography. []
a) Suction pump b) Syringe pump c) Infusion pump d) all
2. The frequency of currents used in surgical diathermy units is in the range of-----MHz []
a) 0.4 to 1.5 b) 1 to 2 c) 1 to 3 d) 1 to 10
3. What is the average glomerular filtration rate per day []
a) 90 b) 120 c) 150 d) 180
4. The _____ electrode area is 50-200 cm² in surgical diathermy []
a) Active b) Different c) Indifferent d) Bipolar
5. The current higher than _____ current is holding on accident []
a) Let go b) Hold on c) Leakage d) Micro
6. The _____ hazards in the operation theaters is due to the presence of anesthetic gases and cleaning agents []
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a) Oxygen b) Water c) Urine d) Blood
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9. The electrode arrangements for use with cardiac pacemakers can be in the form of []
a) Unipolar b) Bipolar c) A and B d) None of the all
10. Automated defibrillators that advise the EMT-Basic to press a button that delivers the defibrillation shock are called. []
a) Fully automatic b) Semi-manual c) Manual d) Semiautomatic

II Fill in the blanks

11. _____ refers to superficial tissue destruction without affecting deep seated tissues.
12. The trapezoidal and rectangular waveforms are required for the effective trans-thoracic _____
13. _____ pump infuses fluids, medication or nutrients into a patient's circulatory system.
14. Heart lung machine was built by _____
15. RF sine wave used in electro surgical devices range from _____
16. The _____ play important role in maintaining acid-base balance in body.
17. The _____ pressure ventilator is used for patients with wide range of pulmonary disorders.
18. Each kidney consists of a million individual units all similar in structure & function called _____
19. The gas exchanges in the lungs are called _____ respiration & those in the tissues are called _____ respiration.
20. Most of the defibrillators deliver between _____ percent of the stored energy to a 50 Ω load

Set No. 3

III B.Tech. II Sem., II Mid-Term Examinations, April - 2014

Objective Exam

Hall Ticket No.

A

I Choose the correct alternative:

1. What is the average glomerular filtration rate per day []
a) 90 b) 120 c) 150 d) 180
2. The _____ electrode area is 50-200 cm² in surgical diathermy []
a) Active b) Different c) Indifferent d) Bipolar
3. The current higher than _____ current is holding on accident []
a) Let go b) Hold on c) Leakage d) Micro
4. The ____ hazards in the operation theaters is due to the presence of anesthetic gases and cleaning agents []
a) Short circuit b) Exposure c) Micro shock d) Leakage
5. Haemodialysis machine also controls the cycling of the _____ from the patient through the artificial kidney & back to the patient. []
a) Oxygen b) Water c) Urine d) Blood
6. The internal pacemaker that sets biological rhythms []
a) Is located in the brain b) Is located in the heart c) A and B d) None of the all
7. The electrode arrangements for use with cardiac pacemakers can be in the form of []
a) Unipolar b) Bipolar c) A and B d) None of the all
8. Automated defibrillators that advise the EMT-Basic to press a button that delivers the defibrillation shock are called. []
a) Fully automatic b) Semi-manual c) Manual d) Semiautomatic
9. Pump that can provide the necessary pressures and flow rates required by modern liquid chromatography. []
a) Suction pump b) Syringe pump c) Infusion pump d) all
10. The frequency of currents used in surgical diathermy units is in the range of-----MHz []
a) 0.4 to 1.5 b) 1to 2 c) 1 to 3 d) 1 to 10

Cont.....2

II Fill in the blanks

11. _____ pump infuses fluids, medication or nutrients into a patient's circulatory system.
12. Heart lung machine was built by _____
13. RF sine wave used in electro surgical devices range from _____
14. The _____ play important role in maintaining acid–base balance in body.
15. The _____ pressure ventilator is used for patients with wide range of pulmonary disorders.
16. Each kidney consists of a million individual units all similar in structure & function called _____
17. The gas exchanges in the lungs are called _____ respiration & those in the tissues are called _____ respiration.
18. Most of the defibrillators deliver between _____ percent of the stored energy to a 50 Ω load
19. _____ refers to superficial tissue destruction without affecting deep seated tissues.
20. The trapezoidal and rectangular waveforms are required for the effective trans-thoracic _____

Set No. 4

III B.Tech. II Sem., II Mid-Term Examinations, April - 2014

Objective Exam

Hall Ticket No.

A

I Choose the correct alternative:

1. The current higher than _____ current is holding on accident []
a) Let go b) Hold on c) Leakage d) Micro
2. The ____ hazards in the operation theaters is due to the presence of anesthetic gases and cleaning agents []
a) Short circuit b) Exposure c) Micro shock d) Leakage
3. Haemodialysis machine also controls the cycling of the _____ from the patient through the artificial kidney & back to the patient. []
a) Oxygen b) Water c) Urine d) Blood
4. The internal pacemaker that sets biological rhythms []
a) Is located in the brain b) Is located in the heart c) A and B d) None of the all
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a) 0.4 to 1.5 b) 1to 2 c) 1 to 3 d) 1 to 10
9. What is the average glomerular filtration rate per day []
a) 90 b) 120 c) 150 d) 180
10. The _____electrode area is 50-200 cm² in surgical diathermy []
a) Active b) Different c) Indifferent d) Bipolar

Cont.....2

II Fill in the blanks

11. RF sine wave used in electro surgical devices range from _____
12. The _____ play important role in maintaining acid–base balance in body.
13. The _____ pressure ventilator is used for patients with wide range of pulmonary disorders.
14. Each kidney consists of a million individual units all similar in structure & function called _____
15. The gas exchanges in the lungs are called _____ respiration & those in the tissues are called _____ respiration.
16. Most of the defibrillators deliver between _____ percent of the stored energy to a 50 Ω load
17. _____ refers to superficial tissue destruction without affecting deep seated tissues.
18. The trapezoidal and rectangular waveforms are required for the effective trans-thoracic _____
19. _____ pump infuses fluids, medication or nutrients into a patient's circulatory system.
- 20.. Heart lung machine was built by _____