

Question Paper Code: 92B05

B.E. / B.Tech. DEGREE EXAMINATION, JUNE 2021

Second semester

Biomedical Engineering

19UBM205- INTRODUCTION TO BIOMEDICAL ENGINEERING

(Regulation 2019)

Duration : 1.45 hour

Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

(Answer any TEN of the following questions)

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| 1. Define Biomedical Engineering. | CO1-U |
| 2. What are the trends in the evolution of health care? | CO1-U |
| 3. Expand and Define SDOH. | CO1-U |
| 4. Explain self adopting processor. | CO2-Ana |
| 5. Draw the structure of Neuron with parts. | CO2-U |
| 6. Explain Needle Electrode system. | CO2-Ana |
| 7. Define Clinical Engineering | CO3-U |
| 8. How equipment planning is carried out? | CO3-U |
| 9. What are the elements of the consent form in clinical trials? | CO3-U |
| 10. Compare Robots and humans | CO4-A |
| 11. Explain some of the bio-manufacturing products. | CO4-A |
| 12. List out the types of medical imaging equipments. | CO4-U |
| 13. Expand and explain ABI, AMI. | CO5-U |
| 14. What are the potential uses of stem cell? | CO5-U |
| 15. Why VR is essential? | CO5-U |

PART – B (3 X 10 = 30 Marks)

(Answer any **THREE** of the following questions)

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| 16. Describe the Biomedical Profession based on their specialization. | CO1-U |
| 17. Explain the anatomy and physiology of Human Body organ system. | CO2-na |
| 18. Write a brief note on GCP. | CO3-U |
| 19. Discuss the overview of organ fabrication and Bio-manufacturing. | CO4-E |
| 20. Explain the workflow of genetic modification. | CO5-U |