



C20-BM-506

7617

BOARD DIPLOMA EXAMINATION, (C-20)

OCTOBER / NOVEMBER—2023

DBME – FIFTH SEMESTER EXAMINATION

MEDICAL INFORMATICS AND TELEMEDICINE

Time : 3 Hours]

[Total Marks : 80

PART—A

3×10=30

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. State the need for knowledge representation.
2. List the prospects of medical informatics.
3. Define telemonitoring.
4. List the limitations of endoscopy.
5. Define Tele-education.
6. Write the limitations of conventional surgery.
7. List the applications of computer in surgery.
8. List the peripheral devices used in telemedicine.
9. Write the applications of telemedicine.
10. Distinguish between general surgery and telesurgery.

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **eight** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) Explain in expert system.

(OR)

(b) Explain medical informatics.

12. (a) Explain the concept of 3D imaging.

(OR)

(b) Explain the utility of simulation in education.

13. (a) Explain orthopedic 3D navigation system.

(OR)

(b) Explain the need for surgical simulation and list its applications.

14. (a) Explain 3D navigation system.

(OR)

(b) Explain about the merits and demerits of computer assisted surgery.

15. (a) Explain technology, materials and method in telesurgery.

(OR)

(b) Explain Robotic surgery equipment.

PART—C

10×1=10

- Instructions :** (1) Answer the following question.
(2) The question carries **ten** marks.
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. Analyze how virtual reality used in acrophobia treatment..

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