

B.Tech. SEM -VI Bio Medical 2014 Course (CBCS) : WINTER - 2018

SUBJECT : INSTALLATION MAINTENANCE AND SERVICING

Day : Saturday
Date : 17/11/2018

W-2018-2511

Time : 10.00 AM TO 01.00 PM
Max. Marks : 60

N. B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Assume suitable data, if necessary.
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- Q.1 a)** What is the role of biomedical engineer in hospital? (05)
b) What are the functions of IMS in industry? (05)

OR

- Q.1** Mention at least 5 points on "Daily Check" or "To Do List" regarding any five medical instruments. (10)

- Q.2** What are the responsibilities of customer care engineer? Explain in detail. (10)

OR

- Q.2** What is the role of biomedical engineer : (10)
i) Maintenance Engineer
ii) Sales and Service Engineer

- Q.3 a)** What precautions to be taken while installing the CT/MRI machines? (05)
b) What are the steps to be followed for the assembly and testing protocols in manufacturing unit before final handover? (05)

OR

- Q.3** Write notes on : (10)
i) Terms and conditions under Warranty
ii) Extended warranty

- Q.4** What are the major factors need to be considered for installation of equipments in various departments of hospitals? (10)

OR

- Q.4 a)** What are the CE standards for any biomedical instrument? (05)
b) Explain the installation procedure for medical gas plant in hospital. (05)

- Q.5** Explain the major calibration checks required in medical equipment maintenance. (10)

OR

- Q.5 a)** Compare the safety precautions in medical and non-medical equipments. (05)
b) Compare between CAMC and LAMC for equipments in hospitals. (05)

- Q.6** What is the significance of NABL and NABH? (10)

OR

- Q.6 a)** Why do we require certifications in hospitals? (05)
b) What is ISO 9001 protocol? (05)

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