

**B. TECH. (CBCS - 2014 COURSE) SEM – VIII (BIOMEDICAL  
ENGG.) : SUMMER - 2018**

**SUBJECT: MEDICAL DEVICES STANDARDS**

Day: **Saturday**  
Date: **02/06/2018**

**S-2018-4713**

Time: **02.30 PM TO 05.30 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.

**Q. 1** What are standards? List and explain specification in standards? (10)

**OR**

**Q. 1** Why do we need standards? What are the various purposes behind making medical devices standardize? Explain it in detail. (10)

**Q.2** Give reason “International standards are a building block for harmonized regulatory processes”. (10)

**OR**

**Q.2** Write short notes on: (10)

- i) National Standard System
- ii) Process for standards development

**Q.3 a)** How do you give optimum assurance of medical device safety? (05)

**b)** Discuss the terms clinical effectiveness and performance with respect to medical devices. (05)

**OR**

**Q.3** Define following terms with example: (10)

- i) Risk Assessment
- ii) Risk Analysis
- iii) Risk Evaluation

**Q.4** Discuss the following stages with respect to government regulations. (10)

- i) Pre-market
- ii) Placing on-market

**OR**

**Q.4** Write a notes on : (10)

- i) Life Span of Medical Device
- ii) Medical Device Safety

**Q.5** Define the term Global Harmonization Task force (GHTF). What is the purpose of GHTF? Explain in detail. (10)

**OR**

**Q.5** Discuss the importance of Global Medical Device Nomenclature (GMDN). How GMDN is to be used by regulators for classification and registration of medical devices? (10)

**Q.6** Write a notes on : (10)

- i) Product representation control
- ii) Promoting compliance and cooperation

**OR**

**Q.6** What is the optimizing use of regulatory resources? List and explain various activities to establish a comprehensive guideline on medical device management. (10)

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