



**B.TECH DEGREE EXAMINATIONS: NOV 2015**

(Regulation 2009)

Seventh Semester

**FASHION TECHNOLOGY**

FTY211: Functional Clothing

**Time: Three Hours**

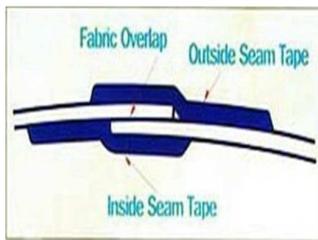
**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. \_\_\_\_\_ is one of the most advanced improvements in medical clothing emerging out of integration of electronic sensors into clothing
  - a) Bio mimetic garments
  - b) Bio-sensing garments
  - c) Pressure garments
  - d) BCR protective garments
2. Stretchiness is an attribute which is classified under \_\_\_\_\_, a type of functional property
  - a) Microclimate control
  - b) Wearing comfort
  - c) Easy care
  - d) Hygiene
3. \_\_\_\_\_ is used for the absorbent layer of a band aid
  - a) Lyocell
  - b) Viscose
  - c) Alginate
  - d) Cotton
4. All types of mechanical heart valves are usually made of \_\_\_\_\_ which makes them strong and very durable
  - a) Titanium or carbon
  - b) Polyester/polyamide
  - c) Nonwoven/ sodium alginate
  - d) Silk/polypropylene
5. Gutter test is a test used to measure \_\_\_\_\_ by the \_\_\_\_\_ technique
  - a) Chemical degradation, immersion based techniques
  - b) Chemical degradation, one side exposure techniques
  - c) Chemical penetration, run-off based techniques
  - d) Chemical penetration, hydrostatic technique
6. Any fabric that allows \_\_\_\_\_ UV transmission is simply labeled \_\_\_\_\_
  - a) . More than 2%, SPF 2%
  - b) Less than 4%, SPF 50+
  - c) Less than 2%, UPF 50+
  - d) Less than 2%, UPF 50+





18. Illustrate a sports shoe and mark its essential parts.
19. List the type of sensors which could be selected for functional clothing that can change its color with changes in light and temperature
20. Write a note on any 2 functional devices incorporated in smart textiles

**PART C (5 x 14 = 70 Marks)**

21. a) i) Categorize functional clothing with explanations and examples (7)  
ii) Explain the mechanism used by the human body to maintain the thermoregulation. (7)

**(OR)**

- b) Elaborate on the process and factors governing the designing of functional clothes

22. a) Explain the various extracorporeal devices used in the medical field and the role of textiles used in them

**(OR)**

- b) Elucidate on the role of textiles materials used in implants and non-implants for medical textiles

23. a) Explore the clothing requirements for flame protective clothing

**(OR)**

- b) Explore the textile materials and finishes required in clothing to offer protection from various mechanical hazards.

24. a) Elaborate on the technological developments adapted to offer improved functionalities in sportswear.

**(OR)**

b) Recommend the suitable textiles and steps involved in the making of a sports footwear

25. a) Investigate the various properties and applications of conductive fibers and chameleon fibers

**(OR)**

b) Elaborate on the various properties and applications of phase change materials and nano fibers

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