1. Complete the following sentence: Referring to the lecture ‘Technology to Innovation’, _____ is a type of manufacturing technology which is additive in nature?

    a. Laser etching
    b. Machining
    c. 3D printing [X]
    d. Cold Drawing(metals)

2. What were some of the requirements in packaging design of an armamentarium designed by professor B. K. Chakravarthy?
    a. The packaging should be temperature and moisture resistant [X]
    b. The packaging should cater to ease of transportation and use [X]
    c. The packaging should should have a rugged and classy appearance
    d. All the equipment in the packaging should be placed in a sequence of use for the doctors convenience[X]

3. Referring to the module ‘Technology to Innovation’, what are the major problems associated with the traditional method of vent cleaning of a tyre mould?
    a. The drill bits may break and get lodged in the vents [X]
    b. It is manual and time consuming [X]
    c. It causes the weakening of tyre structure
    d. Too much heat is required to clean the vent

4. As discussed in the lecture on total knee prosthesis, why were imported knee prosthesis unsuitable for the Indian masses?
    a. Because the prosthesis size variations available were according to the American standards and would not match Indian body types[X]
    b. Because the prosthesis was generally very heavy and cause the patient to limp
    c. Because the prosthesis was very expensive and Indian patients cannot afford it[X]
    d. Because the prosthesis’s quality would get compromised in the indian climatic conditions

5. Apart from titanium, which among the following materials was used in the making of the TKP (total knee prosthesis) as discussed by professor B. Ravi?
    a. Cobalt Chromium[X]
    b. Graphite
    c. Plastic
    d. Stainless steel

6. Complete the following sentence: the tool kit which comprises the surgical instruments was commonly known by the name _____?
    a. TKP Kit
    b. Knee prosthesis kit
    c. Armamentarium [X]
    d. Surgeon’s assistance equipment

7. According to professor B. Ravi, what strategies were involved in the knee replacement process to solve the problem of variations in the length of the Indian patient's leg?
    a. They made customised shoes with varying heel thickness to adjust minor differences in length[X]
    b. The whole prosthesis was modular in design to accommodate for the approximate length [X]
    c. The patient would have to go through a series of operations to correct the length of the leg
    d. The prosthesis was tailor made for each patient, hence the length of the leg was always correct

8. Which of the following materials was used as a layer between the two moving parts of the TKP(total knee prosthesis)?
    a. Titanium alloy
    b. Molybdenum
    c. Ultra high molecular weight polyethylene (x)
    d. Bio friendly liquid silicone bubble

9. Which of the following is NOT a part which makes up the TKP(total knee prosthesis)?
    a. Tibial tray and stem
    b. Circli
    c. Condylar bush
    d. Collar bush [X]

10. Which of the following incidents was like a pleasant accident observed by NFTDC while testing the total knee prosthesis in a specially designed machine?
    a. The team realized that they needed to fabricate a new acceptor alloy which is more bio friendly
    b. The team had to synthesize a new polyester material which went on to be applied to other important medical devices applications
    c. The testing machine broke down before the total knee prosthesis yielded[X]
    d. The knee prosthetic broke down in one go for a certain configuration which helped in creating a stronger design