B.TECH. SEM -VII BIO MEDICAL 2014 COURSE (CBCS) : SUMMER - 2018

SUBJECT : ADVANCED MEDICAL INSTRUMENTATION

Day : **Wednesday** | **S-2018-2532** | Time : **02.30 PM TO 05.30 PM**

Date : **23/05/2018** | Max. Marks : 60

N. B. :

1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.
3) Draw neat and labelled diagram **WHEREVER** necessary.
4) Assume suitable data, if necessary.

Q. 1 What is incubator? Explain the working of incubator and radiation warmer with neat block diagram. **(10)**

OR

a) Define Bilirubin. Explain in detail Bilirubin meter. **(06)**

b) Explain types of OT table with its applications. **(04)**

Q. 2 What are Implantable pumps? Explain working of implantable pumps with neat diagram. **(10)**

OR

a) Explain neuro-stimulators in detail. **(06)**

b) What are the different types of ocular implants? **(04)**

Q. 3 Define stress test in detail and also explain stress test laboratory. **(10)**

OR

a) Give the differences between angiography and angioplasty. **(06)**

b) Write a note on "Balloon Pump". **(04)**

Q. 4 What is nebulizer? Explain the components of nebulizer. **(10)**

OR

a) Explain ear oximeter with block diagram. **(06)**

b) Write a short note on "Transport ventilator". **(04)**

Q. 5 Describe in detail design steps of Bilirubin sensor. Also list the applications of blood glucose sensor. **(10)**

OR

a) Explain the designing steps of creatinine sensor. **(06)**

b) Write a note on "Blood Glucose Sensor". **(04)**

Q. 6 What is intra ocular pressure? How it is monitored and regulated? **(10)**

OR

a) What is Argon Plasma coagulation? Also list its applications. **(06)**

b) What is Picture Acquisition Communication System (PACS). **(04)**

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