



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examination (April 2019)

School : School of Engineering

Course: Nuclear Medicine

Semester: II

Max Marks: 40

Program: M.Tech (Bioengg)

Course Code: BEN518

Duration (mins): 120

Note : 1. Figures to the right indicates full marks.

2. All questions are compulsory

Q. No. 1 Write short note on following –

(any 5)

(15)

- a. Bremsstrahlung
- c. Characteristic X-rays
- e. Bohr model of hydrogen atom
- g. Radiation protection quantities and units

- b. Production of isotopes
- d. Annihilation of quanta
- f. PET/CT

Q. No. 2 Explain in details

(any 5)

(25)

- a. Rate of radioactive decay
- b. Types of Scintillation counters
- c. Nuclear fusion and fission
- d. Basic principles of radiation protection
- e. Radioactive waste
- f. SPECT/CT
- g. Cellular effects of radiation