



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examination (December 2019)

School : School of Engineering

Course: Nanotechnology in Biomedical Engineering

Semester: I

Max Marks: 40

Program: M.Tech (BioMed Engg)

Course Code: BEN507

Duration (mins) : 90

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

2. All questions are compulsory

Q. 1 Define following terms – (each question carries 1 marks) (any 10)

(10)

- | | |
|------------------------|-----------------------|
| a. Nanotechnology | g. Beer-Lamberts law |
| b. Top down approach | h. Hooke's law |
| c. Nanoparticles | i. Monochromator |
| d. Fluorescence | j. Optical density |
| e. Spin quantum no. | k. Gyromagnetic ratio |
| f. Diffraction grating | |

Q. 2 Explain in details - (each question carries 6 marks)

(any 5)

(30)

- Calculate the wavenumber for C-H and O-H stretching.
- NMR spectroscopy
- FTIR spectroscopy
- TEM
- DNA nanotechnology
- Scanning electron microscopy
