

**DEPARTMENT OF BIOPHYSICS**

**UNIVERSITY OF MUMBAI**

**SAMPLE MCQ QUESTIONS**

**BP-CCT403 NANOBIPHYSICS & NANOMEDICINE**

**Q.1 . Spherical gold nanoparticles are \_\_\_ dimensional nanomaterials**

- a) Zero
- b) One
- c) Two
- d) Three

**Q.2. Which of the following nanomaterials contains a hydrophilic peptide head group and one or more hydrophobic alkyl tails**

- a) Lipoproteins
- b) Peptide amphiphiles
- c) Micelles
- d) Carbon nanotubes

**Q.3 Which of the following method employs changes in polarized light to determine film thickness**

- a) Surface tensiometry
- b) Particle size analyser
- c) Ellipsometry
- d) AFM

**Q.4 The torque generating units in the flagella motor is**

- a) C/MS rings
- b) Hook and filament
- c) L and P ring
- d) MotA/MotB

**Q.5 (2,3) carbon nanotube is**

- a) Zigzag
- b) Armchair

- c) Chiral
- d) Both chiral and zigzag

**Q.6 Nanomaterials can confer cytotoxicity by**

- a) Generating free radicals
- b) Disrupting membrane potential
- c) Promoting apoptosis
- d) all of the above

**Q.7 Gold nanoparticles were biosynthesized in which of the following live plant**

- a) Alfaalfa
- b) Aloe vera
- c) Avena sativa
- d) Neem

**Q.8 \_\_\_\_\_ are radially symmetrical, hyperbranched molecules consisting of tree like arms or branches**

- a) Aerogels
- b) Zeolites
- c) Dendrimers
- d) CNTs

**Q.9 Nanoparticles are surface functionalized for**

- a) Preventing aggregation
- b) Specific drug targeting
- c) Diagnosis and sensing
- d) All of the above

**Q.10 Carbon nanotubes coated with cisplatin and folic acid is an example of \_\_\_\_\_ targeted drug delivery**

- a) Passive
- b) Active
- c) Both of these
- d) None of these

