

**Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) Coimbatore-641043.**

Master's Degree Examination – November 2018

Semester - III

**Class : II PG
Major : Physics**

**Time: 3 hours
Max. Marks: 60**

17MPHC17 NANOMATERIALS AND FABRICATION (SELF STUDY)

Part A

10 x 1/2 = 5

Choose the correct answer

- Carbon nanotubes are ----- materials.
a. 0 – D b. 1 – D c. 2 – D d. 3 – D
- Graphene is ----- times stronger compared to steel.
a. ~100 b. ~1000 c. ~200 d. ~10
- The word 'ceramic' meant for
a. soft material b. hard material c. burnt material d. dry material
- The core-shell particles are used in
a. luminescence b. sensors c. drug delivery d. all the above
- 1 bar is equal to
a. 1 mm of Hg b. 750 torr c. 760 torr d. 7.5 mtorr
- At sea level mercury column height is -----
a. 760 mm b. 750 mm c. 760 m d. 750 m
- Evaporation can be achieved by
a. resistive heating b. electron beam heating c. laser heating d. all the above
- In RF sputtering, power supply is set at -----
a. 14 MHz b. 14 Hz c. 30 Hz d. 5 MHz
- Litho means
a. sand b. stone c. heat d. nano
- From use of X-rays in lithography ----- range are used with appropriate metal masks in proximate geometry.
a. 0.1 to 2 nm b. 0.5 to 1.5 nm c. 0.1 to 5 nm d. 0.5 to 10 nm

