

Course outline

How does an NPTEL online course work?

Week-01

Week-02

Week-03

Week-04

Week-05

Week-06

Week-07

Week-08

Week-09

Week-10

Week-11

Week- 12

- Lecture 28- Special Cases: Carbon Based Nanomaterials
- Lecture 29- Special Cases: Polymer Based Nanomaterials

Quiz: Week 12: Assignment 12

Feedback for Week 12

Week-12: Assignment-12 Solution

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Week 12: Assignment 12

The due date for submitting this assignment has passed.

Due on 2021-10-20, 23:59 IST.

As per our records you have not submitted this assignment.

1) When and where was graphene first isolated in the lab?

1 point

- 1998 in Tokyo
- 2004 in Manchester
- 2007 in Houston
- 2010 in Stockholm

No, the answer is incorrect.
Score: 0

Accepted Answers:
2004 in Manchester

2) Which of its properties makes graphene such an amazing material?

1 point

- Electron mobility
- Mechanical strength
- Thermal conductivity
- All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

3) When graphene was first isolated in the lab, what technology did the researchers use?

1 point

- Atomic Force Microscopy (AFM)
- Scotch tape
- Hammer and chisel
- Ultrasensitive planning and milling machine

No, the answer is incorrect.
Score: 0

Accepted Answers:
Scotch tape

4) Which of these carbon allotropes can be formed by graphene?

1 point

- Carbon nanotube
- Fullerene (buckyball)
- Graphite
- All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

5) Graphene is a...

1 point

- Zero-dimensional (0D) material
- One-dimensional (1D) material
- Two-dimensional (2D) material
- Three-dimensional (3D) material

No, the answer is incorrect.
Score: 0

Accepted Answers:
Two-dimensional (2D) material

6) What is the smallest atom that can pass through a sheet of defect-free, single-layer graphene?

1 point

- Cerium
- Oxygen
- Most atoms can pass
- Not even the smallest atoms (helium, hydrogen) can pass

No, the answer is incorrect.
Score: 0

Accepted Answers:
Not even the smallest atoms (helium, hydrogen) can pass

7) carbon nanotube is

1 point

- Zigzag
- Armchair
- Chiral
- All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

8) Chemical solution deposition is also known as _____

1 point

- Sol-gel
- CVD
- Plasma spraying
- Laser pyrolysis

No, the answer is incorrect.
Score: 0

Accepted Answers:
Sol-gel

9) CVD stands for _____

1 point

- Carbon vapour density
- Chemical vapour density
- Chemical vapour deposition
- Carbon vapour deposition

No, the answer is incorrect.
Score: 0

Accepted Answers:
Chemical vapour deposition

10) Nano sized polymers built from branched units are called _____

1 point

- Dendrimers
- Composites
- Carbon-based materials
- Metal-based materials

No, the answer is incorrect.
Score: 0

Accepted Answers:
Dendrimers