

OJEE 2026 BSc Nursing 5 May Shift 2

Question Paper (Memory-Based)

Conducted by Odisha Joint Entrance Examination Committee (OJEEC)



General Instructions

- (i) The examination will be conducted in Computer-Based Test (CBT) mode.
- (ii) Each question carries +1 marks for correct answer and no negative marking for wrong answer.
- (iii) The total number of questions and duration will vary depending on the course.
- (iv) Duration of the exam is 2 hours (120 minutes).

1. Which one of the following statements is wrong?

- (a) Golden algae are also called desmids
- (b) Eubacteria are also called false bacteria
- (c) Phycomycetes are also called algal fungi
- (d) Cyanobacteria are also called blue-green algae

2. Methanogens belong to

- (a) eubacteria
- (b) archaeobacteria
- (c) dinoflagellates
- (d) slime moulds

3. Chromatophores take part in

- (a) photosynthesis
- (b) growth
- (c) movement

(d) respiration

4. Archaeobacteria differ from eubacteria in

- (a) cell membrane structure
 - (b) mode of nutrition
 - (c) cell shape
 - (d) mode of reproduction
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5. Besides paddy fields, cyanobacteria are also found inside vegetative part of

- (a) Pinus
 - (b) Cycas
 - (c) Equisetum
 - (d) Psilotum
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6. Two identical conducting spheres, one carrying a charge of $+4q$ and the other carrying $-2q$, are kept at a distance r apart in a vacuum. The magnitude of the electrostatic force between them is F . If they are brought into contact and then separated to the same distance r , what is the new electrostatic force between them?

- (A) $F/8$
 - (B) $F/4$
 - (C) F
 - (D) $F/2$
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7. A charge Q is placed at the center of an uncharged, hollow, conducting spherical shell. What is the electric field at a point outside the shell at a distance r from the center, and what is the net charge on the outer surface of the shell?

- (A) $E = 0$, Net charge = 0
 - (B) $E = (1/4\pi\epsilon_0)(Q/r^2)$, Net charge = $+Q$
 - (C) $E = (1/4\pi\epsilon_0)(Q/r^2)$, Net charge = 0
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(D) $E = 0$, Net charge = $+Q$

8. Five equal point charges, each $+q$, are placed at five of the six vertices of a regular hexagon of side length a . What is the magnitude of the electric field at the center of the hexagon?

- (A) kq/a^2
 - (B) $2kq/a^2$
 - (C) 0
 - (D) $kq/2a^2$
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9. A simple pendulum has a bob of mass m carrying a positive charge q . It is placed in a region where a uniform electric field E is directed vertically upwards. If the string is displaced slightly and released, what happens to its time period T compared to its time period T_0 without the electric field?

- (A) $T > T_0$
 - (B) $T < T_0$
 - (C) $T = T_0$
 - (D) The pendulum will not oscillate
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10. A point charge $+q$ is placed precisely at the center of one of the faces of a perfectly symmetrical cube. What is the total electric flux passing through the cube?

- (A) $q/6\epsilon_0$
 - (B) $q/2\epsilon_0$
 - (C) q/ϵ_0
 - (D) $q/3\epsilon_0$
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