

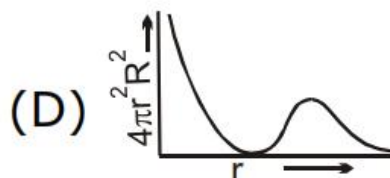
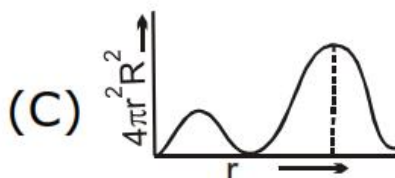
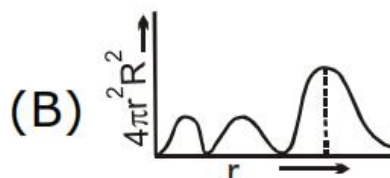
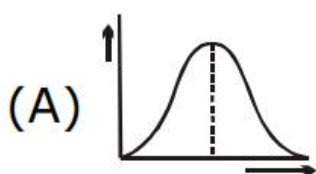
**Chemistry [ DPP ]**

**Atomic Structure**

**DPP - 12**

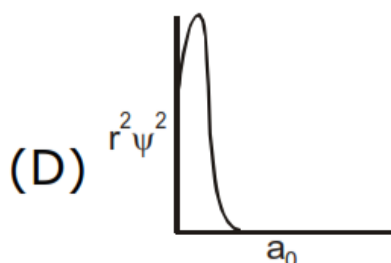
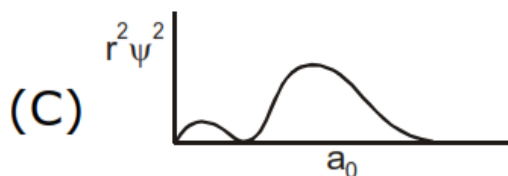
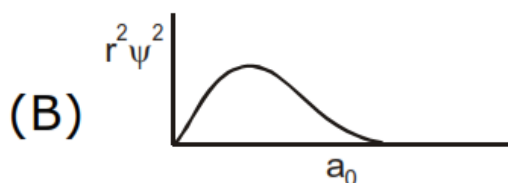
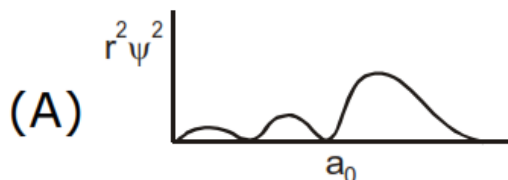
**DPP-12**

1. Which of the following graphs represents the radial charge density of 3d electron ?

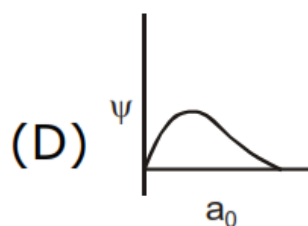
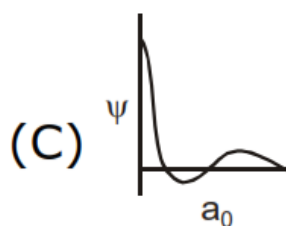
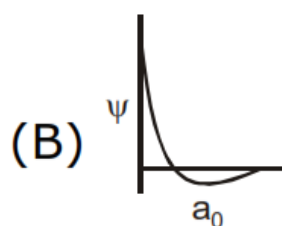
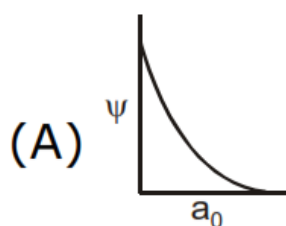


2. A 3p-orbital has :
- (A) two non-spherical nodes
  - (B) two spherical nodes
  - (C) one spherical and one non-spherical node
  - (D) one spherical and two non-spherical nodes

**3.** Which of the following radial distribution graphs correspond to  $l = 2$  for +1 atom :



4. The graph representing - node is :



5. An orbital is correctly described by:

- (A)  $\psi^2$                       (B)  $\psi$   
 (C)  $|\psi^2|\psi$                 (D) none

6. Which best describes orbital :

- (A)  $\psi$                               (B)  $\psi^2$   
 (C)  $|\psi^2|\psi$                     (D) none

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## ANSWER KEY

- |           |   |           |   |           |   |
|-----------|---|-----------|---|-----------|---|
| <b>1.</b> | A | <b>2.</b> | C | <b>3.</b> | C |
| <b>4.</b> | B | <b>5.</b> | A | <b>6.</b> | A |