## PHYSICS 3204

1 Which describes electric field lines?
(A) circle clockwise around positive charges
(B) circle counterclockwise around positive charges
(C) directed away from negative charges
(D) directed toward negative charges
2. Which shows the electric field between two oppositely charged parallel plates?

3. Which shows the electric field lines surrounding oppositely charged objects?

4. What are the charges on spheres X and Y below?


|  | X | Y |
| :--- | :---: | :---: |
| (A) | negative | negative |
| (B) | negative | positive |
| (C) | positive | negative |
| (D) | positive | positive |

5. Which shows the electric field between two equal but opposite charges?

6. Which is true for the strength of the electric field shown?
(A) decreases downward
(B) decreases to the right
(C) increases downward
(D) increases to the right

7. If two objects with the same mass and charge are brought near each other, which best describes their fields?

|  | Gravitational | Electric |
| :---: | :---: | :---: |
| (A) | attractive | attractive |
| (B) | attractive | repulsive |
| (C) | repulsive | attractive |
| (D) | repulsive | repulsive |

8. What are the charges on sphere A and B below?


|  | X | Y |
| :---: | :---: | :---: |
| (A) | negative | negative |
| (B) | negative | positive |
| (C) | positive | negative |
| (D) | positive | positive |

9. Which best illustrates the electric field between parallel plates with opposite electric charges?

10. Which diagram shows the gravitational field lines about a spherical object?

11. If the diagram below shows electric field lines near two charged spheres, what type of charges are present on X and Y electric lines of force

12. Which diagram represents the electric field around a positively charged object?

13. Which represents the gravitational field around a spherical mass?
(A)

(B)

(C)

(D)

14. Which diagram represents the electric field between a positive and negative charge?
(A)

(B)

(C)

(D)

