11. Electric intensity being a vector quantity always points

A. along the direction of force experienced by a unit positive charge

B. opposite to the direction of force experienced by a unit positive charge

C. perpendicular to the direction of force experienced by a uit positive charge

D. any of above

Answer: Option **A**

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12. Electric flux linked with a surface will be maximum when

A. the surface is held parallel to the electric field

B. the surface is held perpendicular to the electric field

C. the surface makes an angle of 45?with the field

D. all of the above

Answer: Option **B**

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13. A closed surface contains two equal and opposite charges. The net electric flux from the surface will be

A. negative

B. positive

C. zero

D. data is insufficient

Answer: Option **C**

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14. The electric lines of force are

A. imaginary

B. physically existing every where

C. physically existing near the charges

D. depends upon case

Answer: Option **A**

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15. Tick the correct statement

A. the electric lines of force have no physical existence

B. they expand laterally and contract longitudinally

C. they do not cross each other and

D. all the above statements are true

group together in dielectric

Answer: Option **D**

16. If free space between the plates of a capacitor is replaced by a dielectric

A. The potential difference remains constant capacittance and energy stored increases

B. The potential difference remains constant capacittance decreases and energy increases

C. The potential difference decreases but both capacitance and energy increase

D. both potential difference and capacitance decrease but energy increases

Answer: Option **C**

17. Two similar charges each of one coulomb placed in air one meter apart repel each other with a force

A. 9 x 109N

B. 9.2 x 104N

C. 9 x 109N

D. 9 x 107N

Answer: Option **A**

18. The variation of electric potential due to a point charge with distance is represented by the graph

Answer: Option **D**

19. A hollow metallic sphere of 8cm diameter is charged with 4 x 10 8C. The potential on its surface will be

A. 900 volts

B. 9000 volts

C. 90 volts

D. zero

Answer: Option **B**

20. The metallic spheres A and B of radii 2m and 4m respectively carry the same charge 4 x 10 8C. If the spheres are connected by a copper wire

A. charge will flow from A to B

B. charge will flow from B to A

C. no flow of charge will occur

D. both a and b are possible

Answer: Option **A**