قسم : الفيزياء المادة : خواص مادة و كهربية

الفرقة : الاولى كلية التربية الزمن : ساعتان

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الاجابات ½ ورقة (كهرومغناطيسية)

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Chose the correct answer (40 degree) 8 x 5 ***answer all questions***

1) A uniform electric field is created by two parallel plates separated by a distance of 0.04 m. What is the magnitude of the electric field established between the plates if the potential of the first plate is +40V and the second one is -40V?

(A) 20 V/m (B) 200 V/m (C) 2,000 V/m (D) 20,000 V/m

2) An electric dipole is

(A) two +ve charges of equal magnitude separated by a distance between them---- (B) two +ve charges of not equal magnitudes separated by a distance between them --- (C) two charges of opposite sign and same value separated by a distance between them--- (D) two charges of opposite sign and not equal value separated by a distance between them

3) The ratio of the magnitude of the charge Q to the magnitude of the potential difference V is defined as:

(A) Resistance (B)Electric Field (C) Electric capacity (D)Magnetic Field

4) A conducting sphere of radius 0.01m has a charge of 1.0 × 10−9 C deposited on it. The magnitude of the electric field in N/C just outside the surface of the sphere is:

A. 0 B. 450 C. 900 D. 4500

5) The capacitance of a parallel-plate capacitor can be increased by: A. increasing the charge B. decreasing the charge C. increasing the plate separation D. decreasing the plate separation

6) A parallel-plate capacitor has a plate area of 0.2m2 and a plate separation of 0.1mm. To obtain an electric field of 2.0 × 106 V/m between the plates, the magnitude of the charge on each plate should be:

A. 8.9 × 10−7 C B. 1.8 × 10−6 C C. 3.5 × 10−6 C D. 7.1 × 10−6 C

7)- A hollow metal sphere is charged to a potential V. The potential at its center is:

A. V B. 0 C. −V D. 2V

8- Which of the following is not the same as watt?

(A) joule/sec (B) amperes/volt

(C) amperes x volts (D) (amperes)^2 x ohm.