

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

أسئلة ميد تيرم سابقة في مادة
الفيزياء العامة
General Physics 🌟



اللهم نسألك بأسمك الأكرم
الذي إذا دُعيت به أجبت
اللهم أنصر أخواننا في فلسطين
اللهم وحد صفهم وأجمع كلمتهم على الحق
اللهم عليك بالصهاينة المعتدين الغاصبين
اللهم أرنا بهم عجائب قدرتك واشف صدور
قوم مؤمنين يا ذا الجلال والإكرام

By : Ahmed Salah ✨

1 Mcq:

【1】 When you touch a cold piece of ice with your finger, energy flows

- A. from the ice to your finger
- B. from your finger to the ice
- C. actually, both ways
- D. All of the above

【2】 Before ice can form on a lake , all the water in the lake must be cooled to

- A. 4°C
- B. a value slightly below 0°C
- C. 0°C
- D. Neither of these

【3】 The heat from the sun is an example of heat transfer by

- A. Heat conduction
- B. Convection
- C. Radiation
- D. Neither of these

【4】 The fact that desert sand is very hot in the day and very cold at night is evidence that sand has a

- A. high specific heat capacity
- B. low heat capacity
- C. low specific heat capacity
- D. Neither of these

【5】 The planet earth loses heat mainly by

- A. Radiation
- B. Convection
- C. Conduction
- D. All of these

【6】 Calculate the volume of a room with dimensions 11m × 7m × 3m in units of cubic feet if 1 m = 3,281 ft ?

- A. 231 m³
- B. 575,9 ft³
- C. 8158,9 ft³
- D. 2486,7 ft³

【7】 There are two types of electric charge

- A. Positive and negative
- B. Protons and electrons
- C. North and South
- D. Kinetic and potential

صلي علي النبي

【8】 How much heat in calories is released when 20gm of water is cooled from a temperature of 90°C to 30°C ? The specific heat of water is $1 \text{ cal/g}^{\circ}\text{C}$.

- A. -3600 cal B. -1200 cal C. -1800 cal D. 1000 cal

【9】 When a ray of light is incident on a reflecting surface and if the reflected ray is at an angle of 90° to the incident ray . The angle of incident of the ray is

- A. 30° B. 90° C. 45° D. 60°

【10】 In the retroreflection phenomenon, the reflected beam returns to the source to its original path.

- A. Perpendicular
B. Parallel
C. away
D. none of them

【11】 The index of refraction for a material generally with increasing wavelength.

- A. decreases
B. increases
C. not change
D. none of them

【12】 A light ray of wavelength 589 nm traveling through air is incident on a smooth, flat slab of crown glass (with a refractive index 1,37) at an angle of 54° to the normal, What is the angle of refraction ?

- A. $19,2^\circ$ B. $30,19^\circ$ C. $36,19^\circ$ D. $17,2^\circ$

【13】 a black spherical object has area of $1,8 \text{ m}^2$ is stationary at constant temperature of 127°C and the temperature of the medium is 27°C . What is the power radiated ? Consider $\epsilon = 1$ knowing that $\sigma = 5,67 \times 10^{-8} \text{ W / m}^2\text{k}^4$.

- A. 26,5 watt B. 2612,7 watt C. 98,6 watt D. 1786 watt

【14】 What is the relationship between optical density and refractive index ?

- A. Inverse B. Direct
C. No relationship D. Undefined

【15】 Which of the following physical quantities does not have a shear modulus in Liquids ?

- A. Pressure
C. Volume

- B. Shear modulus
D. Force
-

【16】 What are the dimensions of the physical quantity "density" ?

- A. L^2

- B. ML^{-3}

- C. LT^{-1}

- D. MLT^{-2}
-

【17】 If a Celsius thermometer reads 37° celsius, What will a Fahrenheit thermometer read in the same room

- A. 310 K

- B. $98,6^\circ C$

- C. 98,6 F

- D. 95 F
-

【18】 A metal slide is 0,4 cm thick and has a surface area of 50cm^2 . If the temperature difference between the two opposite surfaces is $120^\circ C$. find the amount of heat that will be transferred through the slide in a time of one minute, given that

$K = 0,2 \text{ cal/sec.cm,}^\circ C$

- A. 360000 cal

- B. 72000 cal

- C. 180000 cal

- D. None of these
-

【19】 Calculate the speed of a car traveling at 90 miles per hour in SI units. Knowing that 1 mile = 1609 m, 1 hour = 3600 s ?

- A. 24,582 m/s

- B. 0,055 m/s

- C. 40,225 m/s

- D. 201,367 m/s
-

【20】 If two mirrors are at an angle of 120° to each other, and a light ray strikes the first mirror at an angle of 65° , what is the angle of incidence on the second mirror ?

- A. 25°

- B. 55°

- C. 65°

- D. 120°
-

【21】 What is the unit of electric potential ?

- A. J/C

- B. N/C

- C. C/J

- D. V/m
-

【22】 A point charge of 4 μC is placed in a vacuum, calculate the magnitude of the electric field at a distance of 0,5 meters from it ?

- A. 143792 N/C

- B. 147392 N/C

- C. 149372 N/C

- D. 142943 N/C
-

2 True or False:

【23】 The specific heat of a substance changes as its mass changes .

【24】 Ice has a lower density than water.

【25】 If a is the acceleration and t is the time, the term $\frac{1}{2} at^2$ has the dimension of the velocity.

【26】 Alcohol is used as a thermometer in place of mercury for measuring low temperatures.

【27】 The total radiation rate emitted from the unit area of the black body is proportional to its absolute temperature.

【28】 A substance that heats up relatively quickly has low specific heat capacity.

【29】 The potential energy of two point charges is inversely proportional to the distance between them.

【30】 The higher charge density on the surface of a conductor, the greater the electric field around it.

【31】 Angle of refraction The angle between the refracted ray & the normal.

【32】 In diffuse reflection, the reflected rays are parallel.

【33】 Snell's law of refraction relates Angles of incidence and reflection.

سبحان الله وبحمده سبحان الله العظيم

1 Mcq:

- 【1】 B
- 【2】 A
- 【3】 C
- 【4】 C
- 【5】 A
- 【6】 C
- 【7】 A
- 【8】 B
- 【9】 C
- 【10】 B
- 【11】 A
- 【12】 C
- 【13】 D
- 【14】 B
- 【15】 B
- 【16】 B
- 【17】 C
- 【18】 C
- 【19】 C
- 【20】 B

【21】 A

【22】 A

2 True or False:

- 【23】 ✗
- 【26】 ✓
- 【29】 ✓
- 【32】 ✗

- 【24】 ✓
- 【27】 ✗
- 【30】 ✓
- 【33】 ✗

- 【25】 ✗
- 【28】 ✓
- 【31】 ✓