

KEAM 2024 June 6 (Day 2) Answer Key (Unofficial)

Q. 1

Let $f(x) = a^{3x}$ and $a^5 = 8$ then value of $f(5) = \text{-----}$

Answer: 40

Q. 2

Conductivity of a material lies in the range 10^2 to $10^8 \text{ } \Omega^{-1}\text{m}^{-1}$.

Answer: It is a semiconductor.

Q. 3

In gamma emission, nucleus emits

Answer: Photons

Q. 4

The process by which the electron can come out of the metal in a spark plug is

Answer: Thermionic emission

Q. 5

The time period of a satellite nearer to earth is $2\pi g^a R^b$, then a & b

Answer: $a=-1/2$ and $b=3/2$

Q. 6

How many grams of HCl required for 17.4g MnO_2 to liberate Cl_2

Answer: 14.6g

Q. 7

The universal constant which has unit cm^{-1}

Answer: Rydberg constant

Q. 8

How many moles of water produced on complete combustion of 14g cyclopropane

Answer: 6 moles of water

Q. 9

The critical points of function $f(x) = (x - 3)^3(x + 2)^2$ are

Answer: $x=3$ and $x=-2$

Q. 10

Area banded by parabola $y = x^2 + 2$ and line $y = x$, $x = 1$ and $x = 2$

Answer: 19/6