

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# C.U.SHAH UNIVERSITY

## Summer Examination-2018

Subject Name : Applied Physics

Subject Code : 2TE02APH1

Branch: Diploma (All)

Semester : 2

Date : 27/04/2018

Time : 10:30 To 01:30

Marks : 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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**Q-1**

**Attempt the following questions:**

**(14)**

- a) The SI unit of force is \_\_\_\_\_
  - 1) Joule
  - 2) Hertz
  - 3) metre
  - 4) metre-second
- b) If a wave has a time period of 20 ms, its frequency is \_\_\_\_\_
  - 1) 10 ms
  - 2) 20 ms
  - 3) 40 ms
  - 4) 5 m
- c)  $1 \text{ \AA}^0 =$  \_\_\_\_\_ metre
  - 1)  $10^{-10}$
  - 2)  $10^{-14}$
  - 3)  $10^{-16}$
  - 4)  $10^{-8}$
- d) In an intrinsic semiconductor the number of free electrons are \_\_\_\_\_
  - 1) Less than holes
  - 2) Equal to holes
  - 3) Greater than holes
  - 4) zero
- e) The CGS unit of time is \_\_\_\_\_
  - 1) Minute
  - 2) Hour
  - 3) Second
  - 4) Gram
- f) In MKS system the M is meter , K is \_\_\_\_



- 1) kilometer
  - 2) kilogram
  - 3) kilo
  - 4) Kelvin
- g)** If two resistors of  $20\ \Omega$  are connected in series, its equivalent resistance is \_\_\_\_\_ Ohm
- 1) 40
  - 2) 10
  - 3) 5
  - 4) 0
- h)** A pentavalent impurity is added to the silicon atom to form \_\_\_\_\_ type of semiconductor.
- 1) Intrinsic
  - 2) P-type
  - 3) N-type semiconductor
  - 4) all
- i)** Unit of the fundamental quantity -temperature is \_\_\_\_\_ as per SI
1. Meter
  2. second
  3. kelvin
  4. mole
- j)** Give the unit of Radioactivity
- 1) Query
  - 2) kelvin
  - 3) Radian
  - 4) second
- k)** Charge of electron is \_\_\_\_\_
- 1) positive
  - 2) negative
  - 3) neutral
  - 4) zero
- l)** The least count of micrometer screw gauge is \_\_\_\_\_ cm .
- 1) 0.001
  - 2) 0.1
  - 3) 1
  - 4) 10
- m)** Light waves are \_\_\_\_\_
- 1) Longitudinal wave
  - 2) Transverse wave
  - 3) electromagnetic wave
  - 4) none
- n)** Same charges \_\_\_\_\_ each other
- 1) attracts
  - 2) repale
  - 3) cangle
  - 4) ignore









