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**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**

(An Autonomous Institute)

Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

**B.Tech**

**FIRST YEAR (SEMESTER-II) THEORY EXAMINATION (2020-2021)**

**(Subjective Type)**

**Subject Code: AAS0201B**

**Subject: Engineering Physics**

**Max. Mks. : 30**

**Time : 50 Minutes**

**General Instructions:**

*All questions are compulsory.*

*Question No. 1 to 15 are subjective type question carrying 3 marks each. Attempt any 10 out of 15 questions.*

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Type	Difficulty
1	What was the main object of Michelson & Morley experiment?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
2	Explain the concept of Simultaneity.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
3	Write down the postulates of special theory of relativity.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
4	An electron has deBroglie wavelength $2 \times 10^{-12}$ m. Find its kinetic energy.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
5	State & explain Heisenberg uncertainty principle for position & momentum.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
6	Write down the normalization condition for an acceptable wave function.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
7	What do you mean by incoherent sources?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
8	What is the condition of principle maxima in single slit diffraction?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Type	Difficulty
9	What is resolving power?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
10	Write the name of seven crystal systems.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
11	What do you mean by crystal lattice, basis and crystal structure?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
12	Define atomic packing factor.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
13	What is the Meissner effect?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
14	What are High temperature superconductors?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
15	Give two examples of High temperature superconductors.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant