Day : Wednesday   Time : 10:00 AM-01:00 PM

Date : 15-06-2022   **S-14537-2022**   Max. Marks : 60

N.B.:
1) All questions are **COMPULSORY**.
2) Figures to right indicate **FULL** marks.
3) Assume suitable data **WHEREVER** necessary.
4) Use separate answer books for both sections.

SECTION-I

Q.1   How digital ASICs are implemented? Explain in detail.   **(10)**

OR

Q.1   What are the hardware implementation methods in VLSI? Describe in detail.   **(10)**

Q.2   What are the components of GA based optimization engine?   **(10)**

OR

Q.2   What is multi-objective GA? How it is implemented?   **(10)**

Q.3   How floor planning using sequence pair representation is done?   **(10)**

OR

Q.3   How multi-objective optimization is done?   **(10)**

SECTION-II

Q.4   Describe Pseudo-Random Number Generation with reference to GA.   **(10)**

OR

Q.4   What is FPGA based GA? How it is implemented?   **(10)**

Q.5   Discuss Genetic Algorithm v/s Conventional algorithm.   **(10)**

OR

Q.5   What are the applications of Genetic Algorithm?   **(10)**

Q.6   Describe Genetic Encoding.   **(10)**

OR

Q.6   Explain local improvements with respect to GA.   **(10)**

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