

M. Tech.-IV (Electronics V.L.S.I.) (CBCS – 2015 Course) :
SUMMER - 2019

SUBJECT-SELF-STUDY PAPER-II GENETIC ALGORITHMS FOR VLSI DESIGN

Day: Thursday
Date: 13/06/2019

S-2019-3486

Time: 11.00 AM TO 02.00 PM
Max Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to right indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Answer to both the sections should be written in **SAME** Answer book.

SECTION-I

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

OR

Q.1 What are the design methodologies used for VLSI design? Explain using suitable diagrams. **(10)**

Q.2 How will you define various operators with reference to GA. Explain using suitable example. **(10)**

OR

Q.2 Explain following with reference to GA: **(10)**
i) Individual Encoding
ii) Fitness of an individual.

Q.3 Explain floor planning using a sequence pair representation. **(10)**

OR

Q.3 How conversion from a sequence pair to a floor plan is implemented? **(10)**

SECTION-II

Q.4 What are the design considerations for ASIC implementation? **(10)**

OR

Q.4 Explain RT-level simulations. **(10)**

Q.5 Which are the applications of GA? Explain in brief. **(10)**

OR

Q.5 Discuss GA for ATG. **(10)**

Q.6 Define Genetic Encoding in detail. **(10)**

OR

Q.6 What is GASP? Describe in detail. **(10)**

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