

JAIN COLLEGE

463/465, 18th Main Road, SS Royal, 80 Feet Road, Rajarajeshwari Nagar, Bangalore - 560 098

Date: 2019-2020 SUBJECT: Computer Science

II PUC MOCK PAPER – I (2019)

Timings Allowed: 3H 15Mins.

Total Marks70

PART - A

Answer all the questions

 $10 \times 1 = 10$

- 1. What is motherboard?
- 2. Define logic gate.
- 3. Define queue.
- 4. What is meant by an array of objects?
- 5. Define pointers.
- 6. What is data mining?
- 7. What are hackers?
- 8. Expand HTTP.
- 9. Define e-commerce.
- 10. Expand DHTML.

PART - B

Answer any five of the following

 $5 \times 2 = 10$

- 11. Draw K-MAP for $X \overline{Y} + \overline{X} Y$
- 12. Give dual of
- **a.** 1 + X = 0
- **b.** X. X = 0
- 13. What is a class? Give syntax for class declaration.
- 14. Define destructor. Give the operator used for destructors..
- 15. Mention the various types of files.
- 16. List the data types supported by DBMS.
- 17. Mention the various SQL constraints.
- 18. Mention some data transmission medium.

PART - C

Answer any five of the following

 $5 \times 3 = 15$

- 19. Explain Cache memory.
- 20. What is meant by proof by perfect induction? Give an example.
- 21. What are various operations performed on one dimensional array?
- 22. Explain new and delete operators with example.
- 23. What are the various file opening modes? Explain briefly.
- 24. Explain different users of database.

- 25. What are the advantages of e-commerce?
- 26. Differentiate between HTML and XML.

PART - D

Answer any seven of the following

 $7 \times 5 = 35$

- 27. Reduce using K-MAP $f(a,b,c,d) = \sum (0,1,2,3,5,7,9,11,13,15)$
- 28. Write an algorithm to sort an array using Insertion sort technique.
- 29. Write an algorithm for PUSH and POP operations.
- 30. Explain the characteristics of OOP's.
- 31. Explain member function **a.** Inside class
 - **a.** Inside class definition **b.** Outside class definition.
- 32. Explain function overloading and mention the need for function overloading.
- 33. Explain the rules for writing constructor function.
- 34. What is inheritance? Give its advantages.
- 35. Explain the features of database management system.
- 36. Explain difference between order by and group by.
- 37. Explain network security in details.
