**B.C.A.- I year (Annual Pattern)2019-20** **Important Questions**

**Paper code-101-Fundamentals of Computers**

1. Define Computer system and its characteristics.
2. Explain various capabilities and limitations of a computer system.
3. Explain the types of computers with their features.
4. Differentiate between analog computer and digital computer.
5. What are computer generations? Explain with their features.
6. Define in short: - GPS, GIS, cloud computing & e-governance.
7. Differentiate between hardware, software and firmware.
8. Draw the block diagram of computer and explain its functional units.
9. What are input devices? Explain any three in detail.
10. What are output devices? Explain the types of monitors.
11. Explain printer and their types with the help of examples.
12. What do you mean by storage devices? Explain any three in detail.
13. What is a computer program? Write steps in program development.
14. Define algorithm with the help of an example.
15. Explain flowchart and its basic symbols.
16. Explain programming languages with their types, advantages and disadvantages.
17. Differentiate between system software and application software with example.
18. What is an operating system? Explain its types with features.
19. Explain the following: - compiler, assembler, word-processor, multimedia & MIS.
20. Define FAT and its types.
21. Explain Disk operating system and its features.
22. Differentiate between windows and Linux.
23. Write a short note on computer virus and its types. What is anti-virus?
24. What is Internet? Explain its features and uses.
25. Differentiate between website and web portal.
26. Define: - www, search engine, web browser, web server & modem.
27. Explain network and its types.
28. What are topologies? Explain their types with diagram.
29. Explain communication media and communication channels.
30. Define: - Router, Bridge, NIC, broadband & gateways.

Note: - For the answers of above questions, kindly refer to the notes given in the class.

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**B.C.A.- I year (Annual Pattern)2019-20** **Important Questions**

**Paper code-104-Problem Solving And Programming Through “C”**

1. Define algorithm with the help of an example to solve a problem.
2. What is a flowchart? Explain all its basic symbols.
3. What is a computer program? Write steps in program logic development.
4. How algorithm and flowchart are helpful in computer programming.
5. Differentiate between top-down and bottom-up programming techniques.
6. Discuss modular and structured programming with its merits and demerits.
7. Define: - branching, looping, cohesion and coupling.
8. Explain program testing and debugging with their tools.
9. Give introduction, history, versions and features of “C” language.
10. Draw and explain the structure of a c-program.
11. Explain the process of creating, compiling and executing c-program.
12. Explain the following: - keywords, identifiers, variables and constants.
13. Define data types and their basic types in c-language.
14. What are operators? Explain various operators found in c-language.
15. Explain library functions and input/output functions.
16. What are control statements? Explain their types.
17. Differentiate between while-loop and do-loop.
18. Explain arrays and its types with their syntax and example.
19. Differentiate between user defined functions and library functions.
20. What is argument passing? Define “call by value” and “call by reference”.
21. Define structure and its features with syntax.
22. Define union, its features and uses.
23. Explain pointers and their operations.
24. What is debugging? Explain with regard to c-language
25. Explain file handling and operations on files.
26. Write a program in c-language to show the use of “switch” statement.

Or

Write a program in c-language to implement “calling a function”.

Note: - For the answers of above questions, kindly refer to the notes given in the class.

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