

# Fundamentals of computing essay



**ASSIGN  
BUSTER**

FOC QUESTION BANK QUESTION BANK – I YEAR IT PART – A UNIT – I

1. Define Data and Information.
2. Who is the Father of Computer and why is he called so?
3. Name some of the popular Microprocessor manufacturers.
4. Expand COBOL, BASIC, FORTRAN and IBM.
5. Specify the electronic components used for different computer generations.
6. Compare the computer with calculator.
7. What are the languages used in computer generations.
8. How are the mainframe systems useful?
9. What is a base and what are the positional number systems used?
10. Define Bit, Nibble, Byte and Kilobyte.
11. Expand IC, SSI, MSI, LSI and VLSI.
- 12.

What is an IC and how does it help in computers?

13. What are the applications of computers?
14. Specify the reasons to use computers.
15. Define Clients and Servers.
16. Convert the hexadecimal value (2AC) to their binary equivalent.
17. Convert the octal value (127. 54) to their decimal equivalent.
18. Convert the hexadecimal value (2B. C4) to their decimal equivalent.
19. Convert (77)<sub>10</sub> to (? )<sub>4</sub>.
20. Convert (1715)<sub>10</sub> to (? )<sub>12</sub>.

UNIT – II

21. What is meant by Installation and Assembling?
22. Define Operating System.
23. Differentiate Hardware and Software.
24. What are the types of operating system available?
25. Define multiprocessing.
26. What are the functions of control program?
27. Define Compiler, Assembler and Interpreter.
28. What is SDLC and what are the phases.?
29. What is meant by Testing?
30. What are the different types of Testing?
31. What is Design and classify the design phase?
32. Define Developing or Coding.
33. What is implementation and maintenance?
34. What is Internet?
35. What is ARPANET?
36. Define Website and IP.
37. Name some of the Internet

Services. 38. What are the different types of Software? 39. What is Software Requirement Specification document? 40. Define Timesharing. UNIT – III 41. Define Algorithm and what are the different types? 42. What are the characteristics of Algorithm? 43. What is a decision table? 44. Define Flowchart and what is the need for flowchart symbols? 45. What are the rules for drawing a flowchart? 46. What is pseudo code? 47. Define structured programming. 48. Define Sequence logic, Selection logic, Iteration logic. 49. List down the rules for writing pseudo code. 50. What are the ways in which document can be viewed in word processors? 51. What are the test cases available in MS-Word? 52. What is Tab and mention the Tab settings available in Word? 53. Define Headers and Footers. 4. What is a Table? 55. What is meant by Text Wrapping? 56. What is Macro? 57. What is the purpose of Thesaurus tool in word? 58. Define Column, Row, Cell and Cell Pointer. 59. What is meant by Precedence of operators? 60. What is function and mention the types of functions available in Excel? 61. What is a label? 62. What are the types of charts available in Excel? 63. What is the purpose of Autosum? 64. What is the purpose of Comment? 65. Define Filters. 66. What is meant by Validation? 67. What is the use of Pivot Table? 68. Mention the uses of Goal Seek. 69. What is Mailmerge? 70. Define Templates.

UNIT – IV & UNIT – V 71. What are the different data types available in C? 72. What are Keywords? 73. What is an Operator and Operand? 74. What is Ternary operator? 75. What are the Bitwise operators available in C? 76. What is the difference between '=' and '==' operator? 77. What is Type casting? 78. What is the difference between if and while statement? 79. What is the difference between while loop and do.... while loop? 80. What is

<https://assignbuster.com/fundamentals-of-computing-essay/>

the difference between ++a and a++? 81. What is a Global variable? 82. Define String. 83. What is an Array? 84. What is the difference between scanf ( ) and gets ( ) function? 5. Why we don't use the '&' symbol while reading a string through scanf ( )? 86. What is a function? 87. What is a modulo operator? 88. How many bytes are occupied by int, char, float, long int and double? 89. What is meant by Recursion? 90. What is a structure? 91. What is a union? 92. What is the output of the following program? 93. Main ( ) 94. { 95. char name [50]; 96. printf (" name"); 97. scanf ("%s, name); 98. printf ("%s", name); 99. }

100. What is a pointer and what are the uses of pointers? 101. What is the difference between Library function and User-defined functions? 102.

How do you define Enumerated data types? 103. What is meant by Preprocessors? 104. How can you return more than one value from a function? 105. Specify the use of Header files in C language. 106. What is meant by debugging and what are the types of errors that occur in C? 107. What is dynamic memory allocation? 108. PART - B 109. Draw a block diagram of computer and explain the different component of a computer system. a. Explain the functions of ALU, control unit and registers in detail. 110. (b) Describe the characteristics of Home Computer, Notebook computer, Desktop computer and Super Computer. 111.

Discuss important features of various generation of computer system. Give some examples of computers for each generation. 112. Explain the types of memory and devices in detail. a. List out the key hardware and software technologies used in building the computers. b. Convert the following numbers into their binary equivalent. - (FAC) 16, (561) 8 c. Convert the

following numbers into their decimal equivalent. (101. 01) <sub>2</sub> , (245. 14) <sub>8</sub>

113. Explain the features of machine language, assembly language and high

level language with examples. 114. Write a brief note on Batch processing,

Multiprogramming, Timesharing and Real Time systems. 15. Describe the

features of word processing package in detail. 116. Describe the main

features of Graphic packages. 117. Explain the various steps involved in the

software development. 118. What is a pseudo code and write a pseudo code

to find out whether a given quadrilateral ABCD is a rectangle. 119. Draw a

flowchart for the solution of a general quadratic equation. 120. Write

algorithm to find the sum of the following series. 121.  $1+3+5+9+13+ \dots$  20

terms 122. Explain the need for array variables. Describe the following with

respect to arrays: Declaration of array, Two dimensional array and Accessing

an array element. 23. Discuss the different types of operators available in C

with example. 124. Write a program to find the number of and sum of all

integers greater than 200 and less than 400 that are divisible by 6. 125.

Write a program to verify whether the given number is a palindrome or not.

126. Write a program in C to find Fibonacci series upto 200. 127. Write a

program using while loop to reverse the digits of a given number. 128.

Explain the purpose of storage classes auto, extern, static and register with

suitable example 129. FUNDAMENTALS OF COMPUTER 130. FUNDAMENTALS

OF COMPUTER PROGRAMMING UNIT-1. PART-A. 31. Define computers? 132.

What are the features of computers? 133. Give the uses of computer? 134.

Define personal computers? 135. Differentiate Mainframe & Super

computers? 136. Define Mini computers? 137. Mention the basic operation of

computer? 138. Define Single user system? 139. Define multi user system?

140. Define fetch phase? 141. Define execution phase? 142. Define system?

<https://assignbuster.com/fundamentals-of-computing-essay/>

143. Define Hardware & give example? 144. What are the functions in the input unit? 145. Define Auxiliary memory? 146. Mention few output units? 147. Define word length? 148. What is Integral part & functional part? 149. Define biased exponent? 150. Define (1) Bit (2) Nibble (3) Byte? PART-B. 151. Define computer. Explain the characteristics briefly? 152. Describe evolution of computer? 153. Differentiate various generations with features? 154. Explain the fundamental units with a block diagram? 155. Explain the classification of computers? 156. UNIT-2. 157. PART-A. 158. What is meant by operating system? 159. What is a need for operating system? 160. What is software? 161. Define Application software? 162. Define System software? 163. Difference between Software & hardware? 164. Write the functions of operating system? 65. What are the Language Translators? 166. What is compiler? 167. What is interpreter? 168. What is assembler? 169. Give the software development steps? 170. How to test the program? 171. How to document the program? 172. How to maintain the program? 173. What is soft copy? 174. What is meant by software privacy? 175. Define internet? 176. What are the internet services? 177. Write short notes on ARPANET? 178. PART-B. 179. Describe the software? 180. Describe the software development steps? 181. Write the components of a computer system? 182. UNIT-3. 183. PART-A. 184. What is algorithm? 185.

Characteristics of algorithm? 186. What is flowchart? 187. Flowchart symbols? 188. Structure of flowchart? 189. Rules for drawing a flowchart? 190. Pseudo code? 191. What is program? 192. Representation of program? 193. What is application software? 194. What is word processing programs? 195. What is spread sheet program? 196. What is database program? 197.

What is graphics? 198. Draw the flowchart symbol with name? PART-B. 199. Explain the program development cycle? 200. Explain the flowchart and symbols with example? 201. Explain the application software packages? 202. UNIT-4. 203. PART-A. 204.

What are the features of C program? 205. What is keywords in C? 206. What is identifier? 207. What are the features of identifiers? 208. What is the major difference between if else and switch case statement? 209. What is the purpose of go to statement? 210. What is an arithmetic operator? Given one example? 211. What are the types of input and output functions? 212. What is the purpose of getchar function? 213. What is the purpose of putchar function? 214. What is the purpose of gets and puts function? 215. What is meant by unary operator? 216. What is meant by relational and logical operator? 217.

What is the purpose of assignment operator? 218. What is a conditional operator? 219. What are the C tokens? 220. What are the types of errors? 221. What are the several types of constants? 222. What are the four fundamental data types in C? 223. What are the different types of operators in C? 224. What is mean by bitwise operator? What are they and their meaning? 225. PART-B. 226. Explain the structure of a C program? 227. Explain the stages involved in a system life cycle? 228. Explain the switch case statement and example? 229. What is the purpose of break statement? Write a program using it? 30. Explain briefly about input and output functions? 231. What are the types of constants? Explain briefly? 232. UNIT-5. 233. PART-A. 234. What is the NULL character and what is its user in the content of strings? 235. Explain with example how a string is declared and <https://assignbuster.com/fundamentals-of-computing-essay/>

initialized? 236. Explain some string junctions? 237. Explain about function declaration, function and function call? 238. What are the two types of parameters and explain it? 239. What is mean by local and global variable? 240. What are the types of prototype? 241. What is meant by call by reference? 242. What is a pointer? 243.

What is meant by NULL pointer? 244. What is a character pointer? 245. What is meant by pointer to pointer? 246. What is meant by dynamic memory allocations? 247. Define malloc() functions? 248. Define calloc() functions? 249. What is meant by free() functions? 250. What is a structure? 251. What is a user defined data types? 252. Differentiate between array and structure? 253. Give any two comparison between structure and union? 254. What is a self-referential structure? 255. PART-B. 256. Storage classes? 257. Structure & union program? 258. Arrays & pointers program? 259. String functions? 260. Function prototypes? 61. Recursive function? IMPORTANT PROGRAMS Write algorithm, Pseudo code, flowchart and program for the following. 262. Sum of two numbers. 263. Sum of n nos 264. Sum of 1+5+... upto 20 terms. 265. Fibonacci series. 266. Factorial 267. prime or not 268. Greatest of three nums. 269. Fahrenheit to Celsius. 270. Celsius to Fahrenheit 271. Armstrong no 272. Pascal's triangle. GE2112 FUNDAMENTALS OF COMPUTING AND PROGRAMMING QUESTION BANK GE2112 FUNDAMENTALS OF COMPUTING AND PROGRAMMING QUESTION BANK PART A Define a computer. What is GIGO? What is diligence? Define Versatility. Give the full form of ENIAC, EDVAC.

Give the full form of EDSAC, UNIVAC. What are the advantages of transistors over vacuum tubes? State any four characteristics of first generation

<https://assignbuster.com/fundamentals-of-computing-essay/>



computers. State any four characteristics of second generation computers. State any four characteristics of third generation computers. State any four characteristics of fourth generation computers. State any four characteristics of fifth generation computers. Define an IC. What is a transistor? Give the full form of LSI, VLSI, ULSI, and SLSI. What are the advantages of micro computers and mini computers over mainframes? Describe the largest computer of the computer family.

Explain the second largest computer of the computer family. Which computer is known as PC? Which computer is known as notebook? Why? Which computer is known as palmtop? Why? How the computers can be used effectively in the field of science & education? How the computers can be used effectively in the field of medicine & health care? How the computers can be used effectively in the field of Engineering & entertainment? How the computers can be used effectively in the field of communication & banking? What are the advantages of secondary storage over primary storage? What are the functions performed by Input unit?

What are the functions performed by output unit? What are the functions performed by control unit? What are the functions performed by storage unit? What are the functions performed by arithmetic and logic unit? What is CPU? What are the subsystems in it? Define software. What are the categories of software? What is system software? What is an operating system? Give one eg. What are device drivers? Differentiate between machine language and high level language. Difference between compiler and interpreter. What are system utility programs? What is application software? List out some of the application software.

List out any four features of word processors. Give one eg. List out any four features of spreadsheets. Give one eg. List out any four features of image editors. Give one eg. List out any four features of DBMS. Give one eg. List out any four features of presentation applications. Give one eg. List out any four features of desktop publishing software. Give one eg. Define public domain software. What is freeware? Explain donationware & postcardware. Explain abandonware & Adware. What is shareware? What is commercial software? What is open source software? Difference between open source software and closed source software.

What is proprietary software? What is a firmware? Define software piracy. Enumerate the steps involved in program development cycle. What is a base of number system? What is a radix of number system? Determine the binary equivalent of  $(36)_{10}$  Determine the octal equivalent of  $(359)_{10}$  Determine the hexadecimal equivalent of  $(5112)_{10}$  Determine the decimal equivalent of  $(11010)_2$  Determine the decimal equivalent of  $(456)_8$  Determine the decimal equivalent of  $(B14)_{16}$  Determine the octal equivalent of  $(10111)_2$  Determine the hexadecimal equivalent of  $(11001011)_2$  Determine the binary equivalent of  $(231)_8$

Determine the binary equivalent of  $(5AF)_{16}$  Determine the hexadecimal equivalent of  $(2327)_8$  Determine the octal equivalent of  $(2B6)_{16}$  Perform binary addition for the numbers 1010 & 1111 Subtract the binary number 101 from 1111 What is the ones complement of 1010? subtract 1010 from 1000 using ones complement method What is the twos complement of 1010? subtract 1010 from 1000 using twos complement method What is 9's complement of a number? What is 10's complement of a number? PART B

With a neat block diagram explain the basic organization of a computer and list out the functions performed by each unit.

Discuss important features of various generations of computer system. Give some examples of computers for each generation. Explain the classification of computers in detail. Describe the evolution of computers. Explain the importance of system software for a computer system. List out the features of some of the most commonly known types of system software. What is application software? Describe briefly some of the most commonly known types of application software. Explain the steps involved in software development. PART A What is the internet? How did it evolve? In what manner is e-mail similar to postal mail service?

In what manner are the two different from each other? List out some of the advantages & disadvantages of e-mail service against telephone service? Explain the difference between “ downloading ” and “ uploading ” of information. What is ARPANET? What is USENET? What is a newsgroup? How is it useful? What is hypertext? How is it useful? Explain a typical structure of URL. What is the use of telnet service offered by internet? What is FTP? Define the terms online and offline. What are the 5 elements that are common to all video conferencing endpoint? Give the full form of FTP, WWW, HTML, HTTP, URL, TCP/IP, ISDN, and DSL.

Describe the following terms with respect to the internet HTML HTTP Web server Web browser Webpage Website Homepage Index page ISP PART B Name some of the basic services provided by the internet. Explain how each of these services helps the internet users. Describe the evolution of internet

in detail. PART-A Why is it advisable to plan the logic of a program before writing it? Define an algorithm. What are the characteristics necessary for a sequence of instructions to qualify as an algorithm? What is a flowchart? What are the various basic symbols used in flowcharting? Give their pictorial representation.

Describe the function of various basic flowcharting symbols. List out any some of the guidelines used for preparing flowcharts. What are the benefits of flowcharts? What are the limitations of flowcharts? Define a pseudocode. List out any some of the guidelines used for writing pseudocode. What are the benefits of pseudocode? What are the limitations of pseudocode? What are control structures? What are the three basic logic structures used in writing structured programs? Discuss the use of each. What is a sequence control structure? What is a selection control structure? What is a repetition control structure?

What is application software? What is a word processing package? List out some of the key features supported by modern word processing packages. What is a spreadsheet package? List out some of the key features supported by spreadsheet packages. What is an image editor? Give example. What is DBMS? Give example. What is the use of presentation applications? Give example. What is desktop publishing software? Give example. Write the algorithm, draw the flowchart, and write the pseudocode for the following. To find the area of a rectangle To find the area of a circle To find the circumference of a circle

To find the centigrade value for the corresponding Fahrenheit value  
To find the Fahrenheit value for the corresponding centigrade value  
To find the sum and product of two given values  
To find whether the given year is leap year or not  
To find the largest of two numbers  
To find the largest of three numbers  
To find whether the given no is positive or not  
To find whether the given no is odd or even  
To find the factorial of a given no  
To find the sum of all the digits in a given no  
To find whether the given no is Armstrong or not  
To find the reverse of a given no  
To calculate  $1+2+3+\dots+n$   
To calculate  $1^2+2^2+3^2+\dots+n^2$

PROGRAMS IN C  
Write a C program to find the sum of two numbers. Write a C program to find the average of three float numbers. Write a C program to swap two numbers using third variable. Write a C program to swap two numbers without using temporary variable. Write a C program to find the area and circumference of a circle. Write a C program to find the biggest of two numbers using ternary operator. Write a C program to convert centigrade to Fahrenheit. Write a C program to convert Fahrenheit to centigrade. Write a C program to calculate the simple interest. Write a C program to find the area of a rectangle. [pic]