

# MAR ELIAS COLLEGE , KOTTAPPADY



## BCA/B.Sc DEGREE(C.B.C.S) MODEL QUESTIONS



### FIRST SEMESTER

#### CS1CRT02: METHODOLOGY OF PROGRAMMING & C LANGUAGE

#### 2 Mark questions

1. What is a program?
2. What is the use of language.
3. Define programming language.
4. What is software?
5. What is computer language?
6. Define machine language.
7. What is assembly language?
8. Define High Level Language.
9. What is Low Level Language?
10. Give 2 examples of High Level Language.
11. What is the use of language translator ?
12. Define Assembler.
13. Define complier
14. Define interpreter.
15. What is the use of linker?
16. Give any 2 characteristics of a good programming language.
17. What are the factors for selecting a programming language?
18. What is subprogram?
19. What is the purpose of program planning ?
20. Define Algorithm.
21. Write an algorithm for display a message.
22. What is direct algorithm.
23. Define indirect algorithm.
24. Define flowchart.

25. Distinguish program and algorithm.
26. What is a translator?
27. What is Testing & Debugging?
28. What is the purpose of a program planning?
29. What is preprocessor?
30. What is a character set in C?
31. What is a C token?
32. Differentiate identifiers & keywords?
33. Differentiate constants & variables
34. What are delimiters in C?
35. What are operators?
36. What are the uses of break and continue statements in C?
37. What are the uses of break and goto statements in C?
38. What are the uses of goto and continue statements in C?
39. Explain nested-if?
40. Explain if-else-if ladder?
41. Explain switch case?
42. Explain nested-if?
43. Explain nested for loops?
44. What is an array?
45. What is a String variable?
46. What is a pointer variable?
47. What are void wild pointers?
48. What are header files?
49. What is meant by String handling library?
50. What is meant by recursion?
  
51. Mention commonly used symbols in flowchart.
52. What is the purpose of  symbol in flowchart ?
53. What is the purpose of  symbol in flowchart ?

54. What is the purpose of  symbol in flowchart ?
55. What is the use of  symbol in flowchart ?
56. What is pseudocode?
57. Define control structure.
58. What is testing?
59. Define debugging.
60. What are the 3 control structures in C?
61. What is iteration?
62. Give 2 examples of selection control structure.
  
63. Mention any 2 formatted function.
64. Mention any 2 unformatted function.
65. What is the use of getchar() function ?
66. What is the use of putchar() function ?
67. Mention the function of getche().
68. Mention the function of putch().
69. Mention the function of gets().
70. What is the use of puts() function ?
71. What is the use of printf() function?
72. Define formatted function.
73. Define unformatted function.
74. What is library function?
75. Give any 2 examples of library function.
76. What is decision statement?
77. What is the use of if statement?
78. Define switch statement.
79. What is break in C?
80. What is the use of continue ?
81. Define goto in C.
82. What is syntax of if-else ?
83. Define entry controlled loop.
84. Define exit controlled loop.

85. What is for loop in C?
86. What is the syntax of for loop?
87. What is while loop in C?
88. What is syntax of while loop?
89. Define do while loop.
90. What is the syntax of do while loop.
91. Give the example of entry controlled loop.
92. Give the example of exit controlled loop.
93. Define nested if.
94. Define if-else-if ladder.
95. What is header file?
96. Give any 2 example of header files.
97. What is the use of comment in C ?
98. How to represent a comment in C ?

### **5 Mark questions**

99. Describe software
100. Explain the classification of computer languages.
101. Explain language translators
102. What are the characteristics of a good programming language?
103. Describe the qualities of a good programming language.
104. What are the advantages of a good programming language?
105. What are the factors for selecting a language?
106. Give short on assembler, compiler, interpreter.
107. Difference between compiler and interpreter.
108. Explain algorithm
109. Explain different types of algorithm
110. Give any example for algorithm.
111. What is flowchart ? Explain its symbols.
112. Give any example for flowchart.

113. Explain control structures in C.
114. What is the difference between sequence and iteration control structures in C.
115. What is the difference between selection and iteration control structures in C.
116. What are the factors for selecting a language?
117. What are the uses of control structures?
118. What are the purpose of program planning?
119. What are the characteristics of good programming language?
120. How are computer languages classified?
121. Explain language translators in detail?
122. List the arithmetic operators in C.
123. What are the rules for declaring and initializing variables in C?
124. What do you mean by the Scope of the variable?
125. What are the basic Data types supported in C Programming Language?
126. Define the bitwise operators in C language
127. Explain integer constants and real constants in C language with an example.
128. What is symbolic constant?
129. List out various relational operators?
130. Explain property of operators?
131. Explain operator precedence?
132. What are type modifiers?
133. List out various logical operators?
134. List out various arithmetic operators?
135. List out various Assignment operators & expressions?
136. List out various conditional operators?
137. Explain integer constants and real constants in C language with an example
138. Explain different formatted used in C?
139. Explain different unformatted functions used in C?
140. Explain nested-if with example?
141. Explain if-else-if ladder with example?
142. Explain switch case with example?
143. Explain nested-if with example?
144. Explain nested for loops with example?
145. Explain nested while loops with example?
146. Explain nested do-while loops with example?

147. Explain different commonly used library functions in C?
148. Write a C program to accept two numbers compute its sum and print the result.
149. Illustrate with an example the use of switch statement in C language
150. Explain counter controlled repetition with while loop. Give an example
151. What is the purpose of header files? Give examples.
152. What is sentinel controlled repetition? Give example.
153. How formatting input is done in scanf( ) statements? Give an example for each.
154. How can a string be converted to a number?
155. How can a number be converted to a string?
156. Show the different if control statements with an example for each.
157. What is array of pointers? Give an example
158. What are the string handling functions available in C? Write user defined functions for string copy, string compare and substring.
159. Write a C program that converts the given temperature in Fahrenheit to Celsius using the following conversion formula.  $F - 32 = C$
160. Write a C program to accept a number, check whether the number is a prime number or not and print the result
- 161.
162. Write a C program to print the first 'N' Fibonacci numbers. Note : The Fibonacci numbers are 0, 1, 1, 2, 3, 5, 8, 13, 21, 34,.....N where each number is the sum of the preceding two.
163. Write a C program to perform computation of  $\sin(x)$  as given below :  $\sin x = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \frac{x^9}{9!} - \dots$
164. Explain entry-controlled loop and exit-controlled loop with an example.
165. Write a C program to compute factorial of a given number using recursion.
166. Write a C program to store 'N' names in an array.
167. Write a C program to sort an array of 'N' numbers in ascending order.
168. Write a C program using pointers to find the length of a character string.
169. What is array of pointers? Explain with an example in C language
170. With example explain pointers to function.
171. Give an account on predefined symbolic constants
172. Write the purpose of size of operator in pointers
173. What is a function? Explain with an example.
174. Differentiate struct and union.
175. What is an array. How an array is initialized ?
176. Explain different array terminologies?
177. What are the characteristics of an array?
178. Define one-dimensional array with example?

179. Define two-dimensional array with example?
180. What are the features of Pointers?
181. Explain with example arithmetic operation using pointers?
182. How pointers used in one-dimensional array?
183. How pointers used in two-dimensional array?
184. Differentiate recursion vs. iteration.
185. Differentiate between formatted and unformatted functions.
186. Explain formatted function with example.
187. Explain unformatted function with example.
188. Differentiate between scanf() and print() with example.
189. Explain getchar() and putchar() with example.
190. Explain gets() and puts() with example.
191. Describe commonly used library functions.
192. Explain if statement with example.
193. Explain if-else statement with example.
194. Explain if-else-if ladder with example.
195. Explain nested if-else with example.
196. Describe break with example.
197. Write a program to display largest of 2 numbers.
198. Write a program to print largest among 3 numbers.
199. Describe continue statement with example.
200. Describe goto with example.
201. Explain 2 types of goto statement in C.
202. Differentiate between goto and continue statement .
203. Differentiate between break and continue statement.
204. Explain switch with example.
205. Write a program to display weekdays using switch.
206. Explain loop controls.
207. Explain for loop in C with example.
208. Describe while loop with example.
209. Explain do while loop with example.

210. Differentiate between entry controlled loop and exit controlled loop.
211. Write a program to display multiplication table.
212. Write a program to display Floyd triangle.
213. Write a program to display prime numbers upto a limit.
214. Write a program to print Fibonacci series.
215. Write a program to display factorial of a number.
216. Write a program to display Armstrong number.
217. Write a program to perform basic calculator operations.
218. What are the factors for selecting a language?
219. What are the uses of control structures?
220. What are the purpose of program planning?
221. What are the characteristics of good programming language?
222. How are computer languages classified?
223. Explain language translators in detail?
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234. What are type modifiers?
235. List out various logical operators?
236. List out various arithmetic operators?
237. List out various Assignment operators & expressions?
238. List out various conditional operators?
239. Explain integer constants and real constants in C language with an example

### **15 Mark questions**

240. Explain programming, computer language and language translators.



241. What is programming language? Explain its characteristics of a good programming language and factors for selecting a language.
242. Explain algorithm and its types .
- b) Write an algorithm for addition of 2 numbers.
243. a) Describe flowchart and its symbols .
- b) Write a flowchart for biggest of 2 numbers.
244. Explain control structures with example.
245. Explain formatted and unformatted functions.
246. Describe commonly used library functions in C with example.
247. Explain Decision statements in C.
248. Explain different types of if statements.
249. Explain break, continue, goto with example.
250. Describe switch statement.
251. Explain loop controls.
252. Explain for loop with example.
253. Explain while loop with example
254. Explain do while loop with example
255. a) Write a program to display Armstrong number.
- b) Write a program to display factorial of a number.
256. a) Write a program to display multiplication table.
- b) Write a program to display Floyd triangle.
257. Write a program to perform basic calculator operations using switch
258. Explain the different types of operators in C?
259. Explain in detail data types in C?
260. Explain the different types of tokens used in C?
261. Explain in detail Type conversion in C?
262. Explain different input and output functions in C?
263. Explain different formatted and unformatted functions used in C?
264. Explain different Decision making Statements in C?
265. Explain different looping Statements in C?
266. Explain different control structures used in C?

267. Explain different array operations performed using one-dimensional array?
268. Explain different array operations performed using two-dimensional array?
269. Explain in detail Strings and standard functions in C?
270. Explain features of pointers in detail?