

XI CA Model 2024 Answer Key Single Page (FY 146)

----- 1 Mark Answers----- 1 to 6 (any 5)

1. CPU/Processor
2. Linux/Windows/Ubuntu /(Any OS Name)
3. Tokens
4. #
5. Repeater
6. Google/yahoo/bing/ask/(any search engine)

----- 2 Mark Answers----- 7 to 18 (any 9)

7. Binary- Base 2 ,Decimal -- Base 10
Octal- Base 8, Hexa Decimal - Base 16 (any 2)
8. **ASCII**-American standard code for information interchange, 7bit code, represent characters in English keyboard (any 2 point)
9. Mouse, Keyboard ,Light Pen, Joystick
(or any **4 input device** names)
10. a) **coding**: Writing program instruction using HLL,
(b) **Translation**: Convert HLL to machine language
11. 'a' : character literal,
"a" : string literal
12. **IDE**-integrated Development environment /Definition.(1 mark) Eg: Geany (1 mark)
13. **Unary** :Operator with Single operand
Eg: ++ , -- , unary + ,unary -
14. i++, ++i, i=i+1, i+=1 (any 2)
15. i=1;
while(i<=100)
{
cout<<i;
i++;
}

16. a) **FTP**: File Transfer protocol/definition
b) **DNS**: Domain Name System /Definition
17. **Any 2** topology diagram (**star, bus, ring, mesh**)
18. leads to automation of govt services, strengthens the democracy ,more transparency , saves unnecessary visits,(or any 2 valid)

----- 3 Mark Answers----- 19 to 29 (any 9)

19. **Functional block diagram** with **Input Unit, CPU, Storage, Output Unit**
20. **RAM**-Random Access memory, temporary, fast , volatile, stores temp OS and programs data.
ROM: Read only, non volatile, slow, store boot info.
21. a. syntax error
b. Logical error
c. Run time error
22. Any three flowchart symbols (start/stop, input/output, process, decision, flow lines, connector etc)

23. **Cascading** : continuous use of input/output Operators in I/O statement
eg: cin>>a>>b>>c;
cout<<"sum is"<<a+b+c;

24. Note on **any three datatypes** (int, float, void, char, double)

25. a. Convert one datatype to another is type conversion

b) **Implicit(compiler it self) ,Explicite (by programmer)**

```
26. #include <iostream>
using namespace std;
int main()
{   int a,b,c, sum;
    float avg;
    cout<<"Enter three numbers: ";
    cin>>a>>b>>c;
    sum=a+b+c;
    avg=sum/3.0;
    cout<<"Sum of numbers = "<<sum;
    cout<<" average = "<<avg;
}
```

27. Computer Viruses, Hacking ,Phishing, Denial of Service, Man in the middle (or any 3 with explanation)
28. email advantages : Fast ,Easy ,Attachment, Environment Friendly ,Any where Any time (or any 3 valid points)
29. E-Book Reader , E-Text, Educational TV Channels
Online Chat ,E Content(or any 3 valid names/applications)

----- 5 Mark Answers----- 30 to 32 (any 2)

30. a. **Language processor**: It translates programs written in high level language or assembly language into its equivalent machine language. (2)

b. **Assembler**: It converts assembly language into machine language.

Interpreter: It converts a high level language program into machine language line by line.

Compiler: It converts the whole high level language program into machine language at a time. (3)

31. a. initialisation ,test condition ,updatation, body of loop (2 mark)

b. **Entry controlled loop**

1. condition before loop body
2. loop will run only if condition is true
eg: for, while

Exit controlled loop

1. condition after loop body
2. loop will run at least once even condition false
eg: do while
(3)

32. a. Modem converts digital signal to analog and vice versa (1)

b. MAC Address (1)

c. Resource sharing , Communication, Reliability, Price-performance ratio , Scalability (3)