

Frequently Asked Questions (FAQs)

Class XI (Academic Session 2018-19) Computer Science (New Syllabus)

1. Which Version of Python should be preferred?

Ans: Version 3.x. Preferably 3.6.4 and above.

2. From where Python can be downloaded?

Ans: Python Language is an open source language, so you can easily and freely download Python from the Internet. For installing python, log on to the portal www.python.org/downloads

3. Is there any tutorial that will help to learn Python?

Ans: Yes. Refer to official Python tutorial at <https://docs.python.org/3/tutorial/>

4. Programming should be done through interactive mode or script mode?

Ans: In both the modes.

5. Are User defined functions included in the syllabus?

Ans: The concept of user defined functions are to be taken up in class XII and not in XI.

6. Should we categorize data types prescribed in the syllabus as mutable and immutable?

Ans: Yes

7. Do we use library functions to perform string manipulations / sorting/ searching etc.?

Ans: Students should be encouraged to develop a program without using library functions. But at the same time they should also know the use of operations prescribed in the syllabus. Questions should be framed from either of the methods and marked accordingly.

8. Whether nested loop is in syllabus or not?

Ans: Yes, the concept of nested loop has to be taught to the students but not in too much detail for class XI. They should be able to perform the operations like sorting (insertion and bubble), searching, tables etc. and finding output using nested loops.

9. Is Exception handling covered in the syllabus?

Ans: No, in class XI, students should be able to identify and take remedial action. It is required that students should be made aware of various types of errors like syntax, logical and runtime errors. Inserting breakpoints can help them in efficient analysis of the code.

10. Is IPO cycle covered in the syllabus?

Ans: Yes

11. What types and categories of memory are to be discussed?

Ans: Primary memory, Secondary memory, Cache memory with emphasis on need of each type of memory.

12. What should be covered in description of mobile system?

Ans: Only make them aware about different Mobile Operating Systems. For example, Android, IOS etc.

13. What should be covered under the topic Operating System?

Ans: Types (Single User, Multi User, Real Time, Time Sharing , Multitasking and Multiprocessing) and basic functions (Processor management, Memory management, File management and I/O management) in brief. Some commonly used operating systems may also be discussed.

14. Is the structure and working of secondary memory devices to be explained in detail?

Ans: No, students should be able to identify the storage devices and describe the storage capacity.

15. Which number systems should be taught?

Ans: Decimal, Binary, Octal and hexadecimal.

16. Should number system conversions be taught?

Ans: Yes, from any number system to another.

17. Should I teach them to make truth tables for simple boolean expressions?

Ans: Yes

18. What needs to be covered during the practical periods for Unit-2?

Ans: Students may be made familiar with various peripheral and memory devices. They may also be shown different parts of the machine /system like SMPS, processor, motherboard, hard disk, CD drive, RAM etc.

19. Which SQL software is to be used?

Ans: My SQL

20. Whether the concept of domain, tuple, attribute, degree and cardinality of relational database should be given?

Ans: Yes

21. Whether candidate keys and alternate keys are to be explained or not ?

Ans: Yes.

22. Which type of Join operations to be discussed?

Ans: Equi Join

23. Which data types of SQL should be used?

Ans: The data types to be included are: CHAR, VARCHAR, VARCHAR2, DECIMAL, NUMERIC/ NUMBER/ INT, FLOAT and DATE.

24. What all categories of SQL commands are to be covered?

Ans: Only DDL (CREATE, DROP, ALTER) and DML (SELECT, INSERT, DELETE, UPDATE) commands.

25. Is any constraint to be discussed while creating a table?

Ans: Yes. Primary key, NULL and NOT NULL should be covered.

26. Whether the SELECT command with WHERE clause (with different operators) concept is to be given or not? If yes, name the operators.

Ans: Yes. The different operators are: Arithmetic(+, -, *, /), Relational (<, <=, >, >=, =, !=), logical (NOT, AND, OR), BETWEEN ..AND, IN ,LIKE.

27. Whether the Aggregate functions, Group by Clause, Having Clause and Order by Clause in select command are in syllabus or not ?

Ans: No. They are all in class XII syllabus.

28. Is the topic of creation of indexes in the table is also to be covered?

Ans: No, just give the basic definition of indexing.

29. What is Mongo DB?

Ans. *Mongo DB* is an open-source, non-relational database developed by *Mongo DB, Inc.* *Mongo DB* stores data as documents in a binary representation called BSON . *MongoDB* , a leading NoSQL database, is built on an architecture of collections and documents. Documents comprise sets of key-value pairs and are the basic unit of data in *Mongo DB*.

30. Is there any difference between SQL and NoSQL?

Ans. SQL databases are primarily called as Relational Databases (RDBMS); whereas NoSQL database are primarily called as non-relational or distributed database. ... SQL databases have predefined schema whereas NoSQL databases have dynamic schema for unstructured data.

31. In how much detail Mongoddb should be covered?

Ans. Mongoddb should only have a brief mention and need not be taken up technically in depth as it will create a confusion in the learner's mind. We are already teaching them to form and use structured data using MySQL.

32. Has the topic of antivirus software to be discussed with the students?

Ans: Only introduction of antivirus may be given to the students along with names of some popular antivirus software.

33. Is the topic of Cyber ethics to be covered?

Ans: Yes, it can be discussed under cyber trolls and bullying section.

34. Are the topics of Digital signature, Digital certificates, Public key and Private Key be discussed with the students under identity verification section?

Ans: No

35. Up to what level secure connection need to be discussed with the students?

Ans: Only the significance of password protection on the connection and advantages of https over http needs to be discussed with the students under this section.

36. Are students supposed to know about Cyber Laws?

Ans: Students may be made aware about the existence of Cyber Law. This topic will be covered in detail in class XII.

37. Are students to be made aware about basic steps of setting Privacy and Security in a browser in order to ensure safe browsing?

Ans: Yes, it's very much required to make students aware about at least basic steps of setting privacy and security in a browser.

38. What topics are to be covered under identity protection?

Ans: Common threats of identity theft and need to protect identity on the cyber world, Imposters Profile (making fake profiles by putting up real picture and details) needs to be covered under identity protection.

39. What threats are to be covered under malware section?

Ans: Viruses, Worms, Trojans, Adware

40. Up to what level Eavesdropping and phishing needs to be discussed with the students?

Ans: Only the concept with real life case studies need to be discussed.

41. Is the concept of cookies to be discussed with the students?

Ans: Yes, it is to be discussed under required Privacy and Security settings on the browser.