Frequently Asked Questions (FAQs)

Class XI (Academic Session 2018-19)
Informatics Practices (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. **Should we categorize data types prescribed in the syllabus as mutable and immutable?**
   Ans: Yes

6. **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.

7. **Do we use library functions to perform string manipulations / 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. **How to compute standard deviation?**
   Ans: Import statistics and then use the through library functions - stddev() / pstdev()

9. **Are Python modules to be created and then imported?**
   Ans: Yes, students should create small modules and then import them in any python code / script.

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. **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.

13. **What should be covered in description of mobile system?**
    Ans: Only make them aware about different Mobile Operating Systems. For example, Android, IOS etc.

14. **What is to be covered in the topic 'transition from calculator to computer'?**
    Ans: Discuss all generations of computers

15. **Which data type should we preferably use to create Data Frame?**
    Ans: Dictionary

16. **Are Panda data structures mutable or immutable?**
    Ans: All Pandas data structures are value mutable (can be changed) and except Series all are size mutable. Series is size immutable.

17. **What has to be covered in the topic missing data and missing value?**
    Ans: The definition of both to be covered. Use of library functions- isnull() , notnull() and fillna() to find/fill missing values.

18. **Is there any tutorial that I can refer to understand Pandas better?**
    Ans: Yes, you can refer to https://pandas.pydata.org/pandas-docs/stable/basics.html and other online tutorials.

19. **Is there any installation guidelines that I can refer to understand installing Python with Pandas in an easy way?**
    Ans: Yes, pl refer the separate attachment for the same.

20. **Which SQL software is to be used?**
    Ans: My SQL

21. **Whether the concept of domain, tuple, attribute, degree and cardinality of relational database should be given?**
    Ans: Yes

22. **Whether candidate keys and alternate keys are to be explained or not ?**
    Ans: Yes.

23. **Which type of Join operations to be discussed?**
    Ans: Equi Join

24. **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 .

25. **What all categories of SQL commands are to be covered?**
    Ans: Only DDL (CREATE, DROP, ALTER) and DML (SELECT, INSERT, DELETE, UPDATE) commands.

26. **Is any constraint to be discussed while creating a table?**
    Ans: Yes. Primary key, NULL and NOT NULL should be covered.

27. **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.

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. **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.

30. **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.

31. **Is the topic of Cyber ethics to be covered?**
    Ans: Yes, it can be discussed under cyber trolls and bullying section.

32. **Are the topics of Digital signature, Digital certificates, Public key and Private Key be discussed with the students under identity verification section?**
    Ans: No

33. **What is to be covered in the sub topic, 'Secure Connections'?**
    Ans: The student should know the definition of secure connection, basic measures to be taken for having a secure internet connection and a secure WiFi connection

34. **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.

35. **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.

36. **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.

37. **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.

38. **Does the student need to learn the steps for identity verification?**
   Ans: The general steps should be taught but the importance of identity verification should be also be well explained to the students. Example of KYC verification may be given to the students.

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.