

**SAMPLE QUESTION PAPER**  
**Class X**  
**Information Technology (402)**

**Max. Time: 2 Hours**

**Max. Marks: 50**

**General Instructions:**

1. Please read the instructions carefully.
2. This Question Paper consists of **21 questions** in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A – Objective Type Questions (24 Marks):**
  - (i) This section has 05 questions.
  - (ii) Marks allotted are mentioned against each question/part.
  - (iii) There is no negative marking.
  - (iv) Do as per the instructions given.
7. **SECTION B – Subjective Type Questions (26 Marks):**
  - (i) This section has 16 questions.
  - (ii) A candidate has to do 10 questions.
  - (iii) Do as per the instructions given.
  - (iv) Marks allotted are mentioned against each question/part.

**SECTION A : OBJECTIVE TYPE QUESTIONS**

**1. Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**

- (i) When it is difficult to communicate with someone who is not willing to talk or express their feelings and views it means there is a/an .....  
(a) Culture Barrier (b) Interpersonal Barrier  
(c) Physical Barrier (d) Language Barrier (1)

**Ans.** (b) Interpersonal Barrier

- (ii) Kartik's computer is running very slow, hangs and often restarts. He is very confused and tensed as he is working on a very important assignment. Kartik's friends gave him the following suggestions. Identify who has given him a genuine suggestion.  
(a) Radha: Restart your machine  
(b) Ishan: Install reliable antivirus software and update  
(c) Amar: Don't use Pen Drive  
(d) Sam: Install free antivirus from net (1)

**Ans.** (b) Ishan: Install reliable antivirus software and update

- (iii) ..... refers to focusing human efforts for maintaining a healthy body and mind capable of better withstanding stressful situations.  
(a) Self-Motivation (b) Stress Management  
(c) Self-Awareness (d) Self-Regulation (1)

**Ans.** (b) Stress Management

- (iv) High expectations from self can leave with chronic anxiety and stress, thus leading to ..... stress.  
(a) Physical (b) Emotional  
(c) Mental (d) Financial (1)

**Ans.** (c) Mental

- (v) Which of the following is/are a myth about Entrepreneurship?
- (a) Need a lot of Money
  - (b) Must have a great Idea
  - (c) Should know everything about business
  - (d) All of these

**Ans.** (d) All of these

- (vi) Name the organization that has the Sustainable Development Goals?
- (a) UNICEF
  - (b) League of Nations
  - (c) United Nations
  - (d) World Health Organization

**Ans.** (c) United Nations

## 2. Answer any 5 out of the given 6 questions

(1 × 5 = 5 marks)

- (i) Which one is not the tab of the insert index table window of Writer Document?

- (a) Entries
- (b) Background
- (c) Style
- (d) Row

**Ans.** (d) Row

- (ii) In the custom styles, each ..... field on the Structure line represents a blank space in a document.

- (a) Black
- (b) White
- (c) Blue
- (d) Yellow

**Ans.** (a) Black

- (iii) Saurabh has made an advertisement in Digital Document. He is facing difficulty in positioning the images within the text. Suggest him how he can adjust the image?

- (a) Wrap text
- (b) Crop
- (c) Alignment
- (d) Layout

**Ans.** (a) Wrap text

- (iv) A ..... is a collection of records that store data in Mail Merge.

- (a) Data Source
- (b) Main Document
- (c) Document
- (d) Merge Field

**Ans.** (a) Data Source

- (v) To increase the contrast of an image, ..... option is used in a document.

- (a) Smooth
- (b) Sharpen
- (c) Aging
- (d) mosaic

**Ans.** (b) Sharpen

- (vi) ..... provide internet access by transmitting digital data over wires of a local telephone network.

- (a) ISP
- (b) DSL
- (c) Dial-up connection
- (d) Modem

**Ans.** (b) DSL

## 3. Answer any 5 out of the given 6 questions

(1 × 5 = 5 marks)

- (i) ..... is specifically designed to minimize the results according to set rules that we define in a spreadsheet.

- (a) Goal Seek
- (b) Scenario
- (c) Solver
- (d) Subtotal

**Ans.** (b) Scenario

- (ii) Sahil and his partners have created a list of their company employees in one of the spreadsheets in the office. Now the rest of the task they want to complete from home. Which option should they use to access the same Spreadsheet from home?

- (a) Consolidate Worksheet (b) Link Worksheet  
(c) Merge Worksheet (d) Lock Worksheet (1)

**Ans.** (b) Link Worksheet

- (iii) ..... can help to clarify the relation between cells while using “Multiple Operations”.

- (a) Detective (b) Solver  
(c) Navigation (d) Hyperlink (1)

**Ans.** (b) Solver

- (iv) Identify the part of a Spreadsheet using which a user can manage multiple sheets.

- (a) Status Bar (b) Sheet Tab  
(c) Formula Bar (d) Worksheet Area (1)

**Ans.** (b) Sheet Tab

- (v) Spreadsheet software can find the changes by ..... sheets.

- (a) Changing (b) Comparing  
(c) Renaming (d) Editing (1)

**Ans.** (b) Comparing

- (vi) At the bottom of each worksheet, left tab indicates the ..... of the worksheet in a workbook.

- (a) Size (b) 3 Type  
(c) Name (d) Color (1)

**Ans.** (c) Name

#### 4. Answer any 5 out of the given 6 questions

(1 × 5 = 5 marks)

- (i) It enables users to view, enter, and change data directly in database objects.

- (a) Report (b) Query  
(c) Form (d) Database (1)

**Ans.** (c) Form

- (ii) There are ..... types of relationships in a table of a database.

- (a) One (b) 3  
(c) 4 (d) Many (1)

**Ans.** (b) 3

- (iii) A Relational database uses ..... commands which is a standard user application that provides an easy programming interface for database interaction.

- (a) Access (b) Python  
(c) SQL (d) Protocol (1)

**Ans.** (c) SQL

- (iv) Suraj wants to create a database for his clients. For this purpose, he needs to store the email IDs of his clients. Which datatype should he use to accomplish this purpose?

- (a) Numeric (b) Varchar  
(c) Binary (d) Boolean (1)

**Ans.** (b) Varchar

- (v) Geet has written a SQL query in SQL view. But he doesn't know how to execute the query using keyboard keys. Suggest him the shortcut key to complete the task.

- (a) Enter (b) Ctrl + E  
(c) Space bar (d) F5 (1)

**Ans.** (d) F5

(vi) A table can have only ..... Primary key in a database.

- (a) 1 (b) 2  
(c) 3 (d) Many (1)

**Ans.** (a) 1

**5. Answer any 5 out of the given 6 questions**

**(1 × 5 = 5 marks)**

(i) ..... key is an accessibility feature that assists people having difficulty in using keyboard and mouse.

- (a) Guide (b) Sticky  
(c) Serial (d) Home (1)

**Ans.** (c) Serial

(ii) Anaisha is a wildlife photographer. She wants to create her website where she can update the pictures and discuss about different events, reviews, announcements, news, etc. Suggest her a suitable option to complete the task.

- (a) Blog (b) E-Mail  
(c) Instant Messaging (d) Mail Merge (1)

**Ans.** (a) Blog

(iii) Which of the following is not a web browser?

- (a) Safari (b) Internet Explorer  
(c) Google (d) Firefox (1)

**Ans.** (c) Google

(iv) Which of the following is the best example of a strong password?

- (a) 9412356789 (b) 14Hd{[]\$ \_Sb10  
(c) HarryPotterSeries (d) 14Oct2004 (1)

**Ans.** (b) 14Hd{[]\$ \_Sb10

(v) Bharat has set up his company with 20 computers in a building. He wants to connect all the computers together. Which type of Network will be the best for this purpose?

- (a) LAN (b) WAN  
(c) PAN (d) MAN (1)

**Ans.** (a) LAN

(vi) IP stands for .....

- (a) International Protocol (b) Internet Protocol  
(c) Intranet Protocol (d) Interpersonal Protocol (1)

**Ans.** (b) Internet Protocol

**SECTION B : SUBJECTIVE TYPE QUESTIONS**

**Answer any 3 out of the given 5 questions on Employability Skills**

**(2 × 3 = 6 marks)**

**Answer each question in 20 – 30 words.**

**6.** What are the learning objectives of communication? (2)

**Ans.** Learning objectives of Effective communication are:

1. Sending, receiving and understanding the message or information
2. Development of Interpersonal Skills
3. To express effectively with maximum efficiency

**7.** Why do we say that an entrepreneur should be open-minded? (2)

**Ans.** The smartest and most successful people welcome new ideas and diverse perspectives, allowing them to see more opportunities ahead of them and better solutions to problems. Open-minded entrepreneurs are able to strategize better, because they listen to varying opinions and look at problems through multiple lenses.

8. How is self-regulation connected to the ability to work independently? (2)  
**Ans.** The ability to work independently can be enhanced by being self-regulated. Self-regulation guides independent individuals as it helps them to consider long-term consequences rather than just transient feelings. It leads to a responsible and a value-driven behaviour. It teaches self-control and well-directed efforts to reach the goal. Self-regulation includes discipline that helps in consistent efforts to move towards the goal.
9. How can we prevent computer against attack by viruses. (2)  
**Ans.** We can prevent the computer against attack of viruses by installing proper antivirus, enabling the firewall, scan external devices before using on other computer, by avoiding emails that are suspicious or not known to us, should be very careful while downloading files or any programs from the internet, etc.
10. “Green economy promotes sustainable development”. Justify the statement. (2)  
**Ans.** The focus of green growth strategies is to ensure that natural assets can deliver their full economic potential on a sustainable basis. That potential includes the provision of critical life support services – clean air and water, and the resilient biodiversity needed to support food production and human health.

**Answer any 4 out of the given 6 questions in 20 – 30 words each (2 × 4 = 8 marks)**

11. What do you understand by anchoring in Word Processor? (2)  
**Ans.** Anchoring refers to the reference point for the graphics. This point could be the page or frame where the object is, paragraph or even a character. An image always has an anchor point.  
(Answer in Libre Office and Open Office both are acceptable.)
12. What do you mean by Sorting in a Spreadsheet? (2)  
**Ans.** Sorting is the process of arranging data into meaningful order so that one can analyze it more effectively. For example, you might want to arrange sales data by calendar month so that you can produce a graph of sales performance.  
(Answer in Libre Office and Open Office both are acceptable.)
13. State any four etiquettes to be followed while chatting on the internet. (2)  
**Ans.** The etiquettes to be followed while chatting on the internet are:  
(i) Message should be short and to the point.  
(ii) Always introduce yourself by name if your screen name doesn't reflect it.  
(iii) Always ask if the other person has time to chat first, regardless of how important you think what you have to say is, it's not going to be well received if the recipient is busy.  
(iv) Always avoid offensive language, insults or personal attacks. Never type in all capital letters as it is considered shouting online.
14. How is Goal Seek different from Solver in a Spreadsheet? (2)  
**Ans.** Goal Seek determines what values needs to be inputted in a cell to achieve the described result in a formula cell as it allows varying the value for one cell whereas Solver can solve equations that uses several variables, so it can be used to determine what values need to be entered in multiple-input cells to achieve the described result.
15. Differentiate between a primary key and foreign key. (2)  
**Ans.** A primary key is a unique value that identifies a row in a table, whereas a foreign key identifies a column or set of columns in one (referencing) table that refers to a column or set of columns in another (referenced table). A table can have only primary key but a table can have multiple foreign keys.
16. What is the importance of healthy lifestyle? Give any four points related to it. (2)  
**Ans.** A healthy lifestyle helps to keep and improve people's health and well-being. A healthy lifestyle includes:  
(i) Healthy eating habits.  
(ii) Physical activities.  
(iii) Stress management  
(iv) Sound sleep

Answer any 3 out of the given 5 questions in 50–80 words each.

(4 × 3 = 12 marks)

17. What do you understand by the term Table of Contents? List the characteristics of a good 'Table of content' in a word processor. (4)

**Ans.** The Table of Contents is a snapshot of the headings and page numbers in your document and does not automatically updates itself as you make changes. It acts as a map for the users.

A good table of content has the following characteristics:

- It should be easy to read and simple to use.
- It should be organized and formatted properly.
- It must be accurate and easily accessible.
- It should be given after the title and copyright page.

(Answer in Libre Office and Open Office both are acceptable.)

18. Explain the term 'Scenarios' in relation to the Spreadsheets with example. (4)

**Ans.** Scenarios are a tool to test "What-if" questions. Each scenario is names and can be edited and formatted separately. When you print the spreadsheet, only the content of the currently active scenario is printed. A scenario is essentially a saved set of cell values for your calculations. You can easily switch between these sets using the navigator or a drop-down list which can be shown beside the changing cells. For example, if you wanted to calculate the effect of different interest rates on investment, you could add a scenario for each interest rate and quickly view the results. Formulas that rely on the values changed by your scenario are updated when the scenario is opened. If all your sources of income used scenarios, you could efficiently build a complex model of your possible income.

19. Explain different kinds of online threats. (4)

**Ans.** There are different kinds of online threats:

- Phishing:** Phishing attacks use fake communication, such as an email, to trick the receiver into opening it and carrying out the instructions inside, such as providing a credit card number.
- Malware:** Malware is malicious software such as spyware, ransomware, viruses, and worms. Malware is activated when a user clicks on a malicious link or attachment, which leads to installing harmful software.
- Password Attacks:** With the right password, a cyber attacker has access to a wealth of information. Social engineering is a type of password attack that data insider defines as "a strategy cyber attackers use that relies heavily on human interaction and often involves tricking people into breaking standard security practices."
- Email Spoofing:** It is the forgery of an email header so that the message appears to have originated from someone or somewhere other than the actual source.

20. Explain the term "Referential Integrity". Why is it important in a database? (4)

**Ans.** Referential Integrity is used to maintain the accuracy and consistency of data in a relationship. In Base, data can be linked between two or more tables with the help of primary key and foreign key constrains.

Referential Integrity is important in DBMS as:

- It prevents the entry of duplicate data.
- It prevents one table from pointing to a non-existent field in another table.
- It prevents consistency between "Partnered" tables.
- It prevents the deletion of a record that contains a value referred to by a foreign key in another table.
- It prevents the addition of a record to a table that contains a foreign key unless key unless there exists a matching primary key in the linked table.

21. Consider the following Vendor table and write the queries for the following:

Table Datesheet

Sub_code	Sub_Name	DateofExam	Days
E001	English	11-03-2021	Monday
H002	Hindi	15-03-2021	Friday
S003	Social Sci.	18-03-2021	Monday
S004	Science	21-03-2021	Thursday

- (i) Write a SQL command to display the records in ascending order by date of exam.
- (ii) Write a query to display the above date sheet.
- (iii) Write a query to display the subject name and date of the exam held on 'Monday'.
- (iv) Write a SQL command to display the date of exam and Sub\_Name of Science subject. (4)

**For visually impaired candidates.**

Write a short note on the following:

- (i) DBMS (ii) Database Server
- (iii) Data Integrity (iv) Record

- Ans.** (i) `Select*from Datesheet order by DateofExam`  
 (ii) `Select*from Datesheet`  
 (iii) `Select Sub_Name, DateofExam from Datesheet where Days= 'Monday'`  
 (iv) `Select Sub_Name, Date of Exam from Datesheet where Sub_Name = 'Science'`

**(For visually impaired candidates.)**

- (i) A database management system is a software package with computer programs that controls the creation, maintenance, and use of a database. It allows organizations to conveniently develop databases for various applications. A database is an integrated collection of data records, files, and other objects. A DBMS allows different user application programs to concurrently access the same database. Well known DBMSs include Oracle, IBM DB2, Microsoft SQL Server, Microsoft Access, PostgreSQL, MySQL, FoxPro, and SQLite.
- (ii) Database servers are dedicated computers that hold the actual databases and run only the DBMS and related software. Typically, databases available on the database servers are accessed through command line or graphic user interface tools referred to as Frontends; database servers are referred to as back-ends. Such type of data access is referred to as a client-server model.
- (iii) Data integrity means that the data is accurate and consistent in the database. Data Integrity is very important as there are multiple databases in a DBMS. All of these databases contain data that is visible to multiple users.
- (iv) A record is a set of information (made up of fields) stored in your database about one of the items.