

INFORMATION TECHNOLOGY (SUBJECT CODE - 402)

Sample Question Paper for Class X (Session 2022-2023)

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

Q. 1	Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)	
i.	Stress Management covers all the tolls that alleviate _____ stress, which could otherwise prove to be lethal disease. a. Low b. Chronic c. Temporary d. Anxiety	1
ii.	_____ provide us with energy and motivation to achieve our goals. a. Stress b. Distress c. Eustress d. Depression	1
iii.	To be a successful entrepreneur, you must be _____. a. Goal - Oriented b. Rich c. Technology Driven d. Visionaries	1
iv.	Azim H Premji is the chairman of _____. a. Infosys b. Wipro Limited c. Mahindra Group d. Hero Corp	1
v.	CUI refers to _____. a. Character User Interface b. Clever User Interface c. Common User Interface d. Coding User Interface	1
vi.	Windows OS is based on _____ user interface. a. Graphical b. Character c. Data d. Virtual	1

Q. 2	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	Which of these is a psychological factor at work that can prove Hazardous? a. Conflicts at workplace b. Lasers c. Presence of allergens d. None of these	1
ii.	Manmade disasters include _____. a. Civil Disturbances b. Earthquakes c. Tsunami d. None of these	1

iii.	A key strategy to prevent fire us to remove _____. a. Heat and Oxygen b. Heat and fuel c. Heat, Oxygen and Fuel d. None of these	1
iv.	The process of selling and buying products over the internet is called _____. a. Online Shopping b. E- banking c. E- reservation d. None of these	1
v.	The Qumana blog _____ window helps you to add a blog. a. Helper b. Both a and b c. Manager d. None of these	1
vi.	Before publishing your first blog post, you must first _____ your site. a. Publicise b. Customise c. Activate d. Bookmark	1

Q. 3	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	TOC contains all the entries as _____. a. Objects b. Hyperlink c. Item d. BookMark	1
ii.	The _____ document is creating by merging the main document with the data source fields. a. Merged b. Combined c. Collated d. Blank	1
iii.	Which of the following extensions is enclosed with a template? a. .docm b. .dotx c. .docs d. .dox	1
iv.	Mail merge feature can help you in printing multiple address _____ on a single sheet. a. Stickers b. Objects c. Labels d. Details	1
v.	Which category of styles will you click to set the font and size of text in a paragraph? a. Tablet Styles b. Paragraph Styles c. Character Styles d. Indent Styles	1
vi.	_____ is a combination of title, heading, and paragraph styles. a. Style Set b. Font Set c. Color Set d. Index Set	1

vi.	The _____ data type is used to store date or time or combination of date and time. a. Date/Time b. Calendar c. Interval d. Table	1
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SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)

Answer each question in 20 – 30 words.

Q. 6	What is the definition of stress?	2
Q. 7	What is external self – awareness?	2
Q. 8	What is an operating system? What are the basic functions of an operating system?	2
Q. 9	What is the relationship between an entrepreneur and a society?	2
Q. 10	Why should an entrepreneur be open minded?	2

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

Q. 11	What is Table of Contents? What is its significance in a document?	2
Q. 12	Mention any two operations that can be performed using Macros in a spreadsheet.	2
Q. 13	What do you mean by Hyperlinks in Spreadsheets? Give the two different types of Hyperlinks that can be used in Spreadsheets.	2
Q. 14	Differentiate between DBMS and RDBMS.	2
Q. 15	What is Phishing?	2
Q. 16	In which situations online shopping could be useful? Write any two popular e-commerce websites.	2

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

Q. 17	Explain the main steps of Mail Merge in a digital document. How is it useful in printing mailing labels?	4
Q. 18	What are the ‘What-if Analysis’ tools used in a spreadsheet? Explain them briefly.	4
Q. 19	Seema’s father does not have much idea about the internet. Explain the following to him. a. What do you mean by a browser? b. Define the following: i. WiMax ii. Hotspot c. Differentiate between LAN and WAN. d. What is a Blog? Write any two features of a blog.	4
Q. 20	Sudheer is not clear about the use of a database. Explain to him the following to give him a better understanding of the DBMS concepts. 1. Describe any four advantages of DBMS. 2. State the relationship and difference between a primary and foreign key. 3. Define the structure of a table. 4. What is the difference between a tuple and attribute?	4
Q. 21	What is SQL? What is the use of SELECT command of SQL? Discuss any two DDL and DML command with their syntax.	4

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MARKING SCHEME SAMPL PAPER (SESSION 2022-2023)

CLASS X

Max. Time: 2 Hours

Max. Marks: 50

SECTION A: OBJECTIVE TYPE QUESTIONS

Q. No.	QUESTION	Marks
Q. 1	Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)	
i.	b. Chronic	1
ii.	a. Stress	1
iii.	a. Goal - Oriented	1
iv.	b. Wipro Limited	1
v.	a. Character User Interface	1
vi.	a. Graphical	1
Q.2.	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	a. Conflicts at workplace	1
ii.	a. Civil Disturbances	1
iii.	c. Heat, Oxygen and Fuel	1
iv.	c. Manager	1
v.	c. Activate	1
vi.	a. Objects	1
Q. 3	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	a. Objects	1
ii.	a. Merged	1
iii.	b. .dotx	1
iv.	c. Labels	1
v.	b. Paragraph Styles	1
vi.	a. Style Set	1
Q. 4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	b. Sort data	1
ii.	a. Consolidate	1
iii.	c. G2:M12	1
iv.	c. both a and b	1
v.	a. Insert>Comment	1
vi.	a. By Value	1
Q. 5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	c. Tables	1

ii.	b. Relational Database Management System	1
iii.	a. Primary	1
iv.	a. Queries	1
v.	b. Create table	1
vi.	a. Date/Time	1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Q. No.	QUESTION	Marks
	Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks) Answer each question in 20 – 30 words.	
Q. 6	Stress refers to a “physical, mental, or emotional strain or tension”.	2
Q. 7	External self-awareness, means understanding how other people view us. It requires us to gather insights from the world around us to understand what others think of us.	2
Q. 8	An operating system is a program that acts as an interface between the system hardware and the user. All the working of a computer system depends on it. It performs functions like handling memory, processes, the interaction between hardware and software, etc.	2
Q. 9	As businesses prosper the impact the businesses create on society also increases. It is due to entrepreneurial activity that the society is provided with goods and services. In turn, society provides a market for products and services provided by the entrepreneur.	2
Q. 10	Someone open-minded is willing to accept or learn about new ideas and opportunities. That's why open-mindedness is such an essential trait for an entrepreneur. Open-minded entrepreneurs are able to strategize better because they can listen to different viewpoints and look at a problem through different angles.	2
	Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)	
Q. 11	A table of contents is a list of chapters at the beginning of a book. A table of content helps in navigating through a document by providing associated page numbers and direct links to various headings available on those pages. It gives the reader a bird’s eye view of the document. A TOC is like an outline. At a glance, you can see how a document will flow from one topic to the next. A document with a TOC looks more organized and professional	2
Q. 12	Macros are used to perform different types of operations in a Spreadsheet: 1. Formatting settings to be applied repeatedly in a spreadsheet. 2. Sorting Data. 3. Applying mathematical functions/formulas	2
Q. 13	Hyperlinks can be used to jump to a different location from within a spreadsheet and can link to other parts of the current file, to different files or even to web sites. Relative And Absolute Hyperlinks: A relative link has a URL with an address relative to its location and will stop working if the start and target locations change relative to each other. An absolute link has a URL address which is a complete path and will stop working only if the target is moved.	2

Q. 14	DBMS	RDBMS	2
	DBMS stores data as file.	RDBMS stores data in tabular form.	
	Data elements need to access individually.	Multiple data elements can be accessed at the same time.	
	No relationship between data.	Data is stored in the form of tables which are related to each other.	
	Normalization is not present.	Normalization is present.	
	It stores data in either a navigational or hierarchical form.	It uses a tabular structure where the headers are the column names, and the rows contain corresponding values.	
	It deals with small quantity of data.	It deals with large amount of data.	
	Data redundancy is common in this model.	Keys and indexes do not allow Data redundancy.	
Q. 15	Phishing is a type of cyber-attack where an attacker sends a fraudulent message designed to trick a person into revealing sensitive information to the attacker or to deploy malicious software on the victim's machine. The messages appear to come from a reputable source and are usually sent through email.		2
Q. 16	Online shopping can be useful when a product or service is not available in the local market but is available online, a customer does not have sufficient time to visit stores or a product in the store is more expensive than it is online. Example: amazon.in, flipkart.com		2
	Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)		
Q. 17	<p>The mail merging process generally requires the following steps:</p> <ol style="list-style-type: none"> 1. Creating a main document and the template. 2. Creating a data source. 3. Defining the merge fields in the main document. 4. Merging the data with the main document. 5. Saving/exporting <p>For labels, you would construct a source document containing the addresses of the people you wish to print labels for and a main document that controls where each person's name, address, city, state etc. to go on the label. The main document would also contain information about how many labels are on a page, the size of each label, the size of the sheet of paper the labels are attached to, and the type of printer you will use to print the labels. Running a mail merge with the two files results in a set of labels, one for each entry in the source document.</p>	4	

Q. 18	<p>i) Using “What If” Scenarios: Scenarios are a tool to test “what-if” questions. Each scenario is named, 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 a saved set of cell values for your calculations.</p> <p>ii) Using Goal Seek: Usually, you run a formula to calculate a result based upon existing values. By contrast, using the Goal Seek option, you can discover what values will produce the result that you want.</p> <p>iii) Using the Solver: Solver is a more elaborate form of Goal Seek. The difference is that the Solver deals with equations with multiple unknown variables. It is specifically designed to minimize or maximize the result according to a set of rules that you define. Each of these rules sets up whether an argument in the formula should be greater than, lesser than, or equal to the value you enter.</p>	4
Q. 19	<p>a. A browser is a software program that is used to explore, retrieve, and display the information available on the World Wide Web.</p> <p>b.</p> <p>i. WiMAX is a wireless communications standard designed for creating metropolitan area networks. WiMAX operates similar to Wi-Fi, but at higher speeds over greater distances and for a greater number of users.</p> <p>ii. A hotspot is a physical location where people can access the Internet, typically using Wi-Fi, via a wireless local area network with a router connected to an Internet service provider.</p> <p>c. LAN is a computer network established within a small geographic area, such as a house, office or buildings. WAN, on the other side, is a computer network that covers a broad geographical area. LANs allow users to transfer the data faster, whereas WANs have a comparatively slower data transfer rate.</p> <p>d. A blog (weblog) is an online journal or informational website run by an individual, group, or corporation that offers regularly updated content (blog post) about a topic.</p> <p>Features: It presents information in reverse chronological order and is written in an informal or conversational style.</p>	4
Q. 20	<p>1. Advantages of DBMS: Improved data sharing, Improved data security, Better data integration and Minimized data inconsistency.</p> <p>2. A primary key is used to ensure that the value in the particular column is unique. The foreign key provides the link between two tables. A foreign key is a column or a set of columns in one table that references the primary key columns in another table.</p> <p>Difference:</p> <ul style="list-style-type: none"> • A table allows only one primary key but can allow more than one foreign key. • The primary key doesn’t allow null values and cannot be deleted. Foreign key accepts multiple null values and can be deleted. <p>3. In relational databases and flat file databases, a table is a set of data values that is stored in the form of vertical and horizontal rows, with a cell being the unit where a row and column intersect.</p> <p>4. A tuple means a row and an attribute means a column.</p> <ul style="list-style-type: none"> • A row is a horizontal alignment of data, while a column is vertical. • A column or attribute is a set of data values of a particular type, one for each row of the table. A row also called a Record or Tuple represents a single, data item in a table. • Each row in a table represents a set of related data, and every 	4

	row in the table has the same structure.	
Q. 21	<p>SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in a relational database. SQL is the standard language for Relational Database System. All the Relational Database Management Systems (RDMS) like MySQL, MS Access, Oracle etc. use SQL as their standard database language.</p> <p>The SQL SELECT statement is used to fetch the data from one or more database tables and returns this data in the form of a result table. These result tables are called result-sets.</p> <p>A) DDL: DDL is Data Definition Language</p> <p>Commands:</p> <p>i CREATE - CREATE database <databasename></p> <p>ii. DROP - DROP database <databasename></p> <p>B) DML: DML is Data Manipulation Language</p> <p>Commands:</p> <p>i. INSERT - INSERT INTO <tablename> (column1, column2, column3) VALUES (value 1, value2, value3);</p> <p>ii. DELETE - DELETE FROM <tablename> WHERE column= 'VALUE' ;</p>	4