

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 and 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	Which of the following one is a mobile operating system? a. Linux b. Unix c. Mac OS d. iOS	1
ii	Stress cannot be _____ but _____. a. Cured, practiced b. Eradicated, managed c. Learnt, forgotten d. Avoided, welcomed	1
iii	Shobha decides to sell her company tyres in Sri Lanka. They do not sell and she has a loss. She apologises to the people who work for her. She says she will plan better next time. She _____ a. takes responsibility for her mistakes b. thinks before deciding c. does not give up d. is creative	1
iv	_____ operating system is used on desktop computers, laptops, where a user can operate on several programs at the same time. a. Distributed b. Multi-user, single-task c. Real time d. Single-user, multi-task	1
v	Converting weakness into strength and strength into an exceptional talent is known as a. Self-awareness b. Self-confidence c. Self-reliance d. Self-regulation	1
vi	Rahul has started a new business to fulfill the needs of the people in his community and Deepak works for a private organisation. Based on this, which of the following is true? a. Both Rahul and Deepak are self-employed. b. Rahul is self-employed, while Deepak is wage-employed. c. Deepak is self-employed, while Rahul is wage-employed. d. Both Rahul and Deepak are wage-employed.	1

[illegible]

vi	The _____ is automatically loaded when the document is opened. a. Spreadsheet Macro Templates c. Macro Standard Library	b. Spreadsheet Macro Functions d. Macro Recorder	1
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Q. 4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)		
i	Identify websites that offer blog service for free. a. WordPress b. Tumblr c. Talker d. Both a and b		1
ii	In which field can you change the title of the TOC? a. Title b. Outline c. Character Style d. Title and Outline		1
iii	Kalpesh wants to store city names in one of the fields for his table in the database. Which of the following data types will be useful for him? a. Boolean b. Integer c. Varchar d. Binary		1
iv	Which of the following is not a correct way to reduce stress? a. Physical exercise b. Maintaining a healthy diet c. Focusing on negative aspects of life d. Sleeping well		1
v	Macros are especially useful to _____ a task. a. do b. complicate c. repeat d. simplify		1
vi	The absolute link will stop working if a. the target is moved b. the start and target locations change the relative of each other c. the target is intact d. the target is copied		1

Q. 5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)		
i	Which of the following fields of table “Book” can act as the primary key? a. Book_number b. Subject c. Price d. Author_name		1
ii	_____ is not a feature of instant messaging. a. Send messages b. Connect users c. Transfer files d. Provide internet connection		1

iii	_____ analysis in spreadsheets is used to make changes in cell values to see how these changes affect the outcome of formulas in a cell. a. Formula b. What-if c. Decision d. Computing	1
iv	Which of the following is not database software? a. OpenOffice base b. MySQL c. Oracle d. MS Publisher	1
v	The character style in a word processor includes a. Alignment, tab stops, line spacing, and borders b. Font size, bold, italics, underline, etc. c. Wrapping types, border, background, and columns d. Line, area, transparency, and other attributes	1
vi	WAN stands for _____. a. Wide Area Network b. Wirelessly Available Network c. Wired Area Network d. Wide Access Network	1

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	State any two qualities required for working independently.	2
Q.7	What is the meaning of stress management? State some situations which cause stress.	2
Q.8	How does an antivirus work? Name any two popular antivirus applications.	2
Q.9	What do entrepreneurs do when they run their business?	2
Q.10	“Entrepreneurs are born, not made.” Is this a myth or reality? Explain.	2

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

Q.11	Write the difference between pre-defined templates and custom templates in a word processor.	2
Q.12	What is the advantage of using spreadsheet macros?	2
Q.13	Write the difference between relative hyperlink and absolute hyperlink?	2
Q.14	What is a numeric data type in a database? Give examples of any two numeric data types in a database table.	2
Q.15	Write in brief about any two common impairments that may affect computer users.	2
Q.16	What is the importance of using secure passwords during online transactions? Give one example of a strong password.	2

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

Q.17	Inderjeet has to consolidate data form different branches of her office and also analyse the data later. Help her understand the following features of spreadsheets that she can use to make her work easier. i. Subtotals ii. Data Consolidation iii. Goal Seek. iv. Solver	4																								
Q.18	Kailash has to send invitations for the opening ceremony of his father’s new shop. His friend suggested that he should use the Mail Merge feature of Word Processor. Help him understand more about this feature by explaining the following. a. Advantage of using mail merge. b. The three main elements of the mail merge process: <ul style="list-style-type: none">• Main Document• Data Source• Merge Fields	4																								
Q.19	Consider the following table: Payroll <table><tr><th>Employee_id</th><th>Name</th><th>Department</th><th>Salary</th></tr><tr><td>E001</td><td>Shweta Mehta</td><td>Accounts</td><td>45000</td></tr><tr><td>E002</td><td>Sonali Kapoor</td><td>Sales</td><td>48500</td></tr><tr><td>E003</td><td>Uday Sharma</td><td>Accounts</td><td>35000</td></tr><tr><td>E004</td><td>Krishna Mehra</td><td>Sales</td><td>30000</td></tr><tr><td>E005</td><td>Sarika Shaikh</td><td>Sales</td><td>0</td></tr></table> a. What will be the primary key of the table? b. Write SQL commands for the following: <ul style="list-style-type: none">i. Display Name and Department of employees with salary more than 40,000.ii. Update the salary of Employee with id E005 as 35000.iii. Display the Name, Salary, and Bonus of all employees. The bonus is calculated as 10 percent of the salary.	Employee_id	Name	Department	Salary	E001	Shweta Mehta	Accounts	45000	E002	Sonali Kapoor	Sales	48500	E003	Uday Sharma	Accounts	35000	E004	Krishna Mehra	Sales	30000	E005	Sarika Shaikh	Sales	0	4
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E005	Sarika Shaikh	Sales	0																							

Q20	<p>Vandana wants to create a database to keep track of ticket sales for a drama theatre. She wants to manage a record of program-wise ticket sales and the earnings from the ticket sales. Help her understand database concepts better by briefing her about the following concepts:</p> <ol style="list-style-type: none"> What is DBMS? Explain any one advantage. Explain about one-to-many relationship between tables. Explain the concept of primary key. Name any two database programs which can be used to create a table and store the data as per the requirement. 	4
Q.21	<p>Mohan specialises in health and nutrition and wants to connect to the youngsters of today to share his knowledge. He is currently travelling and may have access to internet sometimes. You could help him understand about blogs to enable him to share his knowledge that could benefit a lot of youngsters by explaining about the following concepts.</p> <ol style="list-style-type: none"> What is meant by a blog? Explain the following terms: <ol style="list-style-type: none"> www 3G, 4G, or 5G connections Mention two features of a blog. Mention the advantage of offline blogging. 	4

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MARKING SCHEME FOR CLASS X (SESSION 2022-2023)

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 - i. This section contains 16 questions.
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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.	d. iOS	1
ii.	b. Eradicated, managed	1
iii.	a. takes responsibility for her mistakes	1
iv.	d. Single-user, multi-task	1
v.	a. Self-awareness	1
vi.	b. Rahul is self-employed, while Deepak is wage-employed.	1
Q.2.	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	c. High Contrast	1
ii.	b. Report	1
iii.	d. MS Excel	1
iv.	c. b – c – d – a	1
v.	b. Group	1
vi.	b. Composite Primary Key	1

Q. 3	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	c. Headings	1

ii.	c. Attribute	1
iii.	c. Sticky Keys	1
iv.	b. False	1
v.	a) Comments	1
vi.	c. Macro Standard Library	1
Q. 4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	d. Both a and b	1
ii.	a. Title	1
iii.	c. Varchar	1
iv.	c. Focusing on negative aspects of life	1
v.	c. repeat	1
vi.	a. the target is moved	1
Q. 5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	a. Book_number	1
ii.	d. Provide internet connection	1
iii.	b. What-if	1
iv.	d. MS Publisher	1
v.	b. Font size, bold, italics, underline, etc.	1
vi.	a. Wide Area Network	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	The two qualities are: Self-awareness Having conscious knowledge of your own self, capabilities, feelings and one’s own character is called self-awareness. It helps individuals to chart their ways for working independently. They become aware of their strengths and weak points and work accordingly. They try to focus on strengths to become successful in various arenas of life. Self-motivation Self-motivated individuals have an inner urge to do something, achieve their goals without any external pressure for award or appreciation. It is a life skill and must be necessarily developed.	2
Q. 7	Stress management refers to focusing human efforts for maintaining a healthy body and mind capable of better withstanding stressful situations. (Second part will depend on the individual)	2
Q. 8	To prevent our computer from being infected with virus, we should install antivirus software, run it periodically, and keep it updated so that it can scan and remove new viruses. Antivirus software is a program designed to detect and remove malicious programs from the computer. Some examples of antivirus software are McAfee Virus Scan, and Quick Heal.	2

Q.9	An entrepreneur starts a new business with an eye on what he identifies as an unmet need in the market and works to fulfil it. In the process, new jobs are created which is one of the primary goals of economic development. Entrepreneurs play a key role in increasing the standard of living in a community.	2
Q. 10	This is a myth. Most entrepreneurs are not born; they learn to become entrepreneurs. Every aspiring entrepreneur should remember that starting your own business is not an easy decision, and you must understand that it will change your life in many ways.	2
	Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)	

Q. 11	A template is a model that we use to create other documents. A word processor provides in-built or pre-defined templates, which we can choose while creating a new document. If we do not choose a pre-defined template to create a new document, a word processor creates the document from the default template for that type of document. We can also create our own template or custom template as a model for our document.	2
Q. 12	A macro is a saved sequence of commands or keystrokes that are stored for later use. It helps us by saving time and increasing efficiency in carrying out repetitive tasks. Also, once it is created and executed properly, it can be used again and again without a chance of making errors.	2
Q. 13	An absolute link contains the full address of a location, including the protocols and the domain name for the URLs and entire paths for document names. It will stop working if the target is moved. A relative link contains only a partial address and will stop working if the start and target locations change relative to each other.	2
Q. 14	Numeric data types are used for describing numeric values for the field used in the table of a database. For example: Boolean data type that contains two values, either Yes/No, True/False, Yes/No. Integer values that contain integer values between -2^{31} to $+2^{31} - 1$.	2
Q. 15	Impairments could be: i) Cognitive impairments and learning disabilities, such as dyslexia, attention deficit hyperactivity disorder, or autism. ii) Visual impairment, such as low-vision, complete or partial blindness, and color blindness.	2
Q. 16	Online threats can increase the chances of users getting compromised. We can reduce the risks by using strong passwords. A combination of at least 8 alphanumeric and special characters could be used for creating a password that is not so easy to crack or guessed by other users. Do not keep passwords, such as your favorite colour, friends' names, etc., that can be easily guessed. Example: Rocks@12!	2
	Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)	

Q. 17	i. Subtotals: It totals/adds data arranged in an array—that is, a group of cells with labels for columns and/or rows. Using the Subtotals dialog box, you can select arrays, and then choose a statistical function to apply to them. ii. Data Consolidation allows you to gather together your data from separate worksheets into a master worksheet. In other words,	4
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	<p>the Data Consolidation function takes data from a series of worksheets or workbooks and summaries it into a single worksheet that you can update easily.</p> <p>iii. Goal Seek: Usually, you run a formula to calculate a result based upon existing values. By contrast, using Goal Seek option, you can discover what values will produce the result that you want.</p> <p>iv. Solver is an elaborate form of Goal Seek. The difference is that Solver deals with equations with multiple unknown variables. It is specifically designed to minimise or maximise 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>	
Q. 18	<p>a. Mail Merge is a way to take a letter you’ve written and send it to a large number of people, personalising it with information about them so they might think that you typed that letter personally for them. A Mail Merge can also be a quick way to take a list of people’s mailing addresses and generate labels or envelopes with the address for a different person on each label or envelope.</p> <p>b. Main document contains the text you wish to send to the recipients. Data Source contains address of the recipients, it is associated with the main document, so that its field names can be used in the main document, and it becomes easy to merge address with the main document.</p> <p>Merged Document is the result of merging the data source and the form document.</p>	4
Q. 19	<p>a. Employee_id</p> <p>b.</p> <ol style="list-style-type: none">Update Payroll Set Salary = 35000 where Employee_id = “E005”;Select Name, Department from Payroll where salary > 40000Select Name, Salary, Salary * (10/100) from Payroll	4
Q. 20	<p>a. A database management system is a software package with computer programs that controls the creation, maintenance, and use of a database. It allows organisations to conveniently develop databases for various applications. A database is an integrated collection of data records, files, and other objects.</p> <p>Data redundancy is prevented in a database as there is a single database and any change in it is reflected immediately. Because of this, there is no chance of encountering duplicate data.</p> <p>b. One to Many Relationship</p> <p>In this relationship, one of the tables must have primary key column. It signifies that one column of primary key table is associated with all the columns of associated table.</p> <p>c. A primary key is a unique value that identifies a row in a table. Primary keys are also indexed in the database, making it faster for the database to search for a record.</p> <p>d. Example: MS SQL and Oracle</p>	4
Q. 21	<p>a. A blog is a discussion style site used by non-technical or technical users for creating personal web pages. Blogs are similar to an online personal diary.</p> <p>b. i. World Wide Web (WWW or W3, commonly known as the</p>	4

	<p>Web), is a system of interlinked hypertext documents accessed via internet. With a web browser, one can view web pages that may contain text, images, videos, and other multimedia, and navigate between them via hyperlinks and is simple to use.</p> <p>ii. 3G, 4G, or 5G - a set of standards used for mobile devices, mobile telecommunication services, and networks.</p> <p>c. Features: You can type content, add photos, videos, etc., to the blog. You can comment on posts published by others.</p> <p>d. Offline blogging: If you do not have an active internet connection, you can create blogs using a blog application and publish the blog whenever internet connectivity is available.</p>	
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