

## SHRI GULABRAO ESHWARA KHANDVE EDUCATIONAL FOUNDATION,

## JAGADGURU INTERNATIONAL SCHOOL, LOHEGAON PUNE

PERIODIC TEST-II EXAM (2025-26) SET A

Name of the Student: Class: X & Div: A Roll No.:		Subject: Information Date: 08/10/2025	Technology (402)
Time: 90 Minutes		Marks Obtained	
		Total Marks	40
 Invigilator	 Examiner	 	 oderator

## **General Instructions:**

- **1.** Please read the instructions carefully.
- **2.** This Question Paper consists of 10 Questions with two sections: Section A & Section B.
- **3.** Section A Has Objective type questions whereas Section B contains Case-based questions.
- **4.** All the questions are compulsory.

**SECTION A: (OBJECTIVE TYPE QUESTIONS)** 

Q.1)	Answer any 4 out of the given 5 questions (1 x 4 =	4 marks)
i)	Amina studies diligently to improve her grades because she wants to feel proud of her achievements and also earn a scholarship. What type of motivation is this?  a) Internal b) External c) Both internal and external d) Not specific	1
ii)	Rajesh launches a new app, but it fails to attract users and he faces financial losses. He gathers his team to discuss the failure, takes accountability for the oversight, and assures them that he will conduct thorough market research before the next launch. He  a) Takes the responsibility for his mistakes c) Does not give up b) Thinks before making a decision d) Is innovative	1
iii)	A user notices their computer is running much slower than usual and the hard drive light is constantly active even when no programs are open. Which maintenance task is most likely needed to improve performance?  a) Defragmenting the hard disk b) Updating the graphics card driver c) Replacing the RAM modules d) Performing a system restore	1
iv)	Naseer uses his family's money to set up a chain of schools to cater to children living in slums in Indian cities. This is an example of?  a) Women entrepreneurship b) Social entrepreneurship c) Agricultural entrepreneurship d) Rural Entrepreneurship	1
v)	Trisha is always tense during exam time. She is sincere and a studious student, but the thought of exams create anxiety in her. As per given situation which stress management technique she should use?  a) Yoga b) Vacation with family c) Both a) and b) d) Ensure increased learning	1

Q.2)	Answer any 5 out of the given 6 questions- (1*5= 5 m	arks)
i)	A cleaning crew leaves an open container of strong liquid floor cleaner with harsh fumes near the air conditioning vent in the server room. The strong fumes circulate throughout the office, causing some employees to experience headaches and irritation in their eyes and throat. What is the source of this hazard?  a) Biological Hazard  b) Ergonomic Hazard  c) Chemical Hazard  d) Fire Hazard	1
ii)	The school principal, Ms. Verma, is creating a detailed annual report. She wants all main section headings to be **18pt, Bold, Centered**, and a specific scientific term in the body of each report to be **Italic and Red** to draw attention. Which two types of styles should she use for the headings and the specific term, respectively, to ensure consistency and efficiency?  a) Character and Page Style  b) Paragraph and Character Style  c) Frame and List Style  d) Page and Paragraph Style	1
iii)	Mr. Khan notices that a colleague's desk setup requires them to constantly twist their body to look at the monitor on the left while typing notes on the right. Over time, the colleague develops chronic pain in their lower back. Which type of hazard is the primary source of this issue?  a) Chemical Hazard  b) Electrical Hazard  c) Ergonomic/Physical Hazard  d) Biological Hazard	1
iv)	Mr. Sameer sees that the protective coating (insulation) on the power cord of a nearby water dispenser is cracked, exposing copper wires. What immediate and severe hazard does this exposed wiring represent?  a) Psychological Hazard  b) Electrical Hazard  c) Mechanical Hazard  d) Fire Hazard	1
V)	A school annual prospectus is being prepared. The school logo needs to appear as a subtle, faint watermark behind the main text on every page. Which **Text Wrapping** setting should be applied to the logo image to ensure the text flows completely over it, making the logo appear in the background?  a) Optimal Wrap  b) Wrap through  c) Wrap Left  d) Edit Contour	1
vi)	After generating the TOC, Neha edits the newsletter and moves the 'Careers' section to a new page, changing its page number from 8 to 10. When she looks at the TOC, it still shows page 8. What action must she perform?  a) Delete the TOC and manually type the new page number.  b) Re-run the entire TOC generation wizard from scratch.  c) Save the document and re-open it.  d) Right-click the TOC and select 'Update Index/Table' (or equivalent command).	1

Q.3)	Answer any 5 out of the given 6 questions- (1*5= 5 marks)	
i)	Neha inserts a photo of a new gadget. She wants the photo to always stay next to the specific paragraph describing the gadget, even if she adds or removes text elsewhere in the document. Which anchoring option should she choose for the image?  a) To Page b) To Paragraph c) As Character d) To Frame	1
ii)	Ravi has noticed that every time he opens his study materials, he starts to feel breathless, his palms sweat, and he becomes irritable. He recognizes that these are the physical and mental symptoms of a specific internal state. Which component of self-management is Ravi demonstrating by identifying these changes in himself?  a) Self-Motivation b) Self-Discipline c) Self-Awareness d) Self-Regulation	1
iii)	To combat his procrastination and overwhelming feeling, Ravi decides to apply a time management technique. He lists all his subjects and assigns them categories: Urgent, Important, Not Urgent, and Not Important. Which time management principle is Ravi implementing?  a) Creating SMART goals. b) Prioritizing Tasks c) Developing Intrinsic Motivation. d) Using Extrinsic Rewards	1
iv)	Ravi decides that passing the board exams with a high score is not just for his parents' pride, but because he genuinely enjoys the challenge of problem-solving and wants to get admission to a specific, challenging Science program. This desire to do something for the joy and satisfaction it brings is an example of:  a) Extrinsic Motivation  b) Self-Discipline  c) Intrinsic Motivation  d) Positive Stress (Eustress)	1
v)	Rohan has numerous project files, photos, and downloaded software scattered across his desktop and default 'Downloads' folder. He decides to create separate, organized locations for each type of file (e.g., D:\IT_Projects, E:\Family_Photos). This practice is an example of which key ICT skill?  a) System Update Management b) Software Installation c) Effective File and Folder Management d) Data Encryption	1
vi)	Shreya wants to create a Title Page with unique formatting—specifically, a different page border, background color, and no header/footer—before the main content begins. Which type of style must she apply to the first page to achieve this distinct layout?  a) Character Style b) Paragraph Style c) Frame Style d) Page Style	1

Q.4)	Answer the following questions $(1 \times 5 = 5 \text{ mark})$	xs)
i)	Ravish's hard disk (HDD) is nearly full, and he finds that opening large files takes	1
	significantly longer than before. He remembers his teacher mentioning that files on an	
	HDD can get stored in non-contiguous blocks over time. What maintenance utility	
	should he run to fix this issue and improve file access speed?	
	a) Disk Cleanup b) Task Manager c) Disk Defragmenter d) System Backup Tool	
ii)	Vijay is about to install a major operating system update. Before starting, he copies all	1
	his critical documents and project files onto an external hard drive, disconnected from	
	the PC. Which essential ICT safety practice is Vijay performing?	
	a) Firewall Configuration b) Hardware Troubleshooting	
	c) Data Backup d) Password Protection	

iii)	Rishi notices his PC is slowing down dramatically, and pop-up ads appear even when he is not using a web browser. He suspects his system has been infected by a malicious program. What is the most reliable utility software he should use immediately to scan for and remove this threat?		
	a) Disk Defragmenter b) Antivirus c) Word Processor d) System Restore		
iv)	By default, the automatic Table of Contents might only show headings formatted with "Heading 1" and "Heading 2." You also want to include sub-sections formatted with your custom "Sub-Heading" Paragraph Style in the TOC at the third level. How would you achieve this?  a) Manually type the sub-sections into the TOC. b) Change the "Sub-Heading" style to "Heading 3." c) Modify the TOC settings to include your custom "Sub-Heading" style at Level 3. d) The TOC cannot include custom styles.	1	
v)	Seema noticed that the local IT market lacked affordable, high-quality computer repair	1	
	services, forcing people to travel far. She invested her savings in tools and started		
	offering home-visit repair services after her college hours. By spotting this gap and acting		
	on it, which key entrepreneurial quality did Seema exhibit?		
	a) Risk Aversion b) Initiative c) Self- Motivation d) Followership		

Q.5)	Answer the following questions $(1 \times 5 = 5 \text{ mas})$	rks)
i)	A village craftswoman, Lakshmi, develops a unique website to sell her products worldwide, incorporating 3D models of her crafts that no other artisan has done. The global sales bring her community significant recognition and wealth. Lakshmi's use of a novel method to promote traditional art is an example of which entrepreneurial quality?  a) Decision-making b) Innovation and Creativity c) Leadership d) Perseverance	1
ii)	The database contains a table named `EMPLOYEE` with columns `EmpID`, `Name`,     `Department`, and `Salary`. The IT Manager needs to retrieve the names of all     employees who work in the 'HR' department. Which SQL query is correct?     a) SELECT Name FROM EMPLOYEE WHERE Department = 'HR';     b) SELECT Name FROM EMPLOYEE HAVING Department = 'HR';     c) SELECT Name WHERE Department = 'HR' FROM EMPLOYEE;     d) SELECT Name, Department FROM EMPLOYEE;	1
iii)	A table named `SCHOOL_BUS` is used to record daily bus status. It has columns `BusID` (Primary Key), `RouteNo`, and `Status` (which can be 'On Time', 'Delayed', or 'Cancelled'). The administrator wants to ensure that no entry ever uses a `RouteNo` value that does not exist in the master `ROUTES` table. Which type of constraint should be applied to the `RouteNo` column in the `SCHOOL_BUS` table?  a) Not Null b) Primary Key c) Foreign Key d) Unique	1
iv)	The `STUDENTS` table has columns `ID`, `Name`, and `DOB` (Date of Birth). The principal needs a list of all students sorted alphabetically by `Name`. If two students have the same name, they should be sorted by their `ID` in descending order. Which SQL clause and keywords should be used?	1

	a) GROUP BY Name, ID DESC c) SORT BY Name AS	C, ID DESC	
	b) ORDER BY Name ASC, ID DESC d) SORT ASC Name, S	ORT DESC ID	
v)	A table named `CUSTOMERS` has columns `CustID`, `Name`, and `	City`. The manager	
	wants to retrieve the names of all customers whose `City` is either 'Delhi' or		
	'Mumbai'. Which SQL operator should be used to combine these multiple conditions		
	efficiently?		
	a) AND b) OR c) LIKE d) IN		

## **SECTION B: (CASE BASED QUESTIONS)**

Answer any 4 out of the given 5 questions.

(4\*4= 16 marks)

	A company, <i>TechCorp</i> , maintains its employee records. Due to a legacy system design,	
	the file containing the basic employee details (Name, ID, Department) is stored in three	
	different folders on the network: one for the HR department, one for the Payroll	
	department, and one for the IT support team. Whenever a new employee is hired, the	
	file is copied into all three locations.	
	i) The situation described in the <i>TechCorp</i> case study, where the same file (containing	
	employee details) exists in multiple locations, directly leads to which of the following	
	issues? Mention the issue and justify the reason in few lines.	
	Ans	
Q.6)		2+2
	ii) An HR clerk updates an employee's street address in the file stored in the HR	
	department's folder but forgets to notify the Payroll and IT support teams. Which major	
	problem will this oversight immediately create for TechCorp's data management?	
	Mention the issue and justify your answer in few lines.	
	Ans	
	A regional sales manager, Mr. Gupta, needs to analyse his company's sales data. He is	
	specifically interested in finding:	
	1. A list of all customers who purchased a product with a price greater than	
Q.7)	\$500. 2. The total sales amount for the "Electronics" category for the last quarter.	2+2
Q.7)	3. The names and contact information of sales representatives who achieved sales figures above their monthly target.	2.2
	i) To officiently outract filter and combine this anguific targeted information from the	
	i) To efficiently extract, filter, and combine this specific, targeted information from the	
	main Customers, Products, and Sales Tables, which database object should Mr. Gupta	

	ii) He now wants to make this specific set of data (customers who purchased products over \$500) available to his team in a controlled, visually appealing way that restricts them from accidentally changing the source data, but allows for easy, screen-based browsing. Which database object would be the most appropriate tool to create an interactive, on-screen interface for reviewing and navigating this filtered set of data?	
	Mention the option and justify your answer.  Ans	
Q.8)	Ravi started a small, local business delivering fresh organic vegetables to homes.  Initially, his only mode of transport was a bicycle, and his business struggled to keep up with the demands of the city's busy roads and the need for faster delivery. After realizing he was losing customers due to slow service, he didn't give up. He spent three months researching efficient routing apps, saved money, and eventually purchased electric scooters for his delivery staff. He also designed a sturdy, thermally insulated bo for the vegetables to ensure freshness, even in traffic. His efforts led to a surge in positive customer reviews and doubled his daily orders.  i) Ravi's actions of researching efficient routing apps and designing a thermally insulated box are examples of? Justify your answer.  a) Optimism b) Self-confidence c) Problem-solving d) Motivation  Ans	
	ii) The use of electric scooters to solve the slow delivery problem is primarily an example of which function of an entrepreneur? Justify your answer.  a) Decision-making b) Innovation c) Communication d) Organization  Ans	
Q.9)	Prakash runs a small catering business in a city. He noticed the huge amount of food waste his business and others generated daily, most of which ended up in landfills. He decided to start a separate venture, "GoGreen Compost," where he collects organic	2+2

	converts it into high-quality organic manure. He sells this manure to nearby nurseries and urban gardeners. This initiative not only provides him with a new source of income but also significantly reduces the city's waste load and the need for chemical fertilizers.  i)) Prakash's business model of turning organic waste into organic manure primarily addresses which core component of Sustainable Development? Justify your answer  a) Social Equity b) Economic Growth c) Environmental Protection d) Technological Advancement  Ans	
	<ul> <li>ii) The knowledge and skills Prakash and his employees use to transform waste into a useful resource (manure) are examples of? Justify your answer.</li> <li>a) IT Skills</li> <li>b) Financial Skills</li> <li>c) Management Skills</li> <li>d) Green Skills</li> <li>Ans</li></ul>	
Q.10)	Aarav is the owner of a small manufacturing unit that produces garments. Concerned about rising electricity costs and environmental impact, he took the following steps:  1. He replaced all traditional factory lighting with LED bulbs. 2. He installed <b>sensors</b> to automatically switch off lights and machinery when a specific section of the factory is empty. 3. He optimized his machinery schedule to run during off-peak hours to save on tariffs. As a result, his factory's power consumption dropped by 30%, leading to massive cost savings and a reduction in his carbon footprint.  i) The reduction in the factory's operational costs and the boost to profitability align directly with which pillar of Sustainability? Justify your answer. a) Social Pillar b) Cultural Pillar c) Economic Pillar d) Environmental Pillar Ans	2+2
	ii) If Aarav decides to teach other small business owners in his industrial park how to implement similar energy-saving techniques, he is promoting? Justify your answer.  a) Competition b) Environmental Awareness c) Financial Trading d) Political Activism  Ans	