



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



PRE MID TERM : 2025-26 INFORMATION TECHNOLOGY (802)

Class: XII (SUBJECT-5)

Date: 02-08-2025

Admission No. :

Time : 1 hr.

Max Marks: 25

Roll No. :

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper contain two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. All questions of a particular section must be attempted in the correct order.
5. **SECTION A - OBJECTIVE TYPE QUESTIONS (07 MARKS):**
 - i. This section has 01 question.
 - ii. Marks allotted are mentioned against each question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
6. **SECTION B – SUBJECTIVE TYPE QUESTIONS (18 MARKS):**
 - i. This section has 14 questions.
 - ii. A candidate has to do 8 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

ANSWER KEY

SECTION A: OBJECTIVE TYPE QUESTIONS

Q.(1) Answer any 7 out of the given 10 questions :

(7 x 1 = 7)

- (i) In which phase of the web application creation is design of the application created ?
(a) Requirement Definition (b) Implementation
(c) **Design** (d) Testing
- (ii) What does the R in IRCTC stand for ?
(c) Robot (b) Rover (c) **Railway** (d) Rebel
- (iii) NICNET – A national satellite based computer network in India was launched in the year :
(a) 1986 (b) **1987** (c) 1990 (d) 1992
- (iv) Unit, integration and user acceptance are all forms of :
(a) Frontend development (b) Backend development
(c) Integration (d) **Testing**
- (v) Ravi has feelings of emptiness, abandonment and suicide. What type of personality disorder is this ?
(a) **Borderline** (b) Dependent
(c) Avoidant (d) Obsessive

- (vi) Mona is helping her sister to overcome a personality disorder. What should she do ?
 (a) Talk to her sister (b) Engage her in hobbies
 (c) Help her build confidence (d) **All of these**
- (vii) is the feeling of being overwhelmed or unable to cope with mental or emotional pressure.
 (a) **Stress** (b) Positive attitude (c) Self management (d) Motivation
- (viii) Formula in a Spreadsheet must begin with a sign.
 (a) \$ (b) @ (c) # (d) =
- (ix) Extension of an OpenOffice Calc file is
 (a) .doc (b) .odx (c) .odp (d) **.ods**
- (x) From any open component of OpenOffice, choosing File>New>Presentation will open the:
 (a) Writer application (b) Calc (c) **Impress** (d) Base

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 6 out of the given 10 questions:

(6 x 2 = 12)

Q. (2) What are the benefits of web-based applications ?

Ans. :

- (a) Round the clock accessibility
- (b) Across the globe accessibility
- (c) Provides platform for customers to connect with vendors from the comfort of their home.
- (d) Provision to integrate secure payment mechanism allowing visitors to pay through their debit or credit card
- (e) Web application have played a very important role in imparting education to students online.

Q. (3) What is E-Governance ? Name any two E-Governance sites of India.

Ans. : It stands for Electronic Governance. It refers to the usage of internet and communication technology tools. It allows citizens to access government services and information efficiently and effectively. It provides an online to manage and deliver government services, exchange information and engage with the public.

<https://www.india.gov.in>

<https://www.igod.gov.in>

<https://www.india.gov.in/e-governance-portal>

Q. (4) What is Online shopping ? Explain with example.

Ans. : Online Shopping is the process of buying goods or services over the internet using a smartphone, computer, or other digital device. Instead of visiting a physical store, customers can browse products online, compare prices, read reviews, and make purchases from the comfort of their home.

Example:

Suppose you want to buy a pair of shoes. You visit an online shopping website like Amazon or Flipkart, search for the shoes you like, select your size, add them to the cart, and make the payment using a debit card, credit card, UPI, or cash on delivery. The shoes are then delivered to your home.

Key Features of Online Shopping:

- Available 24/7
- Convenient and time-saving
- Offers a wide range of products
- Includes product reviews and ratings
- Allows home delivery and easy returns

Q. (5) Describe the following online course websites :

(a) Coursera

(b) Udacity

Ans. :

(a) Coursera

Coursera is an online learning platform that offers courses, certifications, and degrees in various subjects. It partners with top universities and organizations like **Stanford University, Yale, Google, and IBM** to provide high-quality content. Courses on Coursera often include video lectures, quizzes, assignments, and peer-reviewed projects. Many courses are free to audit, but a fee is charged for certificates.

Example Subjects: Data Science, Business, Computer Science, Arts, and more.

(b) Udacity

Udacity is an online platform focused mainly on **technology and career-oriented skills**, especially in fields like programming, artificial intelligence, data science, and cloud computing. It is known for its "**Nanodegree**" programs, which are intensive, job-ready courses designed in partnership with tech companies like **Google, Amazon, and Microsoft**. These courses often include hands-on projects and mentorship.

Example Programs: Machine Learning Engineer, Data Analyst, Full Stack Developer, etc.

Q. (6) Define Motivation. Explain any two types of motivation with the help of examples.

Ans. : It is defined as the drive required to engage in goal oriented behaviour. It is the inner urge to do something and self motivation is the ability to do what needs to be done without the influence or thrust from each other people or situations.

Physiological motivation : It is based on the physical needs to satisfy hunger or thirst.

Psychological motivations : It can be guided by need for achievement and need for affiliation.

Q. (7) What are personality disorders ? Write about any two such personality disorders.

Ans. : **Personality disorders** are a group of mental health conditions where a person's way of thinking, feeling, and behaving is significantly different from what is considered normal in society. These patterns are long-lasting, rigid, and can cause problems in relationships, work, and daily life.

Examples of Personality Disorders:

1. **Borderline Personality Disorder (BPD):** Intense emotions, fear of abandonment, and unstable relationships.
2. **Narcissistic Personality Disorder:** Extreme self-importance, need for admiration, and lack of empathy.

3. **Antisocial Personality Disorder:** Ignoring rules, lying, and manipulating others without guilt.

Personality disorders can be managed with therapy, counseling, and sometimes medication. Early diagnosis and treatment can help improve quality of life.

Q. (8) Define self motivation. Why is self motivation important ?

Ans. : Self-motivation is the ability to drive yourself to take action and achieve goals without needing external encouragement or pressure. It comes from an internal desire to improve, learn, or succeed.

Importance of Self-Motivation:

1. **Helps Achieve Goals:** It pushes you to work consistently towards your personal or professional goals.
2. **Builds Confidence:** Self-motivated people believe in their abilities and take initiative.
3. **Improves Performance:** It encourages focus, discipline, and productivity.
4. **Overcomes Challenges:** Helps in staying positive and determined even when facing difficulties.
5. **Promotes Growth:** Leads to continuous learning and self-improvement.

Q. (9) Define the following : Row and Column.

Ans. :

Row : A row is an arrangement of cells in a horizontal manner. It is numbered as 1,2,3,4.....

Column : A column is an arrangement of cells in a vertical manner. It is numbered as A,B,C....

Q. (10) Write the steps to protect the current workbook with a password.

Ans. :

Click Save as from File menu

Select Save with password

Click on save button

Set password in the dialog box

Confirm the password

Click on OK button

Q. (11) Explain the following Calc functions with the help of examples :

(a) Sum()

(b) Average()

Ans. :

(a) **SUM()** : It is used to find the total of numbers in a range of cells.

=SUM(A1:A5)

(b) **AVERAGE()** : It is used to find the average of numbers in a given range of cells.

=AVERAGE(A1:A5)

Answer any 2 out of the given 4 questions :

(2 x 3 = 6)

Q.(12) Give any three precautions that you must take while performing online transactions.

Ans. :

Use secure website

Do not use public computers and networks for making reservation as they can have malware

Do not use unsecured public wi-fi networks for making reservations as unsecured networks can expose your data to potential threats.

Keep software updated

Use strong and unique password

Q.(13) Give any three advantages of using a reservation system.

Ans. :

Automayion of booking system

A major workload reduced for the staff

Eliminates scope for error

Data generated by reservation system is stored and can be used to get insights on how the business is improving.

Management of resources allocation of staff and optimization of operations becomes easy.

Q.(14) What is Goal-setting ? Explain with the help of SMART acronym.

Ans. :

Goal-setting is the process of identifying something you want to achieve and planning steps to reach it. It helps provide direction, focus, and motivation in personal and professional life.

SMART Goals:

The **SMART** acronym is a popular method to set clear and achievable goals. It stands for:

- **S – Specific:**
The goal should be clear and well-defined.
Example: "I want to improve my math skills" is too vague. "I want to score 90% in my math exam" is specific.
- **M – Measurable:**
You should be able to track your progress and know when you've achieved the goal.
Example: "Read 20 pages daily" is measurable.
- **A – Achievable:**
The goal should be realistic and possible to achieve with effort.
Example: "Learn 10 new English words daily" is achievable.
- **R – Relevant:**
The goal should matter to you and align with your values or needs.
Example: A student aiming to improve study habits is working on a relevant goal.
- **T – Time-bound:**
The goal should have a deadline to stay focused and avoid procrastination.
Example: "Finish my project by the end of this week" is time-bound.

Q.(15) Write differences :

- (a) Sorting and Filtering
- (b) Max() and MIN() function
- (c) Active cell and Range of Cells

Ans. :

(a) Sorting and Filtering

Sorting	Filtering
Arranges data in a specific order (A-Z or Z-A, ascending or descending)	Displays only the rows that meet certain criteria
Affects the order of all records	Hides unwanted data temporarily
Commonly used to organize data alphabetically or numerically	Commonly used to view specific information
Example: Sorting names from A to Z	Example: Showing only rows with marks > 50

(b) MAX() and MIN() Function

MAX() Function	MIN() Function
Returns the highest value in a range	Returns the lowest value in a range
Used to find the maximum number	Used to find the minimum number
Example: =MAX(10, 20, 30) → 30	Example: =MIN(10, 20, 30) → 10

(c) Active Cell and Range of Cells

Active Cell	Range of Cells
A single cell that is currently selected	A group of two or more selected cells
Identified by a bold border	Identified by highlighting multiple cells
You can type or edit data in it directly	You can apply formatting or formulas to multiple cells
Example: A1 is active when selected	Example: A1:A5 is a range of 5 cells

***** ALL THE BEST *****