ARWACHIN BHARTI BHAWAN SR. SEC SCHOOL

CODING

CLASS-7 (CH.3)

A. Tick (✔) the correct option

1. Sorting in Excel arranges data:

   ✓b. In a specific order
2. Sorting data in ascending order means arranging it from:

   ✓b. *A to Z*
3. Filtering in Excel helps you:

   ✓b. see only specific data
4. Custom sorting allows:

   ✓b. Sorting by multiple columns
5. Conditional formatting:

   ✓b. Applies specific formatting
6. To remove a filter, you:

   ✓b. clear the filter

B. Fill in the blanks with correct words

1. Sorting can be done in **ascending** order.
2. We use **custom** sorting for multiple columns.
3. **Conditional** formatting highlights important data.
4. A **filter** can hide specific rows.
5. To arrange data from Z to A, you **sort** it in **descending** order.

C. Write T for true and F for false statements

1. Sorting can only be done alphabetically. → F
2. You can use multiple filters at the same time. → T
3. Conditional formatting changes cell values. → F
4. Filters hide rows that do not meet criteria. → T
5. Clearing filters deletes the data. → F

E. Answer the following questions in brief

1. Define sorting.
Sorting is the process of arranging data in a specific order, such as ascending or descending.

2. How do you apply a filter in Excel?
Select the data → click the **Data** tab → click **Filter** → choose the required filter option.

3. What does conditional formatting do?
Conditional formatting applies specific formatting to cells based on given conditions to highlight important data.

4. What is custom sorting?
Custom sorting allows data to be sorted using multiple columns or custom criteria.

5. How can you remove a filter?
Click on the **Filter** button again or choose **Clear Filter** from the Sort & Filter option

6. What is the difference between sorting and filtering?

Sorting:- Sorting arranges data in a specific order such as ascending or descending.
It changes the position of the data but does not hide any values.
Filtering:- Filtering shows only selected data based on conditions.
It hides the remaining data without changing its order.

7. Explain the steps to apply a filter in Excel.
   1. Select the data range.
   2. Click on the **Data** tab.
   3. Click on **Filter**.
   4. Select the required filter option from the drop-down list.

CLASS-7 (CH.10)

A. Tick (✓) the correct option

1. Which of the following is not a domain of AI?
   ✓c. Web Designing

2. What is the first step in data processing?
   ✓b. Data Collection

3. Which AI technology translates languages?
   ✓b. Language Translation

4. What does Computer Vision enable machines to do?
   ✓a. Interpret visual data

5. Which of the following is an ethical concern related to AI?
   ✓c. Bias and discrimination

B. Fill in the blanks with correct words

1. **Computer Vision** is a domain of AI that involves visual data.
2. In **Data Processing**, data is collected, cleaned and analysed.
3. **Natural Language Processing (NLP)** helps computers understand human language.
4. **Sentiment Analysis** is used to determine the emotional tone in text data.
5. AI systems use **Object Detection** to identify objects in images.

C. Write T for True and F for False

1. Self-driving cars use object detection technology. → T
2. NLP is used in language translation. → T
3. Data cleaning is an unnecessary step in data processing. → F
4. AI has no impact on job markets. → F
5. AI has no ethical concerns. → F

D. Answer the following questions in brief

1. What is Artificial Intelligence?
   Artificial Intelligence is the ability of machines to perform tasks that normally require human intelligence.
2. Define Natural Language Processing (NLP).
   Natural Language Processing is a branch of AI that helps computers understand and process human language.
3. What is Data Visualisation?
   Data visualisation is the graphical representation of data to make information easier to understand.
4. Mention one application of AI in transportation.
   Self-driving (autonomous) cars.
5. What is the role of AI in healthcare?
   AI helps in disease detection, medical diagnosis, and patient care.

6. Describe the process of data processing in AI.

Data processing in AI starts with data collection from various sources.
The collected data is then cleaned to remove errors and duplicates.
Next, data is analysed to find useful patterns and information.
Finally, the processed data is used for decision-making and predictions.

7. How does Computer Vision differ from NLP?

Computer Vision deals with images and visual data.
It helps machines recognise objects, faces, and patterns in images.
Natural Language Processing (NLP) deals with human language.
NLP enables machines to understand and respond to text or speech.