

PM SHRI KENDRIYA VIDYALAYA DHARMAPURI

AUTUMN HOLIDAY HOMEWORK (2026-27)

CLASS: 11 A | SUBJECT: COMPUTER SCIENCE (083)

AUTUMN BREAK ASSIGNMENTS & INSTRUCTIONS:

- Revise Iterative Statements (for loop, while loop, range, break, continue), Strings, and Lists with MCQs and Example Programs.
- Complete your CS Practical Lab Record :
- Students complete your Fair note up to the completed syllabus chapters.
- Study well for October monthly test.

PRACTICE QUESTION PAPER (OCTOBER MONTHLY TEST PREPARATION)

Topics: Strings, Lists & Iterative Statements | Level: Moderate | Time: 1 Hour | Max Marks: 25

SECTION A: 3-MARK QUESTIONS (MODERATE LEVEL)

Q1. Consider the following string:

text = 'Kendriya Vidyalaya Dharmapuri 2026'

Write Python statements using appropriate built-in string functions to:

- (a) Check whether the string ends with '2026' using `endswith()`.
- (b) Convert the entire string into uppercase using `upper()`.
- (c) Count how many times the character 'a' (lowercase) appears in text using `count()`. **[3 Marks]**

Q2. Carefully observe the following Python code snippet and write its exact output: **[3 Marks]**

```
msg = 'CBSE Exam 2026'
print(msg[0:4])
print(msg.isalnum())
words = msg.split()
print('#'.join(words))
```

Q3. Given two lists:

list1 = [10, 20, 30]

list2 = [40, 50]

Write Python statements to perform the following operations:

- (a) Concatenate list1 and list2 using the '+' operator into a new list named list3.
- (b) Extend list1 by adding all elements of list2 into it using the `extend()` method.
- (c) Replicate list2 three times using the '*' repetition operator. **[3 Marks]**

SECTION B: 5-MARK QUESTIONS (PROGRAMS)

Q4. Write a Python program that accepts a string from the user and performs the following tasks using iterative statements and string methods:

- (a) Count and display the total number of uppercase letters, lowercase letters, and digits present in the string.
- (b) Check and display whether the string is a palindrome (reads the same backwards and forwards) using string slicing.
- (c) Replace all blank spaces with an underscore ('_') using `replace()` and display the updated string. **[5 Marks]**

Q5. Write a Python program to perform the following operations on a numeric list:

- (a) Input 6 numbers from the user and store them in a list using a while loop and append().
- (b) Find and display the maximum, minimum, and mean (average) of the values in the list using max(), min(), sum(), and len().
- (c) Implement Linear Search: Accept a search element from the user, search for it sequentially in the list, and display its position (index) if found, or print 'Element Not Found'. **[5 Marks]**

SECTION C: CASE-BASED QUESTIONS (MODERATE LEVEL)

Q6 [Case-Based]. Case Study 1: Student Login ID & Security Validation

The school computer lab generates and validates student login usernames. A valid username must be alphanumeric and have no leading or trailing blank spaces.

Given a raw student login input string:

```
user_input = ' KVDharmapuri11A '
```

Answer the following sub-questions based on the above scenario:

- (a) Write the statement to remove all leading and trailing whitespace from user_input using strip() and assign it to clean_id.
- (b) Write the code statement to verify if clean_id consists only of alphanumeric characters using isalnum().
- (c) Write Python statements to check if the clean_id starts with 'KV' using startswith(), and display the length of clean_id using len(). **[3 Marks]**

Q7 [Case-Based]. Case Study 2: Annual Sports Day High Jump Tally

In the inter-house athletic competition, the heights (in cm) cleared by six finalists are recorded in a list:

```
jump_heights = [145, 152, 138, 160, 152, 148]
```

Write Python statements or code segments to answer the following requirements:

- (i) A judge entered a new qualifying jump of 155 cm at index position 2. Write the statement using insert().
- (ii) Write the code to find the winning (maximum) jump height using max().
- (iii) Count how many participants recorded a height of 152 cm using count().
- (iv) Sort and display the jump heights in descending order using sort().
- (v) The lowest score (138 cm) was disqualified. Write the statement to remove 138 from the list using remove().

[5 Marks]