

Assignment 5

Subject: PPWJ (CSE 3838)

Session: Sep 2025 to Jan 2026

Branch: CSIT

Section: All

Course Outcomes: CO3

Learning Levels: Remembering (L1), Understanding (L2), Application (L3), and Analysis (L4)

Q No.	Questions	Learning Levels
Q1	<p>You are designing an online shopping cart system. Write a function <code>calculateTotal(cart, discount = 0)</code> where <code>cart</code> is an array of item prices. The function should:</p> <ul style="list-style-type: none">• Use the rest parameter to handle multiple item prices.• Apply a discount if provided (default is 0%).• Return the final bill amount.	L2, L3
Q2	<p>A university wants to manage students and their grades. Write a function <code>studentReport(name, ...marks)</code> that:</p> <ul style="list-style-type: none">• Accepts the student's name and marks as parameters.• Calculates the average using an inner function.• Displays grade status as Pass if average ≥ 40, else Fail.	L2, L3, L4
Q3	<p>You are tasked with creating a Bank Account system using functions. Define a function <code>bankAccount(balance)</code> that returns an object with methods:</p> <ul style="list-style-type: none">• <code>deposit(amount)</code> – adds money.• <code>withdraw(amount)</code> – subtracts money if balance is sufficient.• <code>checkBalance()</code> – displays current balance. <p>Use closures to maintain account balance securely.</p>	L3, L4

Q4	<p>Create a function <code>bookTickets(eventName, seats, callback)</code> that:</p> <ul style="list-style-type: none"> • Accepts an event name and number of seats. • Uses a callback function to confirm booking. • If seats requested exceed available seats (say 5), print “Booking Failed”. • Otherwise, execute the callback to confirm booking. 	L3, L4
Q5	<p>You are building a program to scan through a nested file system structure. Represent the file system as an object:</p> <pre>let fileSystem = { folder1: { file1: "txt", file2: "jpg" }, folder2: { subfolder: { file3: "pdf" } }, folder3: "mp3" };</pre> <p>Write a recursive function <code>scanFiles(system)</code> that prints all file names and types.</p>	L3, L4
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