BCB744 Practical Exam Assessment Instructions (2025)

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Assessment Instructions for BCB744 Practical Exam (2025)

INPUT

- The rubric is defined in BCB744_Prac_Exam_Rubric_2025.pdf (attached once only at the start).
- The worked out answers which will guide the assessment in BCB744_Biostats_Proac_Exam_2025.pdf (attached once at the start)
- Each student's response will be in a .html, .docx, or .pdf output file.
- Assessment criteria apply per task and question, with overall weightings per task provided.

STEP-BY-STEP ASSESSMENT PROCEDURE

STEP 1: Parse and identify the student file

1. Read the student answer file.
2. Identify and extract answers corresponding to:

- Task 1 (with subcomponents 1.1 and 1.2)
- Task 2.1 (1 and 2), 2.2 (1, 2, 3), and 2.3
- Task 3 (1–4)
- Task 4.1 and 4.2
- Task 5.1 through 5.5
- Task 6 (Write-up)

STEP 2: Evaluate each component using the rubric

For each sub-question or component:

1. Apply the rubric section relevant to that task:

- Use the four assessment dimensions:
  - Technical Accuracy (50%)
  - Depth of Analysis (20%)
  - Clarity and Communication (20%)
  - Critical Thinking (10%)
- Each is scored on a 0–100 scale for that component.

2. Multiply each score by the weighting for that component as defined in the rubric:

- E.g., Task 1.1 is 50% of Task 1 (worth 10%), so max contribution is 5 points.

- Task 5.3 is one of five sub-tasks in Task 5 (30% total), so it's ~6%.

3. Tally sub-task scores to compute the task total (e.g., Task 3 might yield 17.4/20).
4. Round task scores to one decimal place.

STEP 3: Write feedback and save to .txt

For each student, generate a .txt file named identically to their input file (but with .txt extension):

A. Feedback Report Structure

1. Narrative feedback for each task (Tasks 1–6)

- One paragraph per task.
- Highlight:
  - Strengths (e.g., well-structured code, clear visualisations)
  - Weaknesses (e.g., incorrect model use, insufficient explanation)
  - Areas for improvement (e.g., mention VIF or DW test next time)
  - Must be constructive and written for student learning.

2. Marks per component

- Use format: Task 1.1: 43/50 or Task 2.2 (2): 12/20
- One line per sub-question (lowest possible granularity)

3. Task total

- Use format: Task 1: 8.6/10

4. Final total

- Use format: Total mark: 84.5/100

STEP 4: Generate .csv with marks

For the same student, create a .csv file (named identically but with .csv extension) with the following structure:

Task Mark Task 1 8.6 Task 2 9.2 Task 3 17.4 Task 4 9.0 Task 5 27.0 Task 6 9.3 Total 80.5

ADDITIONAL GUIDELINE FOR CONSISTENCY

- Use the same rubric for all students.
- Apply point deductions proportionally across the four dimensions of the rubric.
- Do not penalise for choices beyond the scope of the taught material (e.g., not using mixed models).
- Award partial marks for attempts that demonstrate correct reasoning, even if syntax is flawed.
- Always refer to the original "Notes to Assessor" where included for guidance on expected answers.

SUMMARY

Output Type Content:

- .txt Narrative feedback, component marks, task marks, total mark

- .csv Tabular summary of marks per task + total