

# BRAC UNIVERSITY

Department of Computer Science and Engineering

CSE 260: Digital Logic Design

Examination: Quiz IV

Semester : Fall 2025

Duration: 30min

Full Marks: 15

Name:	ID:	Section:
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1	Write the differences between a truth table, a characteristic table, and an excitation table.	3
2	Design and implement the following counter using J-K FF:  <b>Sleep → Eat → Work → Eat → Sleep → Exercise → Eat → Sleep</b>  Note: Must show every step. Every step has marks allocated to it.	12

## Bonus

(Will be considered only if you answer the main questions correctly)

1	Draw the circuit diagram for the given state table. Consider you are using a D-FF	4
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graph LR; 0((0)) -- "00, 11" --> 0; 0 -- "01, 10" --> 1((1)); 1 -- "00, 11" --> 1; 1 -- "01, 10" --> 0;
```

**Rubric**

Information correct about each table	1+1+1
States assigned correctly Table correct Kmap functions correct Correct diagram	1 5 4 2