

CPT101 Mock Exam

Answer the following multiple-choice questions. Each question is worth 2.5 marks.

1. (b) What is the major bottleneck of modern computer systems?
a) CPU bottleneck b) von Neumann bottleneck c) cache bottleneck d) ALU bottleneck e) GUI bottleneck

2. (d) Recursive procedure call is enabled via?
a) The use of assembly code
b) Mutual exclusion
c) Semantic gap between user code and machine code
d) The provision of program stack
e) The use of C code

3. (b) Which of the following device does not have memory?
a) D flip-flop ✓
b) register
c) multiplexer
d) SR flip-flop ✓
e) hard disk ✓

4. (b) How many bytes are used to represent a single character in ASCII?
a) 1 b) 2 c) 3 d) 4 e) 5

5. (b) How many bytes are used to represent a single character in Unicode?
a) 1 b) 2 c) 3 d) 4 e) 5

6. (c) Which of the following does not need to be pushed into stack before calling a procedure?
a) parameters for the called procedure
b) returning address to the caller
c) current stack frame size
d) EBP of current stack frame
e) None of the above