

1. Which of the following steps corresponds to instruction encoding?

- (a) Algorithm to HLL code
- (b) HLL code to assembly code
- (c) Assembly code to machine code
- (d) Machine code to digital logic

Answer: (c)

2. Why does MIPS choose a uniform 32-bit length for all its instructions?

- (a) This is because it has 32 registers
- (b) This is because each of its registers is 32-bit wide
- (c) This is because the PC is 32 bits wide
- (d) Uniform instruction width leads to regularity which leads to a simple and efficient implementation

Answer: (d)

3. Why does MIPS have different instructions encoded similarly?

- (a) All instructions perform similar functionality
- (b) Similar encoding leads to a simple and thus efficient implementation

Answer: (b)