

Examination 1 (Total Marks 20)
Computer Architecture (Fall 2015)

- 1) A computer which has a specific task or set of tasks is called:
a) Desktop computer. b) Embedded computer. c) Server. d) None of a, b, c.
- 2) Assembly programs are:
a) Hardware dependent. b) Hardware independent. c) high level programs. d) None of a, b, c
- 3) Total work done per unit time is called:
a) Latency. b) Throughput. c) Execution time
- 4) Which of the following translates high level programs into instructions:
a) Operating system. b) Compiler. c) Assembler. d) None of a, b, c
- 5) Computer performance depends upon
a) Instruction count. b) Clock cycle time. c) Clock cycle per instruction (CPI). d) All of a, b, c
- 6) Clock cycle time and CPI depend upon:
a) Compiler b) Instruction set architecture. C) Compiler as well as instruction set architecture.
d) Processor implementation
- 7) Time taken to run a program 10s on A, 50s on B, How much times A is faster than B
a) 10 (b) 15 (c) 1.5 (d) 5
- 8) If there are 10 clock cycles and clock rate is 1 GHz, then CPU time is
a) 10ns (b) 1ns (c) 20ns (d) 5ns
- 9) There are 10 instructions such that each instruction takes one cycle. If clock rate is 1 GHz then CPU time is
a) 10 ns (b) 1 ns (c) 20 ns (d) 5 ns
- 10) In multiprocessors, the focus is on:
a) response time (b) Execution time (c) Throughput (d) None of a, b, c

Translate the following C statements into MIPS assembly code:

1. $A = B + C[4]$

2. $f = -g + h + B[1]$