

Question # 1 of 30 (Start time: 05:30:53 PM, 27 December 2020)

To

Which type of exceptions rise during the process of decoding and executing the instruction?

Select the correct option



Interrupts (External Exceptions)



Hardware Exceptions



Non-mask able Exceptions



Program Exceptions

Question # 2 of 30 (Start time: 05:31:36 PM, 27 December 2020)

To

There are _____ types of reset operations in SRC.

Select the correct option



Three



Four



Two



Five

Question # 3 of 30 (Start time: 05:32:17 PM, 27 December 2020)

To

The instruction _____ will load the register R3 with the contents of the memory location M [PC+56]

Select the correct option



lwr R3, M[56]



ldr R3, M[56]



ldr R3, 56



lwr R3, [56]

Question # 3 of 30 (Start time: 05:32:17 PM, 27 December 2020)

To

The instruction _____ will load the register R3 with the contents of the memory location M [PC+56]

Select the correct option



lwr R3, M[56]



ldr R3, M[56]



ldr R3, 56



lwr R3, [56]

Question # 4 of 30 (Start time: 05:33:42 PM, 27 December 2020)

To

While executing the RTL instruction $A \leftarrow R3$, which of the given below control signals will be activated?

Select the correct option



LA, R3in



R3out



LA, R3out



R3in, Lout

Question # 5 of 30 (Start time: 05:35:13 PM, 27 December 2020)

To

In a _____, the address of next instruction to be executed is also given with the current instruction.

Select the correct option



1-address instruction



2-address instruction



3-address instruction



4-address instruction

Question # 6 of 30 (Start time: 05:36:38 PM, 27 December 2020)

To

To implement an N-bit barrel shifter in form of a combinational circuit, we require N _____.

Select the correct option



multiplexers



demultiplexers



selectors



tri-state buffers

Question # 7 of 30 (Start time: 05:37:17 PM, 27 December 2020)

To

Which of the following bits of SRC instruction are used to hold an operand, an address index, or a branch target register?

Select the correct option



The bits 16 through 0



The bits 26 through 22



The bits 21 through 17



The bits 17 through 0

Question # 8 of 30 (Start time: 05:38:10 PM, 27 December 2020)

To

Which of the given below measure(s) is/are used for comparison of performance of various machines?

Select the correct option



Execution time



MFLOPS



MIPS



All of the given

Question # 8 of 30 (Start time: 05:38:10 PM, 27 December 2020)

To

Which of the given below measure(s) is/are used for comparison of performance of various machines?

Select the correct option



Execution time



MFLOPS



MIPS



All of the given

Question # 9 of 30 (Start time: 05:39:01 PM, 27 December 2020)

To

Which of the following RTL descriptions is used for specifying the operation of an SRC instruction?

Select the correct option



IR<31..27>



IR<22..26>



IR<21..17>



IR<21..0>

Question # 10 of 30 (Start time: 05:40:03 PM, 27 December 2020)

To

The_____ control signal enables the input to the register C for writing the incremented value of PC onto it.

Select the correct option



INC4



LC



PCout



LPC

Question # 11 of 30 (Start time: 05:41:32 PM, 27 December 2020)

To

SPEC stands for _____.

Select the correct option



Scientific Performance Execution Cooperative



System Performance Execution Cooperative



Scientific Performance Evaluation Cooperative



System Performance Evaluation Cooperative

Question # 11 of 30 (Start time: 05:41:32 PM, 27 December 2020)

To

SPEC stands for _____.

Select the correct option



Scientific Performance Execution Cooperative



System Performance Execution Cooperative



Scientific Performance Evaluation Cooperative



System Performance Evaluation Cooperative

Question # 12 of 30 (Start time: 05:41:48 PM, 27 December 2020)

To

In EAGLE, the maximum number of operands allowed in an instruction are _____.

Select the correct option



1



2



3



4

Question # 13 of 30 (Start time: 05:42:56 PM, 27 December 2020)

To

A Stack based machine is also called _____.

Select the correct option



0-address machine



1-address machine



2-address machine



3-address machine

Question # 16 of 30 (Start time: 05:46:35 PM, 27 December 2020)

To

Which of the following is NOT related to the architecture of a computer?

Select the correct option



Instruction set



Control signals



I/O mechanisms



Memory addressing modes

Question # 17 of 30 (Start time: 05:47:28 PM, 27 December 2020)

To

_____ is a register which takes input from the ALSU as a memory address to be accessed and transfers the memory contents on that location onto the memory sub-system.

Select the correct option



PC



MBR



MAR



IR

Question # 18 of 30 (Start time: 05:48:13 PM, 27 December 2020)

To

The instruction "Shiftl R1, R2, 20" is an example of which of the following addressing modes?

Select the correct option



Relative



Displacement



Register



Immediate

Question # 19 of 30 (Start time: 05:48:52 PM, 27 December 2020)

To

MC68000 has a 32-bit program counter but only the least significant _____ bits are used.

Select the correct option



8



16



20



24

Question # 19 of 30 (Start time: 05:48:52 PM, 27 December 2020)

To

MC68000 has a 32-bit program counter but only the least significant _____ bits are used.

Select the correct option



8



16



20



24

Question # 20 of 30 (Start time: 05:50:40 PM, 27 December 2020)

To

All registers of FALCON-A are of _____ while in case of SRC all registers are _____.

Select the correct option



16-bits , 32 bit



24-bits , 32 bit



32-bits , 16 bit



32-bits , 64 bit

Question # 20 of 30 (Start time: 05:50:40 PM, 27 December 2020)

To

All registers of FALCON-A are of _____ while in case of SRC all registers are _____.

Select the correct option



16-bits , 32 bit



24-bits , 32 bit



32-bits , 16 bit



32-bits , 64 bit

Question # 21 of 30 (Start time: 05:51:49 PM, 27 December 2020)

To

Which are the two control unit design approaches?

Select the correct option



Cache and RAM



Registers and instructions



Hardwired and micro programmed



Control signals and busses

Question # 21 of 30 (Start time: 05:51:49 PM, 27 December 2020)

To

Which are the two control unit design approaches?

Select the correct option



Cache and RAM



Registers and instructions



Hardwired and micro programmed



Control signals and busses

Question # 22 of 30 (Start time: 05:53:26 PM, 27 December 2020)

To

_____ form the branch control field in the micro instruction.

Select the correct option



C Bits



M Bits



B Bits



A Bits

Question # 23 of 30 (Start time: 05:54:10 PM, 27 December 2020)

To

In a Falcon-A assembly program, labels are used to implement _____ jump.

Select the correct option



Direct



Indirect



Relative



Displacement

Question # 24 of 30 (Start time: 05:55:08 PM, 27 December 2020)

To

Execution time of a program with respect to the processor is calculated as:

Select the correct option



Execution Time = $IC \times CPI \times MIPS$



Execution Time = $IC \times CPI \times T$



Execution Time = $CPI \times T \times MFLOPS$



Execution Time = $IC \times T$

Question # 25 of 30 (Start time: 05:55:57 PM, 27 December 2020)

To

In FALCON A Program Counter (PC) and Instruction Register (IR) are of ____ bits

Select the correct option



16-bits



24-bits



32-bits



64-bits

Question # 26 of 30 (Start time: 05:57:25 PM, 27 December 2020)

To

In Structural RTL, the first three time steps (i.e. T0, T1 and T2) are of the instruction _____ phase.

Select the correct option



fetch



execute



create



destroy

Question # 27 of 30 (Start time: 05:59:07 PM, 27 December 2020)

To

Which of the given RTL descriptions is used to represent "load register relative (ldr)" instruction?

Select the correct option



$(op<4..0>= 6) : R[ra] \leftarrow rel$



$(op<4..0>= 2) : R[ra] \leftarrow M[rel]$



$(op<4..0>= 3) : M[disp] \leftarrow R[ra]$



$(op<4..0>= 4) : M[rel] \leftarrow R[ra]$

Question # 28 of 30 (Start time: 06:00:43 PM, 27 December 2020)

To

During the RESET operation of processor, control step counter is set to _____.

Select the correct option



0



1



2



-1

Question # 29 of 30 (Start time: 06:01:34 PM, 27 December 2020)

To

A collection of -----is called a micro program.

Select the correct option



large scale operations



Registers



DMA



Microinstructions

Question # 30 of 30 (Start time: 06:02:16 PM, 27 December 2020)

To

In case of FALCON-A, _____ instructions are present which are not present in the SRC processor.

Select the correct option



create and destroy



in and out



open and close



read and write