



Virtual University

About Us

CS401
Solved Final Term Paper 7

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Year
2017

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the Name of Allāh, the Most Gracious, the Most Merciful

Paper Pattern

MCQS 40 each 1 mark
Short 4 each 2 marks
Short 4 each 3 marks
long 4 each 5 marks

Question No : 1 of 52

Marks: 1 (Budgeted Time 1 Min)

The process of sending signals back and forth is called

Answer (Please select your correct option)

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☐

Activity

☐

Hand-shaking

☐

Interruption

☒

Time clicking

Made by: Waqar Siddhu

Question No : 2 of 52

Marks: 1 (Budgeted Time 1 Min)

Which of the following IRQs is connected to serial port COM 1?

Answer (Please select your correct option)

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☒

IRQ 4

☐

IRQ 5

☐

IRQ 6

☐

IRQ 7

Made by: Waqar Siddhu

Question No : 3 of 52

Marks: 1 (Budgeted Time 1 Min)

Which of the following interrupt is of highest priority interrupt?

Answer (Please select your correct option)

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☐ Key board interrupt

☒ Timer interrupt

☐ INT 2

☐ INT 3

Made by: Waqar Siddhu

Question No : 4 of 52

Marks: 1 (Budgeted Time 1 Min)

Regarding assembler, which statement is true:

Answer (Please select your correct option)

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☒ Assembler converts mnemonics to the corresponding OPCODE

☐ Assembler converts OPCODE to the corresponding mnemonics

☐ Assembler executes the assembly code all at once

☐ Assembler executes the assembly code step by step

Made by: Waqar Siddhu

Question No : 5 of 52

Marks: 1 (Budgeted Time 1 Min)

CMPS instruction subtracts the source location to the destination location. Source location always lies in

Answer (Please select your correct option)

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☐ ES:SI

☒ ~~ES:DI~~

☒ DS:SI

☐ DS:DI

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Question No : 6 of 52

Marks: 1 (Budgeted Time 1 Min)

For the execution of the instruction "DIV BL", the implied dividend will be stored in

Answer (Please select your correct option)

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☒ AX

☐ BX

☐ CX

☐ DX

Made by: Waqar Siddhu

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

When two devices in the system want to use the same IRQ line then what will happen?

Answer (Please select your correct option)

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☐ An IRQ Collision

☒ An IRQ Conflict

☐ An IRQ Crash

☐ An IRQ Blockage

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Question No : 8 of 52

Marks: 1 (Budgeted Time 1 Min)

The memory address always move from _____

Answer (Please select your correct option)

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☒ processor to memory

☐ memory to processor

☐ memory to peripheral

☐ peripheral to processor

Made by: Waqar Siddhu

Question No : 9 of 52

Marks: 1 (Budgeted Time 1 Min)

After the execution of following two instructions, what will happen ?

PUSH AX
POP DX

Answer (Please select your correct option)

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- ☐ The value of DX will be at the top of stack
- ☐ The value of AX will be at the top of stack
- ☐ The value of DX will be copied into AX
- ☒ The value of AX will be copied into DX

Made by: Waqar Siddhu

Question No : 10 of 52

Marks: 1 (Budgeted Time 1 Min)

The second byte of the word designated for one screen location holds

Answer (Please select your correct option)

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- ☐ The dimensions of the screen
- ☐ Character position on the screen
- ☒ Character color on the screen
- ☐ ASCII code of the character

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Question No : 11 of 52

Marks: 1 (Budgeted Time 1 Min)

In Shift instructions the destination can be

Answer (Please select your correct option)

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- ☐ An 8-bit register only
- ☐ A register only
- ☐ A memory location only
- ☐ A register or memory location

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Question No : 12 of 52

Marks: 1 (Budgeted Time 1 Min)

INT 10 is used for _____ services.

Answer (Please select your correct option)

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☒ BIOS video

☐ DOS video

☐ RAM

☐ Disk

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Question No : 13 of 52

Marks: 1 (Budgeted Time 1 Min)

In graphics mode a location in video memory corresponds to a _____ on the screen.

Answer (Please select your correct option)

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☐ line

☒ dot

☐ circle

☐ rectangle

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Question No : 14 of 52

Marks: 1 (Budgeted Time 1 Min)

A thread can not be created _____

Answer (Please select your correct option)

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☒ in static way

☐ in dynamic way

☐ in static and dynamic way at the same time

☐ manually

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Question No : 15 of 52

Marks: 1 (Budgeted Time 1 Min)

The space where the current state of a task is stored is called _____

Answer (Please select your correct option)

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☐ control block

☒ Process control block

☐ stack

☐ hard disk

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Question No : 16 of 52

Marks: 1 (Budgeted Time 1 Min)

VESA (an organization) organizes 16 color bits for every pixel in _____ format.

Answer (Please select your correct option)

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☐ 5:5:5

☒ 5:6:5

☐ 5:5:6

☐ 5:6:6

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Question No : 17 of 52

Marks: 1 (Budgeted Time 1 Min)

VESA stands for _____

Answer (Please select your correct option)

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☐ Variable Electronics Standards Association

☒ Video Electronics Standards Association

☐ Video Energy Standards Association

☐ Vega Energy Standards Association

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Question No : 18 of 52

Marks: 1 (Budgeted Time 1 Min)

The Physical address of Interrupt Descriptor Table (IVT) is stored in _____

Answer (Please select your correct option)

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☐ GDTR

☐ LGTD

☒ IDTR

☐ IVT

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Question No : 19 of 52

Marks: 1 (Budgeted Time 1 Min)

IDTR is a _____ register.

Answer (Please select your correct option)

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☐ 16 bit

☐ 20 bit

☐ 32 bit

☒ 48 bit

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Question No : 20 of 52

Marks: 1 (Budgeted Time 1 Min)

In Motorola 68K processors, _____ registers can hold addresses in indirect memory accesses.

Answer (Please select your correct option)

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☒ A0-A7

☐ B0-B7

☐ C0-C7

☐ D0-D7

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Question No : 21 of 52

Marks: 1 (Budgeted Time 1 Min)

Motorola 68K processors have _____ 32 bit general purpose registers.

Answer (Please select your correct option)

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☐ 32

☐ 64

☐ 8

☒ 16

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Question No : 22 of 52

Marks: 1 (Budgeted Time 1 Min)

In Computer Architecture, RISC stands for _____

Answer (Please select your correct option)

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☐ Reversed Instruction Set Computer

☐ Reversed Instruction System Computer

☒ Reduced Instruction Set Computer

☐ Reduced Instruction System Computer

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Question No : 23 of 52

Marks: 1 (Budgeted Time 1 Min)

In multi-tasking environment, which is called scheduler for saving and restoring the registers?

Answer (Please select your correct option)

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☐ INT 10

☐ INT 09

☒ INT 08

☐ INT 07

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Question No : 24 of 52

Marks: 1 (Budgeted Time 1 Min)

Threads can have function calls, parameters and which type of variables?

Answer (Please select your correct option)

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☐ global

☒ local

☐ legal

☐ illegal

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Question No : 25 of 52

Marks: 1 (Budgeted Time 1 Min)

In multi-tasking programming, all threads are

Answer (Please select your correct option)

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☒ Independent to each other

☐ Dependent on each other

☐ Not executed

☐ Not scheduled

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Question No : 26 of 52

Marks: 1 (Budgeted Time 1 Min)

"Far" jump makes intra _____ control possible

Answer (Please select your correct option)

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☐ Register

☒ Segment

☐ Memory

☐ Code

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Question No : 27 of 52

Marks: 1 (Budgeted Time 1 Min)

All possible types of Jumps in assembly language are:

Answer (Please select your correct option)

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- ☐ short, far
- ☐ short, near
- ☒ short, near, far
- ☐ short, near, far, long

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Question No : 28 of 52

Marks: 1 (Budgeted Time 1 Min)

BIOS sees the disks as

Answer (Please select your correct option)

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- ☐ logical storage device
- ☒ raw storage device
- ☐ in the form of sectors only
- ☐ in the form of tracks only

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Question No : 29 of 52

Marks: 1 (Budgeted Time 1 Min)

Which of the following gives more logical view of the storage medium ?

Answer (Please select your correct option)

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- ☒ DOS
- ☐ RAM
- ☐ ROM
- ☐ BIOS

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Question No : 30 of 52

Marks: 1 (Budgeted Time 1 Min)

In 9 pin DB-9, which pin number is assigned to TD (Transmitted Data) ?

Answer (Please select your correct option)

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1

☐

2

☐

3

☒

4

☐

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Question No : 31 of 52

Marks: 1 (Budgeted Time 1 Min)

In 9 pin DB-9, which pin number is assigned to DTR (Data Terminal Ready) ?

Answer (Please select your correct option)

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1

☐

2

☐

3

☐

4

☒

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Question No : 32 of 52

Marks: 1 (Budgeted Time 1 Min)

In 9 pin DB-9, RI (Ring Indicator) is assigned on pin number _____

Answer (Please select your correct option)

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7

☐

8

☐

9

☒

6

☐

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Question No : 33 of 52

Marks: 1 (Budgeted Time 1 Min)

8088 is a

Answer (Please select your correct option)

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☒ 16 bit processor

☐ 32 bit processor

☐ 64 bit processor

☐ 128 bit processor

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Question No : 34 of 52

Marks: 1 (Budgeted Time 1 Min)

A 32 bit address register can access up to of memory, so memory access has increased a lot.

Answer (Please select your correct option)

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☐ 2GB

☒ 4GB

☐ 6GB

☐ 8GB

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Question No : 35 of 52

Marks: 1 (Budgeted Time 1 Min)

AX register in extended 32 bit register is renamed as

Answer (Please select your correct option)

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☐ AXE

☒ EAX

☒ AAX

☐ XAX

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Question No : 36 of 52

Marks: 1 (Budgeted Time 1 Min)

The table index (TI) is set to _____ to access the GDT (Global Descriptor Table).

Answer (Please select your correct option)

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☐ 1

☒ 0

☐ -1

☐ -2

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Question No : 37 of 52

Marks: 1 (Budgeted Time 1 Min)

The segment address of interrupt n will be at

Answer (Please select your correct option)

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☒ $nx4$

☐ $nx4+1$

☒ $nx4+2$

☐ $nx4+3$

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Question No : 38 of 52

Marks: 1 (Budgeted Time 1 Min)

Programmable Interrupt Controller (PIC) has

Answer (Please select your correct option)

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☐ One input signals and eight output signals

☐ One input signal and one output signal

☒ Eight input signals and one output signals

☐ Eight input signals and eight output signals

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Question No : 39 of 52

Marks: 1 (Budgeted Time 1 Min)

_____ number of pin(s) of a processor is/are used by the external hardware to generate an interrupt.

Answer (Please select your correct option)

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- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4

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Question No : 40 of 52

Marks: 1 (Budgeted Time 1 Min)

In Programmable Interrupt Controller, Port _____ is referred as a Control port.

Answer (Please select your correct option)

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- ☐ 19
- ☒ 20
- ☐ 21
- ☐ 22

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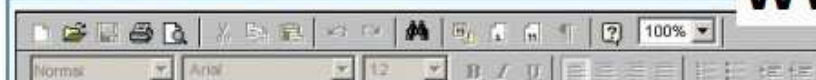
Question No : 41 of 52

Marks: 2 (Budgeted Time 4 Min)

How the data is transferred in serial communication?

Answer (Please click here to Add Answer)

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Question No : 42 of 52

Marks: 2 (Budgeted Time 4 Min)

How to identify maximum possible speed of multitasking?

Answer ([Please click here to Add Answer](#))

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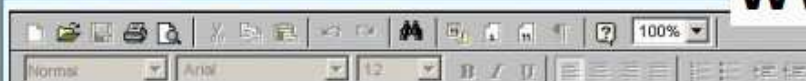
Question No : 43 of 52

Marks: 2 (Budgeted Time 4 Min)

In what order, the parameters are passed to routines in Pascal language?

Answer ([Please click here to Add Answer](#))

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Question No : 44 of 52

Marks: 2 (Budgeted Time 4 Min)

"Interrupts are asynchronous" What does it mean?

Answer ([Please click here to Add Answer](#))

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Question No : 45 of 52

Marks: 3 (Budgeted Time 6 Min)

In context of Disk media, how many bytes are reserved for each of the following parts in "32 bytes directory format"?

- Extension
- Time
- Date

Answer ([Please click here to Add Answer](#))

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Question No : 46 of 52

Marks: 3 (Budgeted Time 6 Min)

Write the functionality of following bits in IDTR

- P
- DPL
- S

Answer ([Please click here to Add Answer](#))

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Question No : 47 of 52

Marks: 3 (Budgeted Time 6 Min)

Give the value of the zero flag, the carry flag, and the sign flag after each of the following instructions if AX is initialized with 0x1254 and BX is initialized with 0x0FFF.

- add ax, 0xEDAB
- add ax, bx
- add bx, 0xF001

Answer ([Please click here to Add Answer](#))

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Question No : 48 of 52

Marks: 3 (Budgeted Time 6 Min)

How many flags that are not used in mathematical operations and also mention their names?

Answer ([Please click here to Add Answer](#))

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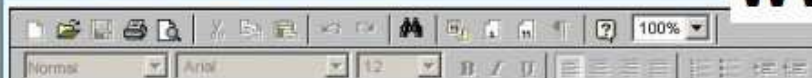
Question No : 49 of 52

Marks: 5 (Budgeted Time 10 Min)

How many types of interrupt are used for writing debugger and also elaborate functionality of these interrupts with proper explanation?

Answer ([Please click here to Add Answer](#))

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Question No : 50 of 52

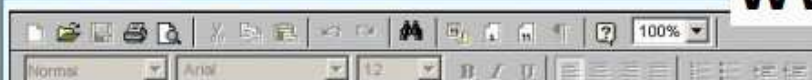
Marks: 5 (Budgeted Time 10 Min)

Calculate first and last physical address accessible by the following segment values:

- a. 0001
- b. E000

Answer ([Please click here to Add Answer](#))

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Question No : 51 of 52

Marks: 5 (Budgeted Time 10 Min)

Which interrupt is used to write Disk System and how can we write this system? Also mention (any four) attributes which are used in this service.

Answer ([Please click here to Add Answer](#))

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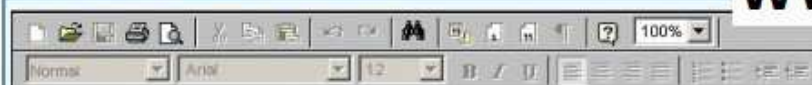
Question No : 52 of 52

Marks: 5 (Budgeted Time 10 Min)

Consider the function "`int multiply (int x, int y);`" declared in C, Write the code to call this function from Assembly language.

Answer ([Please click here to Add Answer](#))

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