



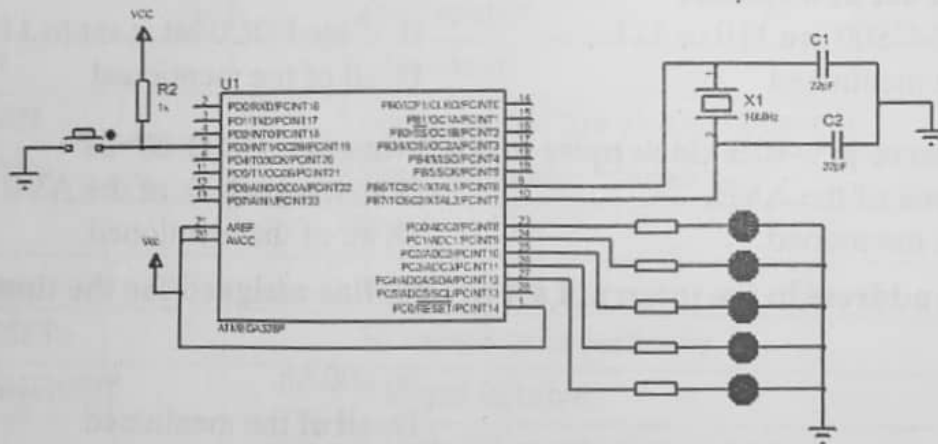
## Mid-Term Examination of Academic Year 2021 - 2022

Department: Communication & Computer Engineering Dept.	Year: 4 <sup>th</sup> level	Total Marks: 20
Course Title: Embedded Systems	Course Code: ELE 413	Term: Second Term
Date: 19-4-2022	2 PAPERS	Allowed Time: 1.5 Hours
Examiner: Assoc. Prof. Refaat Mohamed Fikry AbouZaid		

### 1) Answer briefly on the following questions (10 Marks):

- 1- What is the advantage of the interrupt in microcontroller programming?
- 2- What are the advantages and disadvantages of embedded system?
- 3- Describe shortly the different connections of Push button by microcontroller.
- 4- Define the meaning of the following words:  
a- Firmware. b- Peripherals.

2. Write a C program, utilizing the External interrupt and timer interrupt of the ATmega328P, that when download to it in the figure below perform left shift register on LEDs shown (which are connected from PC0-PC4) delayed by 2.5 sec. Since at the beginning of the program, ALL LEDs are OFF, and when the Push button is pressed (connected on PD3), the LED which is connected on PC0 is ON and all LEDs are OFF and after 2.5 sec, LED which is connected on PC1 is ON and all LEDs are OFF and so on. (5 Marks)



### 3) Choose between the multiple choices for the following:

(5 Marks)

1. How much flash memory does the Atmega328 have?  
A. 13K bytes. B. 32K bytes.  
C. 256K bytes. D. 16K bytes.
2. How many timers does the Atmega328 have?  
A. 1. B. 2.  
C. 3. D. 4.
3. There are \_\_ ADC and \_\_ PWM-Pins on the PDIP Atmega328.  
A. 9, 7. B. 6, 6.  
C. 10, 1. D. 8, 6.

## Mid-Term Examination of Academic Year 2021 - 2022

Department: Communication & Computer Engineering Dept.	Year: 4 <sup>th</sup> level	Total Marks: 20
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Date: 19-4-2022	2 PAPERS	Allowed Time: 1.5 Hours
Examiner: Assoc. Prof. Refaat Mohamed Fikry AbouZaid		

4. If Timer1 interrupt is assigned to interrupt every 6 ms, and TCCR1B register is set to 0x02 for Atmega328P, the number of overflow counts is:
- A. 47. B. 375.  
C. 12000. D. 0.  
E. none of the mentioned.
5. Atmega 328P has \_\_\_\_\_ I/O lines to can make external interrupt
- A. 2. B. 8.  
C. 23. D. 40.
6. Which of the following statements are correct?
- A. PIN register of a port is used to bring data into CPU from pins.  
B. PORT register is used to send data out to pins.  
C. DDR register is used to control the direction of a port.  
D. all of the mentioned.
7. Timer 0 can act as a counter
- A. if the CS02-CS00 are 110 or 111. B. if the FOC0 bit is set to 110.  
C. none of the mentioned D. all of the mentioned
8. Which resource provides clock pulse to AVR timers if CS02=00=6?
- A. internal clock of the AVR. B. external clock of the AVR.  
C. none of the mentioned. D. all of the mentioned
9. What is the address in the interrupt service routine assigned for the timer2 overflow flag?
- A. 0012h. B. 000Ah.  
C. 0016h. D. all of the mentioned
10. What will happen in that condition, if an interrupt occurs while the micro controller is serving any other interrupt?
- A. both the interrupts will be handled simultaneously.  
B. the interrupt which is being done first will be served first.  
C. the interrupt that is more priority in the interrupt vector table will be served first.  
D. the interrupt having low priority in the interrupt vector table will be served first.

Be sure that the ATMEGA 328P microcontroller Datasheet is attached

**GOOD LUCK**

Assoc.Prof. Refaat Mohamed Fikry AbouZaid



الجمهورية العربية السورية  
الوزارة العامة للتعليم العالي

Ministry of Higher Education  
Tanta Higher Institute of Engineering and Technology, THIET

**Examination for the second semester (Midterm)- academic year 2021/2022**

Program Title: Communication & Computer Engineering

Course title: Advanced Programming Techniques

Course Code: ELC 423

Level: 4

Date: 18-4-2022

Time is an hour: 1:30

Degree: 20

The Examiner: Assoc. Prof. Dr. Ahmed Elsayy

**Answer all the following questions - The exam in two papers -**

**Question No. 1 : Match the following :- (10 MARKS)**

Tag	No.	Definition	No.
 		Add main title for table	1
BACKGROUND		sorted list	2
VLINK		Add hyper link	3
<OL>		Add definitions list	4
<B>		Add new line	5
<SUP>		Add new row in table	6
<IMG>		Bold text	7
<A>		Add image in page ground	8
<TR>		Add border	9
BORDER		Super text	10
ROWSPAN		Add color for the visited hyperlink	11
<CAPTION>		Space between frames	12
<DL>		Create table	13
<TABLE>		Insert image	14
<FRAMESET>		To merge cells vertically	15
MARGINHEIGHT		Add cell in table	16
<TD>		To specify an alternative text place image appears	17
<H1>		To determine tire group page	18
ALT		To place a title head on the page	19
FRAMESPACING		Specifies blank spaces around frames	20



**Question No. 2: (10 MARKS)**

Write the code that creates a web page so that the title of the page is "Personal Information". This page contains three vertical parts first part contains an image and two link called Information and video section. Information link opens in the second part which contains data like name, e-mail, address (in multi-line), sex (male or female) and submit and reset button. Second link which called video section open in the second part to shows introduction video about the web. The third part contain a table 2 columns and 3 rows that represent the interview number and interview time.

Thank you, questions finished

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**Examiner's committee**

Dr. ....

Dr. ....



Ministry of Higher Education  
Tanta Higher Institute of Engineering and Technology, THIET

Examination for the midterm second semester - academic year 2021/2022

Program Title: Communication & Computer Engineering

Course title/code: ELE 463 Mobile Communications

Level: Four

Date: 16-4-2022

Time: 90 Minutes

Degree: 20

The Examiner: Dr. Mohamed Elhadad

Answer all the following questions

Question No. 1 (10 MARKS)

- Compare between the three mobile radio transmission systems, give examples for each type, and show the difference between FDD and TDD?
- Compare between different multiple access techniques -(with drawing)-, give examples for each mobile generation?
- Draw a simplified mobile network architecture for the GSM, GPRS, and UMTS. Show the difference between each generation?

Question No. 2 (10 MARKS)

A mobile phone is located 5 km away from a base station. It uses a vertical  $\lambda / 4$  monopole antenna with a gain of 2.55 dB to receive cellular radio signals. The free space E-field at 1 km from the transmitter is measured to be  $10^{-3}$  V/m. The carrier frequency used for this system is  $f = 900$  MHz.

- Find the length and effective aperture of the receiving antenna.
- Find the received power at the mobile using the 2-ray ground reflection model assuming the height of the transmitting antenna is 50 m, and the receiving antenna is 1.5 m above ground.

Thank you, questions finished



2/1/2022

Ministry of Higher Education  
Tanta Higher Institute of Engineering and Technology, THIET

**Examination for the second semester (Midterm) - academic year 2021/2022**

Program Title: Communication & Computer Engineering      Course title: Artificial Intelligence  
Course Code: ELC 471      Level: 4      Date: 17-4-2022      Time is an hour: 1:30  
Degree: 20

The Examiner: Assoc. Prof. Dr. Ahmed Elsayy

**Answer all the following questions - The exam in two papers -**

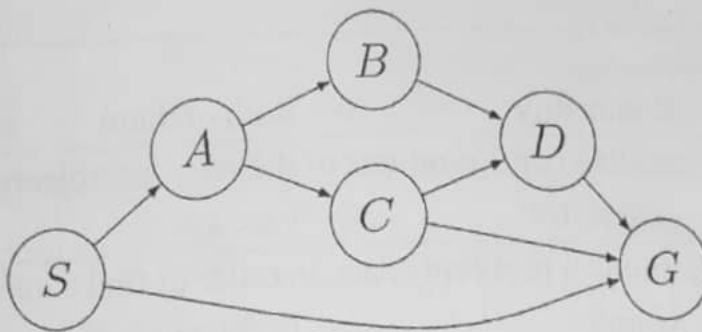
**Question No. 1 Choose the correct answer: - (5 MARKS)**

- 1- AI goal make system think .....  
a- Like human      b- Rationality      c- Both of them
- 2- ..... that contains all the possible configurations of the relevant objects.  
a- initial states      b- goal states      c- state space
- 3- ..... is a method that can examine a problem space in order to find a goal.  
a- Problem      b- Search      c- Problem space
- 4- ..... is a graph in which any two vertices are connected by exactly one path.  
a- Tree      b- graph      c- Structure
- 5- ..... is a logical relation among variables.  
a- Problem      b- variables      c- Constraint
- 6- ..... The algorithms try each possibility until they find the right one.  
a- Generate and Test      b- Backtracking      c- Reasoning
- 7- ..... is exhaustive uses no information about the problem to guide the search.  
a- Informed search      b- Uninformed search      c- Target search
- 8- ..... the control strategies for exploring search from initial state towards a solution.  
a- Forward search      b- Backward search      c- Both of them
- 9- Depth first use ..... to explore the search space.  
a- List      b- Stack      c- Queue
- 10- ..... Like breadth first but selecting only those N nodes at each level  
a- Beam search      b- Hill climbing      c- Hill climbing

**Question No. 2: - Discuss: - (8 MARKS)**

- The kinds of Search strategies.
- The differences between informed and uninformed search?

**Question No. 3: - The following graph represent some states: - (7 MARKS)**



By using depth first search show how to find all paths to reach the goal state (G).

Thank you, questions finished

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**Examiner's committee**

Dr. ....

Dr. ....



Ministry of Higher Education

Mid Term Exam

Class: Communications and Computers

Subject: Advanced programming

Midterm ٢٠١٩

High Institute for Engineering

and Technology in Tanta

Date: 10 - 4 - 2019

Time: 1 hour

Answer the following questions:

1- Match the following:

Tag	No.	Definition	No.
 		Whit color	-١
Face		Incremented list by one	-٢
VLINK		display a horizontal line	-٣
tfoot		Add definitions list	-٤
<B>		Add new line	-٥
</tr>		Add table	-٦
<IMG>		Bold text	-٧
mailto		give a base path for all the links	-٨
<Table>		distance between cell borders and the content of cell	-٩
#FFFFFF		add video or sound	-١٠
ROWSPAN		Add color for the visited hyperlink	-١١
li		Space between frames	-١٢
<DL>		specify an email address to send an email	-١٣
Base		Insert image	-١٤
<FRAMESET>		To merge cells vertically	-١٥
HR		Row closing	-١٦
embed		create a separate table footer	-١٧
<H1>		To determine tire group page	-١٨
cellpadding		To place a title head on the page	-١٩
FRAMESPACING		Determine font names	-٢٠

- 2- Write the code that creates a web page so that the title of the page is "Personal Information". This page contains two vertical parts first part contains an image and two link called Information and video section. This link opens in the second part which contains data like name, e-mail, address (in multi-line), sex (male or female) and submit and reset button. Second link which called video section open in the second part to shows introduction video about the web.

#End of question, Good luck#





Ministry of Higher Education  
Mid Term Exam

الترم الثاني  
الدراسات

High Institute for Engineering  
and Technology in Tanta

Date: 6-4-2019

Class: Communications and Computers  
Subject: Artificial Intelligent

الوقت: ساعة واحدة  
Time: 1 hour

Answer the following questions:

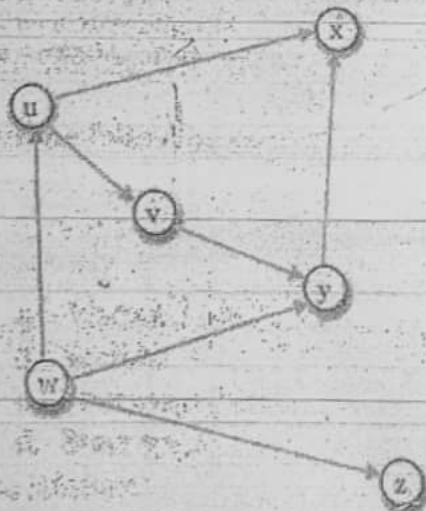
**Q1: Define the following:**

- |                            |                     |
|----------------------------|---------------------|
| a. Artificial intelligent. | e. Problem solving. |
| b. Search.                 | f. Constraint.      |
| c. Successor Function.     | g. Neural Networks. |
| d. State space.            | h. Rationality      |

**Q2: Discuss:**

- The information needs to provide a formal description of a problem?
- Search strategies?
- The differences between Blind search and Heuristic search?

**Q3: The following graph represent some states:**



By using breadth first search show how to find all paths to reach the goal state (x).

#End of question, Good luck#



1. Answer in some details about the following Questions:

- 1) Distinguish between RISC and CISC.
- 2) What are the various types of memories used in microcontroller/microprocessor?
- 3) Describe the essential pins which describe I2C interface between microcontroller and I/O device.
- 4) Define the meaning of the following words:
  - a- Hardware.
  - b. Software.
  - c- Embedded System.
  - d. Nibble.

2. Choose

1. Is the same address is assigned for the timer0 and timer1 overflow flag in the interrupt vector table of the interrupts?
  - A. true.
  - B. false.
  - C. can't be determined.
  - D. depends on the situation.
2. Why are relays used for driving the motors?
  - A. they act as a switch for driving motors.
  - B. they increase the current capability required by the motors.
  - C. they are used to reduce the back emf from the motors.
  - D. all of the mentioned.
3. What does SPI stand for?
  - A. serial parallel interface.
  - B. serial peripheral interface.
  - C. sequential peripheral interface.
  - D. sequential port interface.
4. Why do we make the connection of the SCLK for communicating serially between two devices?
  - A. to get a clock output from the device.
  - B. to synchronize the two devices.
  - C. to obtain an analog output.
  - D. all of the mentioned.
5. Which of the following have an asynchronous data transmission?
  - A. SPI.
  - B. RS232.
  - C. Parallel port.
  - D. I2C.
6. The Timer/Counter can be clocked by an \_\_\_\_\_.
  - A. Internal clock.
  - B. External clock.
  - C. Internal and External clock.
  - D. None of above.

7. Which of the following is the common method for the connecting the peripheral to the processor?

- A. internal interrupts.
- B. external interrupts.
- C. software.
- D. exception.

8. Which of the following is correct?

- A. I2C is a technique by which data is transmitted with the help of only eight pins.
- B. SDA is used to synchronize data transfer between two chips.
- C. TWI is another name for I2C.
- D. All of the mentioned.

9. Which architecture provides different buses for program and data memory?

- A. Harvard architecture.
- B. Von Neumann architecture.
- C. None of the mentioned.
- D. All of the mentioned.

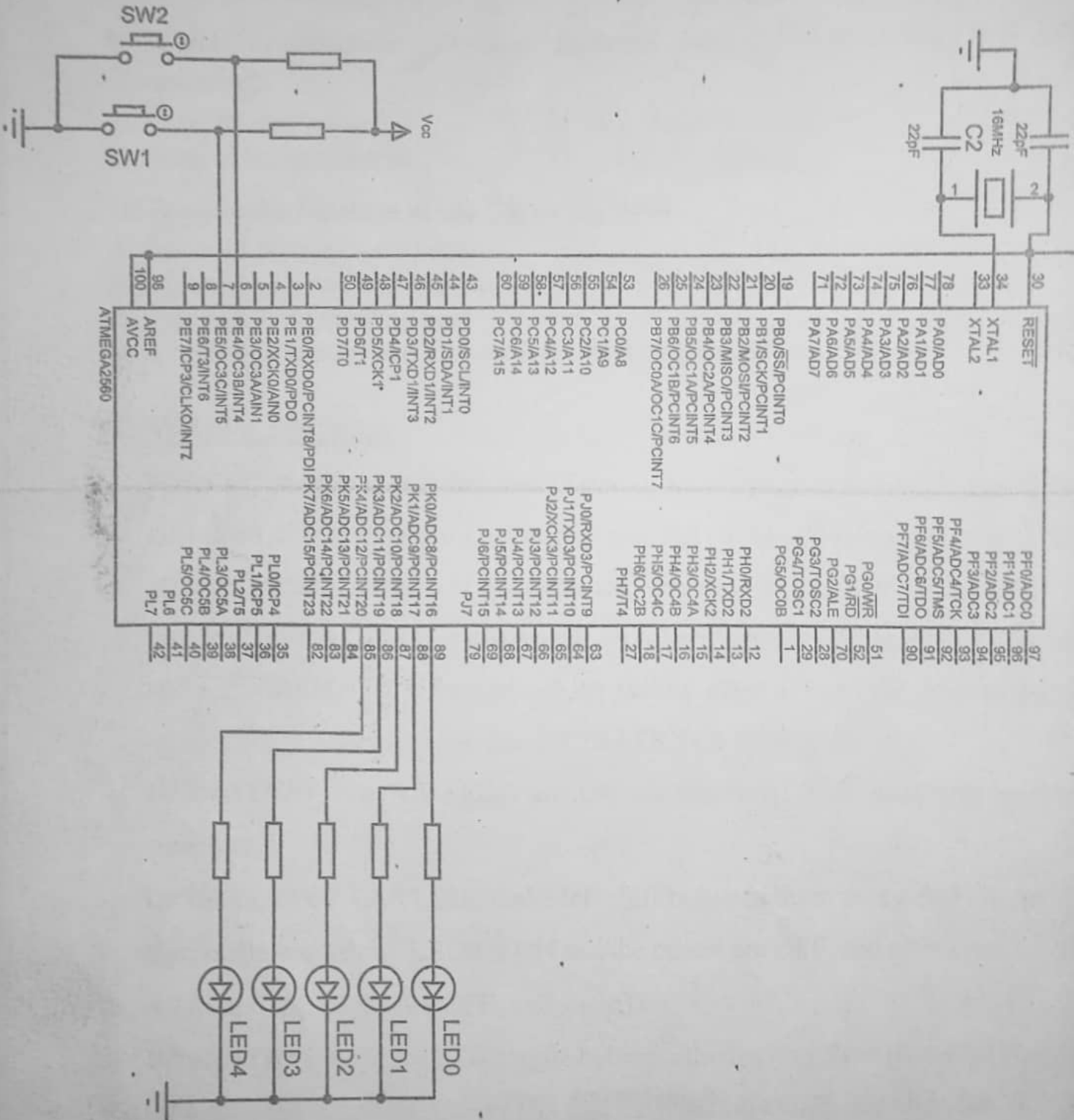
10. What is the function of the CE pin in SPI?

- A. it is used for synchronization.
- B. it is used as a transmitting pin.
- C. it is used as a receiving pin.
- D. it is used to initiate and terminate the data transfer.

### 3. Write a Program

- Write a C program, utilizing *timer interrupt* and *external interrupt*, that when download to it in the figure below perform one of the following operations. On start-up OPERATION 1 is executed and continue indefinitely. If the SW1 is pressed OPERATION 2 is carried out *on falling edge* of the Push Button signal and OPERATION 3 is carried out *on falling edge* of the Push Button signal when SW2 is pressed. After that OPERATION 1 is resumed.
- **OPERATION 1** – All LEDS are ON all the time. This operation is done continuous.
- **OPERATION 2** - All LEDs make left shift between them every 1sec (It means that, in the beginning, LED0 is ON and the others are OFF, and after 1sec, LED1 is ON and the others are OFF, and so on) .
- **OPERATION 3** – All LEDs toggle between them every 2sec (It means that, in the beginning, LEDs 0, 2, 4 are ON and the others are OFF, and after 2sec, LEDs 1, 3 are ON and the others are OFF.







**1. Answer in some details about the following Questions:**

- 1) What is the advantage of the interrupt in microcontroller programming?
- 2) Distinguish between Von-Neumann Architecture and Harvard Architecture.
- 3) What are the various criteria to choose the microcontroller?
- 4) Define the meaning of the following words :  
a- Firmware.      b- Peripherals.

**2. Choose**

**1. TCNT register is used for?**

- A. knowing the status of the timer count
- B. used for masking the interrupts flag of the Timerx.
- C. it is used for enabling all the timer interrupts.
- D. it is used for resetting the value of the interrupts.

**2. The data will not go from the port registers to the pin unless;**

- A. DDR register of that port is set to 0.
- B. PORT register of that port is set to 1.
- C. DDR register of that port is set to 1.
- D. PORT register of that port is set to 0.

**3. In Atmega2560 what is the ISR address for a Pin Change interrupt for PORT J?**

- A. 0012h.      B. 0014h.
- C. 0016h.      D. None of the mentioned.

**4. If Timer1 interrupt is assigned to interrupt every 6 ms, and using prescaler clk/8 for the connections shown in the Question(3), the number of counts is:**

- A. 12000.      B. 35.
- C. 9000.      D. None of the mentioned.

**5. We can count any change of the level of an input signal when \_\_\_\_\_ interrupt is used.**

- A. Pin Change.      B. External Interrupt.
- C. All of the mentioned.      D. None of the mentioned.

**6. All series of Atmega2560 has 8 pins in all of their port?**

- A. True.      B. False.
- C. None of the mentioned.      D. Can't be determined.

7. Atmega2560 has \_\_\_\_\_ channels 10-bit ADC.

- A. 4.
- B. 8.
- C. 12.
- D. 16.

8. In AVR, which of the following registers are not used for programming timers?

- A. TCNT.
- B. TCON.
- C. TIFR.
- D. None of the mentioned.

9. Which of the following will generate the minimum time delay?

- A.  $f/1024$ .
- B.  $f/8$ .
- C.  $f/16$ .
- D.  $f/256$ .

10. External hardware interrupts are assigned to which pins of the atmega2560?

- A. PORTB.
- B. PORTC.
- C. PORTD.
- D. PORTE.

### 3. Write A Program

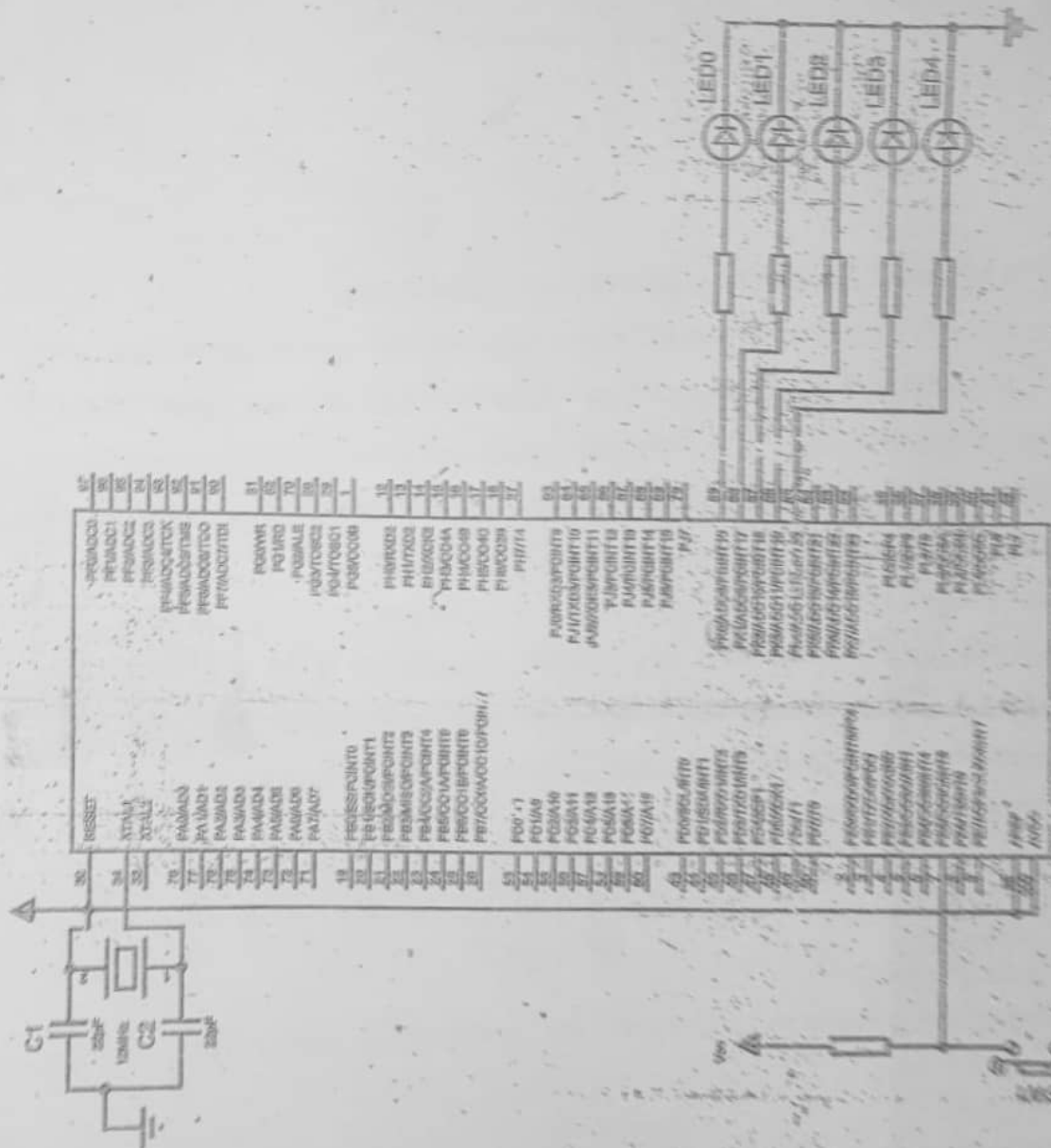
Write a C program, utilizing timer interrupt and external interrupt, that when download to it in the figure below perform one of the following operations. On start-up OPERATION 1 is executed and continue indefinitely. If the SW1 is pressed OPERATION 1 is paused and OPERATION 2 is carried out *on falling edge* of the Push Button signal after which OPERATION 1 is resumed.

**OPERATION 1** – All LEDs are ON all the time. This operation is done continuous.

**OPERATION 2** – All LEDs make like progress bar every 500ms (It means that, in the beginning, LED4 is ON and the others are OFF, and after 500ms, LED3 is ON and LED4 still on the others are OFF, and after that continue to ON each LED every 500ms to be in the end, ALL LEDs are ON.



الأنظمة الإلكترونية الحديثة ٢٠١٩ MidTerm



# امتحانات مسابقة الـ ٢٠١٧ في الـ ٢٠١٧



الوزير العالي للتعليم العالي والبحث العلمي

الترم الثاني ٢٠١٧ Midterm

Ministry of Higher Education

Mid Term Exam

Class: Communications and Computers

Subject: Advanced programming

High Institute for Engineering and Technology in Tanta

Date: 22-4-2017

Time: 1 hour

Answer the following questions:

1- Match the following:

Tag	No.	Definition	No.
 	1	Add main title for table	-1
BACKGROUND	2	sorted list	-2
VLINK	3	Add hyper link	-3
<OL>	4	Add definitions list	-4
<B>	5	Add new line	-5
<SUP>	6	Add new row in table	-6
<IMG>	7	Bold text	-7
<A>	8	Add image in page ground	-8
<TR>	9	Add border	-9
BORDER	10	Super text	-10
ROWSPAN	11	Add color for the visited hyperlink	-11
<CAPTION>	12	Space between frames	-12
<DL>	13	Create table	-13
<TABLE>	14	Insert image	-14
<FRAMESET>	15	To merge cells vertically	-15
MARGINHEIGHT	16	Add cell in table	-16
<TD>	17	To specify an alternative text place image appears	-17
<H1>	18	To determine tire group page	-18
ALT	19	To place a title head on the page	-19
FRAMESPACING	20	Specifies blank spaces around frames	-20

2- Write the code that creates a web page so that the title of the page is "Sports Site Today". This page contain two horizontal parts first part contain head of page "World Cup Matches" and link point to matches table. The second part contain paragraph that aligns the right and the text direction from left to right. The type of font Arial and font color is green and the size is "5". Then write the following paragraph: "The World Cup has started with an opening speech for the President of the Republic.". After paragraph create table for matches contains first team, second team and place

#End of question, Good luck#



Ministry of Higher Education

Mid Term Exam

Class: Communications and Computers

Subject: Artificial Intelligent

High Institute for Engineering  
and Technology in Tanta

Date: 8-4-2017

Time: 1 hour

Answer the following questions:

1. Define the following:

- a. Artificial intelligent.
- b. Problem space.
- c. Successor Function.
- d. State space.
- e. Tree.
- f. Constraint satisfaction.
- g. Neural Networks.
- h. Rationality

2. Discuss:

- a. The behavior of Intelligence?
- b. The factors to consider which search algorithm should be used?

3. Compare between:

- a. Blind search and Heuristic search
- b. Count correct position approach and Count how far away approach (with example).

4. The following table represent some states and its predecessor:

State	Predecessor
A	E, F, B
E	I, J
F	K
B	G, C
I	M, N
J	O
K	P
G	L
C	H, D

By using depth first search show how to find the goal state (O).

#End of question, Good luck#





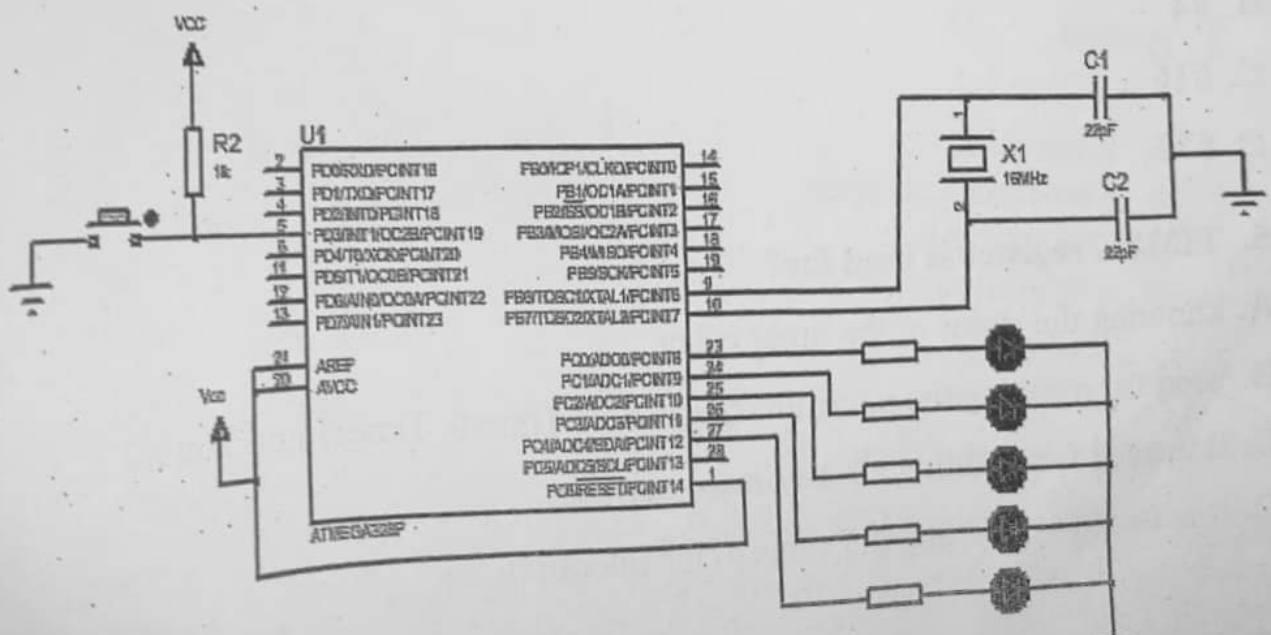
Name: /MidTerm ٢٠١٧ الثاني [الاسم] ID: [الرقم]

- 1) What are the main components of an embedded system?
- 2) Distinguish between Von-Neumann Architecture and Harvard Architecture.
- 3) What are the various types of memories used in microcontroller/microprocessor?
- 4) Define the meaning of the following words :  
a- Firmware.      b- Peripherals.

### Write a Program

Write a C program, utilizing the external interrupt of the ATmega328P, that when download to it in the figure below perform one (1) of two (2) operations. On start-up OPERATION 1 is executed and continue indefinitely. If the push-button switch is pressed OPERATION 1 is paused and OPERATION 2 is carried out *on rising edge* of the Push Button signal after which OPERATION 1 is resumed.

- **OPERATION 1** – All LEDs are ON all the time. This operation is done continuous.
- **OPERATION 2** - ALL the LEDs blink five (5) times delayed by 1 second.



## Choose

1. Which of the following statements are correct?
  - A. PIN register of a port is used to send data out to pins
  - B. PORT register is used to bring data into CPU from pins
  - C. DDR register is used to control the direction of a port
  - D. all of the mentioned
2. In AVR, which registers are there for the I/O programming of ports?
  - A. PORT
  - B. PIN
  - C. DDR
  - D. all of the mentioned
3. In AVR, which of the following registers are not used for programming timers?
  - A. TCNT
  - B. TCON
  - C. TIFR
  - D. none of the mentioned
4. Which of the following will generate the maximum time delay?
  - A.  $f/2$ .
  - B.  $f/4$
  - C.  $f/16$
  - D.  $f/32$
5. TIMSK register is used for?
  - A. knowing the status of the timer count
  - B. used for masking the interrupts flags of the Timer0, Timer1 and Timer2
  - C. it is used for enabling all the timer interrupts
  - D. it is used for resetting the value of the interrupts

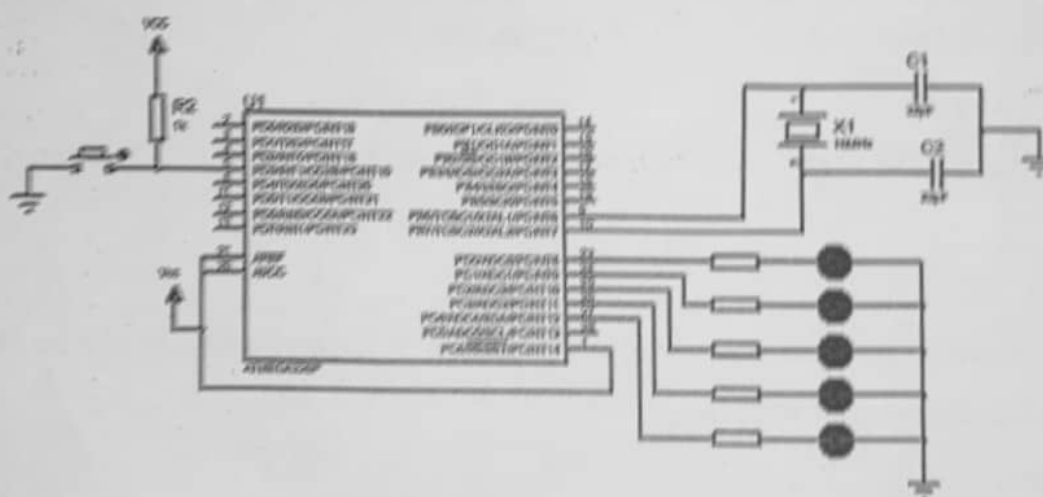


- 1) Distinguish between RISC and CISC.
- 2) What are the various criteria to choose the microcontroller?
- 3) Define the meaning of the following words :
 

a- Firmware.	b- Peripherals.	c- Embedded System.
d- Data Bus.	e- Address Bus.	f- Instruction

### Write a Program

Write a C program, utilizing the General I/O purpose of the ATmega328P, that when download to it in the figure below perform *Right shift register* on LEDs shown delayed by 1 sec. Since at the beginning of the program, ALL LEDs are OFF, and when the Push button is pressed, the LED which is connected on PC4 is ON and all LEDs are OFF and after 1 sec, LED which is connected on PC3 is ON and all LEDs are OFF and so on.



### Choose

1. Which of the following statements are correct?
  - A. PIN register of a port is used to bring data into CPU from pins
  - B. PORT register is used to send data out to pins
  - C. DDR register is used to control the direction of a port
  - D. all of the mentioned



2. In AVR, which registers are there for the I/O programming of ports?
- A. PORT. B. PIN  
C. DDR. D. All of the mentioned.
3. All series of AVR has 8 pins in all of their ports?
- A. True. B. False.  
C. None of the mentioned. D. Can't be determined.
4. What does microprocessor speed depends on?
- A. Clock. B. Data bus width.  
C. Address bus width. D. Number of Registers.
5. Atmega 328P is based on which architecture?
- A. RISC. B. CISC.  
C. Von Neumann. D. None of above.
6. Atmega 328P has \_\_\_\_\_ general purpose I/O lines for connecting external device
- A. 32. B. 20.  
C. 23. D. 24.
7. Atmega328P has 6 number of \_\_\_\_\_ pins.
- A. Analog input pins. B. Digital I/O pins.  
C. PWM pins. D. None of the above.
8. Atmega 328P performs powerful instructions in \_\_\_\_\_ Cycles.
- A. 2. B. 4.  
C. 16. D. 1.
9. In Atmega 328P microcontroller, direction of a particular pin can be changed without changing others.
- A. True. B. False.  
C. Can not Say. D. None.
10. In Atmega 328P Controller Pin 9 and Pin 10 used as a \_\_\_\_\_.
- A. Port Pins. B. Crystal Pins.  
C. Power Supply Pins. D. None.



Ministry of Higher Education  
Mid Term Exam  
Class: Communications and Computers  
Subject: Advanced programming

High Institute for Engineering  
and Technology in Tanta  
Date: 18-4-2018  
Time: 1 hour

Answer the following questions:

1- Match the following:

Tag	No.	Definition	No.
 		Whit color	-١✓
Face		Incremented list by one	-٢✓
VLINK		display a horizontal line	-٣✓
tfoot		Add definitions list	-٤✓
<B>		Add new line	-٥✓
</tr>		Add table	-٦✓
<IMG>		Bold text	-٧✓
mailto		give a base path for all the links	-٨✓
<Table>		distance between cell borders and the content of cell	-٩✓
#FFFFFF		add video or sound	-١٠✓
ROWSPAN		Add color for the visited hyperlink	-١١✓
Li		Space between frames	-١٢✓
<DL>		specify an email address to send an email	-١٣✓
Base		Insert image	-١٤✓
<FRAMESET>		To merge cells vertically	-١٥✓
HR		Row closing	-١٦✓
embed		create a separate table footer	-١٧✓
<H1>		To determine tire group page	-١٨✓
cellpadding		To place a title head on the page	-١٩✓
FRAMESPACING		Determine font names	-٢٠✓

2- Write the code that creates a web page so that the title of the page is "Personal Information". This page contains two vertical parts first part contains an image and link called Information. This link opens in the second part which contains data like name, address, sex (male or female) and submit button.

#End of question, Good luck#

Mid Term Exam  
الترم الثاني  
جامعة الزقازيق



Ministry of Higher Education  
Mid Term Exam  
Class: Communications and Computers  
Subject: Artificial Intelligent

الزكاد التعليمي  
High Institute for Engineering  
and Technology in Tanta  
Date: 25-4-2018  
Time: 1 hour

Answer the following questions:

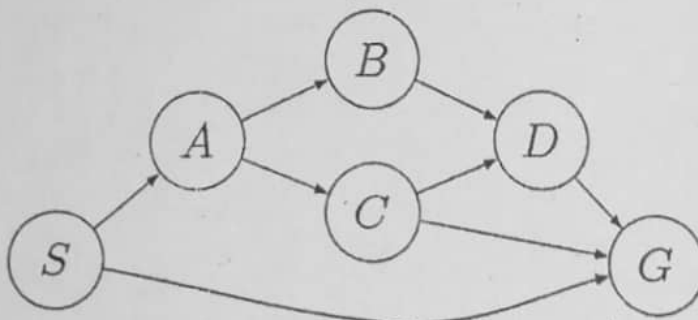
1. Define the following:

- |                            |                     |
|----------------------------|---------------------|
| a. Artificial intelligent. | e. Problem solving. |
| b. Search.                 | f. Constraint.      |
| c. Successor Function.     | g. Neural Networks. |
| d. State space.            | h. Rationality      |
| i. Time Complexity         | j. Beam search      |

2. Discuss:

- The information needs to provide a formal description of a problem?
- Search strategies?
- The differences between informed and uninformed search?

3. The following graph represent some states:



By using breadth first search show how to find all paths to reach the goal state (D).

#End of question, Good luck#