


Faculty of Computers & Information	Year 2015-2016	
	First term Exam	
History of Computing	Two Hours	

Answer only four questions

Q1. Define each of the following terms (15 points)

1. ENIAC (Electrical Numerical Integrator & Calculator)
2. Tabulator
3. Open Architecture Networking
4. Domain Name System (DNS)
5. File Transfer Protocol

Q2.

- a) Write short notes about computer's development from Mainframes to PC's?(5 points)
- b) What is the difference between:(10 points)
 1. Circuit switching and packet switching?
 2. Telephony and Telecommunication?

Q3.

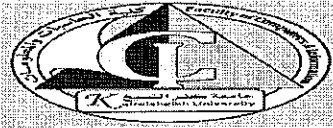
- a) Write short notes about the beginnings of PC's operating Systems?(7.5 points)
- b) Give four mechanisms to provide high speed LAN access to the Internet?(7.5 points)

Q4.

- a) Explain the three IT career clusters pyramid and their required skills?(5 points)
- b) What is the difference between (10 points)
 1. ARPANET and TCP/IP
 2. E-commerce and E-business

Q5.

- a) Write short notes about Routing Algorithms?(5 points)
- b) Give five examples of NWCEIT careers?(5 points)
- c) What is the difference between Analogue and Digital communications (5 points).

Faculty of Computers & Information	Year 2015-2016	
	First term Exam	
Computer Law	Two Hours	

Answer only four questions

Q1. Define each of the following terms (15 points)

1. Cyber Crime
2. Crime prevention
3. Risk Management
4. Cryptography
5. Intellectual property

Q2.

- a) Write short notes about Online Fraud, give three examples? (5 points)
- b) What is the difference between:(10 points)
 1. Firewall and Antivirus software?
 2. Malware and Trojan horse?

Q3.

- a) Write short notes about Life Cycle Planning?(5 points)
- b) Explain in brief Authentication and Identification?(5 points)

Q4.

- a) Write short notes about MALICIOUS Working Mechanism?(5 points)
- b) List five works protected by copyright?(5 points)
- c) What is the difference between Issue-Specific Policy and System-Specific Policy (5 points).

Q5.

- a) List four Cyber crimes against property, explain in brief?(5 points)
- b) Give two examples of work not included the Berne Convention of copy right?(5 points)
- c) What is the difference between Copyright and Industrial property (5 points).



أجب عن أربعة أسئلة من الآتي:

السؤال الأول

ارسم دائرة كهربية تتكون من مصدر جهد متغير التردد و مقاومة أومية ثم وضح فقط بالرسم البياني: كيفية تغير قيمة المقاومة الأومية مع قيمة التردد؟ ماذا تتوقع من تغير في قيمة المقاومة الأومية اذا ما تم اضافة مكثف الي هذه الدائرة؟

السؤال الثاني

عرف كلا من:

(أ) Bit (ب) Encoder (ج) تيار متردد (د) مرشح ترددات عالية (ه) المقاومة الغير أومية

السؤال الثالث

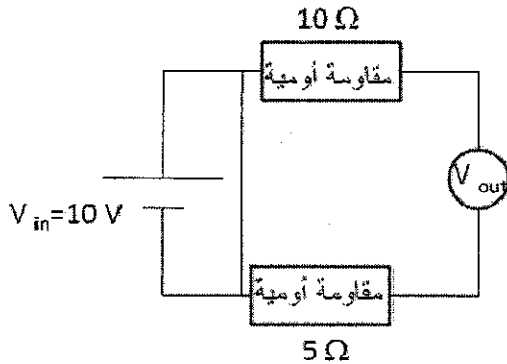
بين بالرسم فقط تصميم دائرة الكترونية توضح كيفية استخدام عدد اثنين دايدود Diodes لتحويل فرق الجهد المتردد الي مستمر

السؤال الرابع

في الدوائر الالكترونية ما وظيفة كلا من: ملف الحث-المكثفات-المقاومات الأومية

السؤال الخامس

في الدائرة الموضحة بالشكل اذكر مع التفسير ما هي قيمة V_{out} ؟



Kafreshikh University
Faculty of Computer Sciences
Dept of English, 1st Year
Sub.: ESL
Name:



Date: 11/01/2016
Time: 2 hrs
Mark: 60
Final Exam: 2 pages
Academic No:

Answer the following questions:

I- Read the passage *carefully* and answer the questions below: (25 Marks)

Many companies have computerized their accounting procedures because computers can do the work more quickly and more accurately than people. The work the computer does (storing information, finding the right information and doing calculations) is called data processing. The part of the computer that processes the data (information) is called the CPU (central processing unit). This contains only electronic components, called microchips.

A computer can only do what it is instructed to do. The instructions that are stored in a computer are called the computer programme. The people who write these instructions and put them in the computer are called computer programmers. You do not have to be a computer programmer to use a computer. The parts of the computer that most people use are called terminals. The terminals are usually a keyboard, which looks like a typewriter, and a VDU (visual display unit), which looks like a television or a printer. Information put into the computer on the keyboard is called input.

When the computer shows the result of the data processing on the VDU or the printer, this is called output. When computers go wrong, it is usually because there is something wrong with the input. In other words, it is a mistake made by a person, not by the computer. This is sometimes called GIGO. *NB. Garbage* is the American word for the British *rubbish*.

This new medium is unprecedented. Every single individual on the Net today is available to every other person on the Net. International connection coexists on the same level with local connection. Also the computer networks allow a more advanced connection between the people who are communicating. With computer-communication systems, information or thoughts are connected to people's names and electronic-mail addresses. On the Net, one can not only connect to others but also learn English and know more about British and American English.

- 1- Give a suitable title for the whole passage.
- 2- Explain the following terms: data processing, computer programmer, & GIGO.
- 3- Summarize the third paragraph in one sentence.
- 4- Translate the second paragraph into Arabic.
- 5- Mention 5 British words vs their American counterparts.

II- Explain *Five Only* of the following abbreviations: (15 Marks)

CV ESL MENA SARS TOEFL UNESCO VIP WHO

III- Choose the correct word:

(20 Marks)


- 1- There is a (little-few-a little) time; I can wait you for ten minutes.
- 2- It is nothing but (a synthesis-an analysis-synthetic) of traditional and modern values.
- 3- We started lectures (in-at-on) September.
- 4- Please, put the book (in-on-at) the shelf after you finish.
- 5- He (misused-abused-disused) his body with heroin.
- 6- We studied the acute and the right (angles-angels-ankles) at school.
- 7- (Although-Even though-Despite) his poverty, he is very happy.
- 8- This blister needs a local (anaesthetic-analgesic-antibiotic).
- 9- He took many courses in (BASIC-basic-basics).
- 10- May you lend me your pen (a while-awhile- for while)?
- 11- We decided to (call-CALL-calls) the new baby 'Asil.
- 12- The vultures are picking at a lion's (corpse-carcass-carcase).
- 13- The surgeon (cleaned-cleansed-clarified) the wound.
- 14- The abbreviations *CPU* and *VDU* are known as (initialism-acronym-shortening).
- 15- I have to finish my (duty-homework-housework) before watching TV.
- 16- There is not a single (mean-means-meanses) of transport in our village.
- 17- The (pharmacist-chemist-druggist) spends most of his time in the lab.
- 18- He explained us how the computer (RAM-Ram-ram) works.
- 19- We now choose the correct answer from (brackets-parentheses-square brackets).
- 20- Please, never (reply to-answer-respond to) more questions than required.

=====Good Luck=====

Dr Khaled Sirwah

Committee Members:

Dr Khaled Sirwah,
Dr Amir Hamzah
Dr Ahmed Madeh

Faculty of Computers & Information	Year 2015-2016	
	First - term Exam	
Information Technology	Three Hours	

Answer only **Two** questions of the following

Q3. (15 Points)

1. Write the difference between(5 points)
 - a. LAN, MAN and WAN.
 - b. Compiler and Assembler.

2. Write short notes about **(5 points)**
 - a. Network Topologies.
 - b. Uses of Multimedia.

3. Write short notes about The Modified von Neumann Architecture, support your answer with a diagram? **(5 points)**

Q4. (15 points)

1. Define the following Terms**(5 points)**
 - a. Multimedia system.
 - b. Low level Languages.

2. List Open System Interconnection (OSI) Model layers and explain each layer in brief? **(5 points)**

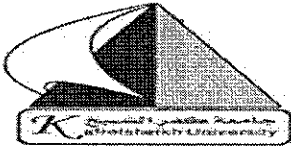
3. What is the computer system framework; support your answer with a diagram? **(5 points)**

Q5. (15 points)

1. What is the ASCII code of letter a, if you know that the ASCII code for the letter A is 65? Use binary conversions. **(5 points)**

2. Write short notes about the Computer level Hierarchy? (5points)

3. Give four examples of Applications of Information Technology Common to most Organizations; explain one of them in brief? **(5 points)**

Faculty of Computers & Information	Year 2015-2016	
	First - term Exam	
Information Technology	Three Hours	

Q1. Choose the correct answer(9 points)

- 1- Hard copy is a term used to describe ...?
 - a. Writing on a hard board
 - b. Printed output
 - c. Storing information on the hard disk
- 2- A Laser printer does NOT use ____?
 - b. A print head
 - b. A Laser beam
 - c. A photoconductive drum
- 3- Tool for generating catalogues is _____.
 - a. Word Processor
 - b. Spread Sheet
 - c. Desktop publishing
- 4- A Laser printer is a _____.
 - a. Page printer
 - b. Line Printer
 - c. Character Printer
- 5- What are responsible for storing permanent data and instructions?
 - a. ROM Chips
 - b. RAM Chips
 - c. DRAM Chips
- 6- Order to copy the contents of a cell in spread sheets is _____.
 - a. Ctrl + X
 - b. Ctrl + V
 - c. Ctrl + C

Q2. Put true (T) or false (F) and correct the false sentences(6 points)

1. SVGA is a type of monitors ().
2. Utility programs are considered application software ().
3. Formatting a floppy disk prepares it into round concentric tracks ().
4. Raster Images are mathematically defined by geometric shapes ().

Q3. (15 points)

1. Draw the logic gate for the following Boolean expressions , fill up the truth table(5 Points)
 - a. $(AB + AC)B$
 - b. $\text{Not}(AB).NOT(A+B).C$
2. **Convert**(6 Points)
 - a. Convert $101\ 011\ 101$ from base 2 to base 8
 - b. Convert $(c3d4)_{16}$ to base 2
 - c. Convert $(0.4125)_{10}$ to binary.
 - d. Convert $(128)_{10}$ to binary.
3. Make the following mathematical calculations in the Binary Number system(4 Points)
 - a. Find the summation of $(100111)_2$ and $(101011)_2$.
 - b. Subtract $(21)_{10}$ from $(7)_{10}$ using two's complement arithmetic?



Answer the following questions

1- (a) Find the solution set to the inequality $x^2 + 2x - 15 > 0$.

(b) Let $f(x) = \sqrt{x+7} - \sqrt{x^2 + 2x - 15}$. Find the domain of f .

2- (a) If $f(x) = \frac{2x+1}{x^2+1}$. Find the domain of f .

(b) Let ε and L be the ellipse and the line given by $2x^2 + y^2 = 6$ and $x + 2y - 3 = 0$ respectively. Find $\varepsilon \cap L$

3- (a) If $f(x) = x^2 + 1$ and $g(x) = x + 1$ Find.

$$: (f \circ g)(a^2), (g \circ f)(\sqrt{a})$$

(b) Let $f(x) = x^2 + 3$. Find $\lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$

4- (a) Prove that $\lim_{x \rightarrow 0} \frac{\sin x}{x} = 1$

(b) Find the area of the region bounded by $y^2 = 4 - 4x$, $y^2 = 4 - x$

5- (a) Use definition to find integral $\int_0^1 x^3 dx$,

$$\text{where } 1^3 + 2^3 + 3^3 + \dots + n^3 = \frac{n^2(n+1)^2}{4}$$

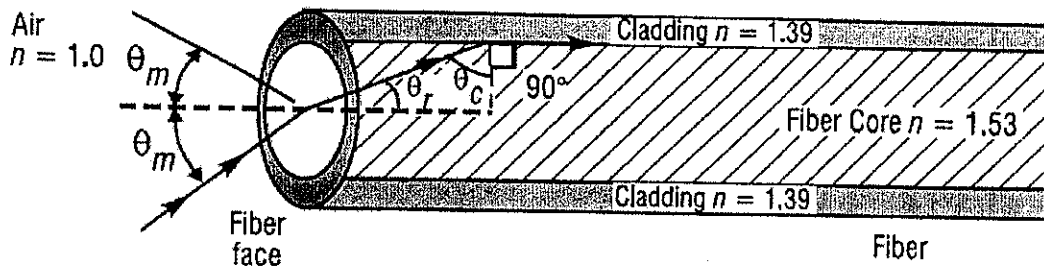
اسم المقرر : PHYS102
الدرجة : 60 درجة

امتحان الفرقة : الاولى كلية الحاسبات والمعلومات
الزمن : 3 ساعات (13:16)

Answer the following questions: (every Q 10 degree)

1. Give notes about: Huygens' wavelets, Constructive and destructive interference, Diffraction, Polarization by reflection and Brewster's angle, and Critical angle and total internal reflection.
- 2.

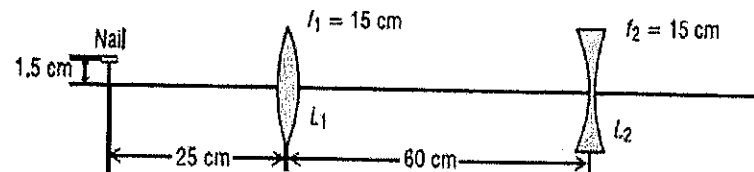
A step-index fiber 0.0025 inch in diameter has a core index of 1.53 and a cladding index of 1.39. See drawing. Such clad fibers are used frequently in applications involving communication, sensing, and imaging.



What is the maximum acceptance angle θ_m for a cone of light rays incident on the fiber face such that the refracted ray in the core of the fiber is incident on the cladding at the critical angle?

3. a) Give notes about: Reflection of light from optical surfaces, Dispersion of light
b) What are the properties of electromagnetic waves?
4. Explain Young's double-slit interference experiment; and obtain expressions for the position y of bright and dark fringes on the screen?
- 5.

A two-lens system is made up of a converging lens followed by a diverging lens, each of focal length 15 cm. The system is used to form an image of a short nail, 1.5 cm high, standing erect, 25 cm from the first lens. The two lenses are separated by a distance of 60 cm. See accompanying diagram. (Refer to



lens. The two lenses are separated by a distance of 60 cm. See accompanying diagram. (Refer to

6. a) Give notes about: Galilean Transformation, the postulates of Einstein, time dilation, and the relativistic Doppler Effect.
b) Drive the Lorentz transformation for the x-direction.