

Department of Mathematics		قسم الرياضيات
Faculty of Science		كلية العلوم
امتحان نهاية الفصل الدراسي الثاني للعام الجامعي ٢٠١٧/٢٠١٨ م		
الفرقة: الأولى	اسم المقرر: ١٠٠ ر	درجة الامتحان: ٥٠ درجة
الزمن: ساعتان		

أولا الجبر: أجب عن خمس فقرات فقط مما يلي:- (خمس درجات لكل فقرة)

١- استخدم الاستنتاج الرياضي في إثبات أن:

$$\frac{1}{1.2} + \frac{5}{2.3} + \frac{11}{3.4} + \dots \text{ إلى } n \text{ حدا } = \frac{n^2}{1+n}.$$

٢- حلل الكسر $\frac{2x^2 + 4x}{2x^2 - x - 1}$ إلى مجموع كسوره الجزئية.

٣- أوجد مجموع المتسلسلة الآتية: $\frac{1}{2.5} + \frac{1}{5.8} + \frac{1}{8.11} + \dots$ إلى ما لانهاية.

٤- اختبر تقارب المتسلسلات الآتية:

$$(i) \sum_{n=1}^{\infty} \frac{(-1)^{n+1}}{(3n-1)} \quad (ii) \frac{4}{1.3.5} + \frac{6}{3.5.7} + \frac{8}{5.7.9} + \dots \rightarrow \infty$$

٥- أوجد الأربعة حدود الأولى في مفكوك $(9-3x)^{3/2}$ بدلالة قوى $\frac{1}{x}$ التصاعدية ، مبينا قيم x

التي تجعل كل مفكوك صحيحا.

٦- باستخدام طريقة جاوس للحذف أوجد حل نظام المعادلات الخطية التالي:

$$x + 2y + 2z - 5 = 0,$$

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أنظر بقية الأسئلة في الخلف

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أنظر بقية الأسئلة في الخلف



Second Semester – Final Exam – May 2018

Course: English Language (1)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

I-Read the following passage, then answer the questions below:

(6x2=12 marks)

Steamships were first introduced into the United States in 1807, and John Molson built the first steamship in Canada (then called British North America) in 1809. By the 1830's dozens of steam vessels were in use in Canada. They offered the traveler **reliable** transportation in comfortable facilities-a welcome alternative to stagecoach travel, which at the best of times could only be described as wretched. This commitment to dependable river transport became entrenched with the investment of millions of dollars for the improvement of waterways which included the construction of canals and lock systems. The Lachine and Welland canals, two of the most important systems, were opened in 1825 and 1829, respectively. By the time that Upper and Lower Canada were united into the Province of Canada in 1841. The public debt for canals was more than one hundred dollars per capita, an enormous **sum** for the time. But it may not seem such a great amount if we consider that improvements allowed steamboats to remain practical for most commercial transport in Canada until the mid-nineteenth century.

1. What is the main purpose of the passage?

- (A) To contrast travel by steamship and stagecoach
- (B) To criticize the level of public debt in nineteenth century Canada
- (C) To describe the introduction of steamships in Canada
- (D) To show how Canada surpassed the United States in transportation improvements

2. The word "reliable" in line 3 is closest in meaning to which of the following.....

- (A) Quick
- (B) Safe
- (C) Dependable
- (D) Luxurious

3. Which of the following can be inferred from the passage about stagecoach travel in Canada in the 1831's?

- (A) It was reasonably comfortable.
- (B) It was extremely efficient.
- (C) It was not popular.
- (D) It was very practical.

4. According to the passage, when was the Welland Canal opened?

- (A) 1807
- (B) 1809
- (C) 1825
- (D) 1829

5. The word "sum" in line 9 is closest in meaning to which of the following?

- (A) Size
- (B) Cost
- (C) Payment
- (D) Amount

6. According to the passage, steamships became practical means of transportation in Canada because of.....

- (A) improvements in the waterways
- (B) large subsidies from John Molson
- (C) a relatively small population
- (D) the lack of alternate means

II- Choose the best definition for the underlined word:

(4x2= 8 marks)

1- Although Zachary is much too inexperienced for the managerial position, he is a willful young man and obdurately refuses to with- draw his application.

- foolishly
- b. reluctantly
- c. constantly
- d. stubbornly

2- Mr. Powers was so gullible that he believed even the most outland- ish excuses of his insincere employees.

- a. intelligent
- b. naïve
- c. dishonest
- d. critical

3-When people heard that timid Bob had taken up skydiving, they were incredulous.

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أنظر بقية الأسئلة في الخلف

- 4- The doctors were pleased that their theory had been fortified by the new research.
a. reinforced b. altered c. disputed d. developed

III- Choose the best topic sentence for the following:

(4x3=12 Marks)

- 1) _____. It rained in April; it rained in May. It rained in the mornings; it rained in the afternoons. It poured, it drizzled, it showered, it misted—but always it rained. But the good news is we won't have a drought this summer.
a. The rain makes me gloomy. b. This spring was the rainiest on record.
c. Rain is nice, but I prefer sunshine.
- 2) _____. I enjoy summer sports like water skiing and baseball. The weather is usually sunny and hot, so I can go to the beach almost every day. Gardening is my hobby and I spend many summer days working in my garden. Unfortunately, the days pass too quickly in summer.
a) I like to garden in summer. b) Summer is my favourite season. c) Summer is too short.
- 3) _____. First of all, we need money to repair old roads and build new roads. We also need more to pay teachers' salaries and to pay for services such as trash collection. Finally, more tax money is needed to give financial help to the poor citizens of the city. It is clear that the city will have serious problems if taxes are not raised soon.
a) We should raise city taxes. b) City taxes are too high. c) City taxes pay for new roads.
- 4) _____. One thing you must consider is the quality of the university's educational program. You also need to think about the school's size and location. Finally, you must be sure to consider the university's tuition to make sure you can afford to go to school there.
a) It is expensive to attend a university in the United States.
b) There are several factors to consider when you choose a university to attend.
c) You should consider getting a good education

IV-Grammar: Choose the best answer:

(6x3=18 marks)

- 1- When I have money. This is a (simple sentence – independent clause – dependent clause)
- 2- The sky is clear; the stars are twinkling. This is a (comma splice – compound sentence – complex sentence).
- 3- My professor read my paper she said it was excellent. This is a (simple sentence – run-on – compound sentence)
- 4- One of our teachers (is – are – am) going to leave the school.
- 5- Each of the girls brought (their – her – she) book.
- 6- Economics (are – is – were) my major field of study.

Best Wishes Dr. Marwa M. Abdelmotaleb



Second Semester – Final Exam – May 2018

Course: English Language (1)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

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Second Semester – Final Exam – May 2018

Course: English Language (2)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

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3. According to the passage, when was the Welland Canal opened?

- (A) 1807 (B) 1809 (C) 1825 (D) 1829

4. The word "sum" in line 9 is closest in meaning to which of the following?

- (A) Size (B) Cost (C) Payment (D) Amount

5. According to the passage, steamships became practical means of transportation in Canada because of.....

- (A) improvements in the waterways (B) large subsidies from John Molson
(C) a relatively small population (D) the lack of alternate means

II- Complete using the suitable homophones.

(2x10=20 marks)

A. "be" and "bee":

1. A _____ stung me at recess today.
2. She is supposed to _____ at work today.
3. I laughed when Mom said I was "Busy as a _____."
4. Hurry! I don't want to _____ late.

B. "cent" and "scent" and "sent"

5. Tracy _____ her mom flowers for her birthday.
6. Vanilla is my favorite _____.
7. A penny is worth one _____.
8. The _____ from her perfume was strong.
9. She was one _____ short to pay for ice cream.
10. The scary movie _____ shivers down my spine!

III. Choose the correct answer.

(2x5=10 marks)

1. Which of these is the correct spelling? We had a ...

- A) disagreement B) dissagreement C) disagreeâment

2. What does the word tireless mean?

- A) always feeling tired B) never feeling tired C) feeling less tired than someone else

3. If you heard that a band had re-formed, what would this mean?

- A) formed again B) formed for the first time C) formed for the last time

4. Which of these words cannot be made into another word by adding the prefix 'sub'?

- A) way B) marine C) book

5. What does the prefix 'dis' do to the word appeared in this sentence?

The cat disappeared before her very eyes.

- A) It tells you that the cat appeared bigger than before.
B) It tells you that the cat vanished.
C) It tells you that the act appeared to be further away.

IV- Choose the information that is most similar to the original sentence.

(2x5=10 marks)

1. We agreed that John and Jim were to buy the food.

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3. I am old enough to be your mother.

- 1) Your mother and I are exactly the same age.
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4. Canada is similar to the United States in that the majority of its people speak English.

- 1) Everyone in Canada and the United States speaks English
2) Some people in Canada speak English but everyone in the States speaks that language.
3) Some people in the State speak English but everyone in Canada speaks that language.
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5. Many of the problems one finds in city and suburban life result from a lack of proper planning.

- 1) We did not properly plan so there are some problems that we have.
2) We did not properly plan and we still do not have any problems.
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Best Wishes Dr. Marwa M. Abdelmotaleb



Second Semester – Final Exam – May 2018

Course: English Language (2)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

I-Read the following passage, then answer the questions below:

(5x2=10 marks)

Steamships were first introduced into the United States in 1807, and John Molson built the first steamship in Canada (then called British North America) in 1809. By the 1830's dozens of steam vessels were in use in Canada. They offered the traveler **reliable** transportation in comfortable facilities-a welcome alternative to stagecoach travel, which at the best of times could only be described as wretched. This commitment to dependable river transport became entrenched with the investment of millions of dollars for the improvement of waterways which included the construction of canals and lock systems. The Lachine and Welland canals, two of the most important systems, were opened in 1825 and 1829, respectively. By the time that Upper and Lower Canada were united into the Province of Canada in 1841. The public debt for canals was more than one hundred dollars per capita, an enormous **sum** for the time. But it may not seem such a great amount if we consider that improvements allowed steamboats to remain practical for most commercial transport in Canada until the mid-nineteenth century.

1. The word "reliable" in line 3 is closest in meaning to which of the following.....

- (A) Quick (B) Safe (C) Dependable (D) Luxurious

2. Which of the following can be inferred from the passage about stagecoach travel in Canada in the 1831's?

- (A) It was reasonably comfortable. (B) It was extremely efficient.
(C) It was not popular. (D) It was very practical.

3. According to the passage, when was the Welland Canal opened?

- (A) 1807 (B) 1809 (C) 1825 (D) 1829

4. The word "sum" in line 9 is closest in meaning to which of the following?

- (A) Size (B) Cost (C) Payment (D) Amount

5. According to the passage, steamships became practical means of transportation in Canada because of.....

- (A) improvements in the waterways (B) large subsidies from John Molson
(C) a relatively small population (D) the lack of alternate means

II- Complete using the suitable homophones.

(2x10=20 marks)

A. "be" and "bee":

1. A _____ stung me at recess today.
2. She is supposed to _____ at work today.
3. I laughed when Mom said I was "Busy as a _____."
4. Hurry! I don't want to _____ late.

B. "cent" and "scent" and "sent"

5. Tracy _____ her mom flowers for her birthday.
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امتحان نهائى للفصل الدراسي الثانى ٢٠١٧ / ٢٠١٨ م
الفرقة : اولى علوم - شعبة كيمياء صناعية

التاريخ: ١٤ / ٥ / ٢٠١٨ م
الزمن: ساعتين

الدرجة الكلية ٥٠ درجة

اسم المقرر: رياضيات عامة (١٠٥)

أجب عن الأسئلة الآتية:

First: The integration: Find the following integrals: (25 mark)

(1) (a) $\int \sin^5 x \, dx$, (b) $\int 3^{2x^2-1} x \, dx$, (c) $\int \frac{x^2+3}{x-1} \, dx$

(2) (a) $\int e^x \cos x \, dx$, (b) $\int_0^1 \sqrt{1-x^2} \, dx$, (c) $\int_0^\infty x e^x \, dx$

(3) Find the area bounded by : $y = \sqrt{x}$ and $y = x^2$.

(4) Find the volume V of the solid formed by the revolving region bounded by the graphs of $y = x + 2$ and $y = x^2$ about the x- axis.

Second: Analytic geometry: (25 mark)

(1) Write the following equation in the cartesian form : $r \cos \left(\theta - \frac{\pi}{3} \right) = 6$

(2) Determine the radius and center of the circle: $r^2 + \sqrt{3} r \cos \theta + r \sin \theta = 27$

(3) Discuss and sketch the graph of the parabola: $y^2 - 6y + 2x + 1 = 0$

(4) Discuss and sketch the graph of the ellipse with foci $\left(\pm \frac{3}{2}, 0 \right)$ and its eccentricity = $\frac{1}{2}$.

(5) Discuss and sketch the graph of the hyperbola with eccentricity = $\frac{\sqrt{7}}{2}$ and distance of the normal focal chord = 6.

انتهت الأسئلة، مع دعواتنا بالتوفيق والنجاح

أ. د. خلف عبد الحكيم - أ. د. حمدي نور الدين

III. Choose the correct answer.

(2x5=10 marks)

1. Which of these is the correct spelling? We had a ...

- A) disagreement B) dissagreement C) disagreeâment

2. What does the word tireless mean?

- A) always feeling tired B) never feeling tired C) feeling less tired than someone else

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Second Semester – Final Exam – May 2018

Course: English Language (2)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

I-Read the following passage, then answer the questions below:

(5x2=10 marks)

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3. According to the passage, when was the Welland Canal opened?

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4. The word "sum" in line 9 is closest in meaning to which of the following?

- (A) Size (B) Cost (C) Payment (D) Amount

5. According to the passage, steamships became practical means of transportation in Canada because of.....

- (A) improvements in the waterways (B) large subsidies from John Molson
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II- Complete using the suitable homophones.

(2x10=20 marks)

A. "be" and "bee":

1. A _____ stung me at recess today.
2. She is supposed to _____ at work today.
3. I laughed when Mom said I was "Busy as a _____."
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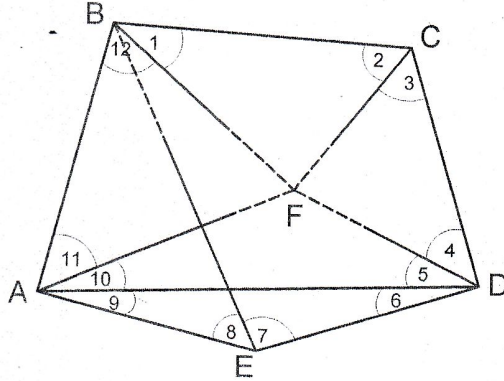
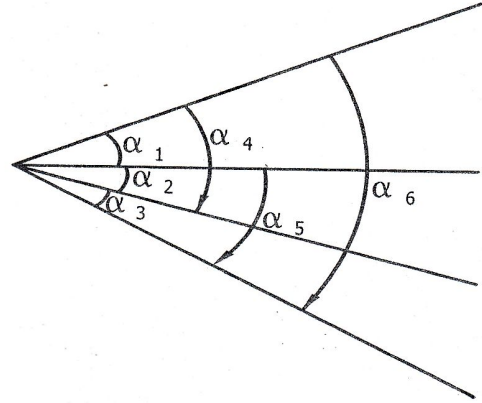
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5. Tracy _____ her mom flowers for her birthday.
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10. The scary movie _____ shivers down my spine!

السؤال الاول: (أ = ٢٥% وب = ٢٥% من الدرجة)

(أ) استخدام الطريقة البسيطة لتصحيح الزوايا المرصودة والمدونة كما يلي باستخدام الاوزان المعطاه.

$\alpha_1 = 30^\circ 10' 15''$	$P = 3$
$\alpha_2 = 21 \quad 15 \quad 08$	$P = 2$
$\alpha_3 = 16 \quad 06 \quad 12$	$P = 1$
$\alpha_4 = 51 \quad 25 \quad 24$	$P = 4$
$\alpha_5 = 37 \quad 21 \quad 22$	$P = 2$
$\alpha_6 = 67 \quad 31 \quad 38$	$P = 8$



(ب) الشكل التالي يوضح جزء من شبكة مثلثات مرصودة الزوايا، المطلوب حساب عدد ونوع الشروط في الشكل حسابيا وبيانها ثم كتابة معادلة شرطية واحدة لكل نوع من الشروط الموجودة.

السؤال الثاني: (أ = ٥% وب = ٢٠% وج = ٢٥% من الدرجة)

(أ) اذكر باختصار الاختلافات الأساسية بين المساحة الجيوديسية والمساحة المستوية.

(ب) نقطتان أ ، ب المسافة بينهما ٦٣,١ كم وارتفاع القمة (أ) هو ٩٤,٥ متر ، وارتفاع القمة (ب) هو ٦٥,٣ مترا . فإذا وجدت قمة اخرى (ج) ارتفاعها ٢٢,٧ متر على نفس الخط بين (أ ، ب) وعلى مسافة ٤٩,٢ كم من القمة (أ) . ابحث وجود تبادل رؤية بين (أ ، ب) ، وفي حالة عدم وجود تبادل رؤية ابحث عن حل مناسب يسمح بتبادل الرؤية بين النقطتين.

(ج) النقطتان A ، C لهما نفس المنسوب. تم عمل القياسات التالية بغرض تحديد ارتفاع الهدف h كما هو موضح بالشكل التالي. α ، γ عبارة عن زاويتين افقيتين . ε عبارة عن زاوية راسية. احسب كلا من h و σ_h .

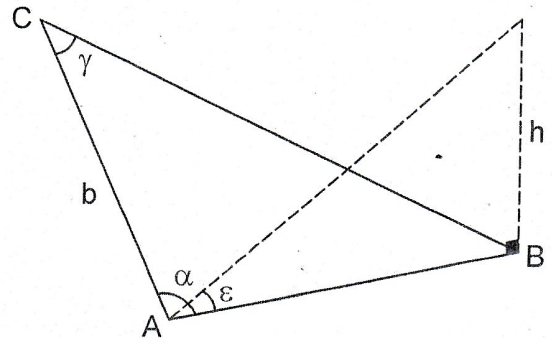
$$b = 128.56 \pm 0.008 \text{ m}$$

$$\alpha = 82^\circ 41' 15'' \pm 10''$$

$$\gamma = 84 \quad 20 \quad 10 \pm 15''$$

$$\varepsilon = 15 \quad 05 \quad 15 \pm 20''$$

$$h = \frac{b \sin \gamma \tan \varepsilon}{\sin(\alpha + \gamma)}$$



----- انتهت الاسئلة. اتمنى لكم التوفيق -----



امتحان نهائى للفصل الدراسي الثانى ٢٠١٧ / ٢٠١٨ م
الفرقة : اولى علوم - شعبة كيمياء صناعية

التاريخ: ١٤ / ٥ / ٢٠١٨ م
الزمن: ساعتين

الدرجة الكلية ٥٠ درجة

اسم المقرر: رياضيات عامة (١٠٥)

أجب عن الأسئلة الآتية:

First: The integration: Find the following integrals: (25 mark)

(1) (a) $\int \sin^5 x \, dx$, (b) $\int 3^{2x^2-1} x \, dx$, (c) $\int \frac{x^2+3}{x-1} \, dx$

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انتهت الأسئلة، مع دعواتنا بالتوفيق والنجاح

أ. د. خلف عبد الحكيم - أ. د. حمدي نور الدين

III. Choose the correct answer.

(2x5=10 marks)

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Second Semester – Final Exam – May 2018

Course: English Language (2)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

I-Read the following passage, then answer the questions below:

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Final Exam for Level 1
Subject: Mathematical and Statistical
Packages, MC100
Time: 2 Hours

Mathematics Dept.
Faculty of Science
Assiut University

Choose the correct answer and write it in the answer table:

Section 1: from 1 to 20 (20 marks)

1. What are common components inside the system unit?

- | | | | |
|---------------------------------|----------------------------|--------------------------|--------------------------|
| a) CPU – Ports-
Power Supply | b) CPU- CD. –
RAM-Mouth | c) CPU-
Keyboard- RAM | d) CPU-Monitor-
Ports |
|---------------------------------|----------------------------|--------------------------|--------------------------|

2.is manipulates raw data into more useful form and controls the other parts of the computer system

- | | | | |
|--------|-----------------|-----------------------------|-----------------|
| a) CPU | b) Mather board | c) Communication
devices | d) control unit |
|--------|-----------------|-----------------------------|-----------------|

3.devices store data and programs when they are not being used in processing.

- | | | | |
|------------------|-------------------|--------------------|----------------------|
| a) Input devices | b) Output devices | c) Primary Storage | d) Secondary Storage |
|------------------|-------------------|--------------------|----------------------|

4.are circuitry paths for transmitting data and signals among the parts of the computer system.

- | | | | |
|----------|-------------|--------|----------|
| a) Buses | b) Storages | c) RAM | d) cards |
|----------|-------------|--------|----------|

5. It has High-capacity storage and Consists of several inflexible, circular platters that store items electronically.

- | | | | |
|--------------|------------------|--------|--------|
| a) Hard disk | b) Magnetic disk | c) RAM | d) ROM |
|--------------|------------------|--------|--------|

6. Touch screen is considered as

- | | | | |
|------------------|-------------------|-----------------------------|-----------------|
| a) Input devices | b) Output devices | c) Communication
devices | d) control unit |
|------------------|-------------------|-----------------------------|-----------------|

7. Gigabyte=

- | | | | |
|---------------------|---------------------------|--------------------|---------------------|
| a) 1 thousand bytes | b) 1 thousand
Megabyte | c) 1 billion bytes | d) 1 trillion bytes |
|---------------------|---------------------------|--------------------|---------------------|

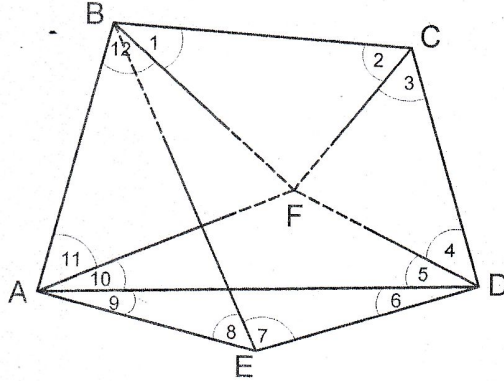
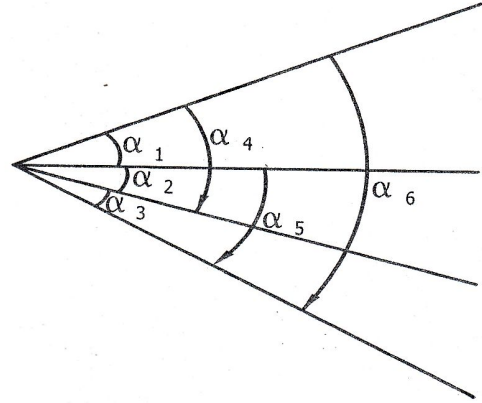
8. It is used for very large business, scientific or military application where a computer must handle massive amounts of data or many complicated processes.

- | | | | |
|----------|--------------|---------|----------|
| a) Micro | b) Mainframe | c) mini | d) Super |
|----------|--------------|---------|----------|

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$\alpha_5 = 37 \quad 21 \quad 22$	$P = 2$
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(ب) الشكل التالي يوضح جزء من شبكة مثلثات مرصودة الزوايا، المطلوب حساب عدد ونوع الشروط في الشكل حسابيا وبيانها ثم كتابة معادلة شرطية واحدة لكل نوع من الشروط الموجودة.

السؤال الثاني: (أ = ٥% وب = ٢٠% وج = ٢٥% من الدرجة)

(أ) اذكر باختصار الاختلافات الأساسية بين المساحة الجيوديسية والمساحة المستوية.

(ب) نقطتان أ ، ب المسافة بينهما ٦٣,١ كم وارتفاع القمة (أ) هو ٩٤,٥ متر ، وارتفاع القمة (ب) هو ٦٥,٣ مترا . فإذا وجدت قمة اخرى (ج) ارتفاعها ٢٢,٧ متر على نفس الخط بين (أ ، ب) وعلى مسافة ٤٩,٢ كم من القمة (أ) . ابحث وجود تبادل رؤية بين (أ ، ب) ، وفي حالة عدم وجود تبادل رؤية ابحث عن حل مناسب يسمح بتبادل الرؤية بين النقطتين.

(ج) النقطتان A ، C لهما نفس المنسوب. تم عمل القياسات التالية بغرض تحديد ارتفاع الهدف h كما هو موضح بالشكل التالي. α ، γ عبارة عن زاويتين افقيتين . ε عبارة عن زاوية راسية. احسب كلا من h و σ_h .

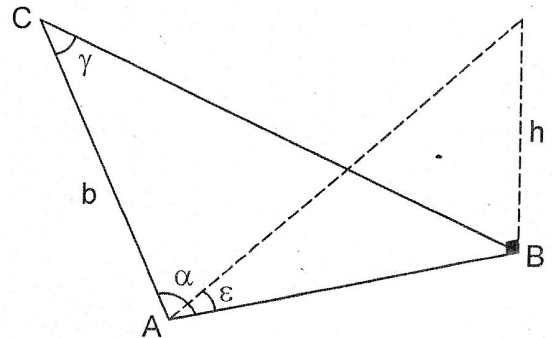
$$b = 128.56 \pm 0.008 \text{ m}$$

$$\alpha = 82^\circ 41' 15'' \pm 10''$$

$$\gamma = 84 \quad 20 \quad 10 \pm 15''$$

$$\varepsilon = 15 \quad 05 \quad 15 \pm 20''$$

$$h = \frac{b \sin \gamma \tan \varepsilon}{\sin(\alpha + \gamma)}$$





امتحان نهائى للفصل الدراسي الثانى ٢٠١٧ / ٢٠١٨ م
الفرقة : اولى علوم - شعبة كيمياء صناعية

التاريخ: ١٤ / ٥ / ٢٠١٨ م
الزمن: ساعتين

الدرجة الكلية ٥٠ درجة

اسم المقرر: رياضيات عامة (١٠٥)

أجب عن الأسئلة الآتية:

First: The integration: Find the following integrals: (25 mark)

(1) (a) $\int \sin^5 x \, dx$, (b) $\int 3^{2x^2-1} x \, dx$, (c) $\int \frac{x^2+3}{x-1} \, dx$

(2) (a) $\int e^x \cos x \, dx$, (b) $\int_0^1 \sqrt{1-x^2} \, dx$, (c) $\int_0^\infty x e^x \, dx$

(3) Find the area bounded by : $y = \sqrt{x}$ and $y = x^2$.

(4) Find the volume V of the solid formed by the revolving region bounded by the graphs of $y = x + 2$ and $y = x^2$ about the x- axis.

Second: Analytic geometry: (25 mark)

(1) Write the following equation in the cartesian form : $r \cos \left(\theta - \frac{\pi}{3} \right) = 6$

(2) Determine the radius and center of the circle: $r^2 + \sqrt{3} r \cos \theta + r \sin \theta = 27$

(3) Discuss and sketch the graph of the parabola: $y^2 - 6y + 2x + 1 = 0$

(4) Discuss and sketch the graph of the ellipse with foci $\left(\pm \frac{3}{2}, 0 \right)$ and its eccentricity = $\frac{1}{2}$.

(5) Discuss and sketch the graph of the hyperbola with eccentricity = $\frac{\sqrt{7}}{2}$ and distance of the normal focal chord = 6.

انتهت الأسئلة، مع دعواتنا بالتوفيق والنجاح

أ. د. خلف عبد الحكيم - أ. د. حمدي نور الدين

III. Choose the correct answer.

(2x5=10 marks)

1. Which of these is the correct spelling? We had a ...

- A) disagreement B) dissagreement C) disagreeâment

2. What does the word tireless mean?

- A) always feeling tired B) never feeling tired C) feeling less tired than someone else

3. If you heard that a band had re-formed, what would this mean?

- A) formed again B) formed for the first time C) formed for the last time

4. Which of these words cannot be made into another word by adding the prefix 'sub'?

- A) way B) marine C) book

5. What does the prefix 'dis' do to the word appeared in this sentence?

The cat disappeared before her very eyes.

- A) It tells you that the cat appeared bigger than before.
B) It tells you that the cat vanished.
C) It tells you that the act appeared to be further away.

IV- Choose the information that is most similar to the original sentence.

(2x5=10 marks)

1. We agreed that John and Jim were to buy the food.

- 1) John and Jim would agree to buy the food for us.
2) John, Jim and we agree to buy the food.
3) We agree John and Jim would to bought the food.
4) John and Jim were chosen by us to by the food.

2. In Japan, even more than, China, people use bamboo for decoration.

- 1) Both the Japanese and the China se bamboo for the same decoration.
2) Only the Japanese use bamboo for more decoration than the Chinese.
3) The Japanese use more bamboo for decoration than the Chinese do.
4) Not only the Japanese, but also the Chinese, use bamboo for decoration.

3. I am old enough to be your mother.

- 1) Your mother and I are exactly the same age.
2) Your mother and I are both older than you.
3) I am about the same age as your mother.
4) I am not nearly as old as your own mother.

4. Canada is similar to the United States in that the majority of its people speak English.

- 1) Everyone in Canada and the United States speaks English
2) Some people in Canada speak English but everyone in the States speaks that language.
3) Some people in the State speak English but everyone in Canada speaks that language.
4) Some people in Canada and the United States speak those languages other than English.

5. Many of the problems one finds in city and suburban life result from a lack of proper planning.

- 1) We did not properly plan so there are some problems that we have.
2) We did not properly plan and we still do not have any problems.
3) We have properly planned so there are no problems.
4) We have properly planned but there are still many problems.

Best Wishes Dr. Marwa M. Abdelmotaleb



Second Semester – Final Exam – May 2018

Course: English Language (2)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

I-Read the following passage, then answer the questions below:

(5x2=10 marks)

Steamships were first introduced into the United States in 1807, and John Molson built the first steamship in Canada (then called British North America) in 1809. By the 1830's dozens of steam vessels were in use in Canada. They offered the traveler **reliable** transportation in comfortable facilities-a welcome alternative to stagecoach travel, which at the best of times could only be described as wretched. This commitment to dependable river transport became entrenched with the investment of millions of dollars for the improvement of waterways which included the construction of canals and lock systems. The Lachine and Welland canals, two of the most important systems, were opened in 1825 and 1829, respectively. By the time that Upper and Lower Canada were united into the Province of Canada in 1841. The public debt for canals was more than one hundred dollars per capita, an enormous **sum** for the time. But it may not seem such a great amount if we consider that improvements allowed steamboats to remain practical for most commercial transport in Canada until the mid-nineteenth century.

1. The word "reliable" in line 3 is closest in meaning to which of the following.....

- (A) Quick (B) Safe (C) Dependable (D) Luxurious

2. Which of the following can be inferred from the passage about stagecoach travel in Canada in the 1831's?

- (A) It was reasonably comfortable. (B) It was extremely efficient.
(C) It was not popular. (D) It was very practical.

3. According to the passage, when was the Welland Canal opened?

- (A) 1807 (B) 1809 (C) 1825 (D) 1829

4. The word "sum" in line 9 is closest in meaning to which of the following?

- (A) Size (B) Cost (C) Payment (D) Amount

5. According to the passage, steamships became practical means of transportation in Canada because of.....

- (A) improvements in the waterways (B) large subsidies from John Molson
(C) a relatively small population (D) the lack of alternate means

II- Complete using the suitable homophones.


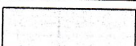
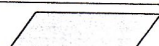

(2x10=20 marks)

A. "be" and "bee":

1. A _____ stung me at recess today.
2. She is supposed to _____ at work today.
3. I laughed when Mom said I was "Busy as a _____."
4. Hurry! I don't want to _____ late.

B. "cent" and "scent" and "sent"

5. Tracy _____ her mom flowers for her birthday.
6. Vanilla is my favorite _____.
7. A penny is worth one _____.
8. The _____ from her perfume was strong.
9. She was one _____ short to pay for ice cream.
10. The scary movie _____ shivers down my spine!

10.is considered as operating system			
a) windows	b) linux	c) Unix	d) all pervious solution
11. convert application programs and any other software programs into the machine language that actually controls the computer's operations.			
a) utility Program	b) Language Translator	c) Network	d) comments
12. translates high-level language program into machine-language all at once.			
a) function	b) Compilers	c) Assemblers	d) Interpreters
13.when you run the program , the program give incorrect result .			
a) logic error	b) syntax error	c) syntax error	d) others
14. Let $x = \begin{bmatrix} 2 \\ 5 \\ 6 \end{bmatrix}$. How can we compute the $\begin{bmatrix} 4 \\ 25 \\ 36 \end{bmatrix}$			
a) $x*x$	b) $x.^{(2)}$	c) x^2	d) $x**x$
15. Which Matlab commands create a vector of the even whole numbers from 99 to 10			
a) 98:-2:10	b) 98:10,2	c) 10:2:99	d) 99:10:-2
16. In Matlab, which of the following symbols cannot be used in the condition statement of an IF statement?			
a) >	b) <=	c) ==	d) =
17. The number in binary sytem is called			
a) Bit	b) bin	c) byte	d) bsys
18. In flow chart, we can express to decision and start with			
a) 	b) 	c) 	d) 
19. When we use calculate the area of circle shape with no condition, the algorithm is considered as			
a) sequence	b) loop	c) branching	d) other
20. command is to delete all variable values.			
a) del	b) clc	c) clear	d) rem



Final Exam for Level 1
Subject: Mathematical and Statistical
Packages, MC100
Time: 2 Hours

Mathematics Dept.
Faculty of Science
Assiut University

Choose the correct answer and write it in the answer table:

Section 1: from 1 to 20 (20 marks)

1. What are common components inside the system unit?

- | | | | |
|---------------------------------|----------------------------|--------------------------|--------------------------|
| a) CPU – Ports-
Power Supply | b) CPU- CD. –
RAM-Mouth | c) CPU-
Keyboard- RAM | d) CPU-Monitor-
Ports |
|---------------------------------|----------------------------|--------------------------|--------------------------|

2.is manipulates raw data into more useful form and controls the other parts of the computer system

- | | | | |
|--------|-----------------|-----------------------------|-----------------|
| a) CPU | b) Mather board | c) Communication
devices | d) control unit |
|--------|-----------------|-----------------------------|-----------------|

3.devices store data and programs when they are not being used in processing.

- | | | | |
|------------------|-------------------|--------------------|----------------------|
| a) Input devices | b) Output devices | c) Primary Storage | d) Secondary Storage |
|------------------|-------------------|--------------------|----------------------|

4.are circuitry paths for transmitting data and signals among the parts of the computer system.

- | | | | |
|----------|-------------|--------|----------|
| a) Buses | b) Storages | c) RAM | d) cards |
|----------|-------------|--------|----------|

5. It has High-capacity storage and Consists of several inflexible, circular platters that store items electronically.

- | | | | |
|--------------|------------------|--------|--------|
| a) Hard disk | b) Magnetic disk | c) RAM | d) ROM |
|--------------|------------------|--------|--------|

6. Touch screen is considered as

- | | | | |
|------------------|-------------------|-----------------------------|-----------------|
| a) Input devices | b) Output devices | c) Communication
devices | d) control unit |
|------------------|-------------------|-----------------------------|-----------------|

7. Gigabyte=

- | | | | |
|---------------------|---------------------------|--------------------|---------------------|
| a) 1 thousand bytes | b) 1 thousand
Megabyte | c) 1 billion bytes | d) 1 trillion bytes |
|---------------------|---------------------------|--------------------|---------------------|

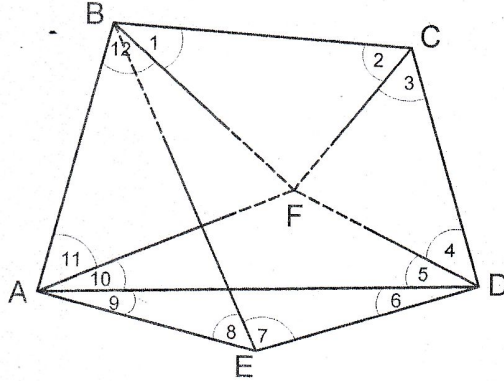
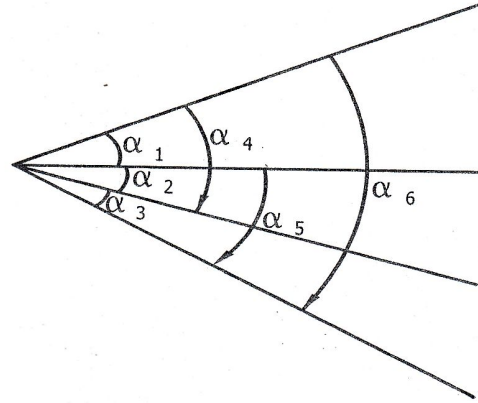
8. It is used for very large business, scientific or military application where a computer must handle massive amounts of data or many complicated processes.

- | | | | |
|----------|--------------|---------|----------|
| a) Micro | b) Mainframe | c) mini | d) Super |
|----------|--------------|---------|----------|

السؤال الاول: (أ = ٢٥% وب = ٢٥% من الدرجة)

(أ) استخدام الطريقة البسيطة لتصحيح الزوايا المرصودة والمدونة كما يلي باستخدام الاوزان المعطاه.

$\alpha_1 = 30^\circ 10' 15''$	$P = 3$
$\alpha_2 = 21 \quad 15 \quad 08$	$P = 2$
$\alpha_3 = 16 \quad 06 \quad 12$	$P = 1$
$\alpha_4 = 51 \quad 25 \quad 24$	$P = 4$
$\alpha_5 = 37 \quad 21 \quad 22$	$P = 2$
$\alpha_6 = 67 \quad 31 \quad 38$	$P = 8$



(ب) الشكل التالي يوضح جزء من شبكة مثلثات مرصودة الزوايا، المطلوب حساب عدد ونوع الشروط في الشكل حسابيا وبيانها ثم كتابة معادلة شرطية واحدة لكل نوع من الشروط الموجودة.

السؤال الثاني: (أ = ٥% وب = ٢٠% وج = ٢٥% من الدرجة)

(أ) اذكر باختصار الاختلافات الأساسية بين المساحة الجيوديسية والمساحة المستوية.

(ب) نقطتان أ ، ب المسافة بينهما ٦٣,١ كم وارتفاع القمة (أ) هو ٩٤,٥ متر ، وارتفاع القمة (ب) هو ٦٥,٣ مترا . فإذا وجدت قمة اخرى (ج) ارتفاعها ٢٢,٧ متر على نفس الخط بين (أ ، ب) وعلى مسافة ٤٩,٢ كم من القمة (أ) . ابحث وجود تبادل رؤية بين (أ ، ب) ، وفي حالة عدم وجود تبادل رؤية ابحث عن حل مناسب يسمح بتبادل الرؤية بين النقطتين.

(ج) النقطتان A ، C لهما نفس المنسوب. تم عمل القياسات التالية بغرض تحديد ارتفاع الهدف h كما هو موضح بالشكل التالي. α ، γ عبارة عن زاويتين افقيتين . ε عبارة عن زاوية راسية. احسب كلا من h و σ_h .

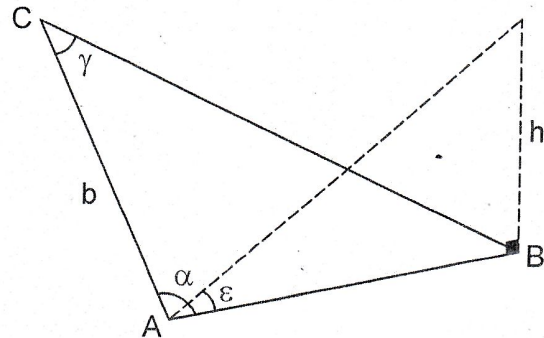
$$b = 128.56 \pm 0.008 \text{ m}$$

$$\alpha = 82^\circ 41' 15'' \pm 10''$$

$$\gamma = 84 \quad 20 \quad 10 \pm 15''$$

$$\varepsilon = 15 \quad 05 \quad 15 \pm 20''$$

$$h = \frac{b \sin \gamma \tan \varepsilon}{\sin(\alpha + \gamma)}$$





امتحان نهائى للفصل الدراسي الثانى ٢٠١٧ / ٢٠١٨ م
الفرقة : اولى علوم - شعبة كيمياء صناعية

التاريخ: ١٤ / ٥ / ٢٠١٨ م
الزمن: ساعتين

الدرجة الكلية ٥٠ درجة

اسم المقرر: رياضيات عامة (١٠٥)

أجب عن الأسئلة الآتية:

First: The integration: Find the following integrals: (25 mark)

(1) (a) $\int \sin^5 x \, dx$, (b) $\int 3^{2x^2-1} x \, dx$, (c) $\int \frac{x^2+3}{x-1} \, dx$

(2) (a) $\int e^x \cos x \, dx$, (b) $\int_0^1 \sqrt{1-x^2} \, dx$, (c) $\int_0^\infty x e^x \, dx$

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Second: Analytic geometry: (25 mark)

(1) Write the following equation in the cartesian form : $r \cos \left(\theta - \frac{\pi}{3} \right) = 6$

(2) Determine the radius and center of the circle: $r^2 + \sqrt{3} r \cos \theta + r \sin \theta = 27$

(3) Discuss and sketch the graph of the parabola: $y^2 - 6y + 2x + 1 = 0$

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(5) Discuss and sketch the graph of the hyperbola with eccentricity = $\frac{\sqrt{7}}{2}$ and distance of the normal focal chord = 6.

انتهت الأسئلة، مع دعواتنا بالتوفيق والنجاح

أ. د. خلف عبد الحكيم - أ. د. حمدي نور الدين

III. Choose the correct answer.

(2x5=10 marks)

1. Which of these is the correct spelling? We had a ...

- A) disagreement B) dissagreement C) disagreeâment

2. What does the word tireless mean?

- A) always feeling tired B) never feeling tired C) feeling less tired than someone else

3. If you heard that a band had re-formed, what would this mean?

- A) formed again B) formed for the first time C) formed for the last time

4. Which of these words cannot be made into another word by adding the prefix 'sub'?

- A) way B) marine C) book

5. What does the prefix 'dis' do to the word appeared in this sentence?

The cat disappeared before her very eyes.

- A) It tells you that the cat appeared bigger than before.
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IV- Choose the information that is most similar to the original sentence.

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1. We agreed that John and Jim were to buy the food.

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4. Canada is similar to the United States in that the majority of its people speak English.

- 1) Everyone in Canada and the United States speaks English.
2) Some people in Canada speak English but everyone in the States speaks that language.
3) Some people in the State speak English but everyone in Canada speaks that language.
4) Some people in Canada and the United States speak those languages other than English.

5. Many of the problems one finds in city and suburban life result from a lack of proper planning.

- 1) We did not properly plan so there are some problems that we have.
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3) We have properly planned so there are no problems.
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Best Wishes Dr. Marwa M. Abdelmotaleb



Second Semester – Final Exam – May 2018

Course: English Language (2)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

I-Read the following passage, then answer the questions below:

(5x2=10 marks)

Steamships were first introduced into the United States in 1807, and John Molson built the first steamship in Canada (then called British North America) in 1809. By the 1830's dozens of steam vessels were in use in Canada. They offered the traveler **reliable** transportation in comfortable facilities-a welcome alternative to stagecoach travel, which at the best of times could only be described as wretched. This commitment to dependable river transport became entrenched with the investment of millions of dollars for the improvement of waterways which included the construction of canals and lock systems. The Lachine and Welland canals, two of the most important systems, were opened in 1825 and 1829, respectively. By the time that Upper and Lower Canada were united into the Province of Canada in 1841. The public debt for canals was more than one hundred dollars per capita, an enormous **sum** for the time. But it may not seem such a great amount if we consider that improvements allowed steamboats to remain practical for most commercial transport in Canada until the mid-nineteenth century.

1. The word "reliable" in line 3 is closest in meaning to which of the following.....

- (A) Quick (B) Safe (C) Dependable (D) Luxurious

2. Which of the following can be inferred from the passage about stagecoach travel in Canada in the 1831's?

- (A) It was reasonably comfortable. (B) It was extremely efficient.
(C) It was not popular. (D) It was very practical.

3. According to the passage, when was the Welland Canal opened?

- (A) 1807 (B) 1809 (C) 1825 (D) 1829

4. The word "sum" in line 9 is closest in meaning to which of the following?

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5. According to the passage, steamships became practical means of transportation in Canada because of.....

- (A) improvements in the waterways (B) large subsidies from John Molson
(C) a relatively small population (D) the lack of alternate means

II- Complete using the suitable homophones.

(2x10=20 marks)

A. "be" and "bee":

1. A _____ stung me at recess today.
2. She is supposed to _____ at work today.
3. I laughed when Mom said I was "Busy as a _____."
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7. A penny is worth one _____.
8. The _____ from her perfume was strong.
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2017/2018


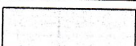
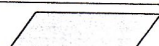

Final Exam for Level 1
Subject: Mathematical and Statistical
Packages, MC100
Time: 2 Hours

Mathematics Dept.
Faculty of Science
Assiut University

Choose the correct answer and write it in the answer table:

Section 1: from 1 to 20 (20 marks)

1. What are common components inside the system unit?			
a) CPU – Ports- Power Supply	b) CPU- CD. – RAM-Mouth	c) CPU- Keyboard- RAM	d) CPU-Monitor- Ports
2.is manipulates raw data into more useful form and controls the other parts of the computer system			
a) CPU	b) Mather board	c) Communication devices	d) control unit
3.devices store data and programs when they are not being used in processing.			
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4.are circuitry paths for transmitting data and signals among the parts of the computer system.			
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a) Hard disk	b) Magnetic disk	c) RAM	d) ROM
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7. Gigabyte=			
a) 1 thousand bytes	b) 1 thousand Megabyte	c) 1 billion bytes	d) 1 trillion bytes
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12. translates high-level language program into machine-language all at once.			
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13.when you run the program , the program give incorrect result .			
a) logic error	b) syntax error	c) syntax error	d) others
14. Let $x = \begin{bmatrix} 2 \\ 5 \\ 6 \end{bmatrix}$. How can we compute the $\begin{bmatrix} 4 \\ 25 \\ 36 \end{bmatrix}$			
a) $x*x$	b) $x.^{(2)}$	c) x^2	d) $x**x$
15. Which Matlab commands create a vector of the even whole numbers from 99 to 10			
a) 98:-2:10	b) 98:10,2	c) 10:2:99	d) 99:10:-2
16. In Matlab, which of the following symbols cannot be used in the condition statement of an IF statement?			
a) >	b) <=	c) ==	d) =
17. The number in binary sytem is called			
a) Bit	b) bin	c) byte	d) bsys
18. In flow chart, we can express to decision and start with			
a) 	b) 	c) 	d) 
19. When we use calculate the area of circle shape with no condition, the algorithm is considered as			
a) sequence	b) loop	c) branching	d) other
20. command is to delete all variable values.			
a) del	b) clc	c) clear	d) rem



Final Exam for Level 1
Subject: Mathematical and Statistical
Packages, MC100
Time: 2 Hours

Mathematics Dept.
Faculty of Science
Assiut University

Choose the correct answer and write it in the answer table:

Section 1: from 1 to 20 (20 marks)

1. What are common components inside the system unit?

- | | | | |
|---------------------------------|----------------------------|--------------------------|--------------------------|
| a) CPU – Ports-
Power Supply | b) CPU- CD. –
RAM-Mouth | c) CPU-
Keyboard- RAM | d) CPU-Monitor-
Ports |
|---------------------------------|----------------------------|--------------------------|--------------------------|

2.is manipulates raw data into more useful form and controls the other parts of the computer system

- | | | | |
|--------|-----------------|-----------------------------|-----------------|
| a) CPU | b) Mather board | c) Communication
devices | d) control unit |
|--------|-----------------|-----------------------------|-----------------|

3.devices store data and programs when they are not being used in processing.

- | | | | |
|------------------|-------------------|--------------------|----------------------|
| a) Input devices | b) Output devices | c) Primary Storage | d) Secondary Storage |
|------------------|-------------------|--------------------|----------------------|

4.are circuitry paths for transmitting data and signals among the parts of the computer system.

- | | | | |
|----------|-------------|--------|----------|
| a) Buses | b) Storages | c) RAM | d) cards |
|----------|-------------|--------|----------|

5. It has High-capacity storage and Consists of several inflexible, circular platters that store items electronically.

- | | | | |
|--------------|------------------|--------|--------|
| a) Hard disk | b) Magnetic disk | c) RAM | d) ROM |
|--------------|------------------|--------|--------|

6. Touch screen is considered as

- | | | | |
|------------------|-------------------|-----------------------------|-----------------|
| a) Input devices | b) Output devices | c) Communication
devices | d) control unit |
|------------------|-------------------|-----------------------------|-----------------|

7. Gigabyte=

- | | | | |
|---------------------|---------------------------|--------------------|---------------------|
| a) 1 thousand bytes | b) 1 thousand
Megabyte | c) 1 billion bytes | d) 1 trillion bytes |
|---------------------|---------------------------|--------------------|---------------------|

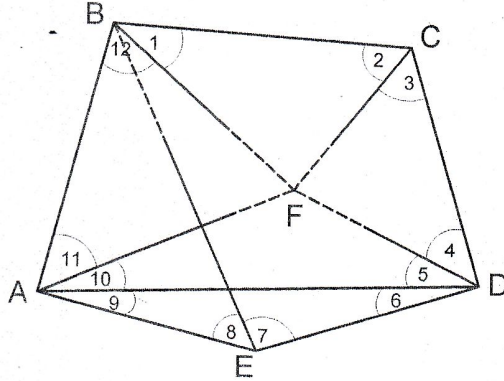
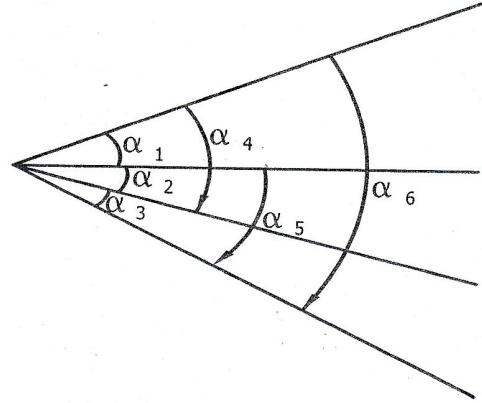
8. It is used for very large business, scientific or military application where a computer must handle massive amounts of data or many complicated processes.

- | | | | |
|----------|--------------|---------|----------|
| a) Micro | b) Mainframe | c) mini | d) Super |
|----------|--------------|---------|----------|

السؤال الاول: (أ = ٢٥% وب = ٢٥% من الدرجة)

(أ) استخدام الطريقة البسيطة لتصحيح الزوايا المرصودة والمدونة كما يلي باستخدام الاوزان المعطاه.

$\alpha_1 = 30^\circ 10' 15''$	$P = 3$
$\alpha_2 = 21 \quad 15 \quad 08$	$P = 2$
$\alpha_3 = 16 \quad 06 \quad 12$	$P = 1$
$\alpha_4 = 51 \quad 25 \quad 24$	$P = 4$
$\alpha_5 = 37 \quad 21 \quad 22$	$P = 2$
$\alpha_6 = 67 \quad 31 \quad 38$	$P = 8$



(ب) الشكل التالي يوضح جزء من شبكة مثلثات مرصودة الزوايا، المطلوب حساب عدد ونوع الشروط في الشكل حسابيا وبيانها ثم كتابة معادلة شرطية واحدة لكل نوع من الشروط الموجودة.

السؤال الثاني: (أ = ٥% وب = ٢٠% وج = ٢٥% من الدرجة)

(أ) اذكر باختصار الاختلافات الأساسية بين المساحة الجيوديسية والمساحة المستوية.

(ب) نقطتان أ ، ب المسافة بينهما ٦٣,١ كم وارتفاع القمة (أ) هو ٩٤,٥ متر ، وارتفاع القمة (ب) هو ٦٥,٣ مترا . فإذا وجدت قمة اخرى (ج) ارتفاعها ٢٢,٧ متر على نفس الخط بين (أ ، ب) وعلى مسافة ٤٩,٢ كم من القمة (أ) . ابحث وجود تبادل رؤية بين (أ ، ب) ، وفي حالة عدم وجود تبادل رؤية ابحث عن حل مناسب يسمح بتبادل الرؤية بين النقطتين.

(ج) النقطتان A ، C لهما نفس المنسوب. تم عمل القياسات التالية بغرض تحديد ارتفاع الهدف h كما هو موضح بالشكل التالي. α ، γ عبارة عن زاويتين افقيتين . ε عبارة عن زاوية راسية. احسب كلا من h و σ_h .

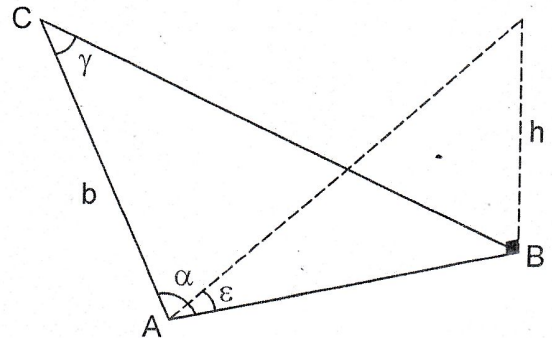
$$b = 128.56 \pm 0.008 \text{ m}$$

$$\alpha = 82^\circ 41' 15'' \pm 10''$$

$$\gamma = 84 \quad 20 \quad 10 \pm 15''$$

$$\varepsilon = 15 \quad 05 \quad 15 \pm 20''$$

$$h = \frac{b \sin \gamma \tan \varepsilon}{\sin(\alpha + \gamma)}$$





امتحان نهائى للفصل الدراسي الثانى ٢٠١٧ / ٢٠١٨ م
الفرقة : اولى علوم - شعبة كيمياء صناعية

التاريخ: ١٤ / ٥ / ٢٠١٨ م
الزمن: ساعتين

الدرجة الكلية ٥٠ درجة

اسم المقرر: رياضيات عامة (١٠٥)

أجب عن الأسئلة الآتية:

First: The integration: Find the following integrals: (25 mark)

(1) (a) $\int \sin^5 x \, dx$, (b) $\int 3^{2x^2-1} x \, dx$, (c) $\int \frac{x^2+3}{x-1} \, dx$

(2) (a) $\int e^x \cos x \, dx$, (b) $\int_0^1 \sqrt{1-x^2} \, dx$, (c) $\int_0^\infty x e^x \, dx$

(3) Find the area bounded by : $y = \sqrt{x}$ and $y = x^2$.

(4) Find the volume V of the solid formed by the revolving region bounded by the graphs of $y = x + 2$ and $y = x^2$ about the x- axis.

Second: Analytic geometry: (25 mark)

(1) Write the following equation in the cartesian form : $r \cos \left(\theta - \frac{\pi}{3} \right) = 6$

(2) Determine the radius and center of the circle: $r^2 + \sqrt{3} r \cos \theta + r \sin \theta = 27$

(3) Discuss and sketch the graph of the parabola: $y^2 - 6y + 2x + 1 = 0$

(4) Discuss and sketch the graph of the ellipse with foci $\left(\pm \frac{3}{2}, 0 \right)$ and its eccentricity = $\frac{1}{2}$.

(5) Discuss and sketch the graph of the hyperbola with eccentricity = $\frac{\sqrt{7}}{2}$ and distance of the normal focal chord = 6.

انتهت الأسئلة، مع دعواتنا بالتوفيق والنجاح

أ. د. خلف عبد الحكيم - أ. د. حمدي نور الدين

III. Choose the correct answer.

(2x5=10 marks)

1. Which of these is the correct spelling? We had a ...

- A) disagreement B) dissagreement C) disagreeâment

2. What does the word tireless mean?

- A) always feeling tired B) never feeling tired C) feeling less tired than someone else

3. If you heard that a band had re-formed, what would this mean?

- A) formed again B) formed for the first time C) formed for the last time

4. Which of these words cannot be made into another word by adding the prefix 'sub'?

- A) way B) marine C) book

5. What does the prefix 'dis' do to the word appeared in this sentence?

The cat disappeared before her very eyes.

- A) It tells you that the cat appeared bigger than before.
B) It tells you that the cat vanished.
C) It tells you that the act appeared to be further away.

IV- Choose the information that is most similar to the original sentence.

(2x5=10 marks)

1. We agreed that John and Jim were to buy the food.

- 1) John and Jim would agree to buy the food for us.
2) John, Jim and we agree to buy the food.
3) We agree John and Jim would to bought the food.
4) John and Jim were chosen by us to by the food.

2. In Japan, even more than, China, people use bamboo for decoration.

- 1) Both the Japanese and the China se bamboo for the same decoration.
2) Only the Japanese use bamboo for more decoration than the Chinese.
3) The Japanese use more bamboo for decoration than the Chinese do.
4) Not only the Japanese, but also the Chinese, use bamboo for decoration.

3. I am old enough to be your mother.

- 1) Your mother and I are exactly the same age.
2) Your mother and I are both older than you.
3) I am about the same age as your mother.
4) I am not nearly as old as your own mother.

4. Canada is similar to the United States in that the majority of its people speak English.

- 1) Everyone in Canada and the United States speaks English
2) Some people in Canada speak English but everyone in the States speaks that language.
3) Some people in the State speak English but everyone in Canada speaks that language.
4) Some people in Canada and the United States speak those languages other than English.

5. Many of the problems one finds in city and suburban life result from a lack of proper planning.

- 1) We did not properly plan so there are some problems that we have.
2) We did not properly plan and we still do not have any problems.
3) We have properly planned so there are no problems.
4) We have properly planned but there are still many problems.

Best Wishes Dr. Marwa M. Abdelmotaleb



Second Semester – Final Exam – May 2018

Course: English Language (2)

Time Allowed: Two Hours

Total Score: 50 Marks

Date: 22-5-2018

I-Read the following passage, then answer the questions below:

(5x2=10 marks)

Steamships were first introduced into the United States in 1807, and John Molson built the first steamship in Canada (then called British North America) in 1809. By the 1830's dozens of steam vessels were in use in Canada. They offered the traveler **reliable** transportation in comfortable facilities-a welcome alternative to stagecoach travel, which at the best of times could only be described as wretched. This commitment to dependable river transport became entrenched with the investment of millions of dollars for the improvement of waterways which included the construction of canals and lock systems. The Lachine and Welland canals, two of the most important systems, were opened in 1825 and 1829, respectively. By the time that Upper and Lower Canada were united into the Province of Canada in 1841. The public debt for canals was more than one hundred dollars per capita, an enormous **sum** for the time. But it may not seem such a great amount if we consider that improvements allowed steamboats to remain practical for most commercial transport in Canada until the mid-nineteenth century.

1. The word "reliable" in line 3 is closest in meaning to which of the following.....

- (A) Quick (B) Safe (C) Dependable (D) Luxurious

2. Which of the following can be inferred from the passage about stagecoach travel in Canada in the 1831's?

- (A) It was reasonably comfortable. (B) It was extremely efficient.
(C) It was not popular. (D) It was very practical.

3. According to the passage, when was the Welland Canal opened?

- (A) 1807 (B) 1809 (C) 1825 (D) 1829

4. The word "sum" in line 9 is closest in meaning to which of the following?

- (A) Size (B) Cost (C) Payment (D) Amount

5. According to the passage, steamships became practical means of transportation in Canada because of.....

- (A) improvements in the waterways (B) large subsidies from John Molson
(C) a relatively small population (D) the lack of alternate means

II- Complete using the suitable homophones.

(2x10=20 marks)

A. "be" and "bee":

1. A _____ stung me at recess today.
2. She is supposed to _____ at work today.
3. I laughed when Mom said I was "Busy as a _____."
4. Hurry! I don't want to _____ late.

B. "cent" and "scent" and "sent"

5. Tracy _____ her mom flowers for her birthday.
6. Vanilla is my favorite _____.
7. A penny is worth one _____.
8. The _____ from her perfume was strong.
9. She was one _____ short to pay for ice cream.
10. The scary movie _____ shivers down my spine!

21. Command Is used to random number between [2,10]			
a) 10*rand+2	b) 8*rand+2	c) rand(2,10)	d) 2*rand(2,10)

Answer Table Section 1

Question	1	2	3	4	5	6	7	8	9	10
Answer										
Question	11	12	13	14	15	16	17	18	19	20
Answer										

Section 2: (20 marks)

1. What is the value of k after the Matlab code below executes?

```
k=1;
for i=1:2:10
    k=k+i;
end
disp(k)
```

a) 26	b) 10	c) 2	d) 5
-------	-------	------	------

2. The output of the following code is:

```
x=10;
y=5
if x>10
    y=y+5;
end
disp(t);
```

a) 0	b) 6	c) 5	d) 10
------	------	------	-------

3. What is the value of b where x=[1 2 5 4]; b=find(x>2) b=.....

4.

a) [1 2]	b) [3 4]	c) [5 4]	d) [0 0 1 1]
-----------	----------	----------	--------------

5. To find the root of the equation, we will use matlab command

a) root	b) dsolve	c) Rsolve	d) Solve
---------	-----------	-----------	----------

Question 3:

Underline the error in each block of code below and correct it:

(10 Marks)

5	<pre> r=1; for i = 1:3 for j = 1:3 a(i,j) = r+i; end end disp(a) </pre>	
---	---	--

Question 4:

Write an algorithm and draw a flowchart to compute:

(5 Marks)

$$S = \frac{1}{1^2} + \frac{1}{2^2} + \frac{1}{3^2} + \dots + \frac{1}{N^2}$$

No	Code	Correction
1.	<pre> x=0; while (x <= 100) total = total + x; x=x+1; </pre>	
2.	<pre> x=0; for i = 1;100;2 x=x+i; end </pre>	
3.	<pre> function [] = f(x) output = 7; end </pre>	
4.	<pre> Y=0; for j = 100;2;2 Y=Y+j; end </pre>	
5.	<pre> function mu[a,b] x=9; while(x<20) r = a+b; x=x+1; end </pre>	

Question 5:

Read and Put (✓) or (X) in the answer table:

- 1) It cannot be written to ROM memory chips
- 2) A(:,2:3) Refers to the elements in all the rows between columns 2 and 3 of the matrix A.
- 3) Abbreviation of RAM is Read Access Memory
- 4) sum(A,[],2) returns the summation of each row of matrix A
- 5) The value of c is 6, if $A = \begin{bmatrix} 1 & 2 & 3 \\ 5 & 3 & 0 \\ -1 & 9 & 1 \end{bmatrix}$ and $c = \text{sum}(A(:,1))$
- 6) $111011+11111$ is equal to 1128
- 7) The value of b is $b = \begin{pmatrix} 5 & 3 \\ 1 & 3 \end{pmatrix}$, where $x = \begin{pmatrix} 1 & 3 & 6 \\ 5 & 3 & 7 \\ 1 & 3 & 4 \end{pmatrix}$; $b = x(2:3, 1:2)$
- 8) Translator translates high-level language into machine-language all at a time
- 9) The summation of $253_8 + 614_8 = 567_{10}$
- 10) RAM and ROM are volatile memory

Answer Table

Question	Answer
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Scat Wishes
Dr. Mohamed Mustafa Darwish



• **اجب عن السؤال الاجباري التالي:**

السؤال الأول: اكتب ما تعرفه عن كل مما يأتي: (30 درجة)

- 1- العناصر الأخلاقية التي يُفضل ان تتواجد في شخصية العالم.
- 2- التراكمية واتجاهاتها كصفة من صفات التفكير العلمي. دعم اجابتك بذكر امثلة.
- 3- "القدم والشهرة" كإحدى الدعامات التي تركز عليها السلطة الفكرية.
- 4- الآراء المختلفة التي توضح حقيقة العلاقة بين التكنولوجيا والعلم.

• **اجب عن سؤال واحد فقط مما يلي:**

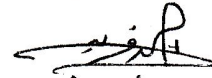
السؤال الثاني: قارن بين كل مما يأتي: (20 درجة)

- 1- التفكير الاسطوري والتفكير الخرافي مع ذكر امثلة.
- 2- الحضارة الشرقية والحضارة اليونانية كحضارات قديمة اثرت بصفة أساسية في تاريخ التفكير العلمي.

السؤال الثالث: ناقش العبارات التالية: (20 درجة)

- 1- انكار قدرة العقل تمثل عقبة من عقبات التفكير العلمي.
- 2- يعتبر التنظيم من أهم سمات التفكير العلمي. دعم اجابتك بذكر امثلة.

مع خالص تمنياتي بالنجاح والتوفيق


د. / أحمد فريد

```
X = X + 2;
NUM=NUM+1; end
```

a) 3 times	b) 4 times	c) 5 times	d) 6 times
------------	------------	------------	------------

13. Convert electronic data produced by the computer system and display them in a form that people can understand.

a) Input devices	b) Output devices	c) Monitor	d) Printer
------------------	-------------------	------------	------------

14.is used for short-term storage of data or program instructions

a) Hard disk	b) ROM	c) RAM	d) CPU
--------------	--------	--------	--------

15.is used as Programs, Commands and user responses

a) Data	b) Commands	c) Software	d) Instructions
---------	-------------	-------------	-----------------

Answer Table

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer															

Question 2:

Write the output of the following blocks of code:

(10 Marks)

No	Code	Output
1.	<pre>n = 3; while (n >= 0) disp (n * n) n=n-1; end</pre>	
2.	<pre>x = 2; y = 3; % disp (x + y)</pre>	
3.	<pre>i = 1; j = 2; k = 3; m = 2; disp (k + m < j 3 - j >= k) disp (~m) disp (m <= 99 && k < m) disp (~ (j - m))</pre>	
4.	<pre>i = 1; while (i < 10) i=i+1; if (mod (i , 3) == 0) disp (i) end end</pre>	



Answer the following questions:

(50 Marks)

Question 1:

Choose the correct answer and write it in the answer table:

(15 Marks)

1. Let $x = [2 \ 5 \ 1 \ 6]$. How can we compute the $[2^2 \ 5^2 \ 1^2 \ 6^2]$?

a) $x*x$	b) $x.^2$	c) x^2	d) $x**x$
----------	-----------	----------	-----------

2. Given the matrix $A = [1 \ 5 \ 7; 2 \ 6 \ 4; 3 \ 8 \ 2]$, which value is referenced by $A(2,1)$?

a) 8	b) 2	c) 6	d) 5
------	------	------	------

3. Which Matlab command is used to execute a set of commands under condition.

a) while	b) for	c) if	d) disp
----------	--------	-------	---------

4. What is the correct way to write the condition $y < x < z$?

a) $(y < x) \parallel (x < z)$	b) $(y < x) \&\& (x < z)$	c) $(y < x) \text{ or } (x < z)$	d) $(y < x) \text{ and } (x < z)$
--------------------------------	---------------------------	----------------------------------	-----------------------------------

5. When we use the repetition, the algorithm is considered as

a) sequence	b) loop	c) branching	d) other
-------------	---------	--------------	----------

6. We can classify the algorithm in three different type.....

a) sequence, selection, branching	b) branching, calculation and loop	c) sequence, branching and loop	d) selection, calculation and loop
-----------------------------------	------------------------------------	---------------------------------	------------------------------------

7. Transmits signal specifying whether to read or write data to or from primary storage address, input device or output device.

a) Address bus	b) Data bus	c) Control bus	d) cards
----------------	-------------	----------------	----------

8. Directs and coordinates operations in computer

a) Control unit	b) CPU	c) RAM	d) ROM
-----------------	--------	--------	--------

9. The devices provide connections between the computer and communications networks.

a) CPU	b) Internet	c) Communication devices	d) control unit
--------	-------------	--------------------------	-----------------

10. What is the value of x after the following code? $x = 10; \%x = 2*x+1;$


a) 21	b) 10	c) No value	d) Error formula
-------	-------	-------------	------------------

11. If we have information with size 32 bits, what is equivalent size in nibble?

a) 4	b) 32	c) 8	d) No relation
------	-------	------	----------------

12. How many times is the while loop executed?

```
X = 0; NUM = 2; SUM = 3;
while (X <= 5)
    SUM = SUM + X;
```

Department of Mathematics		قسم الرياضيات
Faculty of Science		كلية العلوم
امتحان نهائي الفصل الدراسي الثاني ٢٠١٧/٢٠١٨		
التاريخ: ٢٠١٨/٥/١٤ م	علوم	للفرقعة الأولى
الزمن : ساعتان	درجة الامتحان: ٥٠ درجة	اسم المقرر: ١٠٥

أولاً: التكامل أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أحسب قيم التكاملات الآتية (i) $\int x^3 \ln x dx$ (ii) $\int \frac{1}{x^2 - 2x + 2} dx$
- (٢) أوجد المساحة المحددة المحصورة بالمنحني $y = 9 - x^2$ والمستقيمين $x = 2$ و $x = 0$ والمحور السيني .
- (٣) أوجد حجم الجسم الدوراني الناشئ عن دوران القطع الناقص $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ حول المحور السيني .
- (٤) أوجد قانون اختزال للتكامل الآتي $I_n = \int \cos^n x dx$
- (٥) باستخدام التكامل المحدود أوجد مساحة الدائرة $x^2 + y^2 = 16$
- (٦) احسب قيم التكاملات الآتية: (i) $\int x^2 \sec^2(x^3) dx$ (ii) $\int \frac{1}{1 - \sin x} dx$

ثانياً: الهندسة أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أذكر مع التوضيح بالرسم أنواع المنحنيات الممثلة بالمعادلات : (i) $r = 4 \cos \theta$ (ii) $r \sin \theta = 5$
- (٢) أوجد مركز ونصف قطر الدائرة $r^2 - 4r \cos \left(\theta - \frac{\pi}{4} \right) = 12$
- (٣) أثبت مع الرسم أن مجموعة النقط $C = \{(x, y) \in R^2 : x^2 - 8y = 6x - 25\}$ تمثل قطع مكافئ واكتب معادلته وعين احداثيات كلا من الرأس والبؤرة ومعادلة الدليل .
- (٤) أوجد معادلة المماس والعمودي للقطع $y^2 = 16x$ عند النقطه (1,4).
- (٥) للقطع الناقص $9x^2 + 16y^2 = 144$ أوجد احداثيات المركز والبؤرتين ومعادلة الدليلين وطول وتره البؤري العمودي .
- (٦) أوجد معادلة القطع الزائد الذي مركزه نقطة الاصل وينطبق محوره علي محوري الاحداثيات واختلافه المركزي يساوي $\frac{\sqrt{7}}{2}$ وطول وتره البؤري العمودي يساوي 6 .

انتهت الأسئلة مع أطيب التمنيات
منسق المادة: د. عبد الله الصفدي
د. سعاد علي حسن

Section 3: (10 marks)

1. Find the error in the following codes

<p>a) <i>Function</i> (a,b)=res(x,y) <i>for</i> k=100:2:10 a=x(i)+y(i); b =x(i)*y(i);</p>	
<p>b) D='Ahmed' <i>for</i> i =1:10 disp(D(i))</p>	

2. Write an algorithm and draw the flowchart that reads two values, determines the smallest value and prints the smallest value with an identifying message.

The algorithm	
The flowchart	

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6. Find the output k=1 For i=1:4 a(k)=i^2 k=k+1; end disp(a)										
a)16	b)[1 4 9 16]	c)[1 2 3 5]	d)[1 16]							
7. exp(x) that mean										
a)except x	b) e^x	c)eye x	d)others							
8. Convert the following to their binary equivalents: 154.057_8										
a) 1101100.0101111	b) 101011.101011	c) 101001.101111	d)1001101100.11111							
9. The product of $10101 \cdot 101$ equals										
a) 1101001	b) 1011111	c) 1101111	d) 111111							
10. What the value of b, if $A = \begin{bmatrix} 1 & 2 & 3 \\ 5 & 3 & 0 \\ -1 & 9 & 1 \end{bmatrix}$ and $b = \min(A, [], 2)$										
a)[1 2 0]	b) [1 0 -1]	c)[-1 2 0]	d) others							
11. The number 7573_8 equivalents to hexa-decimal number										
a) F7B	b) E7B	c) FF7	d) B5F							
Answer Table Section 2										
Question	1	2	3	4	5	6	7	8	9	10
Answer										

21. Command Is used to random number between [2,10]			
a) 10*rand+2	b) 8*rand+2	c) rand(2,10)	d) 2*rand(2,10)

Answer Table Section 1

Question	1	2	3	4	5	6	7	8	9	10
Answer										
Question	11	12	13	14	15	16	17	18	19	20
Answer										

Section 2: (20 marks)

1. What is the value of k after the Matlab code below executes?

```
k=1;
for i=1:2:10
    k=k+i;
end
disp(k)
```

a) 26	b) 10	c) 2	d) 5
-------	-------	------	------

2. The output of the following code is:

```
x=10;
y=5
if x>10
    y=y+5;
end
disp(t);
```

a) 0	b) 6	c) 5	d) 10
------	------	------	-------

3. What is the value of b where x=[1 2 5 4]; b=find(x>2) b=.....

4.

a) [1 2]	b) [3 4]	c) [5 4]	d) [0 0 1 1]
-----------	----------	----------	--------------

5. To find the root of the equation, we will use matlab command

a) root	b) dsolve	c) Rsolve	d) Solve
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1. Find the error in the following codes

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2. Write an algorithm and draw the flowchart that reads two values, determines the smallest value and prints the smallest value with an identifying message.

The algorithm	
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Best Wishes

Dr. Alaa Fahim

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Answer										

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-----------	----------	----------	--------------

5. To find the root of the equation, we will use matlab command

a) root	b) dsolve	c) Rsolve	d) Solve
---------	-----------	-----------	----------

اجب عن جميع الأسئلة الآتية:

السؤال الأول: (٥٠% من الدرجة الكلية)

(أ) قيست أبعاد قطعة أرض مثلثة الشكل فوجد أن مساحتها ١١٧٣٢٥ م^٢ وبمعايرة الشريط المستخدم وجد أن طوله ينقص ٤ سم عن طوله الاسمي (٢٠ م) . احسب مساحة قطعة الأرض الحقيقية.

(ب) اكمل العبارات التالية:

- ١- خريطة ذات مقياس رسم ١:٢٥٠٠٠ هي خريطة
- ٢- خريطة ذات مقياس رسم ١:٥٠٠ هي خريطة
- ٣- الذراع المعماري = قصبة
- ٤- السهم = ذراع بلدي مربع

(ج) قيس مسطح قطعة أرض علي الطبيعة و حسب مسطحها فوجد أنه يساوي (٥ س ، ٧ ط ، ٤ ف) ثم قيس مسطح نفس القطعة علي الخريطة فكان المسطح = ٢٨ بوصه مربعه . احسب مقياس رسم الخريطة .
و إذا تم قياس خط (س ص) بشريط طوله ٤٩,٩٤ م فكان طول الطريق ٤٥٣,٧٦ م احسب طول الطريق الصحيح علي الخريطة المذكوره .

السؤال الثاني: (٥٠% من الدرجة الكلية)

(أ) تحدث باختصار عن اهمية الميزانية مع ذكر ثلاثة تطبيقات علي الاقل.

(ب) أخذت القراءات التاليه عند عمل ميزانيه علي محور طريق فكانت : -

1.63 ، 1.27 ، 1.47 ، 1.82 ، 0.84 ، 1.35 ، 1.34 ، 0.48 ، 2.18 ، 1.14 ، 2.24 ، 1.31 ، 1.63 ،
2.15 ، 2.20 ، 2.04 ، 1.32 . فإذا كانت القراءات الثالثه و السابعة مؤخرات و القراءه العاشره مقدمه و نقل
الميزان عند النقطة التاسعه و كانت النقطة العاشره نقطة دوران ، أوجد مناسيب النقط المختلفه إذا كانت النقطة
الثالثه روبيير منسوبه (50.00 م) فوق سطح البحر. ثم حقق النتائج حسابيا .

***** انتهت الاسئلة *****

مع أطيب التمنيات بالتوفيق.....

Question 3:

Underline the error in each block of code below and correct it:

(10 Marks)

5	<pre> r=1; for i = 1:3 for j = 1:3 a(i,j) = r+i; end end disp(a) end </pre>	
---	---	--

Question 4:

Write an algorithm and draw a flowchart to compute:

(5 Marks)

$$S = \frac{1}{1^2} + \frac{1}{2^2} + \frac{1}{3^2} + \dots + \frac{1}{N^2}$$

No	Code	Correction
1.	<pre> x=0; while (x <= 100) total=total+ x; x=x+1; end </pre>	
2.	<pre> x=0; for i = 1;100;2 x=x+i; end </pre>	
3.	<pre> function [] = f(x) output = 7; end </pre>	
4.	<pre> Y=0; for j = 100;2;2 Y=Y+j; end </pre>	
5.	<pre> function mu[a,b] x=9; while(x<20) r= a+b; x=x+1; end </pre>	

Question 5:

Read and Put (✓) or (X) in the answer table:

- 1) It cannot be written to ROM memory chips
- 2) A(2:3) Refers to the elements in all the rows between columns 2 and 3 of the matrix A.
- 3) Abbreviation of RAM is Read Access Memory
- 4) sum(A,[],2) returns the summation of each row of matrix A
- 5) The value of c is 6, if $A = \begin{bmatrix} 1 & 2 & 3 \\ 5 & 3 & 0 \\ -1 & 9 & 1 \end{bmatrix}$ and $c = \text{sum}(A(:,1))$
- 6) $111011+1111$ is equal to 1128
- 7) The value of b is $b = \begin{pmatrix} 5 & 3 \\ 1 & 3 \end{pmatrix}$, where $x = \begin{pmatrix} 1 & 3 & 6 \\ 5 & 3 & 7 \\ 1 & 3 & 4 \end{pmatrix}$; $b = x(2:3, 1:2)$
- 8) Translator translates high-level language into machine-language all at a time
- 9) The summation of $253_8 + 614_8 = 567_{10}$
- 10) RAM and ROM are volatile memory

Answer Table

Question	Answer
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Scat Wishes
Dr. Mohamed Mustafa Darwish



• **اجب عن السؤال الاجباري التالي:**

السؤال الأول: اكتب ما تعرفه عن كل مما يأتي: (30 درجة)

- 1- العناصر الأخلاقية التي يُفضل ان تتواجد في شخصية العالم.
- 2- التراكمية واتجاهاتها كصفة من صفات التفكير العلمي. دعم اجابتك بذكر امثلة.
- 3- "القدم والشهرة" كإحدى الدعامات التي تركز عليها السلطة الفكرية.
- 4- الآراء المختلفة التي توضح حقيقة العلاقة بين التكنولوجيا والعلم.

• **اجب عن سؤال واحد فقط مما يلي:**

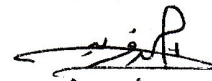
السؤال الثاني: قارن بين كل مما يأتي: (20 درجة)

- 1- التفكير الاسطوري والتفكير الخرافي مع ذكر امثلة.
- 2- الحضارة الشرقية والحضارة اليونانية كحضارات قديمة اثرت بصفة أساسية في تاريخ التفكير العلمي.

السؤال الثالث: ناقش العبارات التالية: (20 درجة)

- 1- انكار قدرة العقل تمثل عقبة من عقبات التفكير العلمي.
- 2- يعتبر التنظيم من أهم سمات التفكير العلمي. دعم اجابتك بذكر امثلة.

مع خالص تمنياتي بالنجاح والتوفيق


د. / أحمد فريد

```
X = X + 2;
NUM=NUM+1; end
```

a) 3 times	b) 4 times	c) 5 times	d) 6 times
------------	------------	------------	------------

13. Convert electronic data produced by the computer system and display them in a form that people can understand.

a) Input devices	b) Output devices	c) Monitor	d) Printer
------------------	-------------------	------------	------------

14.is used for short-term storage of data or program instructions

a) Hard disk	b) ROM	c) RAM	d) CPU
--------------	--------	--------	--------

15.is used as Programs, Commands and user responses

a) Data	b) Commands	c) Software	d) Instructions
---------	-------------	-------------	-----------------

Answer Table

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer															

Question 2:

Write the output of the following blocks of code:

(10 Marks)

No	Code	Output
1.	<pre>n = 3; while (n >= 0) disp (n * n) n=n-1; end</pre>	
2.	<pre>x = 2; y = 3; % disp (x + y)</pre>	
3.	<pre>i = 1; j = 2; k = 3; m = 2; disp (k + m < j 3 - j >= k) disp (~m) disp (m <= 99 && k < m) disp (~ (j - m))</pre>	
4.	<pre>i = 1; while (i < 10) i=i+1; if (mod (i , 3) == 0) disp (i) end end</pre>	



Answer the following questions:

(50 Marks)

Question 1:

Choose the correct answer and write it in the answer table:

(15 Marks)

1. Let $x = [2 \ 5 \ 1 \ 6]$. How can we compute the $[2^2 \ 5^2 \ 1^2 \ 6^2]$?

a) $x*x$	b) $x.^2$	c) x^2	d) $x**x$
----------	-----------	----------	-----------

2. Given the matrix $A = [1 \ 5 \ 7; 2 \ 6 \ 4; 3 \ 8 \ 2]$, which value is referenced by $A(2,1)$?

a) 8	b) 2	c) 6	d) 5
------	------	------	------

3. Which Matlab command is used to execute a set of commands under condition.

a) while	b) for	c) if	d) disp
----------	--------	-------	---------

4. What is the correct way to write the condition $y < x < z$?

a) $(y < x) \parallel (x < z)$	b) $(y < x) \&\& (x < z)$	c) $(y < x) \text{ or } (x < z)$	d) $(y < x) \text{ and } (x < z)$
--------------------------------	---------------------------	----------------------------------	-----------------------------------

5. When we use the repetition, the algorithm is considered as

a) sequence	b) loop	c) branching	d) other
-------------	---------	--------------	----------

6. We can classify the algorithm in three different type.....

a) sequence, selection, branching	b) branching, calculation and loop	c) sequence, branching and loop	d) selection, calculation and loop
-----------------------------------	------------------------------------	---------------------------------	------------------------------------

7. Transmits signal specifying whether to read or write data to or from primary storage address, input device or output device.

a) Address bus	b) Data bus	c) Control bus	d) cards
----------------	-------------	----------------	----------

8. Directs and coordinates operations in computer

a) Control unit	b) CPU	c) RAM	d) ROM
-----------------	--------	--------	--------

9. The devices provide connections between the computer and communications networks.

a) CPU	b) Internet	c) Communication devices	d) control unit
--------	-------------	--------------------------	-----------------

10. What is the value of x after the following code? $x = 10; \%x = 2*x+1;$


a) 21	b) 10	c) No value	d) Error formula
-------	-------	-------------	------------------

11. If we have information with size 32 bits, what is equivalent size in nibble?

a) 4	b) 32	c) 8	d) No relation
------	-------	------	----------------

12. How many times is the while loop executed?

```
X = 0; NUM = 2; SUM = 3;
while (X <= 5)
    SUM = SUM + X;
```


Department of Mathematics		قسم الرياضيات
Faculty of Science		كلية العلوم
امتحان نهائي الفصل الدراسي الثاني ٢٠١٧/٢٠١٨		
التاريخ: ٢٠١٨/٥/١٤ م	علوم	للفرقية: الأولى
الزمن: ساعتان	درجة الامتحان: ٥٠ درجة	اسم المقرر: ١٠٥

أولاً: التكامل أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أحسب قيم التكاملات الآتية
- (i) $\int x^3 \ln x dx$ (ii) $\int \frac{1}{x^2 - 2x + 2} dx$
- (٢) أوجد المساحة المحددة المحصورة بالمنحني $y = 9 - x^2$ والمستقيمين $x = 2$ و $x = 0$ والمحور السيني .
- (٣) أوجد حجم الجسم الدوراني الناشئ عن دوران القطع الناقص $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ حول المحور السيني .
- (٤) أوجد قانون اختزال للتكامل الآتي $I_n = \int \cos^n x dx$
- (٥) باستخدام التكامل المحدود أوجد مساحة الدائرة $x^2 + y^2 = 16$
- (٦) احسب قيم التكاملات الآتية:
- (i) $\int x^2 \sec^2(x^3) dx$ (ii) $\int \frac{1}{1 - \sin x} dx$

ثانياً: الهندسة أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أذكر مع التوضيح بالرسم أنواع المنحنيات الممثلة بالمعادلات : $(i) r = 4 \cos \theta$ (ii) $r \sin \theta = 5$
- (٢) أوجد مركز ونصف قطر الدائرة $r^2 - 4r \cos \left(\theta - \frac{\pi}{4} \right) = 12$
- (٣) أثبت مع الرسم أن مجموعة النقط $C = \{(x, y) \in R^2 : x^2 - 8y = 6x - 25\}$ تمثل قطع مكافئ واكتب معادلته وعين احداثيات كلا من الرأس والبؤرة ومعادلة الدليل .
- (٤) أوجد معادلة المماس والعمودي للقطع $y^2 = 16x$ عند النقطه (1,4).
- (٥) للقطع الناقص $9x^2 + 16y^2 = 144$ أوجد احداثيات المركز والبؤرتين ومعادلة الدليلين وطول وتره البؤري العمودي .
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انتهت الأسئلة مع أطيب التمنيات
منسق المادة: د. عبد الله الصفدي
د. سعاد علي حسن

Section 3: (10 marks)

1. Find the error in the following codes

<p>a) <i>Function</i> (a,b)=res(x,y) for k=100:2:10 a=x(i)+y(i); b =x(i)*y(i);</p>	
<p>b) D='Ahmed' for i =1:10 disp(D(i))</p>	

2. Write an algorithm and draw the flowchart that reads two values, determines the smallest value and prints the smallest value with an identifying message.

The algorithm	
The flowchart	

Best Wishes

Dr. Alaa Fahim

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Answer										

21. Command Is used to random number between [2,10]			
a) 10*rand+2	b) 8*rand+2	c) rand(2,10)	d) 2*rand(2,10)

Answer Table Section 1

Question	1	2	3	4	5	6	7	8	9	10
Answer										
Question	11	12	13	14	15	16	17	18	19	20
Answer										

Section 2: (20 marks)

1. What is the value of k after the Matlab code below executes?

```
k=1;
for i=1:2:10
    k=k+i;
end
disp(k)
```

a) 26	b) 10	c) 2	d) 5
-------	-------	------	------

2. The output of the following code is:

```
x=10;
y=5
if x>10
    y=y+5;
end
disp(t);
```

a) 0	b) 6	c) 5	d) 10
------	------	------	-------


3. What is the value of b where x=[1 2 5 4]; b=find(x>2) b=.....

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a) [1 2]	b) [3 4]	c) [5 4]	d) [0 0 1 1]
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5. To find the root of the equation, we will use matlab command

a) root	b) dsolve	c) Rsolve	d) Solve
---------	-----------	-----------	----------

Department of Mathematics		قسم الرياضيات
Faculty of Science		كلية العلوم
امتحان نهائي الفصل الدراسي الثاني ٢٠١٧/٢٠١٨		
التاريخ: ٢٠١٨/٥/١٤ م	علوم	للفرقعة: الأولى
الزمن: ساعتان	درجة الامتحان: ٥٠ درجة	اسم المقرر: ١٠٥

أولاً: التكامل أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أحسب قيم التكاملات الآتية
- (i) $\int x^3 \ln x dx$ (ii) $\int \frac{1}{x^2 - 2x + 2} dx$
- (٢) أوجد المساحة المحددة المحصورة بالمنحني $y = 9 - x^2$ والمستقيمين $x = 2$ و $x = 0$ والمحور السيني .
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- (٤) أوجد قانون اختزال للتكامل الآتي
- $I_n = \int \cos^n x dx$
- (٥) باستخدام التكامل المحدود أوجد مساحة الدائرة
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- (i) $\int x^2 \sec^2(x^3) dx$ (ii) $\int \frac{1}{1 - \sin x} dx$

ثانياً: الهندسة أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أذكر مع التوضيح بالرسم أنواع المنحنيات الممثلة بالمعادلات :
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- $r^2 - 4r \cos \left(\theta - \frac{\pi}{4} \right) = 12$
- (٣) أثبت مع الرسم أن مجموعة النقط $C = \{(x, y) \in R^2 : x^2 - 8y = 6x - 25\}$ تمثل قطع مكافئ واكتب معادلته وعين احداثيات كلا من الرأس والبؤرة ومعادلة الدليل .
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انتهت الأسئلة مع أطيب التمنيات
منسق المادة: د. عبد الله الصفدي
د. سعاد علي حسن

Section 3: (10 marks)

1. Find the error in the following codes

a) <i>Function</i> (a,b)=res(x,y) for k=100:2:10 a=x(i)+y(i); b =x(i)*y(i);	
b) D='Ahmed' for i =1:10 disp(D(i))	

2. Write an algorithm and draw the flowchart that reads two values, determines the smallest value and prints the smallest value with an identifying message.

The algorithm	
The flowchart	

Best Wishes

Dr. Alaa Fahim

6. Find the output k=1 For i=1:4 a(k)=i^2 k=k+1; end disp(a)										
a)16	b)[1 4 9 16]	c)[1 2 3 5]	d)[1 16]							
7. exp(x) that mean										
a)except x	b) e^x	c)eye x	d)others							
8. Convert the following to their binary equivalents: 154.057_8										
a) 1101100.0101111	b) 101011.101011	c) 101001.101111	d)1001101100.11111							
9. The product of $10101 \cdot 101$ equals										
a) 1101001	b) 1011111	c) 1101111	d) 111111							
10. What the value of b, if $A = \begin{bmatrix} 1 & 2 & 3 \\ 5 & 3 & 0 \\ -1 & 9 & 1 \end{bmatrix}$ and $b = \min(A, [], 2)$										
a)[1 2 0]	b) [1 0 -1]	c)[-1 2 0]	d) others							
11. The number 7573_8 equivalents to hexa-decimal number										
a) F7B	b) E7B	c) FF7	d) B5F							
Answer Table Section 2										
Question	1	2	3	4	5	6	7	8	9	10
Answer										

21. Command Is used to random number between [2,10]			
a) 10*rand+2	b) 8*rand+2	c) rand(2,10)	d) 2*rand(2,10)

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k=1;
for i=1:2:10
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disp(k)
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a) 26	b) 10	c) 2	d) 5
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2. The output of the following code is:

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x=10;
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a) 0	b) 6	c) 5	d) 10
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3. What is the value of b where x=[1 2 5 4]; b=find(x>2) b=.....

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a) [1 2]	b) [3 4]	c) [5 4]	d) [0 0 1 1]
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5. To find the root of the equation, we will use matlab command

a) root	b) dsolve	c) Rsolve	d) Solve
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Answer the following questions:

(50 Marks)

Question 1:

Choose the correct answer and write it in the answer table:

(15 Marks)

1. Let $x = [2 \ 5 \ 1 \ 6]$. How can we compute the $[2^2 \ 5^2 \ 1^2 \ 6^2]$?

a) $x*x$	b) $x.^2$	c) x^2	d) $x**x$
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2. Given the matrix $A = [1 \ 5 \ 7; 2 \ 6 \ 4; 3 \ 8 \ 2]$, which value is referenced by $A(2,1)$?

a) 8	b) 2	c) 6	d) 5
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3. Which Matlab command is used to execute a set of commands under condition.

a) while	b) for	c) if	d) disp
----------	--------	-------	---------

4. What is the correct way to write the condition $y < x < z$?

a) $(y < x) \parallel (x < z)$	b) $(y < x) \&\& (x < z)$	c) $(y < x) \text{ or } (x < z)$	d) $(y < x) \text{ and } (x < z)$
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5. When we use the repetition, the algorithm is considered as

a) sequence	b) loop	c) branching	d) other
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6. We can classify the algorithm in three different type.....

a) sequence, selection, branching	b) branching, calculation and loop	c) sequence, branching and loop	d) selection, calculation and loop
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7. Transmits signal specifying whether to read or write data to or from primary storage address, input device or output device.

a) Address bus	b) Data bus	c) Control bus	d) cards
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8. Directs and coordinates operations in computer

a) Control unit	b) CPU	c) RAM	d) ROM
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9. The devices provide connections between the computer and communications networks.

a) CPU	b) Internet	c) Communication devices	d) control unit
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10. What is the value of x after the following code? $x = 10; \%x = 2*x+1;$


a) 21	b) 10	c) No value	d) Error formula
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11. If we have information with size 32 bits, what is equivalent size in nibble?

a) 4	b) 32	c) 8	d) No relation
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12. How many times is the while loop executed?

```
X = 0; NUM = 2; SUM = 3;
while (X <= 5)
    SUM = SUM + X;
```


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منسق المادة: د. عبد الله الصفدي
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k=1;
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5. To find the root of the equation, we will use matlab command

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```
X = X + 2;
NUM=NUM+1; end
```

a) 3 times	b) 4 times	c) 5 times	d) 6 times
------------	------------	------------	------------

13. Convert electronic data produced by the computer system and display them in a form that people can understand.

a) Input devices	b) Output devices	c) Monitor	d) Printer
------------------	-------------------	------------	------------

14.is used for short-term storage of data or program instructions

a) Hard disk	b) ROM	c) RAM	d) CPU
--------------	--------	--------	--------

15.is used as Programs, Commands and user responses

a) Data	b) Commands	c) Software	d) Instructions
---------	-------------	-------------	-----------------

Answer Table

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer															

Question 2:

Write the output of the following blocks of code:

(10 Marks)

No	Code	Output
1.	<pre>n = 3; while (n >= 0) disp (n * n) n=n-1; end</pre>	
2.	<pre>x = 2; y = 3; % disp (x + y)</pre>	
3.	<pre>i = 1; j = 2; k = 3; m = 2; disp (k + m < j 3 - j >= k) disp (~m) disp (m <= 99 && k < m) disp (~ (j - m))</pre>	
4.	<pre>i = 1; while (i < 10) i=i+1; if (mod (i , 3) == 0) disp (i) end end</pre>	



Answer the following questions:

(50 Marks)

Question 1:

Choose the correct answer and write it in the answer table:

(15 Marks)

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Answer										

21. Command Is used to random number between [2,10]			
a) 10*rand+2	b) 8*rand+2	c) rand(2,10)	d) 2*rand(2,10)

Answer Table Section 1

Question	1	2	3	4	5	6	7	8	9	10
Answer										
Question	11	12	13	14	15	16	17	18	19	20
Answer										

Section 2: (20 marks)

1. What is the value of k after the Matlab code below executes?

```
k=1;
for i=1:2:10
    k=k+i;
end
disp(k)
```

a) 26	b) 10	c) 2	d) 5
-------	-------	------	------

2. The output of the following code is:

```
x=10;
y=5
if x>10
    y=y+5;
end
disp(t);
```

a) 0	b) 6	c) 5	d) 10
------	------	------	-------

3. What is the value of b where x=[1 2 5 4]; b=find(x>2) b=.....

4.

a) [1 2]	b) [3 4]	c) [5 4]	d) [0 0 1 1]
-----------	----------	----------	--------------

5. To find the root of the equation, we will use matlab command

a) root	b) dsolve	c) Rsolve	d) Solve
---------	-----------	-----------	----------



• **اجب عن السؤال الاجباري التالي:**

السؤال الأول: اكتب ما تعرفه عن كل مما يأتي: (30 درجة)

- 1- العناصر الأخلاقية التي يُفضل ان تتواجد في شخصية العالم.
- 2- التراكمية واتجاهاتها كصفة من صفات التفكير العلمي. دعم اجابتك بذكر امثلة.
- 3- "القدم والشهرة" كإحدى الدعامات التي تركز عليها السلطة الفكرية.
- 4- الآراء المختلفة التي توضح حقيقة العلاقة بين التكنولوجيا والعلم.

• **اجب عن سؤال واحد فقط مما يلي:**

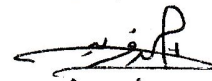
السؤال الثاني: قارن بين كل مما يأتي: (20 درجة)

- 1- التفكير الاسطوري والتفكير الخرافي مع ذكر امثلة.
- 2- الحضارة الشرقية والحضارة اليونانية كحضارات قديمة اثرت بصفة أساسية في تاريخ التفكير العلمي.

السؤال الثالث: ناقش العبارات التالية: (20 درجة)

- 1- انكار قدرة العقل تمثل عقبة من عقبات التفكير العلمي.
- 2- يعتبر التنظيم من أهم سمات التفكير العلمي. دعم اجابتك بذكر امثلة.

مع خالص تمنياتي بالنجاح والتوفيق


د. / أحمد فريد

```
X = X + 2;
NUM=NUM+1; end
```

a) 3 times	b) 4 times	c) 5 times	d) 6 times
------------	------------	------------	------------

13. Convert electronic data produced by the computer system and display them in a form that people can understand.

a) Input devices	b) Output devices	c) Monitor	d) Printer
------------------	-------------------	------------	------------

14.is used for short-term storage of data or program instructions

a) Hard disk	b) ROM	c) RAM	d) CPU
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15.is used as Programs, Commands and user responses

a) Data	b) Commands	c) Software	d) Instructions
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Answer Table

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer															

Question 2:

Write the output of the following blocks of code:

(10 Marks)

No	Code	Output
1.	<pre>n = 3; while (n >= 0) disp (n * n) n=n-1; end</pre>	
2.	<pre>x = 2; y = 3; % disp (x + y)</pre>	
3.	<pre>i = 1; j = 2; k = 3; m = 2; disp (k + m < j 3 - j >= k) disp (~m) disp (m <= 99 && k < m) disp (~ (j - m))</pre>	
4.	<pre>i = 1; while (i < 10) i=i+1; if (mod (i , 3) == 0) disp (i) end end</pre>	



Answer the following questions:

(50 Marks)

Question 1:

Choose the correct answer and write it in the answer table:

(15 Marks)

1. Let $x = [2 \ 5 \ 1 \ 6]$. How can we compute the $[2^2 \ 5^2 \ 1^2 \ 6^2]$?

a) $x*x$	b) $x.^2$	c) x^2	d) $x**x$
----------	-----------	----------	-----------

2. Given the matrix $A = [1 \ 5 \ 7; 2 \ 6 \ 4; 3 \ 8 \ 2]$, which value is referenced by $A(2,1)$?

a) 8	b) 2	c) 6	d) 5
------	------	------	------

3. Which Matlab command is used to execute a set of commands under condition.

a) while	b) for	c) if	d) disp
----------	--------	-------	---------

4. What is the correct way to write the condition $y < x < z$?

a) $(y < x) \parallel (x < z)$	b) $(y < x) \&\& (x < z)$	c) $(y < x) \text{ or } (x < z)$	d) $(y < x) \text{ and } (x < z)$
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5. When we use the repetition, the algorithm is considered as

a) sequence	b) loop	c) branching	d) other
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6. We can classify the algorithm in three different type.....

a) sequence, selection, branching	b) branching, calculation and loop	c) sequence, branching and loop	d) selection, calculation and loop
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7. Transmits signal specifying whether to read or write data to or from primary storage address, input device or output device.

a) Address bus	b) Data bus	c) Control bus	d) cards
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8. Directs and coordinates operations in computer

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9. The devices provide connections between the computer and communications networks.

a) CPU	b) Internet	c) Communication devices	d) control unit
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10. What is the value of x after the following code? $x = 10; \%x = 2*x+1;$


a) 21	b) 10	c) No value	d) Error formula
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11. If we have information with size 32 bits, what is equivalent size in nibble?

a) 4	b) 32	c) 8	d) No relation
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12. How many times is the while loop executed?

```
X = 0; NUM = 2; SUM = 3;
while (X <= 5)
    SUM = SUM + X;
```

Department of Mathematics		قسم الرياضيات
Faculty of Science		كلية العلوم
امتحان نهائي الفصل الدراسي الثاني ٢٠١٧/٢٠١٨		
التاريخ: ٢٠١٨/٥/١٤ م	علوم	للفرقعة: الأولى
الزمن: ساعتان	درجة الامتحان: ٥٠ درجة	اسم المقرر: ١٠٥

أولاً: التكامل أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أحسب قيم التكاملات الآتية (i) $\int x^3 \ln x dx$ (ii) $\int \frac{1}{x^2 - 2x + 2} dx$
- (٢) أوجد المساحة المحددة المحصورة بالمنحني $y = 9 - x^2$ والمستقيمين $x = 2$ و $x = 0$ والمحور السيني .
- (٣) أوجد حجم الجسم الدوراني الناشئ عن دوران القطع الناقص $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ حول المحور السيني .
- (٤) أوجد قانون اختزال للتكامل الآتي $I_n = \int \cos^n x dx$
- (٥) باستخدام التكامل المحدود أوجد مساحة الدائرة $x^2 + y^2 = 16$
- (٦) احسب قيم التكاملات الآتية: (i) $\int x^2 \sec^2(x^3) dx$ (ii) $\int \frac{1}{1 - \sin x} dx$

ثانياً: الهندسة أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أذكر مع التوضيح بالرسم أنواع المنحنيات الممثلة بالمعادلات: (i) $r = 4 \cos \theta$ (ii) $r \sin \theta = 5$
- (٢) أوجد مركز ونصف قطر الدائرة $r^2 - 4r \cos \left(\theta - \frac{\pi}{4} \right) = 12$
- (٣) أثبت مع الرسم أن مجموعة النقط $C = \{(x, y) \in R^2 : x^2 - 8y = 6x - 25\}$ تمثل قطع مكافئ واكتب معادلته وعين احداثيات كلا من الرأس والبؤرة ومعادلة الدليل .
- (٤) أوجد معادلة المماس والعمودي للقطع $y^2 = 16x$ عند النقطه (1,4).
- (٥) للقطع الناقص $9x^2 + 16y^2 = 144$ أوجد احداثيات المركز والبؤرتين ومعادلة الدليلين وطول وتره البؤري العمودي .
- (٦) أوجد معادلة القطع الزائد الذي مركزه نقطة الاصل وينطبق محوره علي محوري الاحداثيات واختلافه المركزي يساوي $\frac{\sqrt{7}}{2}$ وطول وتره البؤري العمودي يساوي 6 .

انتهت الأسئلة مع أطيب التمنيات
منسق المادة: د. عبد الله الصفدي
د. سعاد علي حسن

Section 3: (10 marks)

1. Find the error in the following codes

<p>a) <i>Function</i> (a,b)=res(x,y) <i>for</i> k=100:2:10 a=x(i)+y(i); b =x(i)*y(i);</p>	
<p>b) D='Ahmed' <i>for</i> i =1:10 disp(D(i))</p>	

2. Write an algorithm and draw the flowchart that reads two values, determines the smallest value and prints the smallest value with an identifying message.

The algorithm	
The flowchart	

Best Wishes

Dr. Alaa Fahim

6. Find the output k=1 For i=1:4 a(k)=i^2 k=k+1; end disp(a)										
a)16	b)[1 4 9 16]	c)[1 2 3 5]	d)[1 16]							
7. exp(x) that mean										
a)except x	b) e^x	c)eye x	d)others							
8. Convert the following to their binary equivalents: 154.057_8										
a) 1101100.0101111	b) 101011.101011	c) 101001.101111	d)1001101100.11111							
9. The product of $10101 \cdot 101$ equals										
a) 1101001	b) 1011111	c) 1101111	d) 111111							
10. What the value of b, if $A = \begin{bmatrix} 1 & 2 & 3 \\ 5 & 3 & 0 \\ -1 & 9 & 1 \end{bmatrix}$ and $b=\min(A,[],2)$										
a)[1 2 0]	b) [1 0 -1]	c)[-1 2 0]	d) others							
11. The number 7573_8 equivalents to hexa-decimal number										
a) F7B	b) E7B	c) FF7	d) B5F							
Answer Table Section 2										
Question	1	2	3	4	5	6	7	8	9	10
Answer										

21. Command Is used to random number between [2,10]			
a) 10*rand+2	b) 8*rand+2	c) rand(2,10)	d) 2*rand(2,10)

Answer Table Section 1

Question	1	2	3	4	5	6	7	8	9	10
Answer										
Question	11	12	13	14	15	16	17	18	19	20
Answer										

Section 2: (20 marks)

1. What is the value of k after the Matlab code below executes?

```
k=1;
for i=1:2:10
    k=k+i;
end
disp(k)
```

a) 26	b) 10	c) 2	d) 5
-------	-------	------	------

2. The output of the following code is:

```
x=10;
y=5
if x>10
    y=y+5;
end
disp(t);
```

a) 0	b) 6	c) 5	d) 10
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3. What is the value of b where x=[1 2 5 4]; b=find(x>2) b=.....

4.

a) [1 2]	b) [3 4]	c) [5 4]	d) [0 0 1 1]
-----------	----------	----------	--------------

5. To find the root of the equation, we will use matlab command

a) root	b) dsolve	c) Rsolve	d) Solve
---------	-----------	-----------	----------

Question 5:

Read and Put (✓) or (X) in the answer table:

- 1) It cannot be written to ROM memory chips
- 2) A(:,2:3) Refers to the elements in all the rows between columns 2 and 3 of the matrix A.
- 3) Abbreviation of RAM is Read Access Memory
- 4) sum(A,[],2) returns the summation of each row of matrix A
- 5) The value of c is 6, if $A = \begin{bmatrix} 1 & 2 & 3 \\ 5 & 3 & 0 \\ -1 & 9 & 1 \end{bmatrix}$ and $c = \text{sum}(A(:,1))$
- 6) $111011+11111$ is equal to 1128
- 7) The value of b is $b = \begin{pmatrix} 5 & 3 \\ 1 & 3 \end{pmatrix}$, where $x = \begin{pmatrix} 1 & 3 & 6 \\ 5 & 3 & 7 \\ 1 & 3 & 4 \end{pmatrix}$; $b = x(2:3, 1:2)$
- 8) Translator translates high-level language into machine-language all at a time
- 9) The summation of $253_8 + 614_8 = 567_{10}$
- 10) RAM and ROM are volatile memory

Answer Table

Question	Answer
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Scat Wishes
Dr. Mohamed Mustafa Darwish



• **اجب عن السؤال الاجباري التالي:**

السؤال الأول: اكتب ما تعرفه عن كل مما يأتي: (30 درجة)

- 1- العناصر الأخلاقية التي يُفضل ان تتواجد في شخصية العالم.
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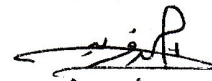
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مع خالص تمنياتي بالنجاح والتوفيق


د. / أحمد فريد

```
X = X + 2;
NUM=NUM+1; end
```

a) 3 times	b) 4 times	c) 5 times	d) 6 times
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13. Convert electronic data produced by the computer system and display them in a form that people can understand.

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Answer Table

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Answer															

Question 2:

Write the output of the following blocks of code:

(10 Marks)

No	Code	Output
1.	<pre>n = 3; while (n >= 0) disp (n * n) n=n-1; end</pre>	
2.	<pre>x = 2; y = 3; % disp (x + y)</pre>	
3.	<pre>i = 1; j = 2; k = 3; m = 2; disp (k + m < j 3 - j >= k) disp (~m) disp (m <= 99 && k < m) disp (~ (j - m))</pre>	
4.	<pre>i = 1; while (i < 10) i=i+1; if (mod (i , 3) == 0) disp (i) end end</pre>	



Answer the following questions:

(50 Marks)

Question 1:

Choose the correct answer and write it in the answer table:

(15 Marks)

1. Let $x = [2 \ 5 \ 1 \ 6]$. How can we compute the $[2^2 \ 5^2 \ 1^2 \ 6^2]$?

a) $x*x$	b) $x.^2$	c) x^2	d) $x**x$
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a) 8	b) 2	c) 6	d) 5
------	------	------	------

3. Which Matlab command is used to execute a set of commands under condition.

a) while	b) for	c) if	d) disp
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4. What is the correct way to write the condition $y < x < z$?

a) $(y < x) \parallel (x < z)$	b) $(y < x) \&\& (x < z)$	c) $(y < x) \text{ or } (x < z)$	d) $(y < x) \text{ and } (x < z)$
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5. When we use the repetition, the algorithm is considered as

a) sequence	b) loop	c) branching	d) other
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6. We can classify the algorithm in three different type.....

a) sequence, selection, branching	b) branching, calculation and loop	c) sequence, branching and loop	d) selection, calculation and loop
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7. Transmits signal specifying whether to read or write data to or from primary storage address, input device or output device.

a) Address bus	b) Data bus	c) Control bus	d) cards
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a) 21	b) 10	c) No value	d) Error formula
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11. If we have information with size 32 bits, what is equivalent size in nibble?

a) 4	b) 32	c) 8	d) No relation
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12. How many times is the while loop executed?

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X = 0; NUM = 2; SUM = 3;
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Department of Mathematics		قسم الرياضيات
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امتحان نهائي الفصل الدراسي الثاني ٢٠١٧/٢٠١٨		
التاريخ: ٢٠١٨/٥/١٤ م	علوم	للفرقعة: الأولى
الزمن: ساعتان	درجة الامتحان: ٥٠ درجة	اسم المقرر: ١٠٥

أولاً: التكامل أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أحسب قيم التكاملات الآتية
- (i) $\int x^3 \ln x dx$ (ii) $\int \frac{1}{x^2 - 2x + 2} dx$
- (٢) أوجد المساحة المحددة المحصورة بالمنحني $y = 9 - x^2$ والمستقيمين $x = 2$ و $x = 0$ والمحور السيني .
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- (i) $\int x^2 \sec^2(x^3) dx$ (ii) $\int \frac{1}{1 - \sin x} dx$

ثانياً: الهندسة أجب عن خمسة اسئلة فقط (كل سؤال ٥ درجات)

- (١) أذكر مع التوضيح بالرسم أنواع المنحنيات الممثلة بالمعادلات : $(i) r = 4 \cos \theta$ (ii) $r \sin \theta = 5$
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انتهت الأسئلة مع أطيب التمنيات
منسق المادة: د. عبد الله الصفدي
د. سعاد علي حسن

Section 3: (10 marks)

1. Find the error in the following codes

<p>a) <i>Function</i> (a,b)=res(x,y) for k=100:2:10 a=x(i)+y(i); b =x(i)*y(i);</p>	
<p>b) D='Ahmed' for i =1:10 disp(D(i))</p>	

2. Write an algorithm and draw the flowchart that reads two values, determines the smallest value and prints the smallest value with an identifying message.

The algorithm	
The flowchart	

Best Wishes

Dr. Alaa Fahim

6. Find the output k=1 For i=1:4 a(k)=i^2 k=k+1; end disp(a)										
a)16	b)[1 4 9 16]	c)[1 2 3 5]	d)[1 16]							
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a) 1101100.0101111	b) 101011.101011	c) 101001.101111	d)1001101100.11111							
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10. What the value of b, if $A = \begin{bmatrix} 1 & 2 & 3 \\ 5 & 3 & 0 \\ -1 & 9 & 1 \end{bmatrix}$ and $b=\min(A,[],2)$										
a)[1 2 0]	b) [1 0 -1]	c)[-1 2 0]	d) others							
11. The number 7573_8 equivalents to hexa-decimal number										
a) F7B	b) E7B	c) FF7	d) B5F							
Answer Table Section 2										
Question	1	2	3	4	5	6	7	8	9	10
Answer										

21. Command Is used to random number between [2,10]			
a) 10*rand+2	b) 8*rand+2	c) rand(2,10)	d) 2*rand(2,10)

Answer Table Section 1

Question	1	2	3	4	5	6	7	8	9	10
Answer										
Question	11	12	13	14	15	16	17	18	19	20
Answer										

Section 2: (20 marks)

1. What is the value of k after the Matlab code below executes?

```
k=1;
for i=1:2:10
    k=k+i;
end
disp(k)
```

a) 26	b) 10	c) 2	d) 5
-------	-------	------	------

2. The output of the following code is:

```
x=10;
y=5
if x>10
    y=y+5;
end
disp(t);
```

a) 0	b) 6	c) 5	d) 10
------	------	------	-------

3. What is the value of b where x=[1 2 5 4]; b=find(x>2) b=.....

4.

a) [1 2]	b) [3 4]	c) [5 4]	d) [0 0 1 1]
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5. To find the root of the equation, we will use matlab command

a) root	b) dsolve	c) Rsolve	d) Solve
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