Accounting Information Systems
Final Examination
Time Allowed: Three Hours
Total Marks: 85

Question 1 (50 Minuets, 35 Marks)
Answer each of the following 38 multiple-choice questions by selecting the best answer

1. Factors that shape an accounting information system include the
   a) Nature of the business.
   b) Size of the firm.
   c) Volume of data to be handled.
   d) All of these

2. The manual input symbol could be used to represent
   a) the entering of data at an on-line keyboard.
   b) the entering of data using switch settings.
   c) the entering of data using touch screens.
   d) All of these answers are correct.

3. Which of the following flow directions is(are) assumed in a flowchart?
   a) From top to bottom
   b) From left to right
   c) Neither answer A nor B is correct.
   d) Answers A and B are both correct.

4. The first step in preparing a flowchart is to
   a) select the symbols to be used.
   b) analyze the system.
   c) sketch a rough draft of the system.
   d) consult the work papers from previous audits.

5. A graphical representation focusing on the sequence of activities in a business process is a(n)
   a) analytical flowchart.
   b) business process diagram.
   c) process flowchart.
   d) data flow diagram.

6. The two broad categories of transaction control are
   a) general controls and specific controls.
   b) general controls and application controls.
   c) general controls and basic controls.
   d) basic controls and application controls.

7. The narratives, diagrams, charts, and other written materials that explain how a system works are
   collectively called
   a) documentation.
   b) data flows.
   c) flowcharts.
   d) schema.
8. What is the major difference between the revenue and the expenditure cycle?
   a) The revenue cycle includes marketing activities; the expenditure cycle does not.
   b) In the revenue cycle, cash is received; in the expenditure cycle cash is paid out.
   c) The expenditure cycle includes paying employees.
   d) The revenue cycle includes the activity of obtaining funds from investors.

9. Which of the following is **not** a common transaction processing cycle found in business organizations?
   a) Expenditure cycle
   b) Accounting cycle
   c) Production cycle
   d) Revenue cycle

10. An important quick response technology used to track objects using radio signals is called
    a) sonic tagging.
    b) radio frequency identification.
    c) object frequency tagging.
    d) frequency waves identification.

11. The operations performed on data to generate meaningful and relevant information are referred to as
    a) general ledger and reporting system
    b) accounting information system
    c) financial reporting
    d) data processing cycle

12. A typical source document could be
    a) in some paper form.
    b) a computer data entry screen.
    c) a notepad entry.
    d) both A and B

13. Data must be collected about three facets of each business activity. What are they?
    a) the business activity, the resources it affects, the people who participate
    b) the business activity, the transactions it creates, the impact on the financial statements
    c) the inputs, outputs and processes used
    d) who is involved, what was sold, how much was paid

14. Common source documents for the revenue cycle include all of the following except
    a) sales order.
    b) receiving report.
    c) delivery ticket.
    d) credit memo.

15. What is a primary example of source data automation?
    a) a utility bill
    b) POS (point-of-sale) scanners in retail stores
    c) a bill of lading
    d) a subsidiary ledger

16. The general ledger account that corresponds to a subsidiary ledger account is known as a
    a) dependent account.
    b) attribute account.
    c) entity account.
    d) control account.
17. The following are benefits of an ERP except for the ability
   a) to eliminate data duplication and redundancy.
   b) to standardize data formats.
   c) to easily share data from various departments.
   d) to easily customize software to meet company needs.

18. Which of the following specialized information systems would be the most useful in providing information for routine decisions?
   a) Decision support system
   b) Expert system
   c) Executive information system
   d) Accounting information system

Use the chart below to answer the following questions regarding flow chart symbols.

19. Which symbol would be used in a flowchart to represent a manual process?
   a) #5
   b) #6
   c) #10
   d) #11

20. Which symbol would be used in a flowchart to represent a computer process?
    a) #1
    b) #2
    c) #5
    d) #15

21. Which symbol would be used in a flowchart to represent a decision?
    a) #10
    b) #16
    c) #9
    d) #6

22. Which symbol would be used in a flowchart to represent an invoice sent to a customer?
    a) #2
    b) #6
    c) #1
    d) #15
23. Which symbol would be used in a flowchart to represent a general ledger master file kept on magnetic disk?
   a) #2  
   b) #5  
   c) #7  
   d) #8

24. Which symbol would be used in a flowchart to represent the display of a report on a computer screen?
   a) #1  
   b) #2  
   c) #3  
   d) #11

25. Which symbol would be used in a flowchart to represent a payroll master file kept on magnetic tape?
   a) #4  
   b) #7  
   c) #8  
   d) #9

26. The systematic assignment of numbers or letters to items to classify and organize them is known as
   a) coding  
   b) chart of accounts  
   c) data input  
   d) pre-numbered documents

27. The chart of accounts for a manufacturing corporation would include
   a) retained earnings.  
   b) common stock.  
   c) raw materials inventory.  
   d) all of the above

28. The efficiency of recording numerous business transactions can be best improved by the use of
   a) prenumbered source documents.  
   b) specialized journals.  
   c) posting references.  
   d) segregation of duties.

29. A specialized journal
   a) is used to record infrequent or non-routine transactions.  
   b) simplifies the process of recording large numbers of repetitive transactions.  
   c) records all detailed data for any general ledger account that has individual sub-accounts.  
   d) contains summary-level data for every account of the organization.

30. Which of the following is conceptually similar to a journal in a manual AIS?
   a) database  
   b) master file  
   c) record  
   d) transaction file

31. Which of the following is not one of the four types of file processing?
   a) changing  
   b) updating  
   c) deleting  
   d) altering
32. Documents generated at the end of transaction processing activities are called
   a) financial statements
   b) operational documents
   c) reports
   d) source documents

33. The graphic description of the flow of data within an organization is called a
   a) systems flowchart.
   b) data flow diagram.
   c) context diagram.
   d) document flowchart.

34. A graphical description of the sequence of logical operations that a computer performs is called
   a) a data flow diagram.
   b) a document flowchart.
   c) a system flowchart.
   d) a program flowchart.

35. The general ledger
   a) is used to record infrequent or non-routine transactions.
   b) simplifies the process of recording large numbers of repetitive transactions.
   c) records all detailed data for any general ledger account that has individual sub-accounts.
   d) contains summary-level data for every account of the organization.

Question 2 (30 Minuets, 14 Marks)

The following trial balance was taken from the books of Yara Corporation on December 31, 2014.

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$12,000</td>
<td></td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td>Note Receivable</td>
<td>7,000</td>
<td></td>
</tr>
<tr>
<td>Allowance for Doubtful Accounts</td>
<td></td>
<td>$1,800</td>
</tr>
<tr>
<td>Merchandise Inventory</td>
<td>44,000</td>
<td></td>
</tr>
<tr>
<td>Prepaid Insurance</td>
<td>4,800</td>
<td></td>
</tr>
<tr>
<td>Furniture and Equipment</td>
<td>125,000</td>
<td></td>
</tr>
<tr>
<td>Accumulated Depreciation--F. &amp; E.</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>10,800</td>
<td></td>
</tr>
<tr>
<td>Share Capital–Ordinary</td>
<td>44,000</td>
<td></td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>55,000</td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>280,000</td>
<td></td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>111,000</td>
<td></td>
</tr>
<tr>
<td>Salaries Expense</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>Rent Expense</td>
<td>12,800</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$406,600</strong></td>
<td><strong>$406,600</strong></td>
</tr>
</tbody>
</table>

At year end, the following items have not yet been recorded.
   a. Insurance expired during the year, $2,000.
   b. Estimated bad debts, 1% of gross sales.
   c. Depreciation on furniture and equipment, 10% per year.
   d. Interest at 6% is receivable on the note for one full year.
   e. Rent paid in advance at December 31, $5,400 (originally charged to expense).
   f. Accrued salaries at December 31, $5,800.

Instructions
   (a) Prepare the necessary adjusting entries.
   (b) Prepare the necessary closing entries.
**Question 3 (30 Minuets, 15 Marks)**

Abu-Musa Company uses a sales journal, a cash receipts journal, and a general journal to record transactions with its customers. Record the following transactions in the appropriate journals. The cost of all merchandise sold was 70% of the sales price.

**July 2**  
Sold merchandise for $18,000 to R. Saleh on account. Credit terms 2/10, n/30. Sales invoice No. 100.

**July 5**  
Received a check for $800 from A. Megahed in payment of his account.

**July 8**  
Sold merchandise to S. Hilal for $700 cash.

**July 10**  
Received a check in payment of Sales invoice No. 100 from R. Saleh minus the 2% discount.

**July 15**  
Sold merchandise for $9,000 to H. El-Agamy on account. Credit terms 2/10, n/30. Sales invoice No. 101.

**July 18**  
Borrowed $25,000 cash from Cairo Bank signing a 6-month, 10% note.

**July 20**  
Sold merchandise for $15,000 to Y. Ahmad on account. Credit terms 2/10, n/30. Sales invoice No. 102.

**July 25**  
Issued a credit memorandum for $600 to Y. Ahmad as an allowance for damaged merchandise previously sold on account.

**July 31**  
Received a check from H. El-Agamy for $5,000 as payment on account.

---

**ABU-MUSA COMPANY**

Sales Journal S1

<table>
<thead>
<tr>
<th>Date</th>
<th>Account Debited</th>
<th>Invoice No.</th>
<th>Acct. Rec. Dr.</th>
<th>C. of G. S. Dr.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sales Cr.</td>
<td>Mer. Inv. Cr.</td>
</tr>
</tbody>
</table>

---

**ABU-MUSA COMPANY**

General Journal G1

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanations</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
</table>

---

**ABU-MUSA COMPANY**

Cash Receipts Journal CRI

<table>
<thead>
<tr>
<th>Date</th>
<th>Accounts Credited</th>
<th>Ref.</th>
<th>Cash Dr.</th>
<th>Sales Discounts Dr.</th>
<th>Accounts Rec. Cr.</th>
<th>Sales Cr.</th>
<th>Other Accounts Cr.</th>
<th>C. of G. S. Dr.</th>
<th>Mer. Inv. Cr.</th>
</tr>
</thead>
</table>
Question 4 (15 Minuets, 7 Marks)
Below are some typical transactions incurred by Farley Company.

1. Purchase of merchandise on account.
2. Collection on account from customers.
3. Payment of employee's wages.
4. Sales of merchandise for cash.
5. Close Income Summary to owner's capital.
6. Adjusting entry for depreciation on machinery.
7. Payment of creditors on account.
8. Purchase of office equipment on credit.
9. Sales discount taken on goods sold on credit.
10. Sales of merchandise on account.
11. Purchase of a delivery truck for cash.
12. Return of merchandise purchased on credit.
13. Payment of rent in advance.
15. Purchase of office supplies for cash.

For each transaction, indicate by the code letter the appropriate journal where the transaction would be journalized.
CR — Cash Receipts Journal
CP — Cash Payments Journal
S — Sales Journal
P — Single-Column Purchases Journal
G — General Journal

Question 5 (35 Minuets, 14 Marks)
Prepare flowcharting segments for each of the following operations: Assorted Flowcharting Segments:

1. processing transactions stored on magnetic tape to update a master file stored on magnetic tape
2. processing transactions stored on magnetic tape to update a database stored on a magnetic disk
3. converting source documents to magnetic tape using a computer-based optical character reader (OCR)
4. processing OCR documents online to update a database on magnetic disk
5. reading data from a magnetic disk into the computer to be printed on a report
6. manually sorting and filing invoices numerically
7. using a computer or terminal to key data from source documents to a file stored on a magnetic disk

Best Regards,
Prof. Ahmad A. Abu-Musa
First Question: 40 Marks

1- The inverse of the matrix $A = \begin{bmatrix} 1 & 2 & 1 \\ 2 & -1 & 3 \\ 1 & 3 & -1 \end{bmatrix}$ is ...........................................

2- The domain of the function $f(x) = \frac{1}{3x - 5}$ is ...........................................

3- The first derivative of the function $y = e^{\ln x}$ is ...........................................

4- $\int 2x^{-1} \, dx = ...........................................

5- $\int (x^5 - 2)^3 (5x^4) \, dx = ...........................................

6- $\int_{4}^{4} x^2 \, dx = ...........................................

7- A consistent linear system is ...........................................

8- If a consistent system has exactly one solution (unique solution), it is said to be ............... but, if a consistent system has more than one solution, it is said to be ............... 

9- Determine if the system is consistent, or inconsistent:

$\begin{align*}
2x - 5y &= 6 \\
-4x + 10y &= -1
\end{align*}$

10- The equation of the line with slope $\frac{2}{3}$ and y intercept $-2$ is ......
Second Question 15 Marks
Labor and material costs for manufacturing two guitar models are given in the table below: Suppose that in a given week $1800 is used for labor and $1200 used for materials. How many of each model should be produced to use exactly each of these allocations?

<table>
<thead>
<tr>
<th>Guitar model</th>
<th>Labor cost</th>
<th>Material cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$30</td>
<td>$20</td>
</tr>
<tr>
<td>B</td>
<td>$40</td>
<td>$30</td>
</tr>
</tbody>
</table>

Third Question: 30 Marks
A. An economy is based on two sectors, agriculture (A), energy (E), each dollar’s worth of agriculture produced requires $0.40 of agriculture and $0.20 of energy. Each dollar’s worth of energy produced requires $0.20 of agriculture and $0.10 of energy. Find the output from each sector that is needed to satisfy a final demand of $8 million for agriculture, $5 million for energy.

B. If the total cost of producing $x$ electric guitars is

\[ C(x) = 1000 + 100x - 0.25x^2. \]

1. Find the exact cost of producing the 51st guitar.
2. Use the marginal cost to approximate the cost of producing the 51st guitar.

Best Wishes

Dr. Tarek Abd Elhamid
The following are Multiple Choice Questions, please determine the correct answers and shade relative squares in the answer sheet:

85 Marks

1) Organizational behavior is constructed from all of the following disciplines except _______.
   A) physics   B) psychology   C) anthropology   D) sociology

2) Psychology’s major contributions to the field of organizational behavior have been primarily at what level of analysis?
   A) At group level   B) At individual level   C) At organization level   D) At culture level

3) The science that seeks to measure, explain, and sometimes change the behavior of humans and other animals is known as _________.
   A) psychiatry   B) psychology   C) sociology   D) political science

4) ________ blends concepts from psychology and sociology and focuses on the influence people have on one another.
   A) Corporate strategy   B) Anthropology   C) Political science   D) Social psychology

5) Group behavior, power, and conflict are central areas of study for _________.
   A) archaeologists   B) sociologists   C) anthropologists   D) social psychologists

6) ________ focuses on the study of people in relation to their social environment.
   A) Psychology   B) Sociology   C) Corporate strategy   D) Political science

7) Which of the following fields has most helped us understand differences in fundamental values, attitudes, and behavior among people in different countries?
   A) anthropology   B) psychology   C) political science   D) operations research

8) ________ is a measure of how organizations are becoming more heterogeneous in terms of gender, race, and ethnicity.
   A) Globalization   B) Workforce diversity   C) Affirmative action   D) Organizational culture

9) A model is a(n) _________.
   A) abstraction of reality   B) someone held in high esteem   C) independent variable   D) real-world scenario

10) What term is used to describe voluntary and involuntary permanent withdrawal from an organization?
    A) absenteeism   B) turnover   C) downsizing   D) truancy

11) The emotional, or feeling component of a person’s attitude is called _________.
    A) complex understanding   B) the cognitive component   C) the affective component   D) a complex attitude

12) Which of the following answer choices is the best definition of attitude?
    A) Attitudes indicate how one will react to a given event.
    B) Attitudes are the yardstick by which one measures one's actions.
    C) Attitudes are the emotional part of an evaluation of some person, object or event.
    D) Attitudes are evaluative statements of what one believes about something or someone.

13) The belief that "violence is wrong" is an evaluative statement. Such an opinion constitutes the ________ component of an attitude.
    A) cognitive   B) affective   C) reflective   D) behavioral
14) Any incompatibility between two or more attitudes or between behavior and attitudes results in _________.
A) organizational dissonance
B) cognitive dissonance
C) attitudinal clarification
D) values clarification

15) "Dissonance" means _________.
A) reactance
B) constance
C) resistance
D) inconsistency

16) What refers to a positive feeling about a job, resulting from an evaluation of its characteristics?
A) job satisfaction
B) job involvement
C) job stability
D) organizational commitment

17) Job satisfaction is best described as _________.
A) a result
B) a value
C) an attitude
D) causing high performance

18) Susan has composed a list of concerns along with her suggestions for improving conditions. Susan is dealing with her dissatisfaction through _________.
A) exit
B) voice
C) loyalty
D) neglect

19) Mark believes that his manager is a good person and will work things out if Mark just gives him time to do so. Mark is dealing with his dissatisfaction through _________.
A) exit
B) voice
C) loyalty
D) neglect

20) Maria is dissatisfied with the way that her manager treats her. She has quit her job and found a new position with another firm. She has expressed her dissatisfaction through _________.
A) exit
B) voice
C) loyalty
D) neglect

21) Steve is unhappy with his job. He takes every possible vacation and sick day and sometimes shows up for work late. He is expressing his dissatisfaction through _________.
A) exit
B) voice
C) loyalty
D) neglect

22) Which of the following is true regarding the relationship between satisfaction and absenteeism?
A) There is a consistent positive relationship between the two.
B) There is a consistent negative relationship between the two.
C) There is a curvilinear relationship between the two.
D) When fairness is controlled for, there is a direct relationship between the two.

23) Which of the following is the best definition of personality?
A) Personality is an aggregate set of traits that are mostly determined at birth.
B) Personality is an aggregate set of traits that are determined over a person's lifetime.
C) Personality is all the ways in which an individual reacts to and interacts with others.
D) Personality is, for the most part, comprised of traits that cannot be measured or defined.

24) Which of the following statements about the determinants of personality is true?
A) Personality appears to have no determinants.
B) Personality appears to be a result of external factors.
C) Personality appears to be a result of only environmental factors.
D) Personality appears to be a result of both hereditary and environmental factors.

25) All of the following are classifications on the Myers-Briggs Type Indicator except _________.
A) extroverted/introverted
B) sensing/intuitive
C) perceiving/judging
D) independent/dependent

26) What does the Myers-Briggs Type Indicator classification of "E or I" stand for?
A) extroverted/introverted
B) emotional/introverted
C) extroverted/introverted
D) emotional/intuitive

27) What does the Myers-Briggs Type Indicator classification of "S or N" stand for?
A) sensing/intuitive
B) sensing/thinking
C) emotional stability/intuitive
D) emotional stability/thinking
28) Which of the following is not included in the Big Five model?
A) agreeableness  B) conscientiousness  C) intuitiveness  D) emotional stability

29) What personality characteristic centers on whether a person is unemotional and pragmatic and believes that ends can justify means?
A) authoritarianism  B) Machiavellianism  C) Type A personality  D) risk-taking

30) What term is used to describe the personality of an individual who is aggressively involved in an incessant struggle to achieve more and more in less and less time?
A) Type A personality  B) Type B personality  C) proactive personality  D) narcissistic personality

31) Which of the following statements about values is true?
A) Values are flexible.  B) Values are synonymous with attitudes.
C) Values tend to be consistent among occupational groups.  D) Values are fairly stable over time.

32) What does the content attribute of a value state?
A) that the value is complete  B) that the value is important
C) that the value is strongly or weakly held  D) the behavior associated with that value

33) When we rank an individual’s values in order of their ________, we obtain the person’s value system.
A) intensity  B) content  C) context  D) social acceptance

34) Which of the following values would be most likely to be considered a terminal value by Rokeach?
A) ambition  B) broad-mindedness  C) helpfulness  D) a sense of accomplishment

35) Which of the following is not an instrumental value?
A) clean  B) wisdom  C) polite  D) loving

36) Motivation is best defined as a process that ________.
A) results in a level of effort  B) intensifies an individual’s efforts
C) accounts for an individual’s efforts toward attaining a goal  D) meets an individual’s needs

37) What are the three key elements of motivation?
A) reactance, congruence, and circumstance  B) interest, activity, and reward
C) awareness, effort, and outcome  D) intensity, direction, and persistence

38) Which level of Maslow's hierarchy of needs deals with satisfying one's hunger, and thirst?
A) safety  B) physiological  C) social  D) esteem

39) According to Maslow, when does a need stop motivating?
A) when it is substantially satisfied  B) it never stops motivating
C) when one returns to a lower level need  D) when one chooses to move to a higher level need

40) How would a Theory X manager view employees?
A) seeking responsibility  B) needing to be coerced to achieve goals
C) viewing work as a normal daily activity  D) exercising self control

41) A Theory Y manager would assume that employees would ________.
A) dislike work  B) need to be controlled
C) avoid responsibility  D) exercise self direction

42) Two-factor theory suggests that dissatisfaction is caused by extrinsic factors. Which of the following is an example of such a factor?
A) advancement  B) working conditions  C) achievement  D) recognition

43) What continuum in the two-factor theory is made up of the hygiene factors?
A) no dissatisfaction to dissatisfaction  B) no dissatisfaction to satisfaction
C) satisfaction to no satisfaction  D) satisfaction to dissatisfaction

44) McClelland's theory of needs concentrates on which three needs?
A) achievement, realization, and acceptance  B) achievement, power, and affiliation
C) power, acceptance, and confirmation  D) affiliation, control, and realization