Answer the following questions:

Question One

Determine whether each one of the following statements is true or false

1- Income statement is an example of accounting information that is provided to the firm’s manager

2- The primary objective of any AIS is to provide accounting information to internal users such as managers and internal users such as customers.

3- Transaction processing consists of processing accounting and nonaccounting transactions through key accounting records by means of procedures.

4- The data collection function (performed during the output stage) include capturing transaction data and recording it into forms.

5- The funds, facilities, and the labour of employees and managers represent the input of the business system.

6- Under the hierarchical organizational structure, the activities and operations of a firm are subdivided like silos.

7- Recording transactions, posting them to ledger, and preparing reports are considered as business events.

8- In a manual AIS, it may not be difficult to differentiate one type of transaction from another.

9- When a document crosses an organizational line within the flowchart, the document is pictured again in the new organizational unit.

10- In flowcharting, the symbol for manual processing (an inverted triangle) should appear each time a clerk performs a step in the procedure.

11- It is not usual for data warehouses to contain hundreds of terabytes of data.

12- In designing relational databases the value of primary key cannot be null.

13- The data organized in the form of records, can be gathered at the time they originate.

14- Data warehouses do not replace transaction processing databases.

15- Companies can reduce fraud possibilities by merely creating internal control system.

16- Accidents caused by human carelessness, failure to follow established procedures, and poorly trained or supervised personnel are examples of intentional threats.

17- Individuals who commit fraud are referred to as blue-collar criminals.

18- In operation stage of SDLC, new hardware and software are installed and tested.

19- One of the forms of resisting new AIS is projection, which can be defined as blaming the new system for everything that goes wrong.

20- The concluding step in systems analysis is preparing a systems analysis report to summarize and document analysis activities.
Question Two
Listed below are some terminologies that are related to AIS:

<table>
<thead>
<tr>
<th>Information</th>
<th>Data</th>
<th>Information System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chart of Accounts</td>
<td>Accounting</td>
<td>System</td>
</tr>
<tr>
<td>Network Structure</td>
<td>Data Mining</td>
<td>Database Management System</td>
</tr>
<tr>
<td>Schema</td>
<td>Primary Key</td>
<td>Record</td>
</tr>
</tbody>
</table>

Each of the following statements describes one of these terminologies. For each statement indicate the terminology described.

1- A set of codes assigned to general ledger accounts in an AIS.
2- An organizational structure that represents an interconnected but non-hierarchical structure that is both flexible and fluid.
3- Using sophisticated statistical analysis, including artificial intelligence techniques such as neural networks, to "discover" un-hypothesized relationships in the data.
4- The interface between the database and the various application programs.
5- Is data that have been processed and are meaningful and useful to users.
6- Describes the logical structure of a database.
7- The database attribute, or combination of attributes, that uniquely identifies a specific row in a table.
8- A series of related data elements of an entity.
9- A unified structure that employs physical resources and components to transform economic data into accounting information for external and internal users.
10- A framework in which data is collected, processed, controlled and managed through stages in order to provide information to users.

Question Three
Choose the best answer for each of the following questions:

1- Data collection function of AIS involves the following steps EXCEPT:
   a- Capturing the transaction data.
   b- Recording data into forms.
   c- Merging, or combining two or more batches or files of data.
   d- Validating and editing the data to ensure their accuracy and completeness.

2- An example of nonaccounting transaction is:
   a- Placing a purchase order for computers
   b- Billing customers for sales transactions
   c- Payment amounts due to creditors
   d- Payment of employees’ monthly salaries

3- The functional step in transforming data into information that includes such steps as interpreting, reporting, and communicating information is:
   a- Data collection
   b- Information generation
   c- Data Maintenance
   d- None of the above

4- The management level information system aims to serve the following group:
   a- Senior managers
   b- Middle managers
   c- Data workers
   d- Operational Managers

5- Which of the following statements about flowcharts is NOT TRUE?
   a- A flowchart is an analytical technique used to describe some aspect of an information system in a clear, concise, and logical manner.
b. Flowcharts use a standard set of symbols to describe pictorially the flow of documents and data through a system.

c. Flowcharts are easy to prepare and revise when the designer utilizes a flowcharting software package.

d. A system flowchart is a narrative representation of an information system.

6. When a functionally organized tractor manufacturing company can also combine in its structure a project-orientation, this is an example of:
   a. Matrix Organizational Structure
   b. Hierarchical Organizational Structure
   c. Decentralized Organizational Structures
   d. Networking Organizational Structure

7. Which of the following flowcharts depict the relationships among the inputs, processing, and output of AIS:
   a. Program flowchart
   b. Computer configuration chart
   c. Document flowchart
   d. System flowchart

8. Which of the following would managers most likely use to retrieve information about sales during the month of November?
   a. DML
   b. DQL
   c. DDL
   d. DSL

9. What is each row in a relational database table called?
   a. Relation
   b. Attribute
   c. Anomaly
   d. Tuple

10. Which of the following attributes would most likely be a primary key?
    a. Customer number
    b. Customer name
    c. Customer account balance
    d. Customer Zip code

11. The following are advantages of database systems except:
    a. Data Integration
    b. Data Sharing
    c. Minimizing Data Redundancy
    d. Data dependence

12. The following are among the design requirements of relational databases except:
    a. Every column must be single valued.
    b. Primary keys must contain data (not null).
    c. Foreign keys must contain the same data as the primary key in another table.
    d. All other attributes must identify a characteristic of the table identified by the foreign key

13. Which of the following is a fraud in which later payments on account are used to pay off earlier payments that were stolen?
    a. Kiting
    b. Salami technique
    c. Lapping
    d. Ponzi scheme

14. Which type of fraud was the one of the main reason behind the collapse of Enron energy company?
    a. Fraudulent financial statements
    b. Ponzi scheme
    c. Kiting
    d. Lapping

15. All of the following conditions are usually necessary for a fraud to occur except:
    a. Pressure
    b. Opportunity
    c. Explanation
    d. Rationalization

16. Which of the following causes the majority of computer security problems?
    a. Human errors
    b. Software errors
    c. Natural disasters
    d. Power outage

17. Which of the following is not among the motivations of fraudulent financial reporting?
    a. Falsified to deceive investors and creditors
    b. Increase a company’s stock price
    c. Meet cash flow needs
    d. Deceive firm’s employees regarding the company’s performance
18- Which of the following is the planning technique that identifies implementation activities and their relationships, constructs a network of arrows and nodes, and then determines the critical path through the network?
   a- Gantt chart       b- Physical model
   c- Flow charts       d- PERT diagram

19- The marketing department is designing a new AIS. Who is best able to determine departmental information requirements?
   a- Steering committee b- Controller
   c- Marketing Department d- Top management

20- Which of the following is the correct order of the steps in systems analysis?
   a- Initial investigation, system survey, feasibility study, determination of information needs and system requirements.
   b- Initial investigation, determination of information needs and system requirements, feasibility study, system survey.
   c- Determination of information needs and system requirements, system survey, feasibility study, initial investigation
   d- System survey, initial investigation, determination of information needs and system requirements, feasibility study

Question Four
Answer FOUR ONLY from the following five questions:
1- The primary aim of any AIS is to provide accounting information to a wide variety of users. Discuss in brief the specific objectives that can help in achieving this primary aim?

2- Briefly discuss the following statement. A system view of accounting allows us to organize our knowledge of accounting from the perspective of an information system?

3- What are the design requirements for Relational Database?

4- Discuss the different kinds of the threats that may face AIS? Support your answer with examples?

5- Discuss the key issues and steps in systems analysis?
The following data can be used to prepare the state budget for the governmental year 2013/2014 (numbers in million):

<table>
<thead>
<tr>
<th>Data</th>
<th>Actual Data</th>
<th>12/13 (Current)</th>
<th>13/14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>09/10</td>
<td>10/11</td>
<td>11/12</td>
</tr>
<tr>
<td>Compensation for employees</td>
<td>220</td>
<td>240</td>
<td>250</td>
</tr>
<tr>
<td>Taxes</td>
<td>520</td>
<td>540</td>
<td>590</td>
</tr>
<tr>
<td>Local loans</td>
<td>160</td>
<td>190</td>
<td>250</td>
</tr>
<tr>
<td>Collection from payment of foreign</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Acquisition of non financial assets</td>
<td>160</td>
<td>190</td>
<td>255</td>
</tr>
<tr>
<td>Subsidies, grants and social</td>
<td>60</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Acquisition of local financial assets</td>
<td>25</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Payment of local loans</td>
<td>90</td>
<td>90</td>
<td>130</td>
</tr>
<tr>
<td>Sales of local financial assets</td>
<td>100</td>
<td>100</td>
<td>70</td>
</tr>
<tr>
<td>Interests</td>
<td>70</td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td>Foreign loans</td>
<td>40</td>
<td>80</td>
<td>110</td>
</tr>
<tr>
<td>Purchase of goods and services</td>
<td>390</td>
<td>410</td>
<td>355</td>
</tr>
<tr>
<td>Other expenses</td>
<td>100</td>
<td>90</td>
<td>200</td>
</tr>
<tr>
<td>Collection from payment of local</td>
<td>30</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Collection from privatization</td>
<td>??</td>
<td>??</td>
<td>??</td>
</tr>
<tr>
<td>Issuing of stocks</td>
<td>25</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>Grants</td>
<td>15</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Payment of foreign loans</td>
<td>100</td>
<td>60</td>
<td>90</td>
</tr>
<tr>
<td>Sales of foreign financial assets</td>
<td>30</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other revenues</td>
<td>110</td>
<td>100</td>
<td>105</td>
</tr>
<tr>
<td>Acquisition of foreign financial assets</td>
<td>20</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Required:**

1. Calculate the operating surplus/deficit for the state budget for the budgetary year 2013/2014.
2. Calculate the cash surplus/deficit for the state budget for the budgetary year 2013/2014.
3. Calculate the total surplus/deficit for the state budget for the budgetary year 2013/2014.
4. Determine the sources of finance which cover the total deficit of the state budget.

5. Prepare the comprehensive form of the state budget for the budgetary year 2013/2014. Assume that the gross national product (GNP) for the years 2012/2013 and 2013/2014 is 30,000 and 25,000 million respectively.

**Question (2):**

A certain governmental unit undertook the following financial operations during the month of November, 2012 (amounts in L.E.):

1. On 1/11, the public treasury of the unit collected 100,000 as a known kind of revenues which belongs to the unit.
2. On 3/11, it drew a cheque for the amount of 50,000 to pay for stationary items the value of which amounts 55,000.
3. On 7/11, the public treasury of the unit collected 10,000 as service revenues which belongs to another unit.
4. On 10/11, it drew a cheque for the amount of 10,000 to pay for spare parts.
5. On 9/11, the unit received two cheques as a known kind of revenues amounted to 60,000 and 30,000 respectively.
6. On 11/11, the cheque issued in November 10, was returned as the beneficiary was not the right person.
7. On 15/11, a supplier lost the cheque which was issued to him for the amount of 50,000. So, he submitted an application to the administration to issue a new cheque for him and the administration approved this application.
8. On 17/11, the unit received two postal orders as a collection of revenues, amounted to 75,000 and 33,000 respectively. By examining the second postal order, it was found that it belongs to another unit. The unit drew a cheque of the value of the second order and send it to the other unit.
9. On 20/11, the unit received credit advice from the central bank confirming the collection of the first cheque received on 9/11.
10. On 24/11, the unit received another advice from the central bank informing that it was impossible to collect the second cheque received on 9/11, due to insufficient balance. Therefore the unit returned the cheque to the titular and collected the value in cash.
11. On 30/11, total wages amounted to 20,000 of which 1,000 and 1,500 are due to the insurance and tax authorities respectively.

**Required:**
Prepare the journal entries required to record the aforementioned transactions in the governmental unit.
Question (3):

1. State the main features of governmental accounting in Egypt.
2. Discuss briefly the main principles for preparing the state budget.
3. What are the main forms to prepare the state budget? (types of budgets).
4. State the main principles applied when preparing the national accounts.
5. Define the following terms:
   a. Gross value added  
   b. Intermediate consumption  
   c. Final consumption

Question (4):
The following data can be used to prepare the sequence of accounts of the domestic economy for the governmental year 2011/2012 (numbers in million):

Output of goods and services 120, Intermediate consumption 50, Compensation of employees and property income receivable from the rest of the world 5, Compensation of employees and property income to the rest of the world 2, Current transfer receivable from the rest of the world 3, Current transfer payable to the rest of the world 4, Final consumption 45, Gross capital formation 17, Capital transfers from the rest of the world 3, Capital transfers to the rest of the world 5, Net acquisition of financial assets (money 4, loans 4), Net incurrence of liabilities 0, Consumption of fixed capital -1, Financial assets 8, Financial liabilities 0. Imports 20, Exports 28.

Required:

a. Prepare a table to show a simplified sequence of accounts of the domestic economy.

b. Prepare a table to show a simplified account of the rest of the world.

Best Wishes
Dr. Ahmed H. Ahmed
Use the diagram Presentation and mathematical equation your answer the following questions if it is necessary

Question no. 1: 30 Mark
(A) "Explain the origin of profit and analyse The relation between wages, capital and surplus value, according to Marxian theory":
(B) "Represent the structural - change approach are the "two - sector surplus labor" theoretical Model of W. Arthur - Lewis ".
(C) "The Keynesian theory is not applicable to underdeveloped counties" Explain why ?

Question no. 2: 30 Mark
(A) Circle whether the following statements are true (T) or false (f).
1- Marx believes that technological progress tends to decrease the organic composition of capital.
2- Forced saving are savings brought about through involuntary reductions in consumption.
3- In the Keynesian theory total income is a function of total employment In a country.
4- The nature of unemployment in an underdeveloped country is chronic rather than cyclical.
5- According to Keynes there is positive relationship between investment and marginal efficiency of capital.
6- According to Marxian theory 'Capitalism leads the proletarian revolution where by the dictatorship Of the proletarian is established.
7- In Lewis model the real rural wage is determined by the marginal and not average product of labor.
8- In Lewis model the level of wages in urban industrial is assumed to be constant.
9- The Keynesian approach rejects the idea that saving determines investment and argues instead that the encouragement of investment will generate its own saving.
10- The materialistic interpretation of history attempts to show that all historical events are the result of a continuous economic struggle between different classes and groups in society.

(B) Circle the appropriate answer:
1- In the keysian financial model the actual growth of capital is a (linear - nonlinear) combination of planned saving and planned investment.
2- The propensity to save out of wages (s_w) plus the propensity to save out of profits (s_p) must equal (one - less than one - more than one)
3- The Keynesian economics is (Long - short) period analysis.
4- The Keynesian theory is based on the Existence of (disguised - chronic - Cyclical) unemployment which occurs during a depression.
5- In an underdeveloped economy the propensity to consume is very (Low - high) And the propensity to savings are almost (negative - zero - negligible)
6- At Marxian theory , capital accumulation and concentration involve increase (constant - variable) capital and decline in (constant - variable) capital
7- The principle of marginal productivity telles that where the (Ratio - Average) Of capital to Other factors is Low the marginal productivity of capital is (Low - high)
(C) write the economist's name which who used the following expression.
1- From each individual will contribute to national income according to his abilities and receive according to his needs.
2- Investment generates its own saving through increases in output and profits.
3- 'Anti-developmental' economic growth.
4- Effective demand.
5- saving adjust to the desired level of investment through a rise in the share of profits in national income.
6- "practical Keynesianism is a seedling which cannot by transplanted into foreign soil; it dies there and becomes poisonous before it dies. But left in English soil, this seedling is a healthy thing and promises both fruit and shade".
7- When the capitalist is replacing the workers by machines, he is killing the goose that laid the golden eggs.
8- Underdeveloped countries as those which compared with the advanced countries are underequipped with capital in relation to their population and natural resources.
9- Economic development has much to do with human endowments social attitudes, political conditions and historical accidents. Capital is necessary but not a sufficient condition of progress.
10- Keynes never formulated the economic problems of underdeveloped countries nor did he discuss the relevance to these countries of either the objective or the policy that he proposed for the more developed countries.

Question no. 3: [40 mark]
(A) present the Harrod – Domar model for growth and illustrate why it is not a dynamic model.

(B) suppose that following values for Harrod-Domar model
\[ V = 5 \quad U = 12 \quad s = 0.10 \quad K_0 = 50 \quad L_0 = 120 \quad n = 0.05 \]
- Calculate the real value for all \( L - (K) - (y) \) and equilibrium case for both \( (0, 1) \) periods.
- Calculate the real value for all \( (L_1) (K_1) (y_1) \) and equilibrium case if \( n \) become \( 0.01 \)
- Calculate the real value for all \( (L_1) (K_1) (y_1) \) and equilibrium case if \( n \) become \( 0.03 \)

(C) use Kaldor's saving function to adjust disequilibrium in above stage if the
\[ S_p = 0.43 \quad , \quad S_w = 0.03 \]

(D) suppose you have the following data,
\[ I = 20 \quad K = 100 \quad S = 10 \quad \frac{\Delta P}{P} \% 20 = 0.6 \quad \lambda = 1 \quad , \quad S_p = 0.4 \quad S_w = 0.05 \]
- Calculate \( \Delta \frac{y}{y} \) according to Keynesian approach
- Calculate \( \Delta \frac{y}{y} \) according to Kaldor's approach

Good luck.....
Dr. Gamal I. Hassan