



FINAL EXAMINATION
NOVEMBER 2023

COURSE TITLE	SYSTEM ANALYSIS AND DESIGN
COURSE CODE	RCIT1793
DATE/DAY	16 FEBRUARY 2024 / FRIDAY
TIME/DURATION	09:00 AM - 11:00 AM / 02 Hour(s) 00 Minute(s)

INSTRUCTIONS TO CANDIDATES:

1. Please read the instruction under each section carefully.
2. Candidates are reminded not to bring into examination hall/room any form of written materials or electronic gadget except for stationery that is permitted by the Invigilator.
3. Students who are caught breaching the Examination Rules and Regulation will be charged with an academic dishonesty and if found guilty of the offence, the maximum penalty is expulsion from the University.

(This Question Paper consists of **8** Printed Pages including front page)

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This question paper consists of TWO (2) sections in this examination paper. Please answer ALL questions in the answer booklet provided. [60 MARKS]

SECTION A

(20 Marks)

There are TWENTY (20) questions in this part. Answer ALL questions in the answer booklet.

1. The _____ in the systems design phase of the SDLC is user interface design.
 - A. first task
 - B. second task
 - C. third task
 - D. forth task

2. Choose THREE (3) different types of output from the output design.
 - I. Stereo and Dolby output
 - II. E-mail
 - III. Audio – audio output
 - IV. Automated facsimile systems
 - A. I, II and III.
 - B. I, III and V.
 - C. II, III and IV.
 - D. None of the answers.

3. Why do end users still choose printed reports on paper?
 - A. Printed reports are prone to be thrown away.
 - B. Printed reports are convenient, and even necessary in some situations.
 - C. Printed reports increase the cost of investment.
 - D. None of the answers.

4. Although output design deals with a different set of physical design concerns, it is an essential component of a user interface (UI) as a whole.
 - A. True
 - B. False

5. Who are the industrial leaders in the user interface research?
- I. Microsoft.
 - II. IBM.
 - III. Apple.
- A. I, and III.
B. I, and II.
C. II, and III.
D. None of the answers.
6. Ergonomics, aesthetics, and interface design do not make good user interface design.
- A. True
B. False
7. What are data structures?
- I. File-oriented system.
 - II. Information system.
 - III. File processing system.
 - IV. Database system.
- A. I, II and III.
B. I, III and IV.
C. II, III and IV.
D. None of the answers.
8. Potential issues with file processing are present in the data design idea. Name the **THREE (3)** possible issues.
- I. Data redundancy
 - II. Data integrity
 - III. Data formality
 - IV. Rigid data structure
- A. I, III and IV.
B. II, III and IV.
C. I, II and IV.
D. None of the answers.
9. The interface for users, database administrators, and related systems is provided by DBMS components.
- A. True
B. False

10. Data retrieval, storage, updating, and deletion are all managed using a data manipulation language (DML). Determine the database DML controls.
- I. INSERT
 - II. SELECT
 - III. IMPOSE
 - IV. UPDATE
 - V. DELETE
- A. I, II, III and IV.
B. I, II, IV and V.
C. I, II, III and IV.
D. None of the answers.
11. In the design phase, determine the entity relationship diagram.
- A. Overall view system and blueprint.
 - B. Overall view analysis of the system.
 - C. Overall view planning of the system.
 - D. None of the answer.
12. The value of project management in terms of creating realistic timetables, meeting deadlines, keeping expenses under control, and maintaining quality.
- A. True
 - B. False
13. What comes after the design phase?
- A. Start coating.
 - B. Start coupling.
 - C. Start coding.
 - D. None of the answer.
14. There will be a testing phase before the system is implemented. What issues need to be identified during the testing phase?
- A. Identify analysis.
 - B. Identify errors.
 - C. Identify interface.
 - D. None of the answer.

15. Independent system testing is referred to as system testing.

- A. True
- B. False

16. During system testing there are documentations to be prepared, identify **FOUR (4)** documentation.

- I. Program documentation.
- II. System documentation.
- III. Policy documentation.
- IV. Operations documentation.
- V. User documentation.

- A. I, II, III and IV.
- B. II, III, IV and V.
- C. I, II, IV and V.
- D. None of the answers.

17. IT staff and user departments frequently share responsibilities for vendor training.

- A. True
- B. False

18. There are different types of system maintenance. Name **FOUR (4)** different types of system maintenance.

- I. Corrective maintenance.
- II. Adaptive maintenance.
- III. Perfective maintenance.
- IV. Preventive maintenance.
- V. Proportionate maintenance.

- A. I, II, III and IV.
- B. I, II, IV and V.
- C. II, III, IV and V.
- D. None of the answers.

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19. The management of system support involves the maintenance staff. Name **THREE (3)** members of the system support team.
- I. Corrective maintenance.
 - II. Adaptive maintenance.
 - III. Perfective maintenance.
 - IV. Preventive maintenance.
 - V. Proportionate maintenance.
- A. I, II, III and IV.
B. I, II, IV and V.
C. II, III, IV and V.
D. None of the answers.
20. Systems analysts and programmers are frequently split into two groups by IT managers: one group develops new systems, while the other group is in charge of all process.
- A. True
B. False


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SECTION B

(40 Marks)

There are **SEVEN (7)** questions in this part of the examination paper. Answer **ALL** question in the answer booklet.

Maxy Mart has emerged as one of the top players in the economically priced good products of Malaysia. Despite recent price rises in the region, the business has seen considerable leaps and bounds. Maxy Mart sells a wide variety of domestic products and offers everything from food to household items in its stores.

Maxy Mart found that the frantic speed of stock movement was no longer able to cope with the conventional manual warehouse record-keeping method. It because with new branch expanded, increase of stock request, returned good, damages stocks and goods in transit. Therefore, Maxy Mart resolved to upgrade its traditional system to a reliable and adequate system to ensure the sustainability of the firm's business.

In order to solve this matter, Maxy Mart's senior management decided to invest on implementing an information system. Before handing over the proposal to be reviewed and approved by the board of directors, preparing the proposal is a huge challenge.

1. Discuss **TWO (2)** of Maxy Mart s' significance for user interface design. Support your answer with examples. (10 marks)
2. In order to develop the web-based database design of Maxy Mart, list **FIVE (5)** internet technologies. (5 marks)
3. Massive amounts of data need to be organised and processed. There are three types of normalization forms. Assist Maxy Mart on first normal form. (5 marks)
4. Relational databases and object-oriented databases are two different approaches of databases. Help Maxy Mart 's database design team by employing an object-oriented approach. (5 marks)
5. As soon as programmers had finished coding the data structure for Maxy Mart. The team will carry out a number of system testing. Explain integration testing. (5 marks)

6. Different kinds of system maintenance exist. How preventive maintenance could be executed by programmers for Maxy Mart's information system? (5 marks)

7. Once Maxy Mart 's information system had undergone testing and was prepared for use. What physical security measures may be used to protect the information system at Maxy Mart? (5 marks)

*** END OF QUESTION PAPER ***


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