

SECTION AAnswer **ALL** questions. Total **20 marks**.

1. What does the PIECES framework primarily assess in system analysis?
 - a. Project budget
 - b. Development team skills
 - c. Various aspects of system performance and functionality
 - d. System testing for bugs

2. What type of report would be best to present to the manager of Company XYZ for an overview of employee sales in terms of targets and sales achieved?
 - a. Summary report
 - b. Detailed report
 - c. Exception report
 - d. All the above

3. "Is the planned environment suitable for deployment?". This proposed questions best describes
 - a. Operational Feasibility
 - b. Technical Feasibility
 - c. Economic Feasibility
 - d. Schedule Feasibility

4. Which of the following system's conversion strategies is based on an approach of using successive versions of the new system?
 - a. Pilot operation
 - b. Phased operation
 - c. Parallel operation
 - d. Direct cutover

5. Which of the following is **NOT TRUE** about Physical Design?
 - i. Concerned with how the requirements are satisfied and how the data is input
 - ii. Concerned with what is required and how the data is input
 - iii. Concerned with what is required and what processes must be performed
 - iv. Concerned with how the requirements are satisfied and what information will be output
 - a. ii and iii
 - b. i, ii and iii
 - c. ii, iii and iv
 - d. all the above

6. In the implementation of an online movie ticketing system, tester Amy needs to identify if the book ticket function works – including viewing movies list, checking seat availability, booking seat(s) and obtaining ticket? This type of testing best describes as
-
- Integrated testing
 - Unit testing
 - System testing
 - All of the answers
7. During system implementation, the following are done except:
- Programs are written and tested with operational data
 - User documentation is created
 - Programmers are recruited and trained
 - The system is tested with to find defects and quality improvements
8. Following a feasibility study of the existing system, Jacob finds out that although the system is technically good, it has some operational defects. Which maintenance can he perform to enhance overall efficiency and functionalities?
- Perfective Maintenance
 - Preventive Maintenance
 - Adaptive Maintenance
 - Corrective Maintenance
- ii and iii
 - i
 - i and iv
 - iv
9. Which of the following is **NOT TRUE** about interpersonal skill of a System Analyst?
- Acquire skills in conducting the fact-finding techniques in order to get the requirements needed for the propose system.
 - Convey the accurate information to the team members such as project manager, programmer and others
 - Identifying the problems and solutions by understanding the organization culture and people.
 - Keep updating the customers and upper management on the project progress.

10. Below are the information that can be obtained from of a Gantt Chart **except** _____.

- a. Importance of task
- b. Duration for each task
- c. List of task
- d. Dependency of each task

11. Cost of software licenses' would be classified as _____

- i. Developmental cost
- ii. Operational cost
- iii. Variable cost
- iv. Direct cost

- a. i, iii, iv
- b. ii, iii, iv
- c. i, iv
- d. ii, iv

12. Which component of an information system represents raw facts and figures that are processed to create meaningful information?

- a. Hardware
- b. Software
- c. Data
- d. People

13. What type of information system helps in making decisions by providing routine summary reports and performance information?

- a. Executive Information System (EIS)
- b. Decision Support System (DSS)
- c. Management Information System (MIS)
- d. Transaction Processing System (TPS)

14. What is a major risk associated with inadequate risk management in a project?

- a. Enhanced team collaboration
- b. Increased likelihood of project success
- c. Unforeseen project delays and cost overruns
- d. Improved project quality

15. Determine the tasks that a project manager needs to know when preparing a project schedule.

- i. Duration of each activity.
- ii. Person in charge for specific activity.
- iii. Dependency of one activity to another.
- iv. Start date and end date for each activity.

a. All of the listed options

- b. i, iii and iv
- c. ii and iv
- d. i, ii and iii

16. Which of the following is a key element in successful change management?

- a. Ambiguous goals
- b. Clear and transparent communication
- c. Top-down decision making only
- d. Limited involvement of the team

17. Define the definition of project creep.

- a. Project creep refers to changes, continuous or uncontrolled growth in a project's scopes, at any point after the project begins.
- b. Project creep refers to changes, continuous or unstable growth in a project's scopes, at any point after the project begins.
- c. Project creep refers to changes, continuous or uncontrolled growth in a project's objectives, at any point after the project begins.
- d. Project creep refers to changes, continuous

18. What is the main goal of the Design phase in the SDLC?

- a. To write the actual code
- b. To identify system requirements
- c. To create the architecture and design of the system
- d. To deploy the system to users

19. Which of the following is a technique used for requirement gathering in system analysis?

- i. Sampling
- ii. Interview
- iii. Observation
- iv. Research

- a. i, iii and iv
- b. i, ii and iv
- c. ii, iii and iv
- d. All the listed above

20. Arrange the following maintenance management in a CORRECT order.

- i. User notification
- ii. System review committee
- iii. Initial determination
- iv. Task completion

- a. iii > ii > iv > i
- b. iii > iv > i > ii
- c. i > iv > ii > iii
- d. ii > i > iv > iii

SECTION B
Answer **ALL** questions. This section carries **20 marks**.

QUESTION B1

CASE STUDY

*Yuki and Hassan are part of a team of software developers, hired to carry out a project of creating a new **Class Attendance System** for your university, to replace the existing system which has gone obsolete (outdated) and reported to have many problems. The new attendance system will be installed on the university’s local server. Students will need to download and install the application onto their smartphones for their attendance to be taken. Your development team needs to develop and deploy the system by the first day in January, replacing the existing attendance system.*

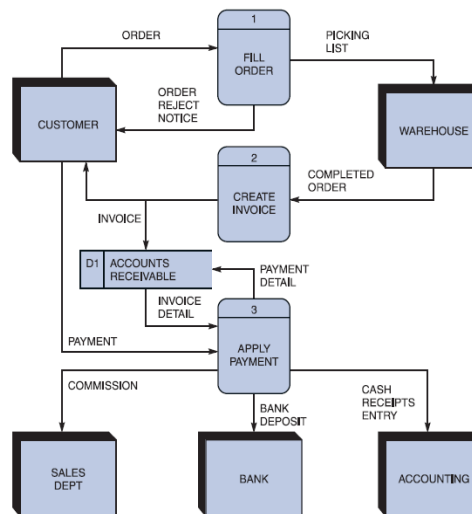
- a) Discuss any **TWO (2)** factors that affects this system change request (5 marks)
- b) Assuming the new system has been fully built, tested and saved into a temporary server. Suggest a **suitable ‘System Changeover’ method** for the deployment of the new system. Briefly explain how the changeover will be conducted for the project. (5 marks)

(10 marks)

QUESTION B2

Data stored required:

- Name
- Description
- Input Data Flow
- Output Data Flow
- Data Structure



Based on the diagram above, create data dictionary for **ONE (1)** data store and **ONE (1)** data flow for the above diagram.

(10 Marks)

(Total 20 Marks)

Data Dictionary

Data Dictionary outlining a Online Gaming Service

Data Item	Data Type	Data Format	Number of Bytes for Storage	Size for Display	Description	Example	Validation
MemberID	String	XNNNNNN	7	7	Unique Identifier For Member	M123456	
First Name	String		25	25	First Name of Member	Scott	
Surname	String		25	25	Last Name of Member	Daniels	
D.O.B	Floating Point (Date Format)	DD/MM/YYYY	4	10	Birth Date of Member	02/04/1990	Date < Today - 15 years
Platinum Membership?	Boolean	X	1	1	True (T) or False (F)	T	
Subscription Cost	Floating Point (Currency Format)	\$NN.NN	4	6	Cost of Members Subscription	\$27.50	Cost > 0 Cost < \$50.00
Available Game Packs	Array (String)		25 * Number of Games	25 * Number of Games	Names of Game Packs	Open World Game Pack	