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|        |         | Roll. No:  | _  |  |  |
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| NO     | OIDA    | INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA   |    |  |  |
|        |         | (An Autonomous Institute Affiliated to AKTU, Lucknow) M.Tech   |    |  |  |
|        |         | SEM: II - THEORY EXAMINATION (20 20)   |    |  |  |
|        |         | Subject: Management Information System   |    |  |  |
| Tin    | ne: 3 I | Hours Max. Marks: 7  | 70 |  |  |
| Gene   | ral In  | astructions:   |    |  |  |
|        |         | fy that you have received the question paper with the correct course, code, branch etc                             | •  |  |  |
|        |         | estion paper comprises of three Sections -A, B, & C. It consists of Multiple Choice                                |    |  |  |
|        |         | MCQ's) & Subjective type questions.  m marks for each question are indicated on right -hand side of each question. |    |  |  |
|        |         | your answers with neat sketches wherever necessary.  |    |  |  |
|        |         | suitable data if necessary.  |    |  |  |
|        |         | ly, write the answers in sequential order.   |    |  |  |
|        |         | should be left blank. Any written material after a blank sheet will not be   |    |  |  |
| evalu  | ated/c  | checked.   |    |  |  |
| ~_ ~_  |         |  |    |  |  |
| SEC'   | ΓΙΟΝ-   | <u>-A</u>  | 15 |  |  |
| 1. Att | empt    | all parts:-  |    |  |  |
| 1-a.   |         | What is the primary purpose of Management Information Systems (MIS) in business? (CO1,K1)                          | 1  |  |  |
|        | (a)     | Enhancing decision-making  |    |  |  |
|        | (b)     | Managing human resources   |    |  |  |
|        | (c)     | Developing marketing strategies  |    |  |  |
|        | (d)     | Facilitating production processes  |    |  |  |
| 1-b.   | V       | What is the primary outcome of subsystem definition in MIS design? (CO2,K1)  | 1  |  |  |
|        | (a)     | Documenting project timelines  |    |  |  |
|        | (b)     | Clarifying project requirements  |    |  |  |
|        | (c)     | Managing project risks   |    |  |  |
|        | (d)     | Defining system components   |    |  |  |
| 1-c.   | ` ,     | What is a key consideration in assessing production and operations information                                     | 1  |  |  |
| 1 0.   |         | ystems? (CO3,K1)   | •  |  |  |
|        | (a)     | Assessing system performance   |    |  |  |
|        | (b)     | Managing project timelines   |    |  |  |
|        | (c)     | Defining project objectives  |    |  |  |
|        | (d)     | Balancing stakeholder interests  |    |  |  |
| 1-d.   | •       | What is a key characteristic of non-programmed decisions? (CO4,K1)   | 1  |  |  |
|        | (a)     | Structured and repetitive  |    |  |  |

|       | (b) Predefined solutions  |        |
|-------|---|--------|
|       | (c) Unstructured and unique   |        |
|       | (d) Routine and operational   |        |
| 1-e.  | . Which type of organizations benefit most from virtual organizations supported by EWIS? (CO5,K1)   | 1      |
|       | (a) Brick-and-mortar businesses   |        |
|       | (b) Small-scale enterprises   |        |
|       | (c) Global and decentralized companies  |        |
|       | (d) Non-profit organizations  |        |
| 2. At | mpt all parts:-   |        |
| 2.a.  | Define and explain the term "system constraints" in the context of MIS.(CO1,K1)   | 2      |
| 2.b.  | Explain the role of project management in ensuring successful MIS implementation. (CO2,K3)  | 2      |
| 2.c.  | Discuss the challenges of evaluating information systems in rapidly changing environments.(CO3,K2)  | 2      |
| 2.d.  | Discuss the benefits of using data visualization tools in decision support systems (DSS). (CO4,K2)  | 2      |
| 2.e.  | Define enterprise-wide information systems (EWIS) and explain their significance in modern organizations. (CO5,K3)  | e 2    |
| SEC'  | ION-B   | 20     |
| 3. An | wer any <u>five</u> of the following:-  |        |
| 3-a.  | Discuss the systems approach in the context of MIS. How does adopting a systems approach benefit the design and implementation of information systems? (CO1,K2)                                       | s 4    |
| 3-b.  | Define and explain the importance of problem definition in MIS development. How does effective problem definition contribute to successful system design? (CO1,K3)                                    | 4      |
| 3-c.  | Explain the concept of scalability in detailed MIS design. How does designing for scalability future-proof information systems against growth and expansion? (CO2,K3)                                 | 4      |
| 3-d.  | Describe the impact of detailed MIS designs on organizational performance and competitiveness. How can organizations measure the ROI of MIS investments and innovation? (CO2,K2)                      | 4<br>1 |
| 3.e.  | Discuss the characteristics and functions of basic information systems. How do these systems support routine business operations? (CO3,K2)  | 4      |
| 3.f.  | Describe the components of decision support systems (DSS) and their functions. How do these components work together to provide decision-makers with valuable insights and analytical tools? (CO4,K2) | 4      |
| 3.g.  | Discuss the ethical issues related to data security and privacy in EWIS implementation. How should organizations address these ethical concerns to  | 4      |

| <b>SECTIO</b> | <u>ON-C</u>   | 35 |
|---------------|---|----|
| 4. Answ       | er any <u>one</u> of the following:-  |    |
| 4-a.          | Describe a case study of a company that implemented a management information system (MIS) successfully. Explain the steps involved in problem definition, setting system objectives, and developing conceptual designs. Evaluate the impact of the MIS on organizational efficiency and decision-making. (CO1,K3) | 7  |
| 4-b.          | Conduct an information needs assessment for a specific industry or business sector. Identify key stakeholders, gather information requirements, and prioritize needs based on business objectives. Propose information system solutions to address the identified needs. (CO1,K3)                                 | 7  |
| 5. Answ       | er any <u>one</u> of the following:-  |    |
| 5-a.          | Explain the importance of detailed information systems design in MIS development. How does detailed design contribute to the successful implementation of complex information systems? (CO2,K3)   | 7  |
| 5-b.          | Discuss the role of risk management in detailed MIS design and implementation. How can proactive risk mitigation strategies minimize project disruptions and delays? (CO2,K2)   | 7  |
| 6. Answ       | er any <u>one</u> of the following:-  |    |
| 6-a.          | Explain the impact of production and operations information systems on manufacturing processes and supply chain management. How do these systems optimize resource utilization and process efficiency? (CO3,K3)   | 7  |
| 6-b.          | Explain the impact of data analytics in evaluating marketing information systems. How can analytics-driven insights enhance customer targeting and campaign effectiveness? (CO3,K3)   | 7  |
| 7. Answ       | er any <u>one</u> of the following:-  |    |
| 7-a.          | Explain the concept of tactical decision-making and its relationship with information systems. How can tactical decisions be supported by real-time data and analytics? (CO4,K3)  | 7  |
| 7-b.          | Describe the role of data visualization tools in enhancing decision support systems. How can visual representations of data improve understanding and communication of complex information? (CO4,K2)  | 7  |
| 8. Answ       | er any <u>one</u> of the following:-  |    |
| 8-a.          | Discuss the role of integration with ERP systems in enterprise-wide information systems. How does ERP facilitate data centralization and standardization across functional areas? (CO5,K2)  | 7  |
| 8-b.          | Explain the concept of virtual organizations and their alignment with EWIS. How do virtual organizations leverage technology to operate efficiently and flexibly? (CO5,K3)  | 7  |