

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination

Course No. : BTM 4869

Course Title : Decision Support Systems (DSS)

Summer Semester, A. Y. 2021-2022

Time : 1.5 hours

Full Marks : 75

Answer all the **3 (three)** questions. All questions carry equal marks. Marks of each question and corresponding CO and PO are written in the right margin with brackets.

1. a) The Business Pressures-Responses-Support (BPRS) model is a critical component of the Decision Support Systems (DSS) field. Can you provide a detailed explanation of the BPRS model, including its components and how it is used to address business pressures in organizations? 8 (CO1)
(PO1)
- b) The field of Decision Support Systems (DSS) encompasses a range of tools and technologies used to support decision-making in organizations. Can you provide a detailed description of the major categories of decision support tools, including their key features and functionalities, and how they contribute to the overall goal of DSS? 8 (CO1)
(PO1)
- c) Models play a crucial role in the Decision Support Systems (DSS) field, serving as a means of representing and analyzing complex problems and information. Can you provide a comprehensive overview of the benefits of using models in DSS, and how they contribute to the overall goal of supporting better decision-making in organizations? 9 (CO3)
(PO5)
2. a) How can DSS/BI technologies and tools aid in each phase of decision making? Describe with example. 8 (CO1)
(PO1)
- b) Explain the various classifications of Decision Support Systems (DSS) and their key attributes, and provide insight into how they are utilized to aid decision-making within organizations across various contexts? 8 (CO1)
(PO1)
- c) Review the major characteristics and capabilities of DSS. How do each of them relate to the major components of DSS? 9 (CO1)
(PO1)
3. a) Why DSS are typically developed and deployed with Web-based technology? Discuss the potential benefits that a DSS application can derive from the Web in terms of both developers and users. 8 (CO2)
(PO2)

- b) Herbert Simon's four-phase decision-making process is a well-known framework for understanding how individuals and organizations make decisions. Give a comprehensive and detailed explanation of the four phases of this process, including the key tasks and activities involved in each phase, and how they interact with each other to support effective decision-making? 8 (CO3)
(PO5)
- c) The Gorry and Scott-Morton framework is a foundational idea in the realm of Decision Support Systems (DSS), presenting a wide-ranging and complete perspective of the diverse aspects and operations of DSS. Could you conduct a comprehensive and evaluative investigation of this framework, exploring its fundamental elements and the ways they collaborate to aid decision-making within organizations? 9 (CO3)
(PO5)