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Daffodil International University
Faculty of Science & Information Technology
Department of Software Engineering
Final Examination, Summer 2026

Course Code: SE 212; Course Title: Software Requirement Specifications & Analysis

Sections & Teachers: A,B,C(JK), D(NML), E,F(KBB),G(MSS)

Time: 2:00 Hrs

Marks: 40

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

	Due to the increasing number of natural disasters such as floods, wildfires, and extreme weather events around the world, governments and organizations are adopting AI-powered emergency management systems. RescueNet is a smart emergency response <u>mobile application</u> designed to assist citizens during emergency situations. After launching the application, <u>users can register using their phone number and current location</u>. The home dashboard provides <u>real-time disaster alerts, emergency contacts, nearby shelters, and safety guidelines</u>. The system collects <u>real-time weather information</u> and uses <u>AI-based prediction models</u> to generate early warnings for possible disasters such as floods, storms, or other environmental hazards. During an emergency, <u>users can activate the "SOS Emergency Request" feature to send their live location, emergency category, and personal information to nearby rescue teams</u>. The system automatically identifies the nearest available rescue center and forwards the emergency request. If <u>network connectivity is unavailable</u>, the application temporarily stores the request and automatically synchronizes it once the connection is restored. The system allows users to <u>upload images or videos of affected areas</u>. An AI-based damage assessment module analyzes the uploaded media to estimate the severity of the situation and helps authorities prioritize rescue operations. Users can also access <u>real-time information about affected locations, available shelters, and relief distribution centers</u>. To ensure data privacy and security, users can <u>control location-sharing permissions</u> and decide whether their emergency history should be		
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