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.]

1.	Path Corporation was using Tally software for managing their only financial and accounting activities. In 2021, the management of the organization decided to build their own ERP for managing the whole organizational activities. You have been hired as the project manager of the ERP project and you decided to implement secSDLC in this project. At the stage while the ERP Software developed by the in-house developing team of Path Corporation, they initially conducted test the solution in the test environment. Before the solution has been implement in the live environment, A user manual along with a user training provided by the given team. They also conducted feasibility analysis based on Performance review and Acceptance test. As a Project Manager of this product, please answer the following question.			**CO-1** *Level-5*
	a)	**Plan** the additional activities how you ensure security of this SDLC stage.	**[Marks-4]**	
	b)	**List** the measures that you need to consider while ensuring information preservation.	**[Marks-2]**	
2.	A security audit team identified a number of unauthorized transactions took place in Core Banking System (CBS) during their investigation of Namnajana Bank Ltd. due to identity spoofing attack that cost the bank Tk. 100,000,000/=. Lead of the investigation team, please answer the following question.			**CO-2** *Level-4*
	a)	**Examine** the weakness(es) in design of CBS for which the given attack took place.	**[Marks-3]**	
	b)	**Recommend** the preventive solution to solve the existed weakness in CBS.	**[Marks-5]**	
3.	*a)*	**Applying** the Playfair cipher with the key of "INDEPENDENCE", decrypt the message of "GHBYMFYDKABSHZFYBRYFFDTUVKPDKHSY".	**[Marks-4]**	**CO-3** *Level-3*
	b)	Decrypt the following message **using** transposition technique where the key is "93465" "ESISIAFNWADKSMLIORFNSDAGHFOIAEENHIAAGHOR".	**[Marks-3]**	
	c)	By using Hill Cipher, decrypt the cipher text of "EPDU" **using** following Encryption Key: $K_E = \begin{bmatrix} 6 & 3 \\ 3 & 2 \end{bmatrix}$ *Note: You are required to create decryption key from the above encryption key for decrypting the above cipher text. Also, start the value of the alphabet from 0 (i.e. A=0, B=1, C=2,.....,Z=25).*	**[Marks-4]**	