



**Balochistan University of Engineering & Technology**  
**Department of Electronics Engineering**  
**BE Electronics**  
**7<sup>th</sup> Semester Final Exam, 2023 (Spring)**



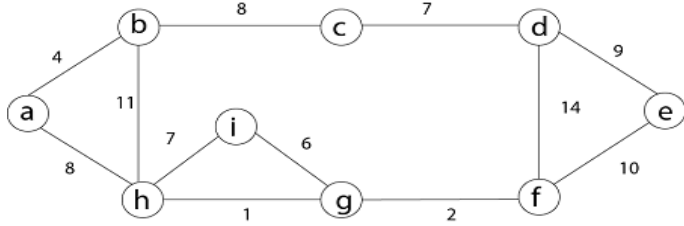
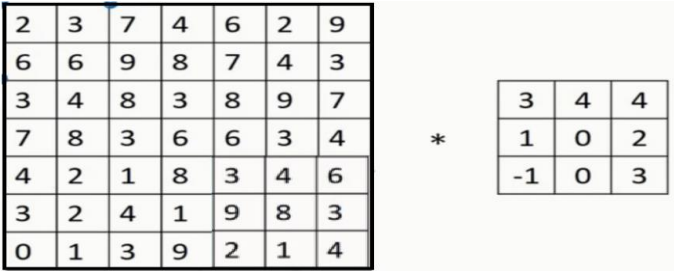
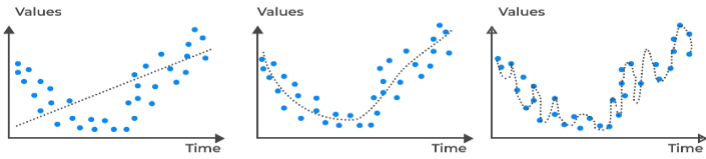
**Subject Code : EE-312**

**Subject : Artificial Intelligence**

**Max Marks : 50**

**Duration : 02 Hours**

**Instructor : Dr.Wazir Muhammad**

S.No	Question	Mks	PLO	CLO	Bloom
Q.1.	<p>Apply the Kruskal's algorithm on Figure 1, to <b>find</b> the minimum cost of spanning tree.</p>  <p style="text-align: center;">Figure 1</p>	15	2	1	2
Q.2.	<p>Define the term Convolution and Deconvolution Operation. <b>Calculate</b> the output of 2D convolution operation, having a Stride value is 2.</p> 	15	3	3	5
Q.3.	<p><b>State and Explain</b> the terms of Regularization, Underfitting, Overfitting, Good Fitting, and identify the below curve as shown in Figure 2, belong to Overfitting, Underfitting, and Good Fitting.</p>  <p style="text-align: center;">Figure 2</p>	10	2	2	3
Q.4.	<p>Write short notes on the following with suitable example</p> <ol style="list-style-type: none"> <li>(1) Python</li> <li>(2) Difference between AI and XAI</li> <li>(3) Define Stride and Padding</li> <li>(4) Queue, LIFO, and FIFO</li> <li>(5) Maxpooling, Minpooling and Averagepooling operation.</li> </ol>	10	1	1	1

**THE END**