

M.Sc. (MATHEMATICS WITH APPLICATIONS IN COMPUTER SCIENCE)
M.Sc. (MACS)

Term-End Practical Examination

June, 2018

00100

MMTE-001(P) : GRAPH THEORY

Time : $1\frac{1}{2}$ Hours

Maximum Marks : 40

Note : There are two questions in this paper totalling 30 marks. Answer **both** questions. Remaining 10 marks are for the viva-voce.

1. Write a program in C language that prints the incidence matrix of a graph taking as input the edge set of the graph. Use it to print the incidence matrix of the graph in Figure 1. 10

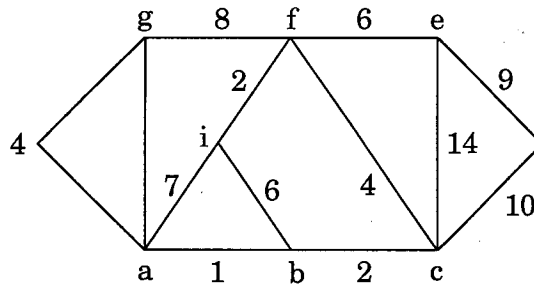


Figure 1

2. Write a program that finds the minimal spanning tree for the weighted graph given in Figure 1. 20