

Examination Roll No - 18312911011

Date & Time - 02/12/2021 @ 9:30 AM

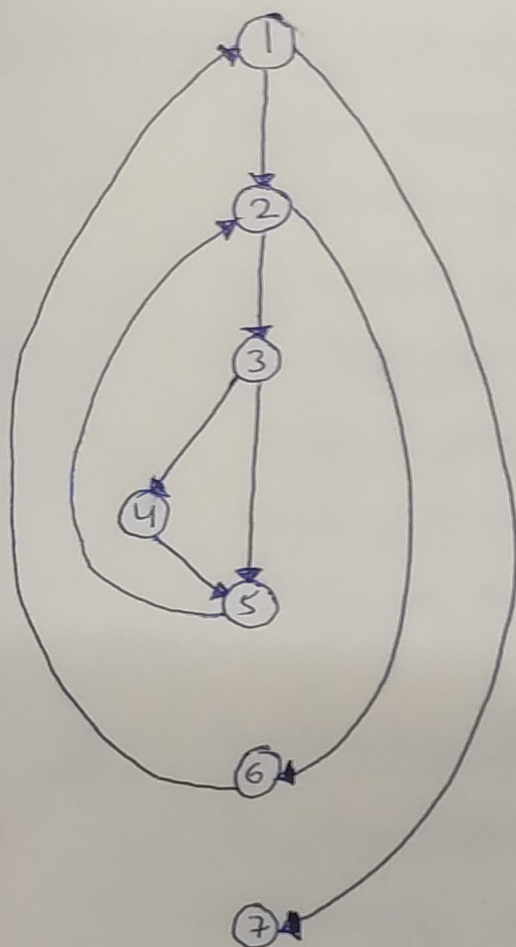
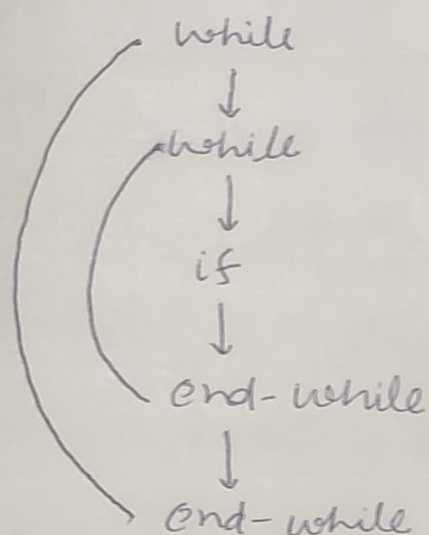
Name of Program - B.tech (IT & MI)

Semester & Year - VII Semester / IV year

Unique Paper Code - 911712

Title of Paper - Software Project Management

Q.2

(a) Flow graph for the code given(b) Cyclomatic Complexity

$$\text{Complexity } (m) = E - N + 2P$$

where $E = \text{no. of edges}$
 $= 9$

$$N = \text{no. of nodes} = 7$$

and $P = \text{no. of connected components or no. of nodes that have exit points}$

$$m = 9 - 7 + 2 \times 1$$

$$= 4$$

(c) Independent Paths forming the basis set

$$(1) \quad 1 \rightarrow 7$$

$$(2) \quad 1 \rightarrow 2 \rightarrow 6 \rightarrow 1 \rightarrow 7$$

$$(3) \quad 1 \rightarrow 2 \rightarrow 3 \rightarrow 5 \rightarrow 2 \rightarrow 6 \rightarrow 1 \rightarrow 7$$

$$(4) \quad 1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5 \rightarrow 2 \rightarrow 6 \rightarrow 1 \rightarrow 7$$