Name – Shantanu N. Deshpande
Class – SYCSE
Roll no. – 7
Batch – S1
Sub. – D.S.

Teacher's Assessment – 1

Q1]

$(A + B + (C * D))$

Sol^n:

i) Resultant expression after first undo
=) $(A + B + (C * D)$

ii) Resultant expression after 5th undo
=) $(A + B + C$

iii) Sequence of input
=) ① C ② A ③ + ④ B ⑤ + ⑥ (⑦ (⑧ *
   ⑨ D ⑩) ⑪)

iv)
=) Yes. As the undo & Redo operations are stack data structure to store Input.
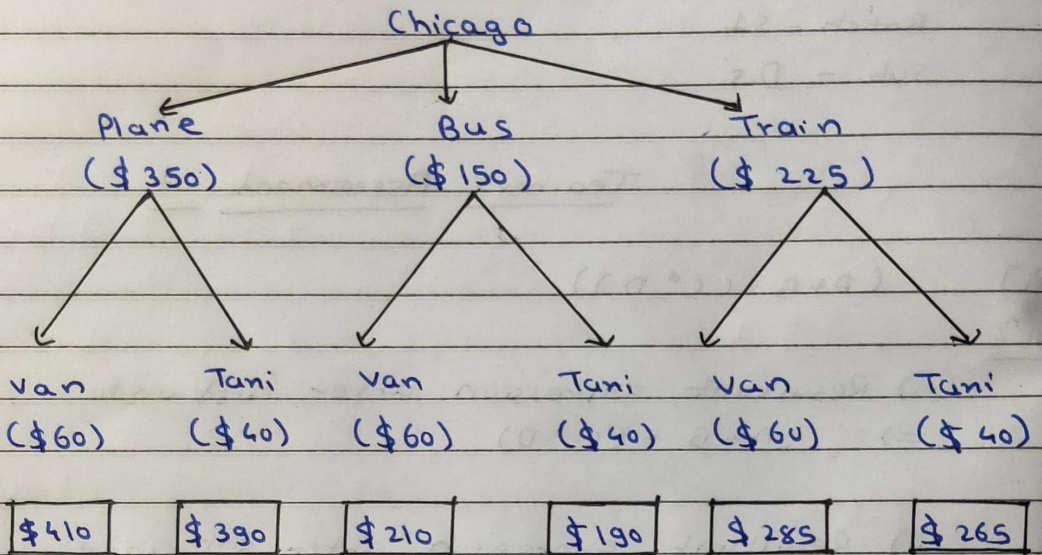
Q2]

Sol^n:

i)
=) Order in which print requests are stored.
   ① Mathew   ② Suzanne   ③ John

ii)
=) mathew document will be first retrive for printing as printer follows (FIFO) order.

Q3]

Sol^n :

Tree diagram :

Chicago

Plane ($350)   Bus ($150)   Train ($225)

Van ($60)   Tani ($40)   Van ($60)   Tani ($40)   Van ($60)   Tani ($40)

| $410 | $390 | $210 | $190 | $285 | $265 |

Miami

Q4]

Sol^n :

a) → linked list or Hash Table

b) → Stack or Tree

c) → Linked list or Graph

d) → Stack

e) → Tree

Q5)

Soln.: Use linear search on the sorted list.

Q6)

Soln.: Heap Sort, because it is in place.

Q7)

Soln.: Insertion sort

Q8)

Soln.: Insertion sort