ECE 322

SOFTWARE TESTING AND MAINTENANCE

Fall 2021

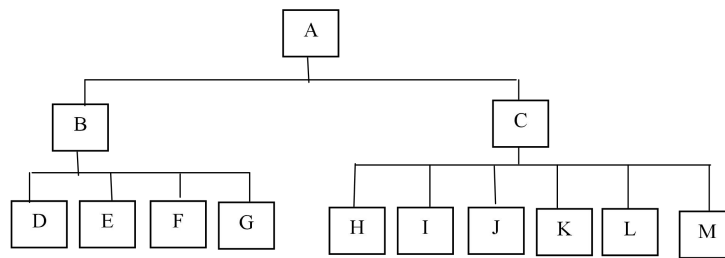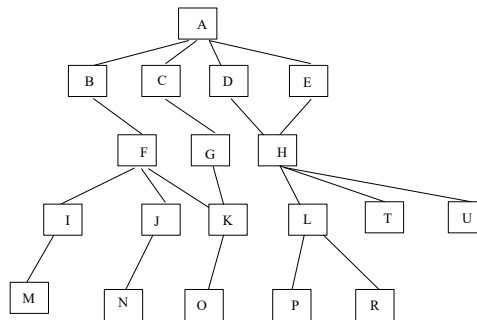## Assignment #6

Total: 30 points

10 points

1. (a)What strategy of integration testing would you recommend for the software system whose dependency tree for the modules is shown below? The system is developed in a stable environment.
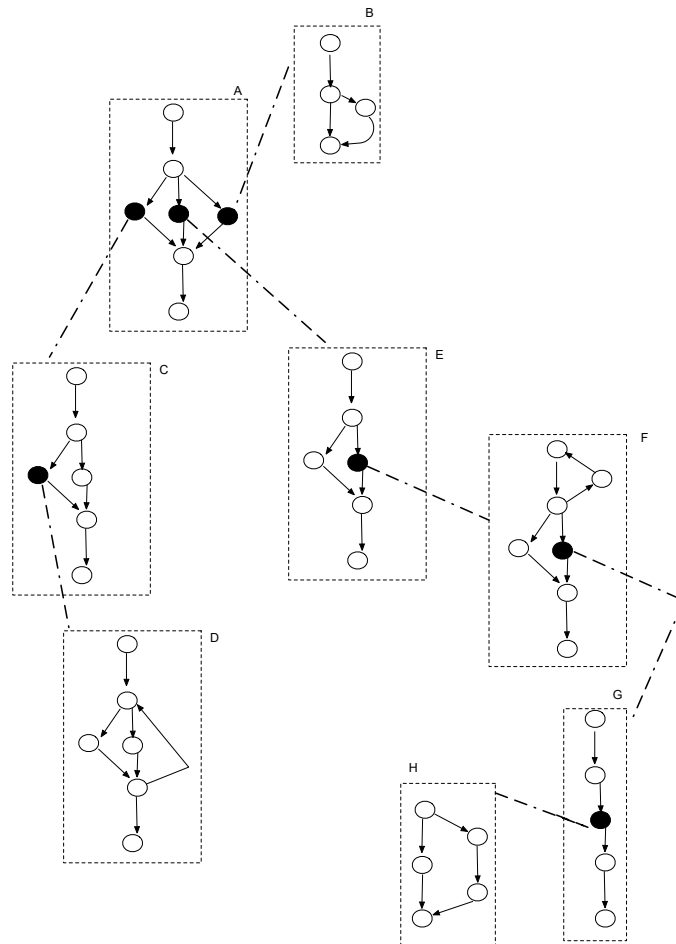

(b) The software is to be tested using a sandwich testing. Which target layer would you consider. Justify your choice.

10 points

2. What is the cyclomatic complexity and integration complexity of the software modules displayed below. Determine complexity of integration testing. List independent integration tests.

3. Propose two metamorphic relations to carry our metamorphic testing of the following function

```python
def product(a):
    p=1
    for i in range(len(a)):
        p=p*a[i]
    return(p)
```