Student id: Time: 25 min

Consider the order in which the leaves of a proper binary tree are visited by preorder, postorder and inorder traversals. Mark the following statements with true or false.

Statement	True / False
1. In the 3 cases the leaves are visited in different order	
2. In the 3 cases the leaves are visited in the same order	
3. Only preorder and postorder visit the leaves in the same order	
4. Only preorder and inorder visit the leaves in the same order	
5. Only inorder and postorder visit the leaves in the same order	

2. Draw the following graphs.

-4

<i>K</i> ₅	K _{5,3}	
W_5	Among these three graphs which is/are Euler?	

3.	Draw an AVL Tree containing keys A, B, C, D, E, F, G such that a pre-order traversal visits the nodes in		
	following order "E,C,B,A,D,F,G".	C	
	Next, insert 'H' and balance the AVL tree if necessary.	-6	
4.	Write down your expected mark of Quiz 3 (out of 15). 🕲 🕲 🕲	(2 Bonus mark if it is matched)	