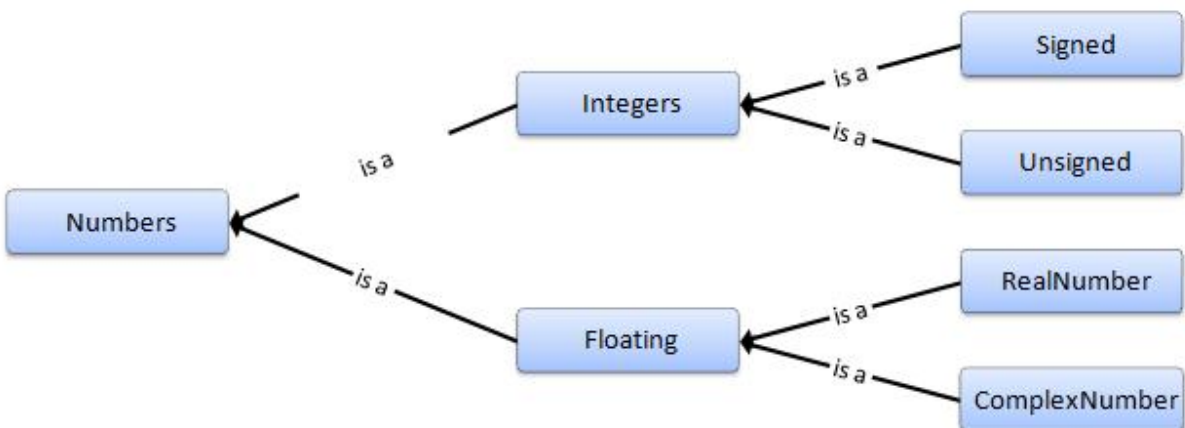


Answer the following questions:

اجابة الاسئلة من 1 3 4 الاسئلة 4 6 في ورقة الاجابه

1- (a) Are the following is correct :						
Classes in same package can call each other without import statement				Yes	No	
You can create a class without implement a constructor				Yes	No	
Abstract class at least has one method with implementation				Yes	No	
Shape s1 = s2; // this mean both reference s2 into s1 point to same object				Yes	No	
Method overloading consider type of dynamic binding				Yes	No	
(b) For design WordFile class, which of the following is <u>attribute</u> , and which is <u>method</u> ?						
font		save	text	copy	Paste	For method write M For attributes write A
2-(a) Which method(s) in Complex class can implement operation c1 += c2; (where c1,c2 are Complex objects)?						
public static Complex add(Complex cx, Complex cy)				Yes	No	
public Complex add(Complex c)				Yes	No	
public static void add(Complex cx, Complex cy)				Yes	No	
(b) For the Date class (from lecture 4) what is the value of day, month, and year after execute the following 6 statements:						
d1 : day=		month=	year=	Date d1 = new Date(1,1,2014); Date d2 = d1.clone(); Date d3 = d2; d1.year=2015; d2.month=2; d3.day=2;		
d2 : day=		month=	year=			
d3 : day=		month=	year=			
3- (a)						
						
From the above hierarchy, choice the correct answer :						
Numbers n = new Integers();		Yes	No	Floating f = new ComplexNumber();	Yes	No
Numbers n = new RealNumber();		Yes	No	Integers i= new RealNumber();	Yes	No
(b) From lecture 7: Are the following blocks of code having a syntax or semantic error?						
Shape p = new Triangle (1,2); p.swap();		syntax		Semantic		
Shape p = new Triangle (1,2); Rectangle r=(Rectangle)p; p.swap();		syntax		Semantic		

4-	<p>Draw the UML of the following classes (with define <u>is-a</u> and <u>has-a</u> relationship):</p> <ul style="list-style-type: none"> - There are two types of mobile phone : iPhone and Samsung - iPhone has the following models iPhone 3, iPhone 4, iPhone 5, iPhone 6 - Samsung has the following models S2, S3,S4,S5 - Any Phone has storage, color, and size attributes - The Employee should has two mobile from any phone type one for business and other personal
5-	<p>Design ClassJump.com website (java classes only) which contains the following:</p> <ul style="list-style-type: none"> - List of Teachers - Each Teacher has name, email, and list of Courses - Each Course has <ul style="list-style-type: none"> o list of lectures o list of sheets - The course has the following properties: course name, description - The lecture has the following properties: lecture name, description, filename - The sheet has the following properties: sheet number ,description, filename - The ClassJump Website should has the following operations: <ul style="list-style-type: none"> o register teacher: which will take teacher name and email, password as argument o Login teacher: which will take teacher name and password as argument - The Teacher should have the following operations: <ul style="list-style-type: none"> o add new Course: which will take Course as argument o delete Course: which will take Course name as argument - The course should have the following operation <ul style="list-style-type: none"> o add new lecture: which will take lecture as argument o delete lecture which will take lecture name as argument o add new sheet: which will take sheet as argument o delete sheet : which will take sheet name as argument
6-	<p>Design Souq.com website (java classes only) which contains the following:</p> <ul style="list-style-type: none"> - The website has list of products - The product has the following properties: name, description, image, price, discount, quantity - There are two type of products the website sell: <ul style="list-style-type: none"> o soft goods (downloadable products i.e. has extra size_in_MB attribute) o hard goods (delivered physical i.e. has extra delivery_address attribute) - Also the website has list of visitors - Each visitor has name, email, and one shopping cart - The shopping cart contains list of products selected by visitor to be purchase - The shopping cart has the following operation: <ul style="list-style-type: none"> o add product: which will take product as argument o remove product: which will take product name as argument o get Total price: which return the summation of selected products prices o get Total after discount : which return the total of selected products prices – total discount - The Website has the following operation: <ul style="list-style-type: none"> o Add visitor : which will take visitor name and email as argument o Add product to website: which will take product as argument o remove product: which will take product name as argument o Search by product name: which will take product name as argument o Search by price: which will take price from and price to as argument o Remove product: which will take product name as argument

6 5

15

4,3,2,1

ملحوظه : 10

بالتوفيق

وارفاقها

عز الدين