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| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **Course:** | **Object Oriented Programming** | **Course Code:** | **CS 217** |
| **Program:** | **BS(Computer Science)** | **Semester:** | **Spring 2019** |
| **Duration:** | **15 Minutes** | **Total Marks:** | **10** |
| **Paper Date:** | **22-Mar-2019** | **Page(s):** | **2** |
| **Section:** | **F** | **Section:** |  |
| **Exam:** | **Quiz 2** | **Roll No:** |  |
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Given the following dummy class and its definition

class dummy

{

private:

static int counter;

int id;

int \*b; //a simple variable on heap

public:

dummy()

{

++counter;

id = counter;

b=new int(-1);

cout<<"dummy() constructor was invoked for dummy "<<id<<endl<<endl;

}

dummy(int y)

{

++counter;

id = counter;

b=new int(y);

cout<<"dummy(int y) constructor was invoked for dummy "<<id<<endl<<endl;

}

dummy(const dummy & otherDummy)

{

++counter;

id=counter;

cout<<"dummy(const dummy &) copy constructorwas invoked for dummy "<<id<<endl;

cout<<"dummy to be copied is "<<otherDummy.id<<endl<<endl;

}

~dummy()

{ delete b

cout<<"~dummy() destructor was invoked for dummy "<<id<<endl<<endl;}

dummy createBiggerDummy() // returns a copy of this newdummy

{

cout<<"createBiggerDummy() was invoked for dummy "<<id<<endl<<endl;

dummy biggerDummy;

return biggerDummy;}

void print()

{

cout<<"ID:"<<id <<endl << "b: "<< \*b<<endl;

}

};

int dummy::counter = 0;

Question 1:Write the output of following main function

void main()

{

dummy \*d2= new dummy[2];

dummy d4[2]= {dummy(4)};

dummy \*d5[2];

}

Question 2:Add statements in main to deallocate dynamic memory