Master in Computer Application (MCA) First Year (Semester—II) Examination JAVA PROGRAMMING

Paper—4

Tim	Time : Three Hours] [Maximum Marks :									
	N.B	 (1) All questions are compulsory and carry equal marks. (2) Draw neat and labelled diagram wherever necessary. 								
	EITHER									
1.	(A)	Explain Applet and application in Java.	3							
	(B)	Explain any four features of Java in detail.	3							
	OR									
	(C)	Explain different data types available in Java.	3							
	(D)	What is inheritance ? Explain different types of inheritance with well labelled diagrams.	3							
	EIT	HER								
2.	(A)	What is object ? Explain how to assign one object reference variable to another.	3							
	(B)	What is an array ? Explain different types of array in Java.	3							
	OR									
	(C)	How applets and applications are different in Java ?	3							
	(D) Explain different looping statements with syntax available in Java.									
	EIT	HER								
3.	(A)	Write notes on :								
		(i) Graphics class								
		(ii) Font class.	8							
	(B)	What are containers ? Write a program to create a frame with title RTMNU and set the background colour to red.	e 8							
	OR									
	(C)	Explain :								
		(i) Flow layout								
		(ii) Border layout.								
		Write a program code for any one of these.	8							
	(D)	Describe the arguments used in the draw Round Rect () Method. Write a program in Java to draw and fill the rectangle.	0 8							

EITHER

4.	(A)	Explain TCP and UDP.	8
	(B)	Explain menu bar creation in Java.	8
	OR		
	(C)	Explain different components of URL with suitable example.	8
	(D)	Write a note on socket and serversocket class.	8
	EIT	HER	
5.	(A)	Explain Thread Life Cycle in detail.	8
	(B)	How do you set priorities of threads ?	8
	OR		
	(C)	Explain try-catch block in Java with an example.	8
	(D)	Explain the runnable interface in Java with suitable example.	8

Master in Computer Application (MCA) First Year Semester—2 Examination JAVA PROGRAMMING

Paper—4

Tim	ie : Tl	hree Hours] [Maximum Marks :	80
	N.B	• :— (1) All questions are compulsory and carry equal marks.	
		(2) Draw well labelled diagram wherever necessary.	
	EIT	HER	
1.	(a)	Explain the life cycle of an applet in detail.	8
	(b)	Write a program in Java to calculate Fibonacci series.	8
	OR		• . •
	(c)	What is inheritance? Explain how we implement single and multilevel inheritance in Java w suitable example.	ith 8
	(d)	Write a program in Java to calculate series :	
		$1! - 2! + 3! - 4! + \dots n!$	8
	EIT	HER	
2.	(a)	Explain constructor overloading in Java. How the constructor of the same object can be us in same class	ed 8
	(h)	Write a program to pass parameters to applet	8
	OR	The a program to pass parameters to appret	U
	(c)	What is an array ? Explain different types of array available in Java.	8
	(d)	Write a program to create Apple application reading user name and password and prompt w	ith
		specified cases, accept or reject.	8
	EIT	HER	
3.	(a)	Explain AWT. Explain any three controls in AWT.	8
	(b)	Write a program in Java to create a form containing name, address, password and hobbies a validate the password.	nd 8
	OR		
	(c)	What is event ? Explain action event in detail.	8
	(d)	What is container ? What is the relation between components and a container class ? Expla	in. 8
	EIT	HER	
4.	(a)	Write a program in Java using frame object display menu files with menu items, new, open, clo and exit.	ose 8
	(b)	What is interfaces ? Explain why interfaces is needed in Java.	8
	OR		
	(c)	Write a code in Java to create Applet read parameters from HTML page and display on it	. 8
	(d) EIT	Explain importance of package. How packages are created ? Explain with example.	8
5	(a)	Explain Runable interface. Explain synchronization of thread used in Java	8
5.	(b)	What is input stream class? Explain various method available in input stream class.	8
	OR		2
	(c)	What is exception ? Why we use exception handling ? Explain.	8
	(d)	Write a program in Java to copy one file to another file by using buffered streams	8
	(-)		2

Master in Computer Application (M.C.A.) First Year Semester–II Examination JAVA PROGRAMMING

Paper-4

Tim	e : T	hree Hours] [Maximum Marks :	80
		N.B. :— ALL questions are compulsory and carry equal marks.	
	EIT	HER	
1.	(a)	How to create Java applets, explain in details.	8
	(b)	Explain the two ways to create a class that can be multithreaded.	8
	OR		
	(c)	How many type of inheritance does Java support without interfaces ? Explain with sam program.	ple 8
	(d)	Describe three uses of final with suitable example.	8
	EIT	HER	
2.	(a)	What is virtual function ? Can we call a virtual function in a constructor ? Explain.	8
	(b)	Explain the life cycle of thread.	8
	OR		
	(c)	What is Applet ? Explain how it is different from a normal application.	8
	(d)	What is Synchronization ? When do we use it ? Explain by giving the different ways to implem	ent
		synchronization.	8
	EIT	HER	
3.	(a)	How to create font object in details ?	8
	(b)	Write short note on Graphics and Font Class.	8
	OR		
	(c)	What is Layout Manager ? Describe the various layout managers supported by swing.	8
	(d)	Explain the different types of dialogue boxes that can be created using Joptionpane class.	8
	EIT	HER	
4.	(a)	Explain menu bar creation in Java.	8
	(b)	How can you add an image to an applet ? Explain with an example.	8
	OR		
	(c)	Write short notes on URL and URL connection.	8
	(d)	What is the difference between TCP and UDP ?	8
	EIT	HER	
5.	(a)	Write a program to implement multithreading.	8
	(b)	How do you set priorities for threads ?	8
	OR		
	(c)	Explain the runnable interface in detail with suitable example.	8
	(d)	Describe the input stream in details.	8

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Master of Computer Application (MCA) First Year Semester–II Examination JAVA PROGRAMMING

Paper—4

Tim	e : T	hree Hours] [Maximum Marks :	80
		N.B. :— All questions are compulsory and carry equal marks.	
	EIT	HER	
1.	(a)	Explain with suitable example four different primitive data types.	8
	(b)	What is constructor in Java ? Explain overloaded constructor.	8
	OR		
	(c)	What is inheritance in Java ? How do we implement inheritance in Java ?	8
	(d)	Write down the difference between Unicast and multicast object.	8
	EIT	HER	
2.	(a)	Explain structure of array object and methods with example.	8
	(b)	What are different ways of initializing a variable ?	8
	OR		
	(c)	State the difference between the execution of while and do-while loop.	8
	(d)	What is Thread ? Explain thread object in Java. Explain JOIN method.	8
-	EIT	HER	
3.	(a)	Explain :	0
		(i) Flow Layout (ii) Border Layout.	8
	(b)	What is an Event ? Explain Action event in detail.	8
	OR		0
	(c)	What is grid layout ? Explain it with suitable example.	8
	(d)	Explain the AWT components working with windows.	8
4			
4.	(a)	(i) DING (ii) ID addressing scheme	0
	(b)	(I) FING (II) IF addressing scheme.	0
	(0)	what is package? Give suitable example in detail.	0
	(c)	What is URL 2 Write a program to explain usage of URL class	8
	(d)	What is socket? What are its applications? Explain concept with any two constructors	8
		HER	0
5	(a)	Explain the Exception give the suitable example	8
0.	(b)	Write a program to illustrate the use of stop () and suspend () methods.	8
	OR		-
	(c)	When are two threads said to be deadlocked ? Write a simple application program to illust	rate
		the deadlock situation.	8
	(d)	Explain the Thread scheduling in detail with suitable example.	8

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Contd

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First Year Second Semester Master in Computer Application Examination

JAVA PROGRAMMING

Paper - IV

2 CSA-4

Time : Three Hours]

[Max. Marks : 80

N. B. : (1) All questions are compulsory and carry equal marks.

EITHER

(a) Explain initialization of an applet. Explain various 1. methods while renaming Applet. 8 (b) Explain the following feature of Java (1) Robust High performance (2)Interpreted (3) Dynamic (4)Memory management (5) Rodfam independence. 8 (6)OR (c) Explain Garbage collector in detail. 8 Explain how polymorphism, Encapsulation and (d) inheritance work together in Java with example. 8

EITHER

2.

- (a) Explain multidimensional array in JAVA. Write a program to sort the string array. 8
 (b) Differentiate loop and Do ----- while statement. Write a program in JAVA to print the tracing as of

 1
 12
 123
 1234

 (c) Explain static variable, methods and constructor with example.
 - (d) Write a program in JAVA Applet to perform the operation ADD(+), SUB (-) MUL(-) and DIV(-). 8

EITHER

- 3. (a) Explain font object. Write a program in JAVA to select font with details of FONT = "Times New Roman", size = 14 and Color = BLUE.
 (b) Explain frame constructor with example. What are properties of frame ?
 0R
 (c) Explain Graphics class.
 - Write a program in JAVA to draw rectangle.8(d) Explain mouse event handling in JAVA.8

2

EITHER

4.	(a)	Explain URL connection using the open connection	()
		method of a URL object.	8

- (b) Explain the following terms in detail.
 - (1) Datagram Packet
 - (2) Datagram Socket
 - (3) Socket Impl
 - (4) Socket Permission. 8

OR

- (c) What is a package ? Explain process to link the classes of package. What is class path ?
- (d) Explain dialog boxes used in JAVA in short. 8

EITHER

- 5. (a) Write a Java program to demonstrate user defined exception using exception class. 8
 - (b) Explain Java's following Built–in Exceptions with example :—
 - (1) String Index out of Bounds.
 - (2) Interrupted Exception. 8

OR

- (c) What is stream ? Explain file Input Stream with example. 8
- (d) What is output stream class ? Explain various methods avaliable in output stream class. 8

Master in Computer Application (MCA) First Year (Semester—II) Examination JAVA PROGRAMMING

Paper-4

Time	e : Tl	hree	Hour	:s]			[]	Iaximum Marks : 80	
N.B.	. :—	· (1)	AL	L qu	estio	ns ai	e compulsory and carry equal marks.		
		(2)	Dra	w ne	eat an	ıd lal	belled diagrams wherever necessary.		
	EIT	HER							
1.	(A)	Exp	olain	any f	ïve fe	eatur	es of Java Programming Language in detail.	8	
	(B)	Def synt	ine c tax a	lass nd ex	and o	objeo le.	et. How to create a class and its object in Java? E	xplain with suitable 8	
	OR								
	(C)	Exp	olain	diffe	rent c	lata 1	ypes available in Java.	8	
	(D)	Wh exa	What is Inheritance ? Explain the creation of a subclass from a base class in Java with an example.						
	EIT	HEF	R						
2.	(A)	What is final class and final method ? Explain with suitable example.							
	(B)	Wh exp	What is object ? Explain how can we assign one object reference variable to another. Also explain how to determine a class of an object.						
	OR								
	(C)	Wri	te a	prog	ram t	to pa	ss parameters to an applet.	8	
	(D)	Stat	the the	e imp	ortan	ice o	f Looping statement. Explain working of for Loop	with an example.	
		Wri	te a j	progi	ram i	n Jav	va to print the triangle :		
			1						
			2	1					
			3	2	1				
			4	3	2	1			
			5	4	3	2	1	_	
		if n		8					

EITHER

3.	(A)	A) Explain :							
		(i) Flow Layout							
		(ii) Grid Bag Layout.	8						
	(B)	What are containers ? Write a program to create a frame to authenticate a user. Using usernar	ne						
		and password.	8						
	OR								
	(C)	Write notes on :							
		(i) Font class							
		(ii) Graphics class.	8						
	(D)	What are keyboard events ? Write a program in Java to handle key event.	8						
	EIT	HER							
4.	(A)	Explain different component of URL with suitable example.							
	(B)	Write a program to design 'file' menu and its menu items as it appear in Notepad Editor.	8						
	OR								
	(C)	Explain the terms :							
		(i) Datagram Socket							
		(ii) Datagram Packet.	8						
	(D)	What do you understand by factory methods ? Explain factory methods of Inet Address Cla	ISS						
		with suitable example.	8						
	EIT	HER							
5.	(A)	Explain in detail, exception handling model in Java.	8						
	(B)	Write a program in Java to copy the contents of one file into another.	8						
	OR								
	(C)	Explain the concept of synchronization with suitable example.	8						
	(D)	Create a try block that is likely to generate two types of exceptions and then incorporate	ıte						
		necessary catch block to catch and handle them appropriately.	ssary catch block to catch and handle them appropriately. 8						

NTK/KW/15-944

First Year Second Semester Master in Computer Application (MCA) Examination

2 CSA-4

JAVA PROGRAMMING

Paper – IV

Time : Three Hours]

[Max. Marks : 80

N. B. : All questions are compulsory and carry equal marks.

EITHER

 (A) Why should the main method in Java be like public static void main (String args []) Explain.
 8

(B) Explain applet life-cycle in detail. 8

OR

- (C) What is variable ? Explain different types of variables in Java and their behaviour with suitable example.
- (D) Describe the use of 'final' keyword with respect to a variable method and class. 8

EITHER

- (A) What is object ? Explain how to assign one object reference variable to another. Also explain how to determine a class of an object.
 - (B) What do you mean by remote applet ? Write a program to pass parameters to an applet ? 8

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Contd.

OR

(C)	What is	an a	rray ?	Explain	how	do	we	declare
	an array	and	create	array o	bejcts	?		8

(D) What are conditional statements ? Explain various statements in Java with example. 8

EITHER

3. (A)	Write	а	note	on	:—
--------	-------	---	------	----	----

- (i) Graphics class
- (ii) Font class. 8
- (B) What are keyboard events ? Write a program to handle key event. 8

OR

- (C) What are containers ? Write a program to create a frame to authenticate a user. 8
- (D) Explain mouselistener and Mousemotion listener in detail. 8

EITHER

- 4. (A) What is a Dialog box ? Explain File Dialog with it's available constructors and methods. 8
 - (B) Write a note on socket and serversocket class. 8

OR

(C) Explain different components of URL with suitable example. 8

NTK/KW/15-944 2 Contd.

(D) Explain about Inet Address class ? What are its factory methods ? Illustrate with suitable example.

EITHER

5. (A) What is exception ? Explain how to create and use an user defined exception with suitable example.

8

(B) Write a program in Java, to count and print the total number of files and directories in D:drive.

OR

- (C) Differentiate between a thread and process. Explain how Interthread communication is possible in Java.
- (D) Explain try-catch block in Java with an explain. 8

3

Master in Computer Application (MCA) First Year Semester–II Examination JAVA PROGRAMMING

Paper-4

Tim	e : Tł	ree Hours] [Maximum Marks : 3	30
Not	e :	 All questions are compulsory and carry equal marks. Draw well labelled diagram wherever necessary. 	
	EIT	HER	
1.	(a)	What is single inheritance ? Explain with suitable example.	8
	(b) OR	List the features of Java and explain any two in detail.	8
	(c)	Explain different data types available in Java	8
	(d)	Explain class and object in Java with suitable example	8
	EIT	HER	U
2.	(a)	Explain different looping statements with syntax available in Java.	8
	(b)	Write a program in Java to pass parameters to an applet.	8
	OR		
	(c)	What is an array ? Write a program in Java to sort an array of ten elements.	8
	(d)	How applets and applications are different in Java? Explain.	8
	ÉÍT	HER	
3.	(a)	What is Frame in Java ? Write a program to create a frame with title RTMNU and set the	he
		background colour as blue.	8
	(b)	What are Threads in Java ? Explain the need of thread. Write a program in Java to display	ay
		thread.	8
	OR		
	(c)	Write notes on :	
		(i) Graphics class	
		(ii) Font Class.	8
	(d)	Describe the arguments used in the drawRoundRect () method. Write a program in Java to dra and fill the rectangle.	wו 8
	EIT	HER	-
4.	(a)	Explain different components of URL with suitable example.	8
	(b)	What is interface ? Explain its need. Write a program in Java to display interface.	8
	ÔR		
	(c)	Write a program in Java to create a 'File' Menu and add 'New', 'Open' and 'Close' submenu	in
	~ /	it.	8
	(d)	Write short notes on :	
		(i) TCP	
		(ii) UDP.	8
	EIT	HER	
5.	(a)	Discuss Thread scheduling in Java.	8
	(b)	Explain try-catch block in Java with an example.	8
	OR		
	(c)	Describe Thread Life Cycle in detail.	8
	(d)	Explain the runnable interface in Java with suitable example.	8