

**B.TECH. DEGREE EXAMINATIONS: APRIL / MAY 2009**

Fourth Semester

**INFORMATION TECHNOLOGY**

**U07IT401 Internet and Java Programming**

**Time: Three Hours**

**Maximum Marks: 100**

**Answer ALL the Questions:-**

**PART A (20 x 1 = 20 Marks)**

- (8) 1. \_\_\_\_\_ servers relay outgoing e-mail.
- (8) a) web                                      b) FTP                                      c) IRC                                      d) SMTP
- (12) 2. Free agent is the software required for
- (4) a) usenet newsgroups      b) IRC                                      c) EMAIL                                      d) online conferencing
- (12) 3. Data transfer capacity across the internet is termed as
- (4) a) storage                                      b) bandwidth                                      c) buffering                                      d) transmission
- (4) 4. Pictures are added to your webpage using
- (12) a) <FORM>                                      b) <BR>                                      c) <IMG>                                      d) <A>
- (4) 5. Output of a Java compiler is
- (12) a) executable code                                      b) object code                                      c) unicode                                      d) bytecode
- (4) 6. Box b1 = new Box();  
Box b2 = b1;  
What do you infer from the above Java statements?
- (12) a) b1 & b2 refer to separate objects                                      b) b1 & b2 refer to same object
- (4) c) b1 only refer to the object                                      d) b2 only refer to the object
- (12) 7. A \_\_\_\_\_ initialize an object immediately upon creation.
- (4) a) constructor      b) destructor                                      c) class                                      d) virtual destructor
- (12) 8. \_\_\_\_\_ keyword can be used inside any method to refer to the current object.
- (4) a) final                                      b) throw                                      c) this                                      d) static
- (12) 9. Switching from one running thread to other is called
- (4) a) polling                                      b) multitasking                                      c) synchronization                                      d) context switch
- (12) 10. A collection is a group of
- (4) a) objects                                      b) packages                                      c) properties                                      d) interfaces

11. A stream is linked to a physical device by the Java  
 a) platform                      b) I / O system                      c) virtual machine                      d) file system
12. \_\_\_\_\_ is the process of writing the state of an object to a byte stream.  
 a) synchronization                      b) marshalling                      c) serialization                      d) buffering
13. Applets must import \_\_\_\_\_ to run in a window.  
 a) java.applet                      b) java.net                      c) java.awt                      d) java.io
14. Which method is called when an applet begins execution?  
 a) paint( )                      b) stop( )                      c) start( )                      d) init( )
15. The Container class is a subclass of  
 a) Panel                      b) Component                      c) Image                      d) Label
16. Each \_\_\_\_\_ object has a layout manager associated with it.  
 a) Container                      b) Component                      c) Graphics                      d) Frame
17. Which of the following is stored on a client and contains state information?  
 a) file                      b) object                      c) cookie                      d) applet
18. \_\_\_\_\_ method is called, when server decides to unload the servlet from memory.  
 a) init( )                      b) stop( )                      c) service( )                      d) destroy( )
19. \_\_\_\_\_ provides functionality that is needed to make objects available from remote machines.  
 a) UnicastRemote object                      b) Remote interface  
 c) Naming class                      d) Serializable interface
20. Java implements datagrams on top of the \_\_\_\_\_ protocol.  
 a) FTP                      b) UDP                      c) TCP                      d) HTTP

**PART B (5 x 16 = 80 Marks)**

21. (a) (i) Explain any four types of Internet connections (8)  
 (ii) Discuss the issues to be aware of when planning your website. (8)
- (OR)**
21. (b) (i) Explain the types of Online chat and conferencing. (8)  
 (ii) Design a HTML page using all the <FORM> objects for student course registration form. (8)
22. (a) (i) Consider a Stack class with Push and Pop member functions. Derive a class Improved stack from this class to check overflow and underflow conditions. (8)

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te stream.  
d) buffering  
d) java.io  
d) init()  
d) Label  
d) Frame  
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d) applet  
d the servlet from  
d) destroy()  
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d) HTTP  
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(ii) Briefly discuss about Java control structures. (8)

(OR)

22. (b) (i) What is an interface? What are the advantages of using an interface? Explain with example. (8)

(ii) Briefly explain about Java's built-in exceptions and user-defined exception with suitable example. (8)

23. (a) (i) Describe the life cycle methods of a thread in Java with suitable example. (8)

(ii) Briefly explain about Collection interfaces. (8)

(OR)

23. (b) (i) Explain serialization with suitable programming example. (8)

(ii) Explain Buffered Input Stream class with an example program. (8)

24. (a) (i) Create a simple banner applet that scrolls a message from right to left across the applet's window. (8)

(ii) Discuss about Adapter classes using an example program. (8)

(OR)

24. (b) Discuss in detail about Flow layout, Border layout, Grid layout and Card layout classes in Java.

25. (a) (i) Describe the servlet life cycle. (8)

(ii) Write a servlet program to handle HTTP GET request and HTTP POST request. (8)

(OR)

25. (b) (i) Explain the types of JDBC drivers. (8)

(ii) Write a program for adding two numbers using RMI concept. (8)

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s. Derive a class  
flow conditions. (8)