

53/2019

Question Booklet
Alpha Code

A

Question Booklet
Serial Number

175817

Total Number of questions : 100

Time : 75 Minutes

Maximum Marks : 100

INSTRUCTIONS TO CANDIDATES

1. The question paper will be given in the form of a Question Booklet. There will be four versions of question booklets with question booklet alpha code viz. A, B, C & D.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the question booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a question booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your question booklet is unnumbered, please get it replaced by new question booklet with same alpha code.
6. The question booklet will be sealed at the middle of the right margin. Candidate should not open the question booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the question booklet supplied to him contains all the 100 questions in serial order. The question booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the question booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

001. _____ is comparable to pair of persons in a room taking turns to speak with each other.
- (A) Time Division Multiplexing (B) Frequency Division Multiplexing
(C) Code Division Multiplexing (D) None of these
002. Which one of the following error detecting code is also known as polynomial code?
- (A) Checksum (B) Parity
(C) Cyclic Redundancy Checks (D) None of these
003. The encryption algorithm for WPA2 is based on
- (A) DES (B) AES
(C) Elliptic curve (D) El Gamal
004. _____ is used to divide physical network topology into different logical topologies.
- (A) WiMAX (B) WLAN
(C) Adhoc Network (D) VLAN
005. Which one of the following is not a Network layer protocol?
- (A) TCP (B) ICMP
(C) ARP (D) DHCP
006. Select the service which is not provided by the Transport Layer.
- (A) Congestion control (B) Routing
(C) Flow control (D) Error correction
007. _____ is not a Linux file system type.
- (A) Ext4 (B) Jfs (C) XFS (D) ReFS
008. The IEEE standard for WiMAX is
- (A) 802.11 (B) 802.15 (C) 802.15.1 (D) 802.16
009. _____ is not a Web Server.
- (A) IIS (B) Apache
(C) Firefox (D) Nginx
010. A denial of service attack against a network belongs to which one of the following type of threat?
- (A) Modification (B) Interception
(C) Interruption (D) None of these

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011. _____ caches web pages on the server hard disk so that they can be quickly retrieved later.
- (A) File Server (B) Proxy Server
(C) Web Server (D) None of these
012. _____ is not an active attack in Network Security.
- (A) Traffic Analysis (B) Masquerade
(C) Replay (D) Denial of Service
013. _____ is an indication of the relative independence among modules.
- (A) Cohesion (B) Coupling
(C) Patterns (D) Modularity
014. The test-case design technique that complements equivalence partitioning and leads to the selection of test cases at the edges of the class.
- (A) Orthogonal array testing (B) Model-based testing
(C) Boundary value analysis (D) Condition testing
015. The framework activity that presents software increment to the customer and includes delivery, support and feedback.
- (A) Communication (B) Planning
(C) Modelling (D) Deployment
016. _____ structures a team loosely and depends on individual initiative of the team members.
- (A) Random paradigm (B) Open paradigm
(C) Closed paradigm (D) Synchronous paradigm
017. The W⁵HH principle is suggested by
- (A) Reel (B) Grady Booch
(C) Liu (D) Barry Boehm
018. A quality metric that provides benefit at both the project and process level is called
- (A) Defect removal efficiency (B) FP
(C) LOC (D) Use-case points
019. The prioritized list of project requirements or features which provides business value for the customer.
- (A) Sprints (B) Demos
(C) Backlog (D) States

020. _____ is an agile process model that provides a framework for building and maintaining systems which meet tight time constraints through the use of incremental prototyping.
- (A) Adaptive software development
 - (B) Dynamic systems development method
 - (C) Scrum model
 - (D) Crystal
021. The small, highly motivated and self-organizing project team is called _____
- (A) Stakeholders
 - (B) Team leaders
 - (C) Agile
 - (D) Mavericks
022. _____ is also called behavioural testing, focuses on the functional requirements of the software.
- (A) Black box testing
 - (B) White box testing
 - (C) Basis path testing
 - (D) Data flow testing
023. Used to show the dynamic communications between objects during execution of a task.
- (A) Class diagram
 - (B) Deployment diagram
 - (C) Use-case diagram
 - (D) Sequence diagram
024. A new technology that emphasizes the design of test cases before the creation of source code.
- (A) Agile process
 - (B) Test-driven development
 - (C) Postmodern design
 - (D) Model-driven software development
025. Which is a technique in Java in which a class can have any number of constructors that differ in parameter lists?
- (A) Constructor overloading
 - (B) Method overloading
 - (C) Operator overloading
 - (D) None of the above
026. Which method is used to change the name of a thread?
- (A) `public String getName()`
 - (B) `public void setName(String name)`
 - (C) `public void getName()`
 - (D) `public String setName(String name)`

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027. Which statement provides an easy way to dispatch execution to different parts of your code based on the value of an expression?
- (A) If (B) Switch
(C) Nested-if (D) if-else-if
028. Which keyword is used to make the classes and interface of another package accessible to the current package?
- (A) Import (B) Implements
(C) Instanceof (D) None of the above
029. Which method of DataInputStream class reads a line from the file and returns it as a string?
- (A) WriteInt() (B) readInt()
(C) readLine() (D) writeDouble()
030. Under which package is the string class encapsulated?
- (A) java.awt (B) java.util
(C) java.io (D) java.lang
031. A class is declared inside a class but outside a method it is known as _____
- (A) Anonymous Inner class (B) Member Inner class
(C) Local Inner class (D) Static nested class
032. JVM stands for?
- (A) Java Very Large Machine (B) Java Verified Machine
(C) Java Very Small Machine (D) Java Virtual Machine
033. What type of constructor is used to provide different values to the distinct objects?
- (A) Default constructor (B) Parameterized constructor
(C) Overloading constructor (D) None of the above
034. How many types of controls does AWT support?
- (A) 7 (B) 6 (C) 5 (D) 8
035. Which type of inheritance one super-class have more than one sub-class?
- (A) Hierarchical inheritance (B) Single inheritance
(C) Multiple inheritances (D) Multilevel inheritance

036. Which allows you to define one interface and have multiple implementations?
- (A) Encapsulation (B) Inheritance
(C) Polymorphism (D) None of the above
037. Which right shift operator preserves the sign of the value?
- (A) << (B) >>
(C) <<= (D) >>=
038. What is it called if an object has its own lifecycle and there is no owner?
- (A) Aggregation (B) Composition
(C) Encapsulation (D) Association
039. What is the return type of Constructors?
- (A) int (B) float
(C) void (D) none of the mentioned
040. Which of these is an incorrect array declaration?
- (A) `int arr[] = new int[5]` (B) `int [] arr = new int[5]`
(C) `int arr[] = int [5] new` (D) `int arr[] = new int[5]`
041. From where break statement causes an exit?
- (A) Only from innermost loop (B) Terminates a program
(C) Only from innermost switch (D) From innermost loops or switches
042. Which of these can be used to fully abstract a class from its implementation?
- (A) Objects (B) Packages
(C) Interfaces (D) None of the mentioned
043. Which of these keywords are used for the block to handle the exceptions generated by try block?
- (A) try (B) catch
(C) throw (D) check
044. Which one is a valid declaration of a boolean?
- (A) `boolean b1 = 1` (B) `boolean b2 = 'false'`
(C) `boolean b3 = false` (D) `boolean b4 = 'true'`

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045. Which of the following is a valid declaration of an object of class Box?

- (A) Box obj = new Box() (B) Box obj = new Box
(C) obj = new Box() (D) new Box obj

046. Which of these is supported by method overriding in Java?

- (A) Abstraction (B) Encapsulation
(C) Polymorphism (D) None of the mentioned

047. What is the output of this program?

```
class selection_statements
{
    public static void main (String args[ ])
    {
        int var1 = 5;
        int var2 = 6;
        if ((var2 = 1) == var1)
            System.out.print(var2);
        else
            System.out.print(++var2);
    }
}
```

- (A) 1 (B) 2
(C) 3 (D) 4

048. A class member declared protected becomes a member of subclass of which type?

- (A) public member (B) static member
(C) protected member (D) private member

049. Which of these is not a bitwise operator?

- (A) & (B) &=
(C) |= (D) <=

050. Thread priority in Java is

- (A) Integer (B) Float
(C) double (D) long

051. Which of these methods is a part of Abstract Window Toolkit (AWT)?
- (A) display() (B) paint()
(C) drawString() (D) transient()
052. The _____ attribute of applet tag specifies the amount of horizontal blank space the browser should leave surrounding the applet.
- (A) SPACE=pixels (B) HSPACE=pixels
(C) HWIDTH=pixels (D) HBLANK=pixels
053. The _____ method is defined by the AWT which causes the AWT runtime system to execute a call to your applet's update() method.
- (A) update() (B) paint()
(C) repaint() (D) reupdate()
054. _____ package in java contains language utility classes such as vectors, hash tables, random numbers etc.
- (A) java.util (B) java.awt
(C) java.net (D) java.lang
055. HTML stands for
- (A) Hyper Text Markup Language (B) Hyper Text Making Language
(C) Hyper Text Markup Links (D) None of the above
056. The capability to store one object inside another object is called
- (A) Encapsulation (B) Aggregation
(C) Polymorphism (D) Inheritance
057. Result of getAllResponseHeaders() XMLHttpRequest method is
- (A) Returns the complete set of HTTP headers as a string
(B) Returns the value of the specified HTTP header
(C) Both (A) and (B)
(D) None of the above
058. WAMP variant for MAC Operating System is
- (A) LAMP (B) MAMP
(C) SAMP (D) None of the above

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059. DNS comprises

- (A) Domain Names and Name server
- (B) Domain Names and Domain Name Space
- (C) Domain Names, Domain Name Space and Name Server
- (D) All of the above

060. Latest web browser of Microsoft?

- (A) Internet Explorer
- (B) Opera
- (C) Safari
- (D) Edge

061. TCP/IP stands for

- (A) Transmission Control Protocol/Internet Protocol
- (B) Transfer Control Protocol/Internet Protocol
- (C) Both (A) and (B)
- (D) None of the above

062. Packet switching method is used in

- (A) TCP
- (B) UDP
- (C) Both (A) and (B)
- (D) None of the above

063. Which layer uses error control mechanism in OSI?

- (A) Network Layer
- (B) Data Link Layer
- (C) Transport Layer
- (D) Application Layer

064. ISDN is an example of _____ network

- (A) Circuit Switched Telephone Network
- (B) Packet Switched Network
- (C) Message Switched Network
- (D) None of the above

065. What is the maximum cable length of STP?

- (A) 300 m
- (B) 200 m
- (C) 100 m
- (D) 150 m

066. Application layer uses the following protocols:

- (A) SMTP
- (B) FTP
- (C) HTTP
- (D) All of the above

067. To define style sheet rules in header section of the HTML document called
- (A) External Style Sheet
 - (B) Internal Style Sheet
 - (C) Inline Style Sheet
 - (D) None of the above
068. The Application server for Java Web Applications is
- (A) JBoss
 - (B) Glassfish
 - (C) Weblogic
 - (D) Tomcat
069. The protocol used to send email from one to another
- (A) POP3
 - (B) HTTP
 - (C) SMTP
 - (D) FTP
070. Commonly used web applications that make use of AJAX
- (A) Google Map
 - (B) Yahoo Maps
 - (C) Gmail
 - (D) All of the above
071. IIS stands for
- (A) International Information Standards
 - (B) International Information Services
 - (C) Internet Information Standards
 - (D) Internet Information Services
072. The attribute of an HTML tag can be used to uniquely identify any element within an HTML page is
- (A) id
 - (B) Title
 - (C) Class
 - (D) Style
073. A small area can use the following network:
- (A) LAN
 - (B) WAN
 - (C) MAN
 - (D) None of the above
074. The attribute is used to specify the URL of the document that occupies the inline frame.
- (A) frame
 - (B) sup
 - (C) src
 - (D) span
075. HTML form control tag is
- (A)* File select boxes
 - (B) Text input controls
 - (C) Checkboxes Controls
 - (D) All of the above

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076. Client Software that is used for email retrieval
- (A) IMAP (B) HTTP
(C) DHCP (D) ICMP
077. The number of sub keys generated by IDEA algorithm is
- (A) 64 (B) 32
(C) 54 (D) 52
078. _____ is an example of public key algorithm
- (A) DES (B) RSA
(C) IREA (D) RCS
079. DSS signature uses which hash algorithm?
- (A) MD5 (B) SHA-1
(C) SHA-2 (D) Does not use hash algorithm
080. In asymmetric key cryptography the private key is kept by
- (A) sender (B) receiver
(C) sender and receiver (D) cryptanalyst
081. What is Data Encryption Standard (DES)?
- (A) Block cipher (B) Stream cipher
(C) Bit cipher (D) None of the above
082. In cryptography, the order of the letters in a message is rearranged by
- (A) Transposition ciphers (B) substitution ciphers
(C) Both (A) and (B) (D) None of the above
083. Using RSA algorithm, what is the value of cipher text C, if the plain text $M=5$ and $P=3$, $q=11$ and $d=7$?
- (A) 24 (B) 25
(C) 26 (D) 32
084. _____ is used for hiding the payment information from the merchant.
- (A) SET (B) SSL
(C) SHTTP (D) TSP

085. The URL property belongs to which of the following object?

- (A) Document (B) Element
(C) Location (D) Event

086. Which of the following attribute can hold the JavaScript version?

- (A) Language (B) Script
(C) Version (D) None of the above

087. Which event occurs when user clicks on an HTML element?

- (A) onclick() (B) onmouseclick()
(C) onchange() (D) onmouseover

088. `<script language ="javascript">`

```
Function x()  
{  
    Document.write(2+0+"4");  
}
```

`</script>`

- (A) 204 (B) 2
(C) Error (D) 24

089. What is the value of \$a and \$b after the function call?

```
<?php  
    function doSomething( &$arg )  
    {  
        $fruit = $arg ;  
        $arg +=1;  
        return $fruit;  
    }  
    $a = 3;  
    $b = doSomething( $a );  
?>
```

- (A) a is 3 and b is 4 (B) a is 4 and b is 3
(C) both are 3 (D) both are 4

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090. Which version of PHP was added with Exception handling?
- (A) PHP 4 (B) PHP 5
(C) PHP 5.3 (D) PHP
091. Which one of the following statements instantiates the mysqli class?
- (A) `mysqli = new mysqli()` (B) `mysqli → new mysqli()`
(C) `$mysqli → new mysqli()` (D) `$mysqli = new mysqli()`
092. Using which of the following way can you embed PHP code in an HTML page?
- (A) `<?php PHP code goes here ?>`
(B) `<? PHP code goes here ?>`
(C) `<script language="php"> PHP code goes here </script>`
(D) All of the above
093. Referential Integrity is directly related to
- (A) Relation Key (B) Foreign Key
(C) Primary Key (D) Candidate Key
094. Consider a schema R (P, Q, R, S) and functional dependencies $P \rightarrow Q$ and $R \rightarrow S$. Then the decomposition R1 (P, Q) and R2 (R, S) is
- (A) Dependency Preserving and lossless join
(B) Lossless join but not dependency preserving
(C) Lossless Join
(D) Dependency preserving but not lossless join
095. The normalization of 1NF relations to 2NF involves
- (A) Removal of full dependencies
(B) Removal of Transitive dependencies
(C) Removal of partial dependencies
(D) Removal of multivalued dependencies
096. An attribute A of data type varchar(20) has the value "Ram". The attribute B of data type char(20) has value "Ramu". Here attribute A has _____ spaces and attribute B has _____ spaces.
- (A) 3, 4 (B) 20, 4
(C) 20, 20 (D) 3, 20

097. E-R model uses this symbol to represent weak entity set.
- (A) Dotted Rectangle (B) Doubly Dotted Rectangle
(C) Double lined Rectangle (D) Rectangle
098. Data mining is used to aid in
- (A) operational management
(B) analysing past decision made by managers
(C) detecting patterns in operational data
(D) retrieving archival data
099. _____ helps solve concurrency problem.
- (A) two-phase commit (B) transaction serializability
(C) locking (D) transaction monitor
100. _____ cursor are declared by ORACLE for each UPDATE, DELETE and INSERT SQL commands
- (A) Internal (B) External
(C) Implicit (D) Explicit
- _____