



ATOMIC ENERGY EDUCATION SOCIETY
Anushaktinagar, Mumbai-400 094

2015 – Open Candidates Examination

Post – PGT (Computer Science)

Date – 27.09.2015

Time – 1 Hour 30 Minutes

Maximum Marks – 50

Instructions

1. There are 50 Multiple Choice Questions (MCQ) in this paper. Each question carries 1 mark. There will be negative marking of 0.25 per wrong answer.
2. Answer should be darkened/marked in the OMR answer sheet only.
3. Use of any electronic gadget (e.g. calculator, mobile phone, etc.) is not permitted, in the examination hall.
4. In case a candidate has not signed the Attendance Sheet or the OMR Answer Sheet is not signed by the Invigilator, it will be dealt with as a case of unfair means.
5. On completion of the test, the candidates **MUST HAND OVER THE OMR ANSWER SHEET AND QUESTION PAPER TO THE INVIGILATOR** in the room/hall.
6. The candidates should ensure that the OMR answer sheet is not folded or damaged.

To be filled by the candidate

Name of the Candidate: _____

Roll Number: _____

OMR Number: _____

2015-Open Candidates- PGT (Computer Science) – QP

Q.1) A flip flop can store

- A) one bit of data
- B) two bits of data
- C) three bits of data
- D) n bits of data

Q.2) Which gate does this truth table mentioned below indicate?

A	B	X
0	0	0
0	1	1
1	0	1
1	1	0

- A) NAND
- B) NOR
- C) XOR
- D) XAND

Q.3) RAID1 data that is distributed across the drives consists of

- A) striping, without mirroring or parity
- B) mirroring, without parity or striping
- C) mirroring, parity without striping
- D) striping, parity without mirroring

Q.4) Windows 7 and Mac OS X, In computing uses the method of scheduling is called

- A) Cooperative scheduling
- B) Multilevel queue scheduling
- C) Multilevel feedback queue scheduling
- D) Round robin scheduling

Q.5) Public key encryption involves the use of

- A) one key
- B) two key
- C) hash key
- D) hash function

Q.6) The interval between the time of submission and completion of the job is called

- A) Waiting time
- B) turnaround time
- C) throughput
- D) response time

Q.7) The technique of removing inactive programs from the memory of computer system is

- A) Semaphore
- B) Scheduler
- C) Spooling
- D) Swapping

Q.8) How many distinguished permutation can be generated from word "ACCESS"?

- A) 720
- B) 180
- C) 240
- D) 120

Q.9) An equivalence relation is a relation which is

- A) reflexive and symmetric
- B) symmetric and transitive
- C) reflexive and transitive
- D) reflexive, symmetric and transitive

Q.10) A simple graph in which there exist an edge between every pair of vertices's is called

- A) Regular graph
- B) Planar graph
- C) Euler graph
- D) Complete Graph

Q.11) A graph is a tree, if and only if it

- A) is completely connected
- B) is minimally connected
- C) contains a circuit
- D) is planar

Q.12) In a directed graph, if there is a path from a to b and from b to a whenever a and b are vertices in graph is called

- A) Complete graph
- B) Bipartite graph
- C) Strongly connected graph
- D) Edge connected graph

Q.13) A tree with n nodes has

- A) n-1 edges
- B) n/2 edges
- C) n edges
- D) n + 1 edges

Q.14) The language accepted by finite automata is

- A) Context free
- B) Regular
- C) Non-Regular
- D) Context Sensitive

Q.15) In Chomsky classification of grammar, type 2 grammar is

- A) Formal grammar
- B) Context sensitive grammar
- C) Context free grammar
- D) Regular grammar

Q.16) Which of the following sorting algorithm is of divide and conquer type?

- A) Bubble sort
- B) Insertion sort
- C) Quick sort
- D) Merge sort

Q.17) The complexity of linear search algorithm is

- A) $O(n)$
- B) $O(\log n)$
- C) $O(n^2)$
- D) $O(n \log n)$

Q.18) In OSI which layer manages Token Management?

- A) Network Layer
- B) Session Layer
- C) Transport Layer
- D) Data Link Layer

Q.19) Transport Layer Security (TLS) and Secure Socket Layer (SSL) works at which of the following Layer?

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

Q.20) In LAN switching prioritize data traffic by application can be achieved using

- A) Layer 2 switch
- B) Layer 3 switch
- C) Layer 3 and Layer 4 switch
- D) Layer 4 switch

Q.21) What is MAC address ?

- A) It is the network layer address of a network interface card that cannot be modified
- B) It is the network layer address of a network interface card that can be modified
- C) It is the data link layer address of a network interface card that cannot be modified
- D) It is the data link layer address of a network interface card that can be modified

Q.22) Which of the protocol is used for remote terminal connection service ?

- A) TELNET
- B) FTP
- C) UDP
- D) HTTP

Q.23) Which of the following network uses software to establish a secure channel on the Internet for transmitting data?

- A) Wireless Network
- B) Secure public network
- C) Virtual Public network
- D) Virtual Private network

Q.24) The IP address 124.168.192.254 is in

- A) Class A
- B) Class B
- C) Class C
- D) Class D

Q.25) IP V6 has _____ address.

- A) 32 Bit
- B) 64 Bit
- C) 128 Bit
- D) variable

Q.26) Which of the following TCP/IP protocols is used for transferring electronic mail messages from server to mail clients ?

- A) FTP
- B) SMTP
- C) POP
- D) IMAP

Q.27) In Software Engineering / Development SRS stands for

- A) Software Requirement Specification
- B) Software Requirement Solution
- C) System Requirement Specification
- D) Software Requirement System

Q.28) Which of the following below refers to maintaining and assuring the accuracy and consistency of data over its entire life-cycle?

- A) Data Constrain
- B) Data Independence
- C) Data Integrity
- D) Data Security

Q.29) In software development life cycle models which model having analysis, design, implementation and testing iterates during the system development?

- A) Build and fix model
- B) Iterative enhancement life cycle
- C) Spiral life cycle model
- D) Waterfall Model

Q.30) What does the following shape (Ellipse with underline) notion in E-R diagram is called?

- A) Key Attribute
- B) Composite Attribute
- C) Derived Attribute
- D) Multivalued Attribute

Q.31) Which of the following unix / linux command is used for search text within files in command line?

- A) as
- B) catch
- C) find
- D) grep

Q.32) Which of the following is not derivative data type in C?

- A) Function
- B) Pointer
- C) Enumeration
- D) Array

Q.33) In C programming a variable which is visible only in the function in which it is defined, is called?

- A) Static Variable
- B) Auto Variable
- C) External Variable
- D) Local Variable

Q.34) What would be the output of the C program?

```
#include <stdio.h>
{
  int i = 0;
  for (;i<=5;i++);
  printf("%d",i);
  return 0;
}
```

- A) 5
- B) 6
- C) 0,1,2,3,4,5
- D) 1,2,3,4,5

Q.35) What would be the output for the following C program fragment?

```
x = 5
y = x ++
printf("%d %d, x, y)
```

- A) 5, 7
- B) 7, 5
- C) 6, 6
- D) 6, 5

Q.36) In C Program, the output of the following given program is

```
int i
main ()
{
    printf("%d",i)
}
```

- A) 0
- B) 1
- C) -1
- D) null

Q.37) In C program, the output of the value x is

```
main()
{
    int x;
    x = 3*4%5;
    printf("x=%d", x)
}
```

- A) 1.9
- B) 2
- C) 2.3
- D) 5

Q.38) When a subclass is inherited from a super class, which itself inherited from a super class, then such inheritance is called ?

- A) Single inheritance
- B) Multiple inheritance
- C) Hierarchical inheritance
- D) Multilevel inheritance

Q.39) The keyword used to define structure in C++ is

- A) stru
- B) stt
- C) struct
- D) structure

Q.40) What is tuple in RDBMS?

- A) name for table in RDBMS
- B) name for the key linking different tables in the database
- C) a row or record in a database table
- D) an attribute attached to a record

- Q.41) A lack of normalization can lead to which one of the following?
- A) Insertion Problems
 - B) Deadlock
 - C) Lost Updates
 - D) Deferred updates
- Q.42) If every non-key attribute is functionally dependent of the primary key, then the relation will be in
- A. First Normal Form
 - B. Second Normal Form
 - C. Third Normal Form
 - D. Fourth Normal Form
- Q.43) In database transaction property, If it ensures that either all the operations of the transactions are reflected properly in the database or none should is called
- A) Atomicity
 - B) Consistency
 - C) Isolation
 - D) Durability
- Q.44) Locking was introduced to the Database so that
- A) keys can be provided to maintain security
 - B) all simultaneous transactions are prevented
 - C) passwords can be provided to maintain security
 - D) consistency can be enforced
- Q.45) The statement in SQL which allows to change the definition of the table is
- A) ALTER
 - B) CREATE
 - C) SELECT
 - D) UPDATE
- Q.46) Which SQL statement is used to return only different values from the table?
- A) SELECT DIFFERENT
 - B) SELECT DISTINCT
 - C) SELECT UNIQUE
 - D) SELECT
- Q.47) Which is the correct order if all the six clauses given below appear in the query?
- A) SELECT, FROM, WHERE, GROUP BY, HAVING, ORDER BY
 - B) SELECT, FROM, WHERE, ORDER BY, HAVING, GROUP BY
 - C) SELECT, FROM, WHERE, HAVING, ORDER BY, GROUP BY
 - D) SELECT, FROM, WHERE, HAVING, GROUP BY, ORDER BY

Q.48) In Web page designing / programming, CSS is an acronym for

- A) Cascading Style Sheet
- B) Color Style Sheet
- C) Cascading System Sheet
- D) Color Scheme Sheet

Q.49) LDAP stands for

- A) Lightweight Data Access Protocol
- B) Lightweight Directory Access Protocol
- C) Large Data Access Protocol
- D) Large Directory Access Protocol

Q.50) Apache Tomcat is a

- A) Applet
- B) Java Program
- C) Servlet
- D) Web Server



OPEN ADVERTISEMENT CANDIDATE EXAM-2015

PGT (Computer Science)

Answer Keys

- | | |
|-------|-------|
| 1. A | 26. B |
| 2. C | 27. A |
| 3. B | 28. C |
| 4. C | 29. C |
| 5. B | 30. A |
| 6. B | 31. D |
| 7. D | 32. C |
| 8. B | 33. D |
| 9. D | 34. B |
| 10. D | 35. D |
| 11. B | 36. A |
| 12. C | 37. B |
| 13. A | 38. D |
| 14. B | 39. C |
| 15. C | 40. C |
| 16. C | 41. D |
| 17. A | 42. C |
| 18. B | 43. A |
| 19. A | 44. D |
| 20. D | 45. A |
| 21. C | 46. B |
| 22. A | 47. A |
| 23. D | 48. A |
| 24. A | 49. B |
| 25. C | 50. D |

