

FINAL ANSWER KEY

Question Paper Code:	28/2015/OL
Category Code:	002/2012
Exam:	Lecturer in Computer Science
Medium of Question:	English
Date of Test	23-11-2015
Alphacode	A

Question1:-Who called Ayyan Kali the Pulaya king in 1936?

- A:-A K Gopalan
 - B:-Dr. Palpu
 - C:-Mahathma Gandhi
 - D:-V T Bhattathirippadu
- Correct Answer:- Option-C

Question2:-The famous Sanskrit work Darsanamala was composed by ?

- A:-Sree Narayana Guru
 - B:-Vaikunda Swamikal
 - C:-Chattampi Swamikal
 - D:-Sankaracharya
- Correct Answer:- Option-A

Question3:-Malabar Special Police (MSP) was organised by the British in ?

- A:-1921
- B:-1854
- C:-1860
- D:-1880

Correct Answer:-**Question Cancelled**

Question4:-Which among the following stories of Vaikom Muhammed Basheer is reflected in the Malayalam movie Bhargavi Nilayam ?

- A:-Anargha Nimisham
 - B:-Balyakalaskhi
 - C:-Janmadinam
 - D:-Neela Velicham
- Correct Answer:- Option-D

Question5:-The Augustan Age of Kerala music is the reign of ?

- A:-Sri Chitra Tirunal
 - B:-Utram Tirunal
 - C:-Swati Tirunal
 - D:-Visakhham Tirunal
- Correct Answer:- Option-C

Question6:-Which country suggested the name Hudhud for the severe cyclonic storm -2014

- A:-Bahrain
- B:-Iran
- C:-Saudi Arabia
- D:-Oman

Correct Answer:- Option-D

Question7:-The First Radio Station in Kerala ?

- A:-Cochin
 - B:-Thiruvananthapuram
 - C:-Alappuzha
 - D:-Thrissur
- Correct Answer:- Option-B

Question8:-2014- Nobel Prize winner in Economics ?

- A:-Jean Tirole
- B:-Eugene F .Fama
- C:-Shuji Nakamura
- D:-Patrick Modiano

Correct Answer:- Option-A

Question9:-Ringworm is a common infection caused by ?

- A:-A Worm
- B:-Fungus
- C:-Bacteria
- D:-Virus

Correct Answer:- Option-B

Question10:-The Election Commission of India is set up by which article of Indian Constitution ?

- A:-Article 310
- B:-Article 316
- C:-Article 324
- D:-Article 256

Correct Answer:- Option-C

Question11:-The approach which is grounded in the theoretical belief that there is an objective reality that can be known to the researcher if she/he uses the correct methods and applies those methods in a correct manner.

- A:-Dialectics
- B:-Positivism
- C:-Interpretivism
- D:-Pragmatism

Correct Answer:- Option-B

Question12:-One of the prime aims of scientific method in research is to

- A:-eliminate spurious relations
- B:-improve data interpretation
- C:-confirm triangulation
- D:-introduce new variables

Correct Answer:- Option-A

Question13:-Developing a hypothesis based on an existing theory and designing a research strategy to test the hypothesis is

- A:-pragmatic approach
- B:-inductive approach
- C:-deductive approach
- D:-emancipatory approach

Correct Answer:- Option-C

Question14:-Knowingly representing the work of others as your own in the manuscript submitted to a journal or publication is

- A:-citation
- B:-documentation
- C:-epigraph
- D:-plagiarism

Correct Answer:- Option-D

Question15:-The idea of 'micro-teaching' was first originated in

- A:-Oxford University
- B:-Stanford University
- C:-Delhi University
- D:-Christ University

Correct Answer:- Option-B

Question16:-The type of learning which leads to deep learning is

- A:-reflective learning
- B:-memory level learning
- C:-mnemonic technique
- D:-conceptual understanding

Correct Answer:- Option-A

Question17:-A teacher attempts to shape, control and evaluate the behaviour and attitude of students in accordance with a set standard of conduct. The approach of the teacher is

- A:-permissive
- B:-constructivist
- C:-authoritarian
- D:-accommodative

Correct Answer:- Option-C

Question18:-After learning certain topics from a particular subject, the student put the ideas together to form a new content. The cognitive process involved is

- A:-evaluation

- B:-synthesis
- C:-analysis
- D:-application

Correct Answer:- Option-B

Question19:-Effective teaching happens when the teacher

- A:-maintains discipline in the class
- B:-possesses advanced scholarship in the subject
- C:-has skill in teaching and managing the classroom
- D:-makes the students actively engage in learning

Correct Answer:- Option-D

Question20:-Which among the following is a non-parametric test

- A:-'t'-test
- B:-analysis of variance
- C:-chi-square test
- D:-all of the above

Correct Answer:- Option-C

Question21:- 1. The power to form a new state is vested in

- A:- President of India
- B:- Union Cabinet
- C:- Parliament
- D:-Supreme Court

Correct Answer:- Option-C

Question22:- 1. Part III of the Constitution deals with

- A:-Union and Territories
- B:-Citizenship
- C:-Directive Principles of State Policy.
- D:-Fundamental Rights

Correct Answer:- Option-D

Question23:- 1. Writ Petitions are filed before the Supreme Court for the enforcement of

- A:-Fundamental Rights
- B:-Fundamental Duties
- C:-Directive Principles
- D:-To declare emergency

Correct Answer:- Option-A

Question24:- 1. List II in the VII Schedule of the Constitution is

- A:-Union List
- B:-Concurrent List
- C:-State List
- D:-None of the above

Correct Answer:- Option-C

Question25:- 1. Duration of Rajya Sabha is

- A:-Five Years
- B:-Six years
- C:-Two years
- D:-Permanent

Correct Answer:- Option-D

Question26:- The word 'public servant' means :

- A:- Any person in the service or pay of the Government
- B:- Any person in the service or the pay of any local authority
- C:- Any person in the service or pay of any corporation established under a State or a Central Act
- D:- All of the above

Correct Answer:- Option-D

Question27:- The world environment day is celebrated on ----- of every year

- A:- 8th June
- B:- 5th September
- C:- 2nd October
- D:- 1st May

Correct Answer:-**Question Cancelled**

Question28:- Every request for obtaining information under the Right to Information Act is to be disposed of with in:

A:- 45 days

B:- 90 days

C:- 30 days

D:- 60 days

Correct Answer:- Option-C

Question29:- The Supreme Court of India recognized sexual harassment at work place as a violation of human rights in the case of :

A:- Ahmed Khan v Shah Bano Begum

B:- Visakha v State of Rajasthan

C:- Tukaram v State of Maharashtra

D:- Bachan Singh v State of Punjab

Correct Answer:- Option-B

Question30:- The information exempted from disclosure under Section 8 of the Right to Information Act includes:

A:- Information received in confidence from a foreign government

B:- Cabinet papers including records of deliberations of the council of ministers and secretaries

C:- Information available to a person in his fiduciary relationship

D:- All the above.

Correct Answer:- Option-D

Question31:-The binary equivalent of decimal number 20.625 is

A:-10100.1011

B:-10100.1100

C:-10100.1010

D:-10101.1010

Correct Answer:- Option-C

Question32:-A memory that contains 32K memory requires how many different addresses

A:-32752

B:-32768

C:-32640

D:-31744

Correct Answer:- Option-B

Question33:-An SDRAM chip has 4096 rows, a refresh time of 128ms, the memory bus runs at 166MHz and the refresh cycle takes 4 clock cycles. The refresh overhead is:

A:-0.00076

B:-0.00770

C:-0.00740

D:-0.00748

Correct Answer:- Option-A

Question34:-What is the address line for RST 4.5?

A:-0028H

B:-0018H

C:-0020H

D:-0024H

Correct Answer:- Option-D

Question35:-Which of the following is a software interrupt?

A:-RST 6.5

B:-RST 5

C:-INTR

D:-RST 7.5

Correct Answer:- Option-B

Question36:-The expression $E + ((A + B) * D) - C$ can be written in Reverse Polish Notation as

A:-AB+D*E+C-

B:-AB+D*+E-C

C:-+*+ABDEC

D:-EAB+D*+C-

Correct Answer:- Option-D

Question37:-The maximum number of I/O devices that can be connected to 8085 microprocessor is

A:-255

B:-512

C:-65536

D:-256

Correct Answer:- Option-C

Question38:-How many pins does a DDR SDRAM DIMM have?

A:-184

B:-168

C:-72

D:-172

Correct Answer:- Option-A

Question39:-UART is

A:-8255

B:-8250

C:-8251

D:-8279

Correct Answer:- Option-B

Question40:-DMA Controller gets complete access to main memory through which technique?

A:-Burst Mode

B:-Memory Stealing

C:-Cycle Stealing

D:-Memory Con

Correct Answer:- Option-A

Question41:-Which of the following represents the average-case performance of a quicksort algorithm?

A:- $O(n)$

B:- $O(\log n)$

C:- $O(n/2)$

D:- $O(n \log n)$

Correct Answer:- Option-D

Question42:-Which of the following is not the required condition for binary search algorithm?

A:-The list must be sorted

B:-There should be direct access to the middle element in any sublist

C:-There must be mechanism to delete and/or insert element in list

D:-None of these

Correct Answer:- Option-C

Question43:-A 3-ary tree is a tree in which every internal node has exactly 3 children. The number of leaf nodes in such a tree with 6 internal nodes will be

A:-10

B:-23

C:-17

D:-13

Correct Answer:- Option-D

Question44:-Of the following sorting algorithms, the one which has a running time that is least dependent on the initial ordering of the input is

A:-Insertion sort

B:-Quick sort

C:-Merge sort

D:-Selection sort

Correct Answer:- Option-C

Question45:-The number of edges in a regular graph of degree d and n vertices is

A:- $\text{maximum}(n,d)$

B:- $n+d$

C:- nd

D:- $nd/2$

Correct Answer:- Option-D

Question46:-The depth of a complete binary tree is given by

A:- $n \log n$

B:- $\log n + 1$

C:- $\log n$

D:- $n \log n + 1$

Correct Answer:- Option-B

Question47:-Convert the expression $((A+B)*C-(D-E)^{(F+G)})$ to equivalent Postfix notation

A:-AB+C*DE--FG+^

B:-AB-C*DE--FG+^

C:-AB+CDE*--FG+^

D:-AB+*CDE--FG+^

Correct Answer:- Option-A

Question48:-Merge sort uses

A:-Divide and Conquer strategy

B:-Backtracking approach

C:-Heuristic search

D:-Greedy approach

Correct Answer:- Option-A

Question49:-Linked lists are best suited

A:-for relatively permanent collections of data

B:-for the size of the structure and the data in the structure are constantly changing

C:-for both of above situations

D:-for none of above situations

Correct Answer:- Option-B

Question50:-The complexity of the average case of an algorithm is

A:-much more complicated to analyze than that of worst case

B:-much more simpler to analyze than that of worst case

C:-some times more complicated and some other times simpler than that of worst case

D:-none of the above

Correct Answer:- Option-A

Question51:-What is the minimum number of units of resource R required such that no deadlock will ever occur in an operating system containing 5 user processes each requiring 2 units of R?

A:-5

B:-6

C:-7

D:-8

Correct Answer:- Option-B

Question52:-The page miss ratio in a paged memory is 0.72. The time required to access a page in primary and secondary memory are 10ns and 100ns, respectively. The average time required to access a page is:

A:-64.8

B:-35.2

C:-74.8

D:-45.2

Correct Answer:- Option-C

Question53:-The value of a counting semaphore at a particular instance of time is 5. '#' P operations and 16 V operations were completed on this semaphore subsequently. If the final value of the semaphore is 8, then '#' will be

A:-11

B:-12

C:-16

D:-13

Correct Answer:- Option-D

Question54:-Given the following disk queue:

95, 180, 34, 119, 11, 123, 62, 64

with read-write head initially at the track 50 and the tail track being at 199. If C-LOOK disk scheduling algorithm is followed, then the total number of head movement required is:

A:-157

B:-146

C:-187

D:-236

Correct Answer:- Option-A

Question55:-NTFS stands for

A:-New Type File System

B:-Novel Technology File Service

C:-New Technology File System

D:-New Technology File Service

Correct Answer:- Option-C

Question56:-Shift-reduce parsers are

- A:-top-down parsers
- B:-bottom-up parsers
- C:-both top-down and bottom-up parsers
- D:-None of the above

Correct Answer:- Option-B

Question57:-Consider the following grammar:

S→ABSc|Abc

BA→AB

Bb→bb

Ab→ab

Aa→aa

Which of the following sentences can be derived by the above grammar?

- A:-aab
- B:-abcc
- C:-abbc
- D:-abc

Correct Answer:- Option-D

Question58:-Which of the following is an intermediate language?

- A:-UNCOL
- B:-PASCAL
- C:-COBOL
- D:-SNOBOL

Correct Answer:- Option-A

Question59:-If an input file named "Test" is given to Lex, then its output file will be

- A:-Test.lex
- B:-Test.obj
- C:-Test.out
- D:-Test.yy.c

Correct Answer:- Option-D

Question60:-The Banker's algorithm is used

- A:-to detect deadlock in operating system
- B:-to rectify a deadlocked state
- C:-to prevent deadlock in operating system
- D:-None of the above

Correct Answer:- Option-C

Question61:-In the Internet Protocol(IP) suit of protocols, which of the following best describes the purpose of the Address Resolution Protocol?

- A:-To translate web addresses to host names
- B:-To determine the IP address of a given host name
- C:-To determine the hardware address of a given host name
- D:-To determine the hardware address of a given IP address

Correct Answer:- Option-D

Question62:-Given the basic ER and relational models, which of the following is incorrect?

- A:-An attribute of an entity can have more than one value
- B:-An attribute of an entity can be composite
- C:-In a row of a relational table, an attribute can have more than one value
- D:-In a row of a relational table, an attribute can have exactly one value or a NULL value

Correct Answer:- Option-C

Question63:-If a relation scheme is in BCNF, then it is also in

- A:-1NF
- B:-2NF
- C:-3NF
- D:-both (1) and (2)

Correct Answer:-**Question Cancelled**

Question64:-Communication circuits that transmit data in both directions but not at the same time are operating in

- A:-simplex mode
- B:-half duplex mode
- C:-full duplex mode
- D:-asynchronous mode

Correct Answer:- Option-B

Question65:-For which one of the following reasons does Internet Protocol(IP) use the time-to-live(TTL) field in the IP datagram header?

- A:-Ensure packets reach destination within that time
- B:-Discard packets that reach later than that time
- C:-Prevent packets from looping indefinitely
- D:-Limit the time for which a packet gets queued in intermediate routers

Correct Answer:- Option-C

Question66:-The transport layer protocols used for real time multimedia, file transfer, DNS and email, respectively are

- A:-TCP, UDP, UDP and TCP
- B:-UDP, TCP, TCP and UDP
- C:-UDP, TCP, UDP and TCP
- D:-TCP, UDP, TCP and UDP

Correct Answer:- Option-C

Question67:-The normal form that is considered adequate for relational database design is

- A:-2NF
- B:-3NF
- C:-4NF
- D:-BCNF

Correct Answer:- Option-B

Question68:-Result of compilation of DDL statement is stored in a special file called as

- A:-database file
- B:-symbol table
- C:-database schema file
- D:-data dictionary

Correct Answer:- Option-D

Question69:-The number of entities to which another entity can be associated via a relationship set is called

- A:-Messaging Cardinality
- B:-Logical Cardinality
- C:-Mapping Cardinality
- D:-Data Cardinality

Correct Answer:- Option-C

Question70:-The network topology that supports bidirectional links between each possible node is

- A:-Ring
- B:-Star
- C:-Tree
- D:-Mesh

Correct Answer:- Option-D

Question71:-Which of the following UML diagram has a static view

- A:-Collaboration
- B:-Use case
- C:-State-chart
- D:-Activity

Correct Answer:- Option-B

Question72:-What is the goal of the requirements analysis and specifications phase of the software development life cycle?

- A:-Understanding the customer requirements and organize them in an informal document
- B:-Determining the scope of the software
- C:-Analyzing the cost of the development
- D:-none of the above

Correct Answer:- Option-A

Question73:-Which diagram in UML shows a complete or a partial view of the structure of a modeled system at a specific time

- A:-Sequence diagram
- B:-Collaboration diagram
- C:-Class diagram
- D:-Object diagram

Correct Answer:- Option-D

Question74:-SRS document is called a black box specification of a system because

- A:-It does not contain the contradictory material
- B:-It does not contain the user document

C:-SRS document should specify only the external behavior of the system

D:-none of the above

Correct Answer:- Option-C

Question75:-Which of the following is the structural model that demonstrate the other system in the environment of the system being developed

A:-System context model

B:-Interaction model

C:-Environmental model

D:-Both system context and interaction

Correct Answer:- Option-A

Question76:-In object oriented design of software which of the following is not true

A:-Object inherits the properties of the class

B:-Classes are defined based on the attributes of the object

C:-Objects can belong to two classes

D:-Classes are always different

Correct Answer:- Option-C

Question77:-Quality management in software engineering is also known as

A:-SQA

B:-SQM

C:-SQI

D:-SQA & SQM

Correct Answer:- Option-A

Question78:-Which of the following is not a core step of Six Sigma?

A:-Define

B:-Control

C:-Measure

D:-Analyse

Correct Answer:- Option-B

Question79:-According to ISO 9001, inspection and testing comes under which management responsibility

A:-Process control

B:-Document control

C:-Control of non-conforming products

D:-Servicing

Correct Answer:- Option-A

Question80:-What involves preparing software for external release and keeping track of the system version that have been released for customer use

A:-System building

B:-Release management

C:-change management

D:-Version management

Correct Answer:- Option-B

Question81:-A class variable is a variable declared as _____ inside a class.

A:-const

B:-final

C:-static

D:-extends

Correct Answer:- Option-C

Question82:- _____ determines the point of time at which a variable comes into existence in memory.

A:-data type

B:-functions

C:-scope

D:-storage class

Correct Answer:- Option-D

Question83:-What does the following program output?

```
public class ABC {
public static int function1(int p, int q) {
if (q==0) return 1;
else if (p<q) return 0;
else
return function1(p-1,q)+function1(p-1,q-1);
}
public static void main(String[] args) {
System.out.println(ABC.function1(3,2));
}
}
```

- A:-4
- B:-3
- C:-2
- D:-1

Correct Answer:- Option-B

Question84:-The following program prints:

```
public class XYZ {
public static void main (String[] args){
byte val=(byte) 128;
System.out.println(val);
}
}
```

- A:--128
- B:-128
- C:-127
- D:--127

Correct Answer:-**Question Cancelled**

Question85:-The following Java program segment prints:

```
String S1=new String("Hello");
String S2=new String("Hello");
if (S1==S2)
System.out.println("They are same");
else
System.out.println("They are not same");
```

- A:-They are same
- B:-They are not same
- C:-Garbage
- D:-Run time error

Correct Answer:- Option-B

Question86:-Asynchronous Java Script and XML (Ajax) incorporates

P: Asynchronous data retrieval using XMLHttpRequest

Q: Standards based presentation using XHTML and CSS

R: Data interchanges and manipulation using XML and XSLT

S: Dynamic display and interaction using the Document Object Model

- A:-P and R
- B:-P and Q
- C:-P, R and S
- D:-P, Q, R and S

Correct Answer:- Option-D

Question87:-In Java, MVC stands for

- A:-Model Video Controller
- B:-Mobile View Controller
- C:-Model View Controller
- D:-None of the above

Correct Answer:- Option-C

Question88:-Among the following, the Java package which is used by the compiler itself and need not be explicitly imported is:

- A:-java.lang
- B:-java.awt
- C:-java.math
- D:-java.applet

Correct Answer:- Option-A

Question89:-Distributed applications are created in Java using _____.

- A:-RMI and JDBC
- B:-CORBA and JDBC
- C:-RMI and CORBA
- D:-None of the above

Correct Answer:- Option-C

Question90:-DMSP stands for:

- A:-Distributed Mail Support Plan
- B:-Document Management System Protocol
- C:-Digital Media Services Protocol
- D:-Distributed Mail System Protocol

Correct Answer:- Option-D

Question91:-The Artificial intelligence is concerned with designing intelligent computer system that exhibits intelligent characteristics expressed by _____

- A:-Functional behavior
- B:-Human behavior
- C:-Human brain
- D:-Statistical analysis

Correct Answer:- Option-B

Question92:-In a program module such as procedure or a function the role of parameters is to

- A:-serve as module's input and output
- B:-indicate the number of variables that will be declared in the module
- C:-isolate calculations that could potentially cause errors
- D:-reassign data types to variables declared in the main program

Correct Answer:- Option-A

Question93:-Which of the following functions is performed by the compiler?

- A:-Formatting program output
- B:-Evaluating the data passed to the program modules
- C:-Connecting multiple object programs
- D:-Translating a source program into object code

Correct Answer:- Option-D

Question94:-A ____ is a set of information that is exchanged between a client and a web browser and a web server during an HTTP transaction.

- A:-infoset
- B:-clientinfo
- C:-cookies
- D:-transkie

Correct Answer:- Option-C

Question95:-Which of the following steps should be taken first in the development of a web site?

- A:-creating links for navigating the site.
- B:-drafting the text for the site.
- C:-mapping out the structure and contents of the site.
- D:-inserting image place holders.

Correct Answer:- Option-C

Question96:-PHP scripts are used in

- A:-server side scripting
- B:-command-line scripting
- C:-Client-side GUI application
- D:-All of the above

Correct Answer:- Option-D

Question97:-Which webserver is developed by Microsoft?

- A:-Apache Tomcat
- B:-Caudium

C:-Internet Information Services(IIS)

D:-WEBrick

Correct Answer:- Option-C

Question98:-Which of the following is not an ASP.NET page event?

A:-Init

B:-Load

C:-Import

D:-Disposed

Correct Answer:- Option-C

Question99:-The exact format of frame in case of synchronous transmission depends on whether transmission scheme is

A:-digital

B:-analog

C:-either character oriented or bit-oriented

D:-none of the above

Correct Answer:- Option-C

Question100:-A module which is a collection of functions and data designed to be used by another application is called

A:-Abandon

B:-DLL

C:-LCID

D:-PICS

Correct Answer:- Option-B