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B.C.A. – I (Semester – I) Examination, 2014
INTRODUCTION TO INFORMATION TECHNOLOGY (Old)

Day and Date : Wednesday, 12-11-2014

Max. Marks : 80

Time : 11.00 a.m. to 2.00 p.m.

- Instructions:** 1) Q. No. 1 and Q. No. 7 are **compulsory**.
2) Attempt **any two** questions from Q. No. 2, 3 and 4.
3) Attempt **any one** question from Q. No. 5 and 6.
4) Figures to the **right** indicate **full** marks.

1. Choose correct alternatives :

16

- 1) The _____ key will launch the start buttons.
a) Shift b) Home c) Page up d) Windows
- 2) Network components are connected to the same cable in the _____ topology.
a) star b) bus c) mesh d) none of these
- 3) The internet began with the development of
a) USENET b) ARPANET c) ETHERNET d) INTRANET
- 4) Single program processed by multiple CPU is called
a) Multiprogramming b) Multitasking
c) Multiprocessing d) None of these
- 5) 1024 bytes represent a
a) Megabyte b) Gigabyte c) Kilobyte d) All of these
- 6) The physical components of the computer is called
a) Software b) Hardware c) Package d) None of these
- 7) Multiple choice examination answer sheets can be evaluated automatically by
a) MFCR b) OMR
c) Bar Code Reader d) None of these



- 8) EBCDIC is an _____ bit code.
a) 16 b) 4 c) 8 d) 64
- 9) Which one is the largest storage device of the following ?
a) CD b) DVD c) Hard disk d) RAM
- 10) _____ is the magnetic storage device.
a) CD-ROM b) DVD c) ROM d) Tape
- 11) In a computer system, which device is functionally the opposite of a key board ?
a) Mouse b) Trackball c) Joystick d) Printer
- 12) The fifth generation computers characterized by
a) IC b) VLSI c) ULSI d) Transistor
- 13) Quantum is used in
a) Multiprogramming b) Multiprocessing
c) Multitasking d) Time sharing
- 14) Secondary memory is also known as _____ memory.
a) Temporary b) Main c) Auxiliary d) None of these
- 15) _____ accept input by allowing the user to place a fingertip directly on the screen.
a) Trackball b) Touch screen
c) Keyboard d) None of these
- 16) Machine and assembly languages are also known as _____ languages.
a) High level b) Low level c) Both a) and b) d) None of these
2. a) What is computer ? Explain characteristics and limitations of computer. **6**
b) Carry out the following conversion **6**
 i) $(110110)_2 = (?)_{10}$
 ii) $(428)_{10} = (?)_{16}$
 iii) $(101110)_2 = (?)_8$
c) Write the full form of following abbreviations used in computer terminology. **4**
 i) SSI ii) ULSI
 iii) UNIVAC iv) ENIAC



3. a) Define output device. Explain working of Inkjet printer. 6
 - b) What is memory ? List out secondary storage device. Explain any one. 6
 - c) Write note on SMPS. 4
 4. a) Define operating system. Explain the different types of operating system. 6
 - b) Discuss the machine language with their advantages and disadvantages. 6
 - c) Write application of computer in various fields. 4
 5. a) What are the types of securities for data in a network ? Describe securities at different level. 8
 - b) What is internet ? Explain various applications of internet. 8
 6. a) Draw a block diagram of computer. Explain all its functional units. 8
 - b) Discuss the identifying suitable software and precautions while shifting from manual system to computer system. 8
 7. Write short note on (**any four**) : 16
 - a) E-mail
 - b) Compiler
 - c) MICR
 - d) Firmware
 - e) Types of software.
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Seat No.	
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B.C.A. – I (Semester – II) Examination, 2014
OOP WITH C++

Day and Date : Thursday, 13-11-2014

Max. Marks : 80

Time : 11.00 a.m. to 2.00 p.m.

- Instructions:** 1) Q.No. 1 and 7 are **compulsory**.
2) Solve **any 2** questions from Q. No. 2, 3 and 4.
3) Solve **any 1** question between Q.No. 5 and 6.
4) Figures to the **right** indicate **full** marks.

1. Choose the single correct alternative :

16

- 1) Which of the following is an abstract data type ?
a) int b) double c) string d) class
- 2) Which of the following approach is adapted by C++ ?
a) Top-down b) Bottom-up
c) Right-left d) Left-right
- 3) _____ refer to the names of variables, functions, arrays, classes, etc.
a) Keywords b) Constants
c) Identifiers d) None of these
- 4) In procedure-oriented programming, all data are shared by all functions.
a) True b) False
- 5) Which of the following function/type of function cannot be overloaded ?
a) Member function b) Static function
c) Virtual function d) Both b) and c)
- 6) _____ is also known as an instance of a class.
a) Friend function b) Object
c) Member function d) Data member



- 7) A _____ function can have access to only other static members declared in the same class.
a) Virtual b) Friend c) Inline d) Static
- 8) Data items in a class must always be private.
a) True b) False
- 9) A constructor that accepts _____ parameters is called the default constructor.
a) one b) two c) no d) three
- 10) Destructor has the same name as the constructor and is preceded by
a) ! b) ? c) ~ d) \$
- 11) The mechanism of deriving a new class from an old class is called
a) operator overloading b) data abstraction
c) inheritance d) none of these
- 12) A base class is never used to create objects
a) True b) False
- 13) A class, which contains pure virtual function is called
a) nested class b) derived class
c) friend class d) abstract class
- 14) A _____ is a sequence of bytes and serves as a source or destination for an I/O data.
a) stream b) object c) file d) none of these
- 15) To open an existing file for updating without losing its original contents, we need to open it in _____ mode.
a) append b) write c) binary d) none of these
- 16) We can design our own manipulators for certain special purposes.
a) True b) False
2. a) What is object-oriented programming ? How is it different from the procedure-oriented programming ? **6**
- b) Explain reference variable with suitable example. **6**
- c) What is function prototyping ? **4**



- 3. a) How does C++ structure differ from C++ class ? Explain with example. **6**
 - b) Explain constructor overloading with example. **6**
 - c) What is operator overloading ? Explain unary operator overloading with example. **4**
 - 4. Write short notes on the following : **16**
 - 1) Pure virtual function
 - 2) This pointer
 - 3) Manipulators
 - 4) Command line arguments.
 - 5. a) What are the different forms of inheritance ? Explain with example. **8**
 - b) Define a class string. Use overloaded = = operator to compare two strings. **8**
 - 6. a) Explain parameterized constructors with suitable example. **8**
 - b) Explain array of objects with suitable example. **8**
 - 7. a) What is file ? Explain different file opening modes. **8**
 - b) What is friend function ? Explain with suitable example. **8**
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Seat No.	
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B.C.A. – I (Semester – II) Examination, 2014
DEVELOPMENT OF HUMAN SKILLS

Day and Date : Thursday, 20-11-2014

Total Marks : 80

Time : 11.00 a.m. to 2.00 p.m.

- Instructions :** 1) Q. 1 and Q. 7 are **compulsory**.
2) Answer **any two** from Q. 2, Q. 3, Q. 4.
3) Answer **any one** from Q. 5, Q. 6.

1. a) Fill in the blanks with correct alternatives :

8

- 1) _____ is a continuous process.
 - a) Behaviour
 - b) Value
 - c) Learning
 - d) Attitude
- 2) Oral communication is also known as _____ communication.
 - a) non-verbal
 - b) verbal
 - c) interactive
 - d) oneway
- 3) _____ is an important aspect of managing organization.
 - a) Dectatorship
 - b) Leadership
 - c) Secularism
 - d) Group behaviour
- 4) Which of the following is not type of reader ?
 - a) Motor reader
 - b) Auditory reader
 - c) Visual reader
 - d) Sensory reader
- 5) _____ is a kind of communication which helps to us to discover the self.
 - a) Value
 - b) Attitude
 - c) Behaviour
 - d) Self-discovery
- 6) _____ is an individual capacity to perform different task in job.
 - a) Attitude
 - b) Ability
 - c) Behaviour
 - d) Tendency



7) Bad part of personality can be termed as _____ of the personality.

- | | |
|-------------|----------------|
| a) Strength | b) Weakness |
| c) Threat | d) Opportunity |

8) Child is an _____

- | | |
|----------------|--------------|
| a) intelligent | b) imitative |
| c) intimate | d) none |

b) Fill in the blanks : **4**

- 1) _____ reader moves his lips and larynx while reading.
- 2) _____ is a control device to discourage and reduce annoying behaviour of others.
- 3) _____ is nothing but an ability in a person to hold back all his experiences, incidents and events in his life.
- 4) _____ skills can be cultivated and developed with some knowledge of the formal aspects and with practice.

c) Match the following : **4**

A

- 1) Body language
- 2) Group discussion
- 3) Value
- 4) Reinforcement

B

- a) Oral communication
- b) Posture
- c) Expected behaviour
- d) Truth
- e) Ability

2. Answer the following :

- a) What is meant by human skills ? Explain writing and listening skill. **6**
- b) What is meant by group discussion ? Write the helpful expression during the group discussion. **6**
- c) Stress management. **4**

3. Answer the following :

- a) Explain the concept of SWOT analysis. **6**
- b) What is meant by values ? Explain five universal values. **6**
- c) Write in brief on importance of presentation skills. **4**



4. Answer the following :
- a) What is meant by interview ? Explain the process of interview in detail. **6**
 - b) What is meant by leader ? Explain the qualities of leadership. **6**
 - c) Write a note on learning through experience. **4**
5. a) What is meant by attitudes and write the functions of attitudes ? **8**
- b) Explain the concept of basic abilities in detail. **8**
6. a) What is meant by seminar ? Write about the preparation of seminar and conducting seminar in detail. **8**
- b) Explain the concept of team role and sports mental skill. **8**
7. Write a short note (**any four**) : **16**
- a) Organizing conference
 - b) SQRRR
 - c) Body language
 - d) Extempore speech
 - e) Goal setting to overcome weakness.
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Seat No.	
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**B.C.A. – I (Semester – II) Examination, 2014
BUSINESS STATISTICS**

Day and Date : Saturday, 22-11-2014

Total Marks : 80

Time : 11.00 a.m. to 2.00 p.m.

- Instructions:** i) *Que. 1 and Que. 7 are compulsory.*
ii) *Attempt any two questions from Que. 2 to Que. 4.*
iii) *Attempt any one question from Que. 5 and Que. 6.*
iv) *Figures to the right indicate full marks.*
v) **Graph paper will be supplied on request.**
vi) **Use of simple or scientific calculator is allowed.**

1. A) Select most correct alternative.

8

- i) A variable is
a) a qualitative characteristic b) a quantitative characteristic
c) a) or b) d) none of these
- ii) From less than ogive curve we can obtain
a) Mean b) Median
c) Mode d) All of these measures
- iii) The measure of central tendency that needs to arrange the data in ascending order of its magnitude is
a) A.M. b) Mode
c) Median d) None of these
- iv) The measure of dispersion that is free from unit in which data is expressed is
a) Range b) Variance c) S.D. d) C.V.
- v) The range of Karl Pearson's coefficient of correlation is
a) 0 to 1 b) 0 to ∞ c) -1 to 1 d) $-\infty$ to ∞
- vi) Laspeyre's price index formula uses _____ as the weights.
a) Current year's quantities b) Base year's quantities
c) Base year's prices d) Current year's prices



vii) If $\sum p_0 = 230$, $\sum p_1 = 320$ for 4 commodities then price index number is

- a) 550 b) 139.13 c) 90.23 d) 71.87

viii) If $P(B) = 0.5$ and $P(A/B) = 0.6$ then $P(A \cap B) =$

- a) 0.7 b) 0.3 c) 0.1 d) None of these

B) Fill in the blanks :

4

- i) If $P(B) = 0.4$ then $P(\bar{B})$ is equal to _____
- ii) Median of the set of values 8, 11, 7, 9, 11, 12, 13, 10, 9, 10, 11, 12 is _____
- iii) If covariance between two variables X and Y is positive then the correlation coefficient between X and Y is _____
- iv) For two events A and B if $P(A \cap B) = 0$ then the events A and B are said to be _____

C) State whether the following statements are **true** or **false**.

4

- i) Probability of any event is always non negative.
- ii) Variance is a square root of standard deviation.
- iii) There is a positive correlation between price and demand.
- iv) If the price index number is 185 then it indicates there is a decrease in prices of commodities by 85% in the current year.

2. A) What is central tendency ? Define arithmetic mean and median.

8

B) Calculate C.V. for the following data :

8

X :	11	12	13	14	15	16
f :	2	4	6	6	4	2

3. A) What is a dispersion ? Define Range and S.D.

8

B) Find correlation coefficient between X and Y.

8

X :	10	15	20	25	30
Y :	8	12	16	20	24

4. A) What is correlation ? Explain types of correlation.

8

B) Calculate Median and Mode for the following data :

8

Class	:	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	:	5	12	15	20	14	10	4



5. A) A bag contains 3 black, 4 white and 3 red balls. One ball is drawn at random. Find the probability that (i) it is either black ball or white ball (ii) it is either a black ball or red ball. 8

B) Construct histogram for the following frequency distribution and hence find modal value. 8

Wages in Rs.	:	25-30	30-35	35-40	40-45	45-50	50-55	55-60
No. of Recipients	:	10	13	18	21	24	28	20

6. A) From the following data construct Laspeyre’s, Paasche’s and Fisher’s price index numbers for the year 2012. 8

Commodity	2012		2010	
	Price	Quantity	Price	Quantity
A	40	6	25	8
B	60	5	55	10
C	20	25	25	20
D	50	15	45	15

B) Find line of regression of Y on X from the following information. 8

$$n = 5 \quad \Sigma X = 15 \quad \Sigma Y = 150$$

$$\Sigma X^2 = 55 \quad \Sigma Y^2 = 5500$$

$$\Sigma XY = 540$$

7. Attempt **any four** : 16

i) Write a note on frequency distribution.

ii) State multiplication law of probability.

iii) Mean marks scored by 10 boys is 55 and that of 20 girls is 60. Calculate mean marks scored by all boys and girls together.

iv) Define population and sample.

v) Draw scatter diagram for $r = -1$ and $r = 1$.



Seat No.	
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B.C.A. – II (Semester – III) Examination, 2014
COMPUTER SCIENCE
Database Management System

Day and Date : Monday, 17-11-2014
Time : 3.00 p.m. to 6.00 p.m.

Max. Marks : 80

- Instructions :**
- 1) Q. 1 and Q. 7 are **Compulsory**.
 - 2) Attempt **any two** questions from Q. 2 to Q. 4.
 - 3) Attempt **any one** question from Q. 5 and Q. 6.
 - 4) **All** questions carry **equal** marks.

1. Choose the correct alternatives : 16
- 1) The physical storage structures or devices could be changed without affecting conceptual schema. This is known as
 - a) Physical data independence
 - b) Logical data independence
 - c) External data independence
 - d) None of the above
 - 2) A log file is a sequence of log records.
 - a) True
 - b) False
 - 3) When a transaction never progresses then we say that it is
 - a) Aborted
 - b) Starved
 - c) Shared
 - d) Locked
 - 4) The overall design of the database is known as
 - a) Instance
 - b) Schema
 - c) Snapshot
 - d) None of the above
 - 5) A superkey is a set of one or more attributes that, taken collectively, allow us to identify uniquely a tuple in the relation.
 - a) True
 - b) False



- 6) Disks and tapes are the example of
- a) Volatile storage
 - b) Non-volatile storage
 - c) Both a) and b)
 - d) None of these
- 7) The initial state of a transaction is known as
- a) Active state
 - b) Partially committed state
 - c) Failed state
 - d) Aborted state
- 8) The primary goal of a DBMS is to provide a way to store and retrieve database information that is both convenient and efficient.
- a) True
 - b) False
- 9) The process of minimizing the differences between entities by identifying their common characteristics is known as
- a) Specialization
 - b) Generalization
 - c) Multiplicity
 - d) None of the above
- 10) When we want to display records with attributes from many relation then we use
- a) SELECT operation
 - b) PROJECT operation
 - c) JOIN operation
 - d) None of the above
- 11) A schedule in which the operations from a set of concurrent transactions are interleaved is called as a
- a) Non-serial schedule
 - b) Serial schedule
 - c) Complete schedule
 - d) None of the above
- 12) Shadowing may result in
- a) Page loss
 - b) Data scattering
 - c) Page swap
 - d) None of the above
- 13) The point in the schedule where the transaction has obtained its final lock is known as
- a) Deadlock
 - b) Commit point
 - c) Lock point
 - d) None of the above
- 14) DDL stands for
- a) Data Domain Language
 - b) Data Definition Law
 - c) Data Definition Language
 - d) None of the above



- 15) The process of compiling information on an object, thereby abstracting a higher level object is known as
- a) Specialization
 - b) Generalization
 - c) Aggregation
 - d) None of the above
- 16) The process of decomposition of a table is known as
- a) Specialization
 - b) Generalization
 - c) Normalization
 - d) None of the above
2. a) Explain different functions of Database Administrator (DBA). 6
- b) Explain unary relational-algebra operators. 6
- c) Write note on shadow paging. 4
3. a) What is attribute ? Explain different types of attributes. 6
- b) Explain 3 tier architecture. 6
- c) What are the types of schedules ? 4
4. a) Explain Hierarchical Data model and Network data model. 6
- b) What is log-based recovery ? Explain different types of log record. 6
- c) Explain conflict serializability. 4
5. a) What are the limitations of traditional file system ? 8
- b) What is Indexing ? Explain methods of Indexing. 8
6. a) What is Normalization ? Explain different normal forms. 8
- b) What is transaction ? Explain ACID properties with example. 8
7. Write short notes on (**any four**) : 16
- i) Database Languages
 - ii) Deadlock Handling
 - iii) Schema and Instances
 - iv) Database user
 - v) Primary key.
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Seat No.	
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**B.C.A. (Semester – III) Examination, 2014
FINANCIAL MANAGEMENT**

Day and Date : Friday, 21-11-2014

Max. Marks : 80

Time : 3.00 p.m. to 6.00 p.m.

- Instructions:** 1) Q. No. 1 and 7 are **compulsory**.
2) Attempt **any two** questions from Q. 2 to 4.
3) Attempt **any one** question from Q. 5 and Q. 6.
4) Figures to **right** indicate **full** marks.

1. A) State **true** or **false** :

- 1) Financial Management is a profit extracting device.
- 2) Financial Management is something of which accounting is a part.
- 3) Financial planning horizon is limited to short term.
- 4) Commercial bank caters to the working capital requirements of business.
- 5) Operating and financial leverage are not inter-dependent.
- 6) Permanent working indicates the amount of minimum working capital which is required to be maintained by every business at any point time. **6**

B) Fill in the blanks (Select one option from the bracket) :

- 1) Net working capital = Current Assets – (Current liabilities/long term liabilities).
- 2) Financial planning should achieve the total (diversification/integration) of all the plans or other functions of the firm.
- 3) The objectivity of a financial plan means that it should be free from (prejudice/politics).
- 4) (Temporary/permanent) working capital is the minimum amount of current assets needed to conduct a business even during the dullest season of the year.
- 5) (Equity/preference) shareholder is the absolute owner of the company. **5**



C) Select correct alternative :

- 1) _____ assets are defined as those assets which in normal course of business are convertible into cash usually within one year.
 - a) Fixed
 - b) Current
 - c) Fictitious
 - d) None of these
- 2) Collection from debtors leads to _____ in the amount of working capital.
 - a) increase
 - b) decrease
 - c) remain constant
 - d) none of these
- 3) Financial management is the application of _____ principles to a particular financial operations.
 - a) management
 - b) administration
 - c) planning
 - d) controlling
- 4) _____ maximisation objective is better than profit maximisation.
 - a) money
 - b) asset
 - c) wealth
 - d) profit after tax
- 5) The rate of dividend payable on _____ shares is not fixed.
 - a) preference
 - b) equity
 - c) debenture
 - d) non voting shares

5

2. Write short notes (**any two**) :

- a) Preference share
- b) Equity shares
- c) Characteristics of Financial Plan.

16

3. Write short notes (**any two**) :

- a) Over capitalisation
- b) Operating and financial leverage
- c) Functions of Finance Manager.

16



4. Attempt **any two** :

- a) Combined leverage
- b) Types of financial plan
- c) Sidheshwar Engineering Company Ltd. requests you to forecast their working capital requirement for a level of activity 1,56,000 units of production.

Following information is available :

a) Particulars	Per Unit (Rs.)
Raw Materials	90
Direct Labour	40
Overheads	<u>75</u>
	205
Profit	<u>60</u>
Selling price per unit	<u>265</u>

- b) Raw materials are in stock on average one month
- Materials are in process, on average 2 weeks
- Finished goods are in stock, on average one month
- Credit allowed by suppliers one month
- Time lag in payment from Debtors 2 months
- Lag in payment of wages one month
- Lag in payment of overheads is one month

20% of the output is sold against cash. Cash in hand and at bank is expected to be Rs. 60,000. It is to be assumed that production is carried on evenly throughout the year, wages and overheads accrue similarly and a time period of 4 weeks is equivalent to a month.

16

- 5. Define Financial Management. Explain the significance of financial management. Critically evaluate the objectives of profit maximisation and wealth maximisation. **16**
- 6. Define working capital. What are the determinants of working capital. **16**
- 7. Define Financial planning. What are the objectives of financial planning ? What are the steps in financial planning ? **16**



Seat No.	
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**B.C.A. – II (Semester – IV) Examination, 2014
GUI PROGRAMMING THROUGH VB (Old)**

Day and Date : Saturday, 15-11-2014

Total Marks : 80

Time : 3.00 p.m. to 6.00 p.m.

- Instructions :** 1) Question No. 1 and Q. No. 7 are **compulsory**.
2) Attempt **any two** questions from Q. No. 2, 3, and 4.
3) Attempt **any one** question from Q. No. 5 and 6.
4) Figures to the **right** indicate **full** marks.

1. A) Choose the correct alternative :

8

- 1) _____ date format display year in full.
a) y b) yy c) yyy d) yyyy
- 2) VB supports the _____ statement which can trap run-time errors.
a) Errors b) OnError
c) Debugerror d) None of above
- 3) A _____ arrays is a group of control that share the same name.
a) dynamic b) control
c) single d) multi
- 4) A _____ control used to display text that a user can't change directly.
a) Text b) Data
c) Label d) None of above
- 5) A _____ control is used to grouping controls.
a) Frame b) Label
c) Option d) Combo
- 6) _____ function converts a string to a number.
a) Input b) Str c) Val d) None of above
- 7) _____ arrays are also called variable length arrays.
a) single b) double
c) dynamic d) multi
- 8) A combo box control combines the features of a _____ and a list box controls.
a) Text box b) Label c) Frame d) Picture

P.T.O.



- B) Fill in the blanks : 8
- 1) _____ function create string of repeating string.
 - 2) A static variable can be used at the _____ level only.
 - 3) The _____ function returns the highest integer that is less than or equal to sepcified number.
 - 4) _____ data type is similar to the integer data type.
 - 5) _____ is the only item in the toolbox that does not draw a control.
 - 6) A _____ control can execute code at regular intervals.
 - 7) _____ structure allow you to execute one or more lines of repetitively.
 - 8) DAO stands for _____
2. a) What is GUI ? Explain environment of VB. 8
- b) What is an array ? Explain control array with suitable example. 8
3. a) What is function ? Explain data type conversion function with suitable examples. 8
- b) What is looping ? Explain looping statements in VB with examples. 8
4. a) What is debugging ? Explain debugging tools in VB. 8
- b) Write the difference between msgbox and inputbox function. 8
5. a) Write a program to print following series, 10, 22, 36, 52. 4
- b) Write a program to input any 4 digits number and count and print only odd digits. 4
- c) Write a program to input any one value and find it is prime or not. 4
- d) Write a program to print the following output 4
- ```

1 1 1 1 1
2 2 2 2
3 3 3
4 4
5

```
6. a) Write a VB programm to search and print given roll number in the table using ADO connection. 8
- b) What is menu ? Explain the menu editor window, with the suitable diagram. 8
7. Write short notes on **any four** : 16
- 1) List box
  - 2) OLE control
  - 3) File list box
  - 4) Data control
  - 5) Date functions.
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| Seat<br>No. |  |
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**B.C.A. – II (Semester – IV) Examination, 2014  
COMPUTER SCIENCE (Old)  
Web Technologies**

Day and Date : Saturday, 22-11-2014

Max. Marks : 80

Time : 3.00 p.m. to 6.00 p.m.

- Instructions :** 1) Q. 1 and Q. 7 are **compulsory**.  
2) Solve **any two** questions from Q. 2 to Q. 4.  
3) Solve **any one** question from Q. 5 and Q. 6.

1. A) Choose correct alternatives :

8

- 1) \_\_\_\_\_ attribute changes the default color of hyperlink.  
a) Link                      b) Alink                      c) Vlink                      d) Color
- 2) The maximum value of size attribute of <font> tag is  
a) 3                              b) 5                              c) 7                              d) 4
- 3) \_\_\_\_\_ does not allow data validation.  
a) HTML                              b) Javascript  
c) Vbscript                              d) None of these
- 4) \_\_\_\_\_ tag is used to divide portation of image in image map.  
a) <map>                              b) <area>  
c) Both a) and b)                              d) None of these
- 5) \_\_\_\_\_ are actions that are triggered when user does something.  
a) Script                              b) Event                              c) Action                              d) Reaction
- 6) ParseInt ("12.5") returns the value  
a) 13                              b) 12.5                              c) 12                              d) 13.5
- 7) Do until loop is terminated with  
a) dowhile                              c) braces                              c) wend                              d) loop
- 8) \_\_\_\_\_ constant is used in ASP to indicate a variable contains no valid data.  
a) Null                              b) Nothing                              c) Empty                              d) None



- B) State whether **true** or **false**. 4
- 1) The Vlink is attribute of body tag.
  - 2) Use map is valid attribute for <img>.
  - 3) Float is valid data type in Javascript.
  - 4) In Vbscript, function name is case sensitive.
- C) Fill in the blanks. 4
- 1) \_\_\_\_\_ is used to create static pages.
  - 2) \_\_\_\_\_ tag gives additional information about document.
  - 3) SGML stands for \_\_\_\_\_
  - 4) \_\_\_\_\_ object is used to link in Vbscript.
2. A) Explain general structure of HTML document. 6
- B) Explain looping statements in Javascript. 6
- C) Explain following tags. 4
- 1) <strike>
  - 2) <big>
  - 3) <ins>
  - 4) <del>
3. A) Explain client-server model in detail. 6
- B) Explain built in functions in Vbscript. 6
- C) Explain ISS and ESS of CSS with example. 4
4. A) Explain message box in Javascript. 6
- B) Write a program to find out given number is perfect or not in Javascript. 6
- C) Explain lists in HTML. 4
5. A) What is hyperlink ? Explain hyper-link with example. 8
- B) Explain event handling in Javascript. 8
6. A) Explain Vbscript procedure with example. 8
- B) Explain POP and IMAP protocol. 8
7. Write a note on **(any 4)** : 16
- 1) Get and post method
  - 2) Architecture of World Wide Web
  - 3) <table> tag
  - 4) Traces and ISP
  - 5) Layers and div.
-



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**B.C.A. – II (Semester – IV) (New) Examination, 2014  
RDBMS WITH ORACLE**

Day and Date : Saturday, 15-11-2014

Max. Marks : 80

Time : 3.00 p.m. to 6.00 p.m.

- Instructions :** 1) Q.1 and Q. 7 are **compulsory**.  
2) Solve **any two** question from Q.2, Q.3 and Q.4.  
3) Solve **any one** question from Q.5 and Q. 6.  
4) Figures to the **right** indicate **full** marks.

1. Choose correct alternatives :

16

- 1) Joining a table to itself is called as equi join.  
a) True                                          b) False
- 2) RDBMS stands for  
a) Record Data System  
b) Relational Database Management System  
c) Relational Data Model  
d) All of above
- 3) All loop statements must end with an \_\_\_\_\_ statement.  
a) end loop                  b) end if                  c) else                  d) none of these
- 4) The query associated with an cursor is executed in  
a) Declare phase                                  b) Open phase  
c) Fetch phase                                          d) Close phase
- 5) A subquery is also termed as  
a) nested sub query                                  b) nested query  
c) sub query                                          d) none of these
- 6) ROWID is a datatype.  
a) True                                                  b) False



- 7) The having clause can only contain aggregate function
  - a) True
  - b) False
- 8) The default parameter type in stored
  - a) IN
  - b) OUT
  - c) INOUT
  - d) There is no default type
- 9) An Oracle PL/SQL block is always
  - a) Interpreted
  - b) Compiled
  - c) Interpreted and then compiled
  - d) Either a) or b)
- 10) The size of DATE data type in oracle is
  - a) 8 bytes
  - b) 4 bytes
  - c) 10 bytes
  - d) 7 bytes
- 11) \_\_\_\_\_ is a set of SQL commands used to create, modify and delete data base structure but not data.
  - a) DDL
  - b) DML
  - c) DCL
  - d) DQL
- 12) \_\_\_\_\_ function take many rows as input and return single value.
  - a) Date
  - b) Math
  - c) Aggregate
  - d) None
- 13) Alter table is \_\_\_\_\_ command.
  - a) DDL
  - b) DCL
  - c) DML
  - d) All of the above
- 14) Commit can be faired upto savepoint.
  - a) True
  - b) False
- 15) Foreign key does not allow duplicate value.
  - a) True
  - b) False
- 16) \_\_\_\_\_ is more popular than data warehouse.
  - a) Data
  - b) Database
  - c) Datamart
  - d) None of these





- 2. a) What is cursor and explain its types with example ? 8
    - b) Write a PL/SQL block to test given number is armstrong or not by using procedure. 8
  - 3. a) Explain difference between DBMS and RDBMS. 8
    - b) What is join and explain various types of join ? 8
  - 4. a) Define triggers. Write the syntax of triggers. 4
    - b) Explain the features of SQL. 6
    - c) Write down the package and its example. 6
  - 5. a) Explain looping statement in PL/SQL with example. 4
    - b) Explain the term 'nesting sub queries'. 6
    - c) Explain any two aggregate function in SQL with example. 6
  - 6. a) Explain order by, group by clause with example. 4
    - b) Explain the different types of constraints with example. 6
    - c) Explain the comparison between SQL and PL/SQL. 6
  - 7. Write short note on **any four** : 16
    - a) Cluster
    - b) Indexes
    - c) Views
    - d) Components of SQL
    - e) Exception handling.
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**B.C.A. – II (Semester – IV) (New) Examination, 2014**  
**COMPUTER SCIENCE**  
**Web Technology – II**

Day and Date : Thursday, 20-11-2014

Total Marks : 80

Time : 3.00 p.m. to 6.00 p.m.

- Instructions :** 1) Q. 1 and Q. 7 are **compulsory**.  
2) Attempt **any two** questions from Q. 2 to Q. 4.  
3) Attempt **any one** question from Q. 5 and Q. 6.  
4) Figures to the **right** indicate **full** marks.

1. Choose the correct alternative :

16

- 1) Which of the following function is used to generate a random integer ?
  - a) rand
  - b) random
  - c) rnd
  - d) none of these
- 2) The `$a == $b` is
  - a) true if \$a is equal to \$b
  - b) true if \$a is equal to \$b and they are of the same type
  - c) both a) and b)
  - d) none of these
- 3) \_\_\_\_\_ function finds the first occurrence of a string.
  - a) str
  - b) strstr
  - c) strpos
  - d) strchr
- 4) In array \_\_\_\_\_ function is used to counts the elements in an array.
  - a) range
  - b) total
  - c) count
  - d) max
- 5) You can call base class methods by appending \_\_\_\_\_ in front of the base class method's name.
  - a) parent ::
  - b) base ::
  - c) super ::
  - d) higher ::



- 6) PHP is a widely used \_\_\_\_\_ scripting language.
- a) Proprietary general purpose
  - b) Open source special purpose
  - c) Proprietary special purpose
  - d) Open source general purpose
- 7) Which of the following method sends input to a script via a URL ?
- a) Get
  - b) Post
  - c) Both a) and b)
  - d) None of these
- 8) \_\_\_\_\_ tag is valid to begin and end a PHP block code.
- a) `< % ... % >`
  - b) `< ? ... ? >`
  - c) `< ! ... ! >`
  - d) `< ? php ... ? >`
- 9) The \_\_\_\_\_ function checks if the “end of file” has been reached.
- a) `f-eof ()`
  - b) `f-of ()`
  - c) `feofs ()`
  - d) `feof ()`
- 10) PHP runs on different platforms.
- a) True
  - b) False
- 11) Use the \_\_\_\_\_ to delete the data inside the table but not the table itself.
- a) drop table
  - b) delete table
  - c) truncate table
  - d) remove table
- 12) Include files must have the file extension “inc”.
- a) True
  - b) False
- 13) What is the correct way to connect to a MySQL database ?
- a) `dbopen (“localhost”);`
  - b) `mysql_open (“localhost”);`
  - c) `mysql_connect (“localhost”);`
  - d) `open (“localhost”);`
- 14) Which of the following is used to end a PHP statement ?
- a) `</PHP>`
  - b) New line
  - c) `< ? PHP>`
  - d) ;
- 15) PHP can run on Internet Information Server (IIS)
- a) True
  - b) False
- 16) Which one of the following function is used to start a session ?
- a) `start_session`
  - b) `session_start`
  - c) `session_begin`
  - d) `begin_session`



- 2. a) What is function ? Explain its types. 6
    - b) Give the advantages of object oriented programming. 6
    - c) Write note on PHP variables. 4
  
  - 3. a) Explain the concept of merging arrays and sorting an associative arrays. 6
    - b) What is cookie ? Explain with suitable example. 6
    - c) Why sessions are more secure than cookies ? 4
  
  - 4. a) Write a program to overload the constructor. 6
    - b) Explain super global variables. 6
    - c) Write a short note on form control properties. 4
  
  - 5. a) What is inheritance ? Give the advantages of inheritance. Explain interface with example. 8
    - b) Explain different file handling functions with example. 8
  
  - 6. a) How to make database connection and perform different operations on database ? 8
    - b) What is exception and explain custom exception with suitable example. 8
  
  - 7. Write short notes on (**any four**) : 16
    - i) die () and exit ()
    - ii) Advantages of MySQL
    - iii) Use of session variable
    - iv) Function by value and reference parameters
    - v) Client-side validation.
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**B.C.A. – III (Semester – V) Examination, 2014  
COMPUTER SCIENCE (Old)  
Client Server Environment (Using VB and MS SQL)**

Day and Date : Wednesday, 12-11-2014  
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- Instructions :**
- 1) Q. 1 and Q. 7 are **compulsory**.
  - 2) Attempt **any two** questions from Q. No. 2, 3 and 4.
  - 3) Attempt **any one** question between Q. 5 and Q. 6.
  - 4) Figures to the **right** indicate **full marks**.

1. Choose the correct alternative :

16

- 1) Linked server queries is also known \_\_\_\_\_ queries.
  - a) Distributed
  - b) Connected
  - c) Linkage
  - d) None of these
- 2) \_\_\_\_\_ constraint can be used to assign a constant values to a column and the user not need to insert values for such a column.
  - a) IN
  - b) BETWEEN
  - c) DEFAULT
  - d) None of these
- 3) \_\_\_\_\_ TRANSACTION statement is used to tell SQL server to start a new transaction.
  - a) SAVE
  - b) BEGIN
  - c) ROLLBACK
  - d) None of these
- 4) Which one of the following sorts rows in SQL ?
  - a) SORT BY
  - b) ALIGN BY
  - c) ORDER BY
  - d) GROUP BY
- 5) DAO stands for
  - a) Data Access Object
  - b) Duplicate Data Object
  - c) Data Acquire Object
  - d) Data Auto Object
- 6) \_\_\_\_\_ function returns the current system date and time.
  - a) DATE
  - b) GETDATE
  - c) DATEDIFF
  - d) DATEADD





- 3. A) Explain various advanced features of T-SQL. 6
    - B) Explain the client/server architecture in details. 6
    - C) What is Rollup in Grouping ? 4
  - 4. A) Explain the table joins in details. 6
    - B) Explain Row set functions. 6
    - C) Which wild cards are used in SQL Server ? 4
  - 5. A) What is database ? Explain its all parts. 8
    - B) Consider the following table and perform the given operation on the table : 8

Table Name : Employee  
emp\_no, first\_name, last\_name, city.  
joining\_date, salary.

      - i) Add five records in the given table.
      - ii) Find out the employee whose salary is less than Rs. 8,000/-
      - iii) Find out employee names, who live in "Pune" city.
      - iv) Find out employee, whose last name starts with 'PA'.
      - v) Find out all employee who do not live in "Latur" city.
  - 6. A) What is the concept of ADO, DAO and RDO ? Give the steps of ADO connectivity. 8
    - B) What is trigger ? Explain with suitable example. 8
  - 7. Write short notes on (**any four**) : 16
    - 1) Operators
    - 2) Action Query
    - 3) Full Text Searching
    - 4) View
    - 5) String Functions.
-



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**B.C.A. – III (Semester – V) Examination, 2014**  
**COMPUTER SCIENCE (Old)**  
**Linux and Shell Programming**

Day and Date : Monday, 17-11-2014

Max. Marks : 80

Time : 11.00 a.m. to 2.00 p.m.

- Instructions:** 1) Q. 1 and Q. 7 are **compulsory**.  
2) Attempt **any two** questions from Q. 2 to Q. 4.  
3) Attempt **any one** question from Q. 5 and Q. 6.  
4) **All** questions carry **equal** marks.

1. Choose the correct alternative :

16

- 1) The symbol used to represent pipe-lining is  
a) &                      b) @                      c) |                      d) <<
- 2) The command to list user's processes is  
a) more                      b) cat                      c) kill                      d) PS
- 3) Which of the following is not a communication command ?  
a) write                      b) mail                      c) mesg                      d) grep
- 4) Which command is used to sort the lines of data in a file in reverse order ?  
a) sort-r                      b) sort                      c) rev                      d) both a and b
- 5) Command \_\_\_\_\_ compares two files byte by byte and displays the first mismatch.  
a) comm                      b) cmp                      c) diff                      d) cmap
- 6) The permission -rwxr - - - w - represented in octal expression will be  
a) 785                      b) 642                      c) 742                      d) 744
- 7) How do you submit a process to run at background ?  
a) add & (and)                      b) add \$                      c) add !                      d) add \*





- 8) What is the standard graphics environment in linux called ?  
a) X-Window    b) KDE    c) GNOME    d) All of these
- 9) Head command is used to display last lines from a file.  
a) False    b) True
- 10) A hidden file in Linux begins \_\_\_\_\_ character.  
a) \*    b) \$    c) • (dot)    d) ?
- 11) Linux was developed in  
a) 1991    b) 1981    c) 1969    d) 1972
- 12) The command which positions the cursor on line 35 is  
a) 35 dd    b) 35 G    c) \$ 35    d) 35 up
- 13) In Grep \_\_\_\_\_ option is used to display line numbers along with lines.  
a) -n    b) -v    c) -1    d) -c
- 14) Which of the following command is used unmount a file system ?  
a) Demount    b) Unmount    c) Umount    d) Mount-d
- 15) Which command is used to remove directory in Linux ?  
a) rmdir    b) rm-r    c) only b    d) both a and b
- 16) What is a shell in Linux ?  
a) the login screen  
b) a program through which users can issue commands to Linux  
c) window management system  
d) none of these
2. a) What is shell script ? Give its advantages. **6**  
b) List the basic Linux command for managing directories. Explain it. **6**  
c) Write a note on shut-down command. **4**
3. a) How to create tar archive in Linux ? **6**  
b) Explain a commands for comparing a files. **6**  
c) Explain the following user management command. **4**  
a) useradd  
b) userdel



- 4. a) What are meta-characters ? Explain the purpose of following metacharacters. **6**
    - i) ?                      ii) \*                      iii) [ ]                      iv) [!]
  - b) What are commands used for navigation in vi editor ? **6**
  - c) Write a short note on NIS. **4**
  - 5. a) How can you run a job in back-ground and how to get job back-ground to foreground ? Explain it with its advantages. **8**
  - b) Explain chmod command with suitable example. **8**
  - 6. a) What is the output of following command in detail ? **8**
    - 1) Cat emp|cut – d “1” – F3 | WC – 1
    - 2) Cut – d “1” – F4 emp | sort | Uniq – d
    - 3) Sort – t “1” – K 5.1 emp > bca
    - 4) Cat emp | head – n3 | sort – t “1”– r – K2
  - b) Describe file structure of Linux system. **8**
  - 7. Write short note on (**any four**) : **16**
    - 1) Find command
    - 2) Wine and willow
    - 3) Difference between hard link and soft link
    - 4) Shell variables
    - 5) LILO.
-



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**B.C.A. – III (Semester – V) Examination, 2014  
MANAGEMENT INFORMATION SYSTEM (Old)**

Day and Date : Friday, 21-11-2014

Total Marks : 80

Time : 11.00 a.m. to 2.00 p.m.

- Instructions :** 1) Figures to the **right** indicate **full** marks.  
2) Q. No. 1 and Q. No. 7 are **compulsory**.  
3) Solve **any two** questions from Q. No. 2 to 4.  
4) Solve **any one** question from Q. 5 and 6.

1. A) Choose the correct alternatives :

8

- i) DML stands for
  - 1) Data Market Language                      2) Disk Management Language
  - 3) Data Manipulation Language            4) Data Management Language
- ii) MKIS stands for
  - 1) Market Incharge System                  2) Major Information System
  - 3) Management Information System       4) Marketing Information System
- iii) Knowledge based system supports
  - 1) Knowledge of creation                    2) Knowledge of support
  - 3) Knowledge of dissemination            4) All of the above
- iv) Which of the system uses multi dimensional data analysis ?
  - 1) DSS                      2) MIS                      3) ESS                      4) All of the above
- v) The quality of your \_\_\_\_\_ is a large part of the quality of your information system.
  - 1) Computer            2) Thinking            3) Time                    4) Challenges
- vi) Which of the following is not a characteristic of good information ?
  - 1) Inter changeability                      2) Relevance
  - 3) Cost effectiveness                        4) Timeliness
- vii) Assembling a product, identifying customers and hiring employees are
  - 1) Transactions                                2) Phases
  - 3) Business Processes                        4) Business functions
- viii) \_\_\_\_\_ is the one steps in management process.
  - 1) Planning                      2) Graphic                      3) Feedback                      4) Communication



- B) Answer **one** sentence : **8**
- 1) What is meant by Hardware ?
  - 2) How many types of level ?
  - 3) Long form of GDSS.
  - 4) Long form of CRM.
  - 5) Example of MIS in service sector.
  - 6) Example of MIS in manufacturing sector.
  - 7) What is meant by decision ?
  - 8) What is meant by life cycle ?
2. a) Give the definition and characteristics of MIS. **6**
- b) What are the components of Information System ? Explain each of them. **6**
- c) Write short notes on security and control. **4**
3. a) What is meant by organisation ? Explain features of organisation. **6**
- b) Explain the types of MIS. **6**
- c) Write notes on limitations of MIS. **4**
4. a) Write down data fields in Banking service sector. **6**
- b) Write down advantage of DBMS. **6**
- c) Data mining and Data warehousing. **4**
5. a) Describe MIS of Marketing Management. **8**
- b) Explain the application of MIS in Hotel. **8**
6. a) Explain the types of Information System. **8**
- b) Write down the management levels and their information needs. **8**
7. Write short notes (**any 4**) : **16**
- a) DSS models
  - b) System vulnerability
  - c) Role of manager in organisation
  - d) MIS in Marketing Sector
  - e) Information Technology in SCM.
-







- |                                                            |    |
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| 4. a) Explain the need of security control in detail.      | 8  |
| b) Explain different backup strategy in detail.            | 8  |
| 5. a) Explain different authentication protocol in detail. | 8  |
| b) What is backup ? Explain different types of backup.     | 8  |
| 6. a) Explain authentication and authorisation in detail.  | 8  |
| b) Explain different application areas of internet.        | 8  |
| 7. Write a note on :                                       | 16 |
| 1) Security aspect                                         |    |
| 2) Copy right                                              |    |
| 3) Cyber crime                                             |    |
| 4) Logical security.                                       |    |
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**B.C.A. – III (Semester – VI) Examination, 2014  
BUSINESS DATA PROCESSING, ERP AND BPR**

Day and Date : Thursday, 20-11-2014

Total Marks : 80

Time : 11.00 a.m. to 2.00 p.m.

- Instructions :** 1) *Q. 1 and Q. 7 compulsory.*  
2) Solve **any two** questions from Q. 2, Q. 3 and Q. 4.  
3) Solve **any one** question from Q. 5 and Q. 6.  
4) Figures to the **right** indicate **full** marks.

1. A) Choose correct alternatives :

8

- i) SAP AG is founded in  
a) 1972                      b) 1970                      c) 1969                      d) 1975
- ii) \_\_\_\_\_ eliminates existing job and create one.  
a) ERP system                      b) Legacy system  
c) Software                      d) Manual work
- iii) \_\_\_\_\_ is the head in ERP implementation team.  
a) Project management                      b) Executive committee  
c) Work team                      d) Technical support team
- iv) The heart of data warehouse is its \_\_\_\_\_ where the bulk of data resides.  
a) current data      b) raw data                      c) new data                      d) reports
- v) The \_\_\_\_\_ approach emphasizes the human element of necessary change within organizations.  
a) OLAP                      b) Data mining                      c) Data warehousing      d) BPR
- vi) SCM stands for  
a) Supply Change Management                      b) Supply Chain Management  
c) Service Chain Management                      d) Server Change Management
- vii) People soft was established in  
a) 1990                      b) 1987                      c) 1988                      d) 1989
- viii) The reason for failure for implementing BPR is  
a) no plan                      b) improper implementation  
c) cost                      d) training

P.T.O.





- B) Answer **one** sentence : **8**
- 1) Long form of OLAP.
  - 2) Long form of MRP – II.
  - 3) What is meant by market ?
  - 4) What is meant by module ?
  - 5) Define data.
  - 6) What is meant by life cycle ?
  - 7) How many phases in ERP implementation ?
  - 8) Define quality.
2. a) Why is pre-evaluation screening required ? Explain. **6**
- b) Why do many ERP implementation fail ? **6**
- c) How does data warehousing improve the efficiency of ERP system ? **4**
3. a) What is data mining and give its advantages. **6**
- b) Explain baan company in detail. **6**
- c) Short notes on global market share. **4**
4. a) Explain oracle corporation in detail. **6**
- b) What is process of ERP implementation ? **6**
- c) Short notes on Enterprises. **4**
5. a) Write down evolution of ERP implementation. **8**
- b) Explain the benefits of ERP. **8**
6. a) Explain in brief careers in ERP. **8**
- b) Explain different phases of the ERP implementation life cycle. **8**
7. Write short notes on (**any 4**) : **16**
- a) JD Edwords
  - b) Limitation of ERP
  - c) Data mining
  - d) Human Resource Module
  - e) Reengineering.
-





VIII) The Environment (Protection) Act was passed by Govt. of India in the year

- \_\_\_\_\_
- A) 1986                      B) 1976                      C) 2006                      D) 1996

IX) Marine life is in danger due to \_\_\_\_\_ pollution.

- A) Air                                              B) Noise  
C) Land                                              D) Water

X) In world population India stand \_\_\_\_\_ position.

- A) Second                                              B) First  
C) Fourth                                              D) Third

2. Write short answers (**any four** out of six) : **8**

- a) Food chains.
- b) What is natural resources ?
- c) Define biodiversity.
- d) What is drought ?
- e) What is ecosystem ?
- f) Define pollution.

3. Write short notes (**any four** out of six) : **12**

- a) Scope of environmental studies.
- b) Problems of dam.
- c) Function of ecosystem.
- d) India as a Mega-Diversity Nation.
- e) Causes of water pollution.
- f) Causes of population growth.

4. a) What is Air Pollution ? Explain the causes and effects of it. **10**

OR

b) Describe Urban problems related to energy and suggest remedies on it.

5. What is climate change ? Explain its causes and effects. **10**



मराठी रूपांतर

सूचना : १) सर्व प्रश्न अनिवार्य आहेत.

२) उजवीकडील अंक प्रश्नाचे पूर्ण गुण दर्शवितात.

१. बहुपर्यायी प्रश्न :

१०

I) परिसंस्था हा शब्द सर्व प्रथम \_\_\_\_\_ यांनी उपयोगात आणला.

अ) इ. पी. ओडम

ब) रॅचेल कर्सन

क) अर्थर टॅन्सले

ड) अर्थर स्टॅनले

II) \_\_\_\_\_ या वर्षी भारतात हवा प्रदूषण प्रतिबंध आणि नियंत्रण कायदा अस्तित्वात आला.

अ) १९७१

ब) १९८१

क) १९९१

ड) २००१

III) परिसंस्थे मध्ये \_\_\_\_\_ हा विघटक आहे.

अ) बाघ

ब) सूक्ष्मजीव

क) सिंह

ड) कुत्रा

IV) कोणत्याही देशासाठी \_\_\_\_\_ टक्के जमीन वनाच्छादित असणे आवश्यक आहे.

अ) १३%

ब) २३%

क) ३३%

ड) ४३%

V) उर्जेचा प्राथमिक स्रोत \_\_\_\_\_ हा आहे.

अ) वारा

ब) सूर्य

क) सागरी लाटा

ड) जलविद्युत

VI) उत्तरप्रदेशातील चिपको आंदोलनाचे \_\_\_\_\_ हे प्रणेते आहेत.

अ) मोहन धारिया

ब) मेधा पाटकर

क) सुंदरलाल बहुगुणा

ड) बाबा आमटे

VII) भारतातील \_\_\_\_\_ हा प्रदेश जैवविविधतेने समृद्ध आहे.

अ) पूर्वहिमालय - पश्चिम घाट

ब) पश्चिम हिमालय - अरवली

क) अजिंठा - अरवली

ड) पूर्वघाट-कोरोमंडळ

VIII) भारत सरकारने \_\_\_\_\_ या वर्षी पर्यावरण प्रतिबंध कायदा पास केला.

अ) १९८६

ब) १९७६

क) २००६

ड) १९९६



IX) \_\_\_\_\_ या प्रदूषणामुळे सागरीजीव धोक्यात येतात.

अ) हवा                      ब) ध्वनी                      क) भूमी                      ड) जल

X) जागतिक लोकसंख्येत भारताचा \_\_\_\_\_ क्रमांक लागतो.

अ) दुसरा                      ब) पहिला                      क) चौथा                      ड) तिसरा

२. थोडक्यात उत्तरे लिहा (कोणतेही चार) :

८

अ) अन्न साखली.

ब) नैसर्गिक संसाधने म्हणजे काय ?

क) जैवविविधतेची व्याख्या.

ड) अवर्षण म्हणजे काय ?

इ) परिसंख्या म्हणजे काय ?

फ) प्रदूषणाची व्याख्या.

३. टीपा लिहा (कोणतेही चार) :

१२

अ) पर्यावरण अभ्यासाची व्याप्ती.

ब) धरणाची समस्या.

क) परिसंस्थेचे कार्य.

ड) भारत एक जैवविविधता समृद्ध देश.

इ) जल प्रदूषणाची कारणे.

फ) लोकसंख्या वाढीची कारणे.

४. अ) हवा प्रदूषण म्हणजे काय ? त्याची कारणे परिणाम स्पष्ट करा.

१०

किंवा

ब) नागरी भागातील उर्जा समस्याचे वर्णन करून त्यावरील उपाय सूचवा.

५. वातावरणातील बदल म्हणजे काय ? त्याची कारणे व परिणाम स्पष्ट करा.

१०



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**B.C.A. – I (Sem. – I) Examination, 2014  
(CGPA Pattern)  
INTRODUCTION TO INFORMATION TECHNOLOGY**

Day and Date : Wednesday, 12-11-2014  
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 70

- N. B. :** 1) Q. 1 and Q. 7 are **compulsory**.  
2) Attempt **any two** questions from Q. 2, Q. 3 and Q. 4.  
3) Attempt **any one** question from Q. 5 and Q. 6.

1. a) Select the correct alternatives :

7

- 1) The earliest calculating device are \_\_\_\_\_
  - a) Abacus
  - b) Clock
  - c) Difference engine
  - d) None of these
- 2) The basic operations performed by a computers are \_\_\_\_\_
  - a) Arithmetic operations
  - b) Logical operations
  - c) Storage and retrieve
  - d) All of the above
- 3) A byte consists of \_\_\_\_\_ bits.
  - a) 2
  - b) 4
  - c) 8
  - d) 16
- 4) Data (information) stored in computers called as \_\_\_\_\_
  - a) Files
  - b) Directories
  - c) Floppies
  - d) CD
- 5) \_\_\_\_\_ is a magnetic storage device.
  - a) Tape
  - b) CD-ROM
  - c) DVD
  - d) None of these
- 6) \_\_\_\_\_ is the picking device.
  - a) Touch Screen
  - b) Light Pen
  - c) Glid Pad
  - d) MICR
- 7) \_\_\_\_\_ is an impact type of printer most commonly used in offices.
  - a) Inkjet printer
  - b) Dot matrix printer
  - c) Laser printer
  - d) None of these



- b) Fill in the blanks. 7
- 1) In 1821, \_\_\_\_\_ who developed the difference engine.
  - 2) ENIAC stands for \_\_\_\_\_
  - 3) CPU is the \_\_\_\_\_ of the computer.
  - 4) The language that the computer can understand and execute is called \_\_\_\_\_
  - 5) Quantum is used in \_\_\_\_\_ system.
  - 6) Operating system acts as an \_\_\_\_\_ between user and hardware.
  - 7) In \_\_\_\_\_ two way communication can take place simultaneously.
2. Write answer of the following questions (**any two**) : 14
- a) What is computer ? Explain types of computer according to size.
  - b) What is primary memory ? Explain its various types of memory.
  - c) Define the computer generation. Explain the third generation of computer.
3. Write answer of the following questions (**any two**) : 14
- a) Draw the block diagram of computer ? Explain all units of computer.
  - b) What is printer ? Explain the printing mechanism of dot matrix printer.
  - c) Define scanner. What are two types of scanner ?
4. Write answer of the following questions (**any two**) : 14
- a) Define operating system. Explain different functions of operating system.
  - b) Solve the following :
    - i)  $(100101)_2$  to  $(?)_{10}$
    - ii)  $(60)_{10}$  to  $( )_2$
    - iii)  $(1A2.3D)_{16}$  to  $( )_{10}$ .
  - c) What is input devices ? List the different input devices. Explain keyboard.
5. A) What is computer network ? Explain different types of computer network. 7  
B) What are the computer viruses ? Explain the characteristics of viruses. 7
6. A) Define assembly language. Explain advantages and disadvantages of assembly language. 7  
B) Discuss the factors which should consider while purchasing the computer. 7
7. Write short note on (**any two**) : 14
- a) BCD and ASCII
  - b) Network topology
  - c) Compiler and interpreter.
-









4. A) If  $A = \{a, b, c, d, e\}$ ,  $B = \{b, c, e, f, g, h\}$  and  $C = \{a, b, f, g, h, i, j\}$  then verify that  $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$ . 6
- B) Let  $A = \{1, 2, 3, 4\}$ . Let  $R$  be the relation defined on  $A$  by,  $aRb$  if and only if  $a$  divides  $b$ , then write relation  $R$  and matrix of relation  $R$ . Also draw digraph of relation  $R$ . 5
- C) Determine whether the following statement is tautology or contradiction or neither  $[(p \rightarrow \sim q) \rightarrow (\sim p \vee q)] \leftrightarrow [(p \wedge q) \rightarrow \sim p]$ . 5
5. A) Translate the following argument into symbolic form and test the validity, by using truth table.  
"If we study hard then we will pass B.C.A. with good marks. Discrete mathematics is easy if and only if we study hard. Discrete mathematics is not easy. Hence either discrete mathematics is easy or He pass B.C.A. with good marks." 8
- B) Find g.c.d. of 1122 and 493 using Euclidean algorithm. And express it in the form,  $1122m + 493n$ , where  $m, n \in \mathbb{Z}$ . 8
6. A) Find transitive closure of relation  $R$  given by  $R = \{(4, 4), (4, 5), (4, 7), (5, 5), (5, 6), (6, 7), (6, 6), (7, 4)\}$  defined on the set  $A = \{4, 5, 6, 7\}$ , by using Warshall's algorithm. 8
- B) How many integers between 1 to 1000, which are divisible either by 2 or by 5 or 7. Hence find the number of integers between 1 to 1000 which are neither divisible by 2 nor by 5 nor by 7. 8
7. Attempt **any four** of the following : 16
- 1) Let  $A = \{p, q, r, s\}$  and  $B = \{1, 2, 3\}$ . Find  $A \times B$  and  $B \times A$ . Is  $A \times B = B \times A$  ?
- 2) Let  $P = \{a, b, c, d, e, f, g\}$ ,  $Q = \{b, c, e, g, h, i, j\}$  then write the following sets  $P \cap Q$ ,  $P - Q$ ,  $P \oplus Q$  and  $Q - P$ .
- 3) Find the truth table for the compound statement  $[(p \leftrightarrow \sim q) \vee (\sim p \leftrightarrow q)]$ . Also write your comment.
- 4) If  $a|b$  and  $a|c$  then prove that  $a|(bx + cy)$  where  $a, b, c, x, y \in \mathbb{Z}$ .
- 5) Find the remainder when  $4^{32}$  is divided by 7, by using Fermat's theorem.
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**B.C.A. – I (Semester – II) Examination, 2014  
COMPUTER SCIENCE  
Web Technology**

Day and Date : Saturday, 15-11-2014  
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- Instructions :** 1) Q. 1 and Q. 7 are **compulsory**.  
2) Attempt **any two** questions from 2 to 4.  
3) Attempt **any one** question from 5 to 6.  
4) **All** question carry **equal** marks.

1. A) Choose correct alternatives :

8

- 1) \_\_\_\_\_ tag is used to create bulleted list.  
a) < ul >                      b) < ol >                      c) < menu >                      d) < dl >
- 2) \_\_\_\_\_ tag is used to define many form fields.  
a) < input >                      b) < option >                      c) < form >                      d) none
- 3) The default color of horizontal ruler with <hr> tag is \_\_\_\_\_  
a) red                      b) green                      c) gray                      d) blue
- 4) Target = \_\_\_\_\_ will open linked file in the new window.  
a) \_parent                      b) \_top                      c) \_self                      d) \_blank
- 5) In Javascript joining two different literals referred as \_\_\_\_\_  
a) combination                      b) conversion                      c) casting                      d) sum
- 6) In Javascript 6%2 will return the value \_\_\_\_\_  
a) 0                      b) 2                      c) 3                      d) 6
- 7) \_\_\_\_\_ object is used to retrieve data from client.  
a) response                      b) session                      c) cookies                      d) request
- 8) In Vbscript while loop is terminated with \_\_\_\_\_  
a) do while                      b) wend                      c) braces                      d) end



- B) State whether **true** or **false** : 4
- 1) Active server pages consist of client side script.
  - 2) To execute a function one has to invoke it.
  - 3) Document validation is possible in HTML.
  - 4) Use map is valid attribute for <img>.
- C) Fill in the blanks : 4
- 1) \_\_\_\_\_ tells the browser how to display the content of document.
  - 2) A class always start with \_\_\_\_\_
  - 3) We include Javascript in HTML by using \_\_\_\_\_ tag.
  - 4) \_\_\_\_\_ created personal web server.
2. A) Explain <Frameset> tag with example. 6
- B) Explain image map with example. 6
- C) Explain client side validation with example. 4
3. A) What is HTML ? Explain general structure of HTML document. 6
- B) Explain control structure in Javascript. 6
- C) Write a program in Vbscript to find out given number is even or odd. 4
4. A) What is procedure ? Explain types of procedure in Vbscript. 6
- B) Explain classes and IDS with example. 6
- C) What is array ? How array declared and used in Javascript ? 4
5. A) What is hyperlink ? Explain types of hyperlink with its example. 8
- B) Write a program in Vbscript to find out given number is armstrong or not.  
(Use form for accessing value) 8
6. A) Why Form is used ? Explain <Form> tag with its object and attributes. 8
- B) Write a program in Javascript to find out given number is prime or not.  
(Use function) 8
7. Write note on **(any 4)** : 16
- 1) CSS
  - 2) POP
  - 3) Data types in Vbscript
  - 4) 3D-layers
  - 5) Option explicit.
-



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**B.C.A. – I (Semester – II) Examination, 2014  
FINANCIAL ACCOUNTING WITH TALLY**

Day and Date : Tuesday, 18-11-2014  
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- Instructions :** 1) Question No. 1 and No. 7 are **compulsory**.  
2) Attempt **any two** question from Q. 2, 3 and 4.  
3) Attempt **any one** question from Q. 5 and Q. 6.  
4) Figures to **right** indicate **full** marks.

1. A) Choose the single alternative :

8

- 1) In Tally, for receipt voucher \_\_\_\_\_ key is used.  
a) F6                      b) F7                      c) F8                      d) F9
- 2) Select the voucher type from the following in Tally  
c) Credit                      b) Contra                      c) Debit                      d) Cost
- 3) How to get Trial Balance of Top Level Primary Groups  
a) Select display → Trial balance  
b) Select display → Trial balance → Primary  
c) Select display → Account books → Trial balance  
d) None of the above
- 4) Value of machinery comes under \_\_\_\_\_ group.  
a) Fixed asset                      b) Direct expenses  
c) Capital                      d) Sundry debtor
- 5) To print Profit and Loss A/c press \_\_\_\_\_ key simultaneously.  
a) Ctrl + P                      b) Alt + P                      c) Shift + P                      d) P
- 6) The financial accounting year period is \_\_\_\_\_  
a) 20 June to 19 May                      b) 1 Jan. to 31 Dec.  
c) 1 April to 31 March                      d) 1 Oct. to 30 Sept.



7) In Tally, to change the features of the company \_\_\_\_\_ key is used.

- a) F12                      b) F4                      c) F11                      d) F1

8) ST stands for \_\_\_\_\_

- a) Software Tax                      b) Service Tax  
c) Security Tax                      d) Source Tax

B) Answer **one** sentence :

**8**

1) What is meant by function ?

2) What is meant by password ?

3) Long form of TDS.

4) Write down example of Indirect Expenses.

5) Write down rule of personal account.

6) What is meant by value ?

7) What is meant by voucher ?

8) What is meant by Data ?

2. a) Explain the different type a voucher. **6**

b) Explain the features of tally. **6**

c) Write down document printing. **4**

3. a) Explain the gateway of tally menu. **6**

b) What is meant by sales order ? How can create alter and delete a sales order ? **6**

c) Write down debit note and credit note. **4**

4. a) Draw Journal Proforma, Ledger Proforma, Trial Balance Proforma and Balance Sheet Proforma. **6**

b) Write down advantage and disadvantage of computered tally. **6**

c) Write notes on Bill of Material. **4**



5. State voucher for following transactions : **16**
- 1) Mr. Ram starts business with Rs. 1,00,000/-
  - 2) Purchase raw material of Rs. 10,000/-
  - 3) Paid wages Rs. 2,000/-
  - 4) Paid salary Rs. 10,000/-
  - 5) Sold old newspaper Rs. 450/-
  - 6) Receive interest on Bank Amount Rs. 500/-
  - 7) Paid stationary Rs. 230/-
  - 8) Sold goods to Mr. Shekar Rs. 5,000/-
- To create all ledger first and enter voucher in tally.
6. Explain the groups that are given tally with example. **16**
7. Write a short notes on (**any 4**) : **16**
- a) Software maintenance
  - b) Special function keys
  - c) Final Account
  - d) TDS in Tally
  - e) Introduction to VAT.
-









- 3. a) What is linked list ? Explain all types of linked list. **6**
  - b) Implement function to add new node in a binary search tree. **6**
  - c) Write a program to find minimum and maximum number in an array. **4**
  - 4. a) Explain following operations of singly linear linked list. **6**
    - i) Insert first
    - ii) Count
    - iii) Display.
  - b) Explain selection sort method with its function. **6**
  - c) Give the difference between stack and queue. **4**
  - 5. a) What is mean by tree traversal ? Explain all tree traversal techniques with example. **8**
  - b) Explain all basic operations of queue. **8**
  - 6. a) What is threaded binary tree ? Explain its all types with example. **8**
  - b) Write an algorithm which converts an infix expression to postfix expression with example. **8**
  - 7. Write short notes on the following : **16**
    - a) AVL tree
    - b) Priority queue
    - c) Binary search method
    - d) Stack in Recursion.
-



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**B.C.A. – II (Semester – III) Examination, 2014**  
**COMPUTER SCIENCE**  
**Networking and Data Communication**

Day and Date : Friday, 14-11-2014  
Time : 3.00 p.m. to 6.00 p.m.

Max. Marks : 80

- N.B. :** 1) Q. 1 and Q. 7 are **compulsory**.  
2) Solve **any two** questions from Q. 2 to Q. 4.  
3) Solve **any one** question from Q. 5 to Q. 6.

1. a) Choose the correct alternative :

8

- 1) \_\_\_\_\_ is an advantage to use fiber optics for data transmission.
  - a) Resistance to data theft
  - b) Fast transmission
  - c) Few transmission errors
  - d) All
- 2) \_\_\_\_\_ of the following is required to communication between two computers.
  - a) Communication hardware
  - b) Communication software
  - c) Protocol
  - d) All
- 3) \_\_\_\_\_ is a 802.3 standard.
  - a) Token bus
  - b) CSMA/CD
  - c) Token ring
  - d) None of the above
- 4) Retrieval of specific individual items of information is done by \_\_\_\_\_.
  - a) TCP
  - b) CMIP
  - c) SNMP
  - d) FTP
- 5) \_\_\_\_\_ is more suitable for computer communication.
  - a) Circuit switching
  - b) Message switching
  - c) Packet switching
  - d) None of the above

P.T.O.



- 6) \_\_\_\_\_ is the most commonly used transmission medium.
- a) Optical fiber                      b) UTP  
c) Co-axial cable                      d) STP
- 7) The bit stream is broken into frames is job of \_\_\_\_\_
- a) Data link layer                      b) Physical layer  
c) Network layer                      d) None of the above
- 8) \_\_\_\_\_ transmission scheme is to avoid the timing problem by not sending, long, uninterrupted stream of bits.
- a) Synchronous                      b) Asynchronous  
c) Isochronous                      d) All
- b) Fill in the blanks : 4
- 1) The well-known port numbers occupy values ranging from \_\_\_\_\_
- 2) The \_\_\_\_\_ switching technology usually operates with a master/slave relationship.
- 3) In \_\_\_\_\_ modulation, two or more different tones are used.
- 4) A single railroad track is called \_\_\_\_\_
- c) State **true/false** : 4
- 1) Post office protocol is standard that defines how user agent operates.
- 2) FTP stands for future trends and predictions.
- 3) HTTP(S) protocol do web browsers and web servers use most often.
- 4) 802.3 IEEE standard defines the communication protocol for ethernet.
2. a) Explain the connection oriented and connection less oriented networks. 6  
b) Differentiate between TCP and UDP. 6  
c) Explain the components of data communication. 4
3. a) Compare virtual circuit subnets and datagram subnet. 6  
b) Explain broad cast and multicast routing. 6  
c) Explain error control in data link layer. 4



- 4. a) Differentiate between simplex and stop-and-wait protocol. **6**
  - b) Define the terms : **6**
    - 1) Phase
    - 2) Amplitude
    - 3) Frequency.
  - c) Explain the synchronous and asynchronous mode of transmission. **4**
  - 5. a) What is framing ? Explain the methods of it. **8**
  - b) What is compression ? Explain the various types of it. **8**
  - 6. a) Define protocol. Explain any four protocols. **8**
  - b) Discuss telephone system in detail. **8**
  - 7. Write a short note on (**any four**) : **16**
    - 1) ARP and RARP
    - 2) Data representation
    - 3) Flow control in Data Link Layer
    - 4) Data flow
    - 5) Design issues of network layer.
-



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**B.C.A. – II (Semester – III) Examination, 2014  
COMPUTER SCIENCE  
Core Java**

Day and Date : Wednesday, 19-11-2014

Max. Marks : 80

Time : 3.00 p.m. to 6.00 p.m.

- Instructions :** 1) *Q. 1 and Q. 7 are compulsory.*  
2) *Solve any two questions from Q. 2 to Q. 4.*  
3) *Solve any one question from Q. 5 and Q. 6.*

1. A) Choose the correct alternatives :

8

- 1) A constant value in Java is created by using \_\_\_\_\_
  - a) keyword
  - b) variable
  - c) literal
  - d) int
- 2) A subclass can call a constructor method defined by using \_\_\_\_\_
  - a) this()
  - b) super()
  - c) abstract
  - d) all
- 3) Variable declared inside interface are implicitly \_\_\_\_\_
  - a) final
  - b) static
  - c) both
  - d) none
- 4) \_\_\_\_\_ is default layout manager.
  - a) Grid layout
  - b) Flow layout
  - c) Border layout
  - d) Layout manager
- 5) A \_\_\_\_\_ is an object that is notified when an event occurs.
  - a) Class
  - b) Event
  - c) Event object
  - d) Listener



- 6) \_\_\_\_\_ to cause any data that is in the buffer to get written.
- a) buffer()
  - b) flush()
  - c) read()
  - d) write()
- 7) One interface can inherit another by use of the keyword \_\_\_\_\_
- a) implements
  - b) extends
  - c) both
  - d) interface
- 8) The \_\_\_\_\_ block will execute whether or not an exception is thrown.
- a) finally
  - b) try-catch
  - c) both
  - d) none

B) Fill in the blanks :

4

- 1) \_\_\_\_\_ group includes byte, short, int and long which are for whole valued signed number.
- 2) An \_\_\_\_\_ is group of like-typed variable that are referred to by a common name.
- 3) A \_\_\_\_\_ operator determines the relationship that are one operand has to the other.
- 4) A \_\_\_\_\_ initializes an object immediately upon creation.

C) State **true** or **false** :

4

- 1) All exceptions that method can throw must be declared in throws clause.
- 2) The interface statement defines the name space in which classes are stored.
- 3) All exception types are subclasses of the built-in class throwable.
- 4) Show status () is used to displaying information in its window.

2. A) What are the features of Java ? Explain.

6

B) What is thread priority ? Explain with an example.

6

C) What is garbage collection ? Explain how memory is managed in Java ?

4



- 3. A) What is static polymorphism ? Explain with example. 6
  - B) What is the difference between abstract class and interface ? 6
  - C) Why the main() method in Java is public, static and void ? 4
  
  - 4. A) What is method overriding and explain with example. 6
  - B) Write a program to validate user name and password using text field. 6
  - C) Explain with example 'this' key word. 4
  
  - 5. A) Discuss inter-thread communication. 8
  - B) What are layout manager ? Explain any two with example. 8
  
  - 6. A) What is runtime exception ? Explain any two of them. 8
  - B) Write a program to copy file to file using character stream. 8
  
  - 7. Write a short note on **(any four)** : 16
    - 1) Event model
    - 2) Java ADI
    - 3) Thread synchronization
    - 4) Try-catch block
    - 5) JDK tools.
-







6) By default 'C' function returns \_\_\_\_\_ type value.

- a) float
- b) double
- c) void
- d) int

7) \_\_\_\_\_ is invalid identifier in 'C' language.

- a) net\_\$
- b) net\_@
- c) -net#
- d) all of these

b) Fill in the blanks :

4

- 1) \_\_\_\_\_ Format code is used for array of character.
- 2) \_\_\_\_\_ is exit controlled loop in 'C' language.
- 3) \_\_\_\_\_ is compulsory used user defined function in 'C' program.
- 4) \_\_\_\_\_ is step by step description of how to solve problem.

c) State whether **true** or **false** :

3

- 1) We can give any name for variable.
- 2) Documentation section of 'C' program is optional section.
- 3) Release ( ) function is used to release allocated memory.

2. Attempt **any two** questions from followings :

14

- a) What is string ? Explain any two string handling function with example.
- b) Write a program to check entered number is palindrome or not using function with argument with return value.
- c) Explain 'switch' statement with example.

3. Attempt **any two** questions from following :

14

- a) Write a program which copy the content of one file into another file.
- b) Explain 'Nested structure' with example.
- c) What is flowchart ? Explain different symbols used in flowchart. Draw the flow chart to find maximum number between three numbers.



4. Attempt **any two** questions from the following : **14**
- 1) Write a program to print following pattern [use 'for' loop]
- ```
5  4  3  2  1
5  4  3  2
5  4  3
5  4
5
```
- 2) What is array ? Explain all types of array in details.
- 3) What is structure ? Explain pointer to structure with example.
5. A) What is data type ? Explain derived data type in 'C' language. **7**
- B) Write a program which accept single character as input and check entered character is Alphabet or Digit or special symbol. **7**
6. A) Write a program which accept 10 integers and write only odd numbers into file named "odd.txt". **7**
- B) Write a program that demonstrate the difference between structure and union. **7**
7. Write short note on following (**any two**) : **14**
- 1) Storage classes in 'C' language.
- 2) Recursion with example.
- 3) Forward and backward jump of go to statement.
-



Seat No.	
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**B.C.A. – II (Semester – IV) Examination, 2014
COMPUTER SCIENCE
Operating System (Old)**

Day and Date : Thursday, 13-11-2014
Time : 3.00 p.m. to 6.00 p.m.

Max. Marks : 80

- N. B. :** 1) Q. 1 and Q. 7 are **compulsory**.
2) Attempt **any 2** questions from Q. 2 to Q. 4.
3) Attempt **any 1** question from Q. 5 to Q. 6.
4) **All** questions carry **equal** marks.

1. Choose the correct alternatives :

16

- 1) The scheduling in which CPU is allocated to the process with least CPU-burst time is called _____
A) Priority scheduling B) Shortest job first scheduling
C) Round-Robin scheduling D) Multilevel queue scheduling
- 2) Device controller is a H/W unit which is attached to the I/O bus of computer system.
A) True B) False
- 3) Interval between the time of submission and completion of the job is called _____
A) Waiting time B) Turnaround time
C) Throughput D) Response time
- 4) Before proceeding with its execution, each process must acquire all the resources it needs is called _____
A) Hold and wait B) No-preemption
C) Circular wait D) Starvation
- 5) The memory allocation scheme subject to external fragmentation is _____
A) Segmentation B) Swapping
C) Pure demand paging D) Multiple fixed contiguous partitions



- 2. a) What is process ? Explain process life cycle. 6
 - b) Explain different features of unix operating system. 6
 - c) Write note on scheduling criteria 4

 - 3. a) What is memory management ? Explain swapping in details. 6
 - b) What is directory ? Give various directory structure. 6
 - c) Explain limit registers and paging. 4

 - 4. a) What is security ? Explain types of security. 6
 - b) What is deadlock ? Explain necessary conditions for deadlocks. 6
 - c) Write note on process loading. 4

 - 5. a) Define operating system. What are the functions of an operating system ? 8
 - b) What is I/O system ? Explain I/O structure in details. 8

 - 6. a) What is file ? Explain different types and access methods. 8
 - b) What is buffer ? Explain different types of buffer in details. 8

 - 7. Write short note on (**any four**) : 16
 - a) Authentication.
 - b) Concept of Kernel.
 - c) Interprocess communication.
 - d) Virtual memory.
 - e) Multiuser-multitasking O.S.
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Seat No.	
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B.C.A. – II (Semester – IV) Examination, 2014
COMPUTER SCIENCE
Software Engineering (Old)

Day and Date : Tuesday, 18-11-2014
Time : 3.00 p.m. to 6.00 p.m.

Max. Marks : 80

- Instructions :** 1) Q. 1 and Q. 7 are **compulsory**.
2) Solve **any 2** questions from Q. 2 to Q. 4.
3) Solve **any 1** question from Q. 5 and Q. 6.

1. A) Choose the correct alternatives :

8

- 1) UML stands for _____
 - a) Uniform Modeling Language
 - b) Unified Modeling Language
 - c) Uniforms Models Language
 - d) None of these
- 2) The model remains operative until the software is retired
 - a) Waterfall
 - b) Incremental
 - c) Spiral
 - d) None of these
- 3) Design phase includes _____
 - a) Data, architectural and procedural design only
 - b) Architectural, procedural and interface design only
 - c) Data, Architectural and interface design only
 - d) Data, Architectural, interface and procedural design
- 4) Monitoring and control system are an important class of _____ system.
 - a) Monitoring
 - b) Control
 - c) Real time
 - d) Data acquisition



- 5) An important aspect of coding is _____
- a) Readability
 - b) Productivity
 - c) To use as small memory space as possible
 - d) Brevity
- 6) The objective of testing is _____
- a) To uncover errors
 - b) To gain modularity
 - c) To analyze system
 - d) None of these
- 7) The term module in the design phase refers to _____
- a) Functions
 - b) Procedures
 - c) Sub programs
 - d) All of the above
- 8) RAD is not appropriate when ?
- a) Fast finding already done
 - b) Technical risks are high
 - c) Testing is not needed
 - d) None of above

B) True or False :

8

- 1) Waterfall model is suitable for accommodating and change.
- 2) Design is refined in every cycle and finally it is documented to produce software design document.
- 3) Spiral model is useful in such situation which guide the risk in the project.
- 4) Alpha testing is conducted on customer site.
- 5) Software inspection is a static verification and validation process in which software system is reviewed to find error.
- 6) CBSE stands for commerce based software engineering.
- 7) Dispatcher is responsible for starting the execution of a process.
- 8) Component based development model contain many of the spiral model.



- 2. A) Explain application families in component based software engineering. **6**
 - B) Explain quality and productivity in software engineering. **6**
 - C) Explain iterative enhancement model. **4**
 - 3. A) Explain use case diagram with example. **6**
 - B) Define testing. Explain object oriented testing. **6**
 - C) Explain automated static analysis. **4**
 - 4. A) Explain software requirement document in detail. **6**
 - B) Explain non-functional requirement in detail. **6**
 - C) Explain consistency and reliability in software engineering. **4**
 - 5. A) Define process. Explain design and implementation process activity. **8**
 - B) What is UML ? Explain collaboration and sequence diagram with example. **8**
 - 6. A) Explain stages of static analysis. **8**
 - B) Explain use of prototyping in software process development. **8**
 - 7. Write a short note on : **16**
 - a) External requirement
 - b) Spiral model
 - c) Activity diagram
 - d) Black box testing.
-



- 6) Funds that are needed for a period from one to five years are often classified as _____
- A) Short term funds B) Long term funds
C) Medium term funds D) All above
- 7) Abnormal mood is a cardinal sign of _____
- A) Mental health B) Hypertension
C) Depression D) Mania
- 8) Manager of _____ responsible for base pay incentive and be administration.
- A) Employment B) Compensation
C) Training and development D) Employee and labour

B) Fill in the blanks :

8

- 1) _____ are those incentives which do not offer any monetary benefit.
- 2) The _____ form of stress is called distress.
- 3) Ploughing back of profit is also known as _____ or _____
- 4) MBO stands for _____
- 5) _____ are also referred to as creditorship security.
- 6) When two or more companies of the same industry merge with one another it is known as _____
- 7) _____ function is the conversion of raw materials into finished goods.
- 8) VED stands for _____

2. A) Explain the term Human Resource Management. **6**
B) Explain the different types of debentures. **5**
C) Explain the objectives of inventory management. **5**
3. A) Write the methods of performance appraisal. **6**
B) Explain VED analysis. **5**
C) Define quality certification system. **5**



- | | |
|--|-----------|
| 4. A) Discuss the consequences of stress. | 6 |
| B) What is finance ? Explain the functions of finance. | 5 |
| C) Explain advantages of equity share capital. | 5 |
| 5. A) Explain the advantages and disadvantages of merging. | 8 |
| B) Explain ABC analysis and JIT. | 8 |
| 6. A) Explain the scope and benefits of ISO 9000 standards. | 8 |
| B) Explain the scope and nature of production management. | 8 |
| 7. Define production planning and control. Explain objectives, function and phases in production planning and control. | 16 |
-



- 6) _____ are sometimes referred 'Bubble Diagrams'.
- a) ERD
 - b) Flow chart
 - c) Decision table
 - d) DFD
- 7) _____ is a process-related quality that refers to the ability to deliver a product on time.
- a) Productivity
 - b) Visibility
 - c) Inter operability
 - d) Timeliness
- 8) A _____ can be considered as a structured interview.
- a) observation
 - b) record review
 - c) questionnaires
 - d) none of these
- 9) In ER diagrams relationship is represented by diamond box.
- a) True
 - b) False
- 10) White Box testing is also called _____
- a) Glass-Box testing
 - b) Green-Box testing
 - c) Functional testing
 - d) None of these
- 11) Waterfall model is easy to understand but difficult to follow in project.
- a) True
 - b) False
- 12) _____ refer to the process of using software in a live environment in order to find errors.
- a) Validation
 - b) Verification
 - c) Both a) and b)
 - d) None of these
- 13) _____ incremental implementation combine the best of top-bottom and bottom-up implementation.
- a) Universal
 - b) Sandwich
 - c) Hybrid
 - d) None of these
- 14) _____ is decomposition of complex data structure into 'Flat files' called relation
- a) Normalization
 - b) Denormalization
 - c) Formalization
 - d) Unformalization
- 15) 2 NF can not be achieved unless data is in the 1 NF.
- a) True
 - b) False
- 16) A computer is relatively _____ system.
- a) abstract
 - b) conceptual
 - c) opened
 - d) closed



- 2. A) Define system analysis and explain the role of system analyst. **6**
 - B) Explain good software qualities. **6**
 - C) Write difference between open and close system. **4**
 - 3. A) Explain feasibility study in detail. **6**
 - B) Explain outline of software requirement. **6**
 - C) Explain Interview. **4**
 - 4. A) What are the main components of HIPO chart. **6**
 - B) Explain flow chart types. **6**
 - C) Explain normalization. **4**
 - 5. A) Explain data validation with its various types of validation checks. **8**
 - B) Draw a system outline chart for payroll system. **8**
 - 6. A) Explain incremental implementation in detail. **8**
 - B) Draw first level DFD for College Admission System. **8**
 - 7. Write short note on :
 - A) Observation
 - B) Testing principles
 - C) Rules of ERD
 - D) Advantage of waterfall model.
-



Seat No.	
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B.C.A. – II (Semester – IV) Examination, 2014
COMPUTER SCIENCE
Operating System (New)

Day and Date : Tuesday, 18-11-2014
Time : 3.00 p.m. to 6.00 p.m.

Max. Marks : 80

- Instructions:** 1) Q. No. 1 and Q. No. 7 are **compulsory**.
2) Attempt **any two** questions from Q. No. 2 to Q. No. 4.
3) Attempt **any one** question between Q. No. 5 and Q. No. 6.
4) **All** questions carry **equal** marks.

1. Choose the single correct alternative :

16

- 1) The first O.S. developed was in the form of _____
 - a) Batch system
 - b) Simple monitor
 - c) Multiprogramming O.S.
 - d) Time-sharing O.S.
- 2) Which of the following is contained in Process Control Block (PCB) ?
 - a) Process Number
 - b) Memory Limits
 - c) List of open files
 - d) All of the above
- 3) A process is said to be in _____ state if it is waiting for an event that will never occurs.
 - a) Safe
 - b) Unsafe
 - c) Starvation
 - d) Deadlock
- 4) A page fault _____
 - a) Occurs when a program access a page of memory
 - b) Is an error in a specific page
 - c) Is an access to a page not current in memory
 - d) Is reference to a page belonging to another program



- 2. a) Discuss classical problem of synchronization for dining philosopher. **6**
- b) Explain the working of Batch system and time sharing system. **6**
- c) What is co-operative process ? Write advantages of it. **4**
- 3. a) Define process. Draw and explain process control block. **6**
- b) What is semaphore ? Write its usage and implementation. **6**
- c) Write and explain different types of files. **4**
- 4. a) What is scheduler ? Explain the short-term and long-term scheduler. **6**
- b) Write a note on allocation of disk space for file. **6**
- c) Explain deadlock detection technique for single Instance of each resource type. **4**
- 5. a) Explain segmentation in detail. **8**
- b) Write the interprocess communication in detail. **8**
- 6. a) Solve the following example :

Process	Execution time (in sec.)
----------------	-------------------------------------

P ₁	10
P ₂	4
P ₃	2
P ₄	7

- i) Draw Gantt chart for FCFS, SJF, RR scheduling algorithm. (Take time slice = 4 sec.)
 - ii) Calculate average waiting time for above scheduling algorithms.
 - iii) State which algorithm gives minimum average waiting time. **8**
 - b) Write and explain different components of operating system. **8**
 - 7. Write short notes on the following (**any 4**) : **16**
 - a) Swapping
 - b) Two level directory structure
 - c) Operating system architecture
 - d) System call
 - e) Layered system.
-



Seat No.	
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**B.C.A. – I (Semester – I) (CGPA Pattern) Examination, 2014
FUNDAMENTALS OF FINANCIAL ACCOUNTING**

Day and Date : Monday, 17-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 70

- N.B. :** 1) Q. No. 1 and Q. No. 7 are **compulsory**.
2) Attempt **any two** questions from Q. No. 2, 3 and 4.
3) Attempt **any one** question from Q. No. 5 and Q. No. 6.

1. a) Select the correct alternative :

7

- 1) A commodity in which trader deals is known as
 - a) Property
 - b) Goods
 - c) Expenditure
 - d) Income
- 2) According to _____ concept, assets are recorded at a price paid to acquire them.
 - a) cost
 - b) money measurement
 - c) entity
 - d) dual aspects
- 3) Amount bought in by the proprietor in the business should be credited to
 - a) Cash A/c
 - b) Drawings A/c
 - c) Bank A/c
 - d) Capital A/c
- 4) Rent paid to the landlord should be debited to
 - a) Drawings
 - b) Cash A/c
 - c) Landlord's A/c
 - d) Rent
- 5) Depreciation arises because of
 - a) wear and tear
 - b) inflation
 - c) fall in the value of an assets
 - d) fixed assets



- 6) A list of balances of all accounts in ledger called
- | | |
|------------------|------------------------|
| a) Balance Sheet | b) Profit and Loss A/c |
| c) Trading A/c | d) Trial Balance |
- 7) Carriage inward is debited to _____ Account.
- | | |
|----------------|------------------------|
| a) Trading A/c | b) Profit and Loss A/c |
| c) Capital A/c | d) Balance Sheet |

b) State whether the following statements are **True** or **False** :

7

- 1) An amount of net profit is added to the capital.
- 2) Outstanding expenses are the assets of business.
- 3) Repairs to building is debited to Buildings A/c is an error of principle.
- 4) Cash discount is not recorded in the books of account.
- 5) Capital = Liabilities – Assets.
- 6) Prepaid insurance is nominal account.
- 7) Ram's account is a real account.

2. Write short notes (**any two**) :

14

- a) Explain advantages of double entry system.
- b) Subsidiary books
- c) Trade discount and cash discount.

3. Journalise the following transactions in the books of Mahesh :

14

Balances on 1st April 2008, Machinery Rs. 2,00,000, Buildings Rs. 4,00,000, Cash at bank Rs. 1,80,000, Computers and Printers Rs. 1,00,000. Bills payables Rs. 10,000, Sundry Creditors Rs. 20,000.

Transactions during the month of April 2008

Date	Particulars
April 1	Cheque received from Sanjay Rs. 20,000
4	Goods sold to Ramesh on Credit Rs. 15,000
6	Goods purchased from Ganesh on credit Rs. 8,000



- 7 Rs. 14,000 received from Ramesh in full settlement
- 10 Rent paid Rs. 100
- 15 Salary paid by cheque Rs. 200

4. a) Write short notes (**any one**) : 7
- 1) Merits and demerits of straight line method of depreciation.
 - 2) Advantages of Bank Reconciliation Statement.
- b) From the following transactions prepare necessary Ledger Accounts : 7

Date	Particulars
July 1	Started business with cash Rs. 8,000
6	Cash sales Rs. 3,000
10	Cash purchases Rs. 2,000
14	Rent paid Rs. 200
16	Cash deposited into bank Rs. 3,000

5. a) Explain the needs of depreciation. 7
- b) Basic accounting concepts. 7

6. Akshay purchased machinery worth Rs. 20,000 on 1st April 2006. He charges depreciation @ 10% by WDV method on 31st March every year. 14

On 1st July 2008 he sold part of machinery for Rs. 2000, the original cost of which on 1st April 2008 was Rs. 4,000.

Pass Journal entries. (Working is part of your answer).

7. Following balances are taken from the books of Mr. OM on 31-3-2001. Prepare Trading and Profit and Loss A/c for the year ended and the Balance Sheet as on that date : 14

Particulars	Dr. (Rs.)	Cr. (Rs.)
Capital	–	1,42,000
Creditors	–	50,000
Sales	–	1,68,000



Commission received	–	4,000
Bills payable	–	14,000
Bank overdraft	–	4,800
General expenses	4,000	–
Drawings	24,000	–
Building	70,000	–
Machinery	20,000	–
Stock (Opening)	44,000	–
Power	6,200	–
Taxes and Insurance	5,400	–
Wages	28,000	–
Debtors	44,000	–
Bad debts	3,400	–
Purchases	1,04,000	–
Vehicles	20,000	–
Cash	8,600	–
Packing charges	1,200	–
Closing stock is valued at Rs. 64,000		



Seat No.	
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**B.C.A. – II (Sem. – IV) Examination, 2014
E-COMMERCE (New)**

Day and Date : Saturday, 22-11-2014
Time : 3.00 p.m. to 6.00 p.m.

Max. Marks : 80

- Instructions:** 1) Q. 1 and Q. 7 are **compulsory**.
2) Solve **any 2** questions from Q. 2, Q. 3, Q. 4.
3) Solve **any 1** question from Q. 5, Q. 6.

1. A) Select correct alternative and rewrite statement. 8
- 1) A computer system that permits multiple users to run programs at same time _____
A) Real Time System B) Multi Programming System
C) Time Sharing System D) Multi Tasking System
 - 2) An e-business that allows consumer to name their own price for products and services is following which e-business model _____
A) B2B B) B2G C) C2C D) C2B
 - 3) These type of commercial internet service providers are the most widely used _____
A) National Service Provider
B) Regional Service Providers
C) Centralized Service Provider
D) Decentralized Service Provider
 - 4) URL is an acronym for _____
A) Uniform Resource Locator
B) Uniform Resource Link
C) Universal Reference Locator
D) Unlimited Real Language



3. A) Define electronic cash.	6
B) Write the difference between traditional payment system and modern payment system.	5
C) Define E-diversity.	5
4. A) Define Payment Security.	6
B) What is the future of electronic market ?	5
C) Define market and electronic market.	5
5. A) State advantages and disadvantages of E-commerce.	8
B) Explain types of E-commerce.	8
6. A) Write a case study on e-commerce in passengers air transport.	8
B) Define Porter's Value Model.	8
7. Explain online payments options and web site evaluation model.	16



Seat No.	
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B.C.A. – III (Semester – V) Examination, 2014
COMPUTER SCIENCE (Old)
Web Technologies

Day and Date : Friday, 14-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- Instructions:** 1) Question 1 and 7 are **compulsory**.
2) Attempt **any two** questions from 2 to 4.
3) Attempt **any one** question form 5 to 6.
4) **All** questions carry **equal** marks.

1. Choose the correct alternative :

16

- 1) _____ are used to pass information between pages to same site.
a) Session b) Cookies c) Get d) Post
- 2) In ASP Do-untl loop is terminated with _____
a) loop b) braces c) wend d) end
- 3) _____ created personal web server.
a) Infosis b) IBM c) Microsoft d) Turbo
- 4) _____ codes never be viewed from Browser.
a) HTML b) DHTML c) Asp d) Java script
- 5) _____ object of Asp captures incoming data.
a) Response b) Request
c) Session d) Application
- 6) Perl is scripting language.
a) True b) False
- 7) The default value for timeout property of session object is _____ minutes.
a) 12 b) 20 c) 10 d) 25



- 3. a) What is data type ? Explain data types in detail. 6
 - b) Explain conditional control structure in Asp with example. 6
 - c) Explain any four string functions. 4
 - 4. a) Explain application object in detail. 6
 - b) Write a ASP code to find out given number is perfect or not. (Access number by using Form). 6
 - c) Why type casting is needed ? Explain with suitable example. 4
 - 5. a) How to read and write cookies explain with suitable example ? 8
 - b) Write a ASP code to display employees record in tabular form from employee table. 8
 - 6. a) Explain lock types with suitable example. 8
 - b) Design web page form for account information and do operation move, insert, delete and save. 8
 - 7. Write a note on (**any four**) : 16
 - a) Recordset object
 - b) Option explicit
 - c) Object context object
 - d) Buffering
 - e) Date functions.
-



Seat No.	
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**B.C.A. – III (Semester – V) Examination, 2014
COMPUTER SCIENCE (Old)
Core Java**

Day and Date : Wednesday, 19-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- Instructions:** 1) Q. 1 and Q. 7 are **compulsory**.
2) Solve **any two** questions from Q. 2 to Q. 4.
3) Solve **any one** question from Q. 5 and Q. 6.

1. A) Choose the correct alternatives : 8

- 1) Which is valid declaration within an interface ?
- a) Public static short stop = 23 b) Protected short stop = 23
c) Transient short stop = 23 d) Final void madness (short stop)

- 2) String a = "newspaper";
a = a + b;
char b = a.charAt (1);
a = a + b;
System.out.println(a);
What is the result ?
- a) apa b) app c) apea d) apep

- 3) Class equals
- ```
{ public static void main (string[] args)
{ int x = 100;
double y = 100.1;
Boolean b = (x = y);
System.out.println(b);
}
}
```

- What is the output ?
- a) True                      b) False  
c) Compilation fails                      d) An exception is thrown



- 4) What is the byte code in java ?
- a) The type of code generated by JVM
  - b) The type of code generated by java compiler
  - c) It is the code written within the instance methods of a class
  - d) It is another name of java source file
- 5) Which of the following may be part of a class definition ?
- a) Instance variable
  - b) Instance methods
  - c) Constructors
  - d) All of the above
- 6) The following a legal java statement
- a) `M1 = new Textfield("sixty");`
  - b) `1a = 6;`
  - c) `add (m1);`
  - d) `m1.setText ("Hello World");`
- 7) The following is NOT an example of a data type.
- a) `int`
  - b) `public`
  - c) `Button`
  - d) `Void`
- 8) What is the purpose of this bit of code ?
- ```
Void init()
{
    ....
}
```
- a) A class that initializes the applet
 - b) A required method in an applet
 - c) A place to declare variables
 - d) Interacting with the user

B) Fill in the blanks :

4

- 1) _____ will takes place if you try using a null reference.
- 2) _____ is a run time environment for the compiled java class files.
- 3) A single source file can contain any number of class declarations but only one of the class can be declared as _____
- 4) A _____ method can be accessed by the classes within the same package or by the subclasses of the class in any package.



- C) State **true/false** : **4**
- 1) A class is the basic entity of object oriented programming language.
 - 2) The init() is called only on that time, when the browser need to shut down.
 - 3) The readLine() method returns null when it has reached the end of file.
 - 4) The checkboxMenuItem class extends the MenuItem class to support a menu item that may be checked or unchecked.
2. a) Differentiate between method overloading and method overriding with example. **8**
b) Write a program to display the given a number is armstrong or not. **8**
3. a) Explain the life cycle of thread. **8**
b) What is constructor ? Discuss the parameterized constructor with example. **8**
4. a) How many ways we can create the thread ? Explain with example. **8**
b) Write a program to find a given number is palindrome or not. **8**
5. a) Write a program to display multiplication of two numbers. (Using TextField read two numbers from keyboard) and display result. (Use TextField, Button and Label). **8**
b) Differentiate between abstract class and interface with example. **8**
6. a) What is thread synchronization ? Explain with example. **8**
b) Write a program to handle multiple exceptions at least having two catch blocks. **8**
7. Write a short note on : **16**
- 1) Throw and throws keyword
 - 2) 'This' reference
 - 3) Access specifiers
 - 4) Garbage collection.
-



Seat No.	
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**B.C.A. – III (Semester – V) (New) Examination, 2014
ADVANCED JAVA – I**

Day and Date : Wednesday, 12-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- N. B. :** 1) Question No. 1 and 7 are **compulsory**.
2) Attempt **any two** questions from Q. No. 2, 3 and 4.
3) Attempt **any one** question from Q. No. 5 and 6.
4) Figures to the **right** indicate **full** marks.

1. A) Choose the correct alternative :

8

- 1) How many JDBC driver types does sun defines ?
a) one b) two c) three d) four
- 2) Which JDBC driver type can be used in either applet or servlet code ?
a) both type 1 and type 2 b) both type 1 and type 3
c) both type 3 and type 4 d) type 4 only
- 3) _____ is an open source DBMS product that runs on Unix, Linux and Windows.
a) Mysql b) JSP/SQL
c) JDBC/SQL d) Sun Access
- 4) What servlet processor was developed by Apache Foundation and Sun ?
a) Apache Tomcat b) Apache web server
c) Sun servlet processor d) None of the above is correct
- 5) What is invoked via HTTP on the web server computer when it responds to requests from a users web browser ?
a) java application b) a java servlet
c) a java applet d) none of the above is correct
- 6) Which is the method that starts the applet ?
a) main () b) destroy () c) init () d) repaint ()
- 7) What is correct syntax of the declaration which defines the XML version ?
a) <xml version = "1.0"/> b) <qxml version = "1.0"?>
c) <qxml version = "1.0"/> d) None of the above is correct
- 8) Comment in XML document is given by
a) <? ---- > b) <! ---- !> c) <! ---- > d) </ ---- >



- B) Fill in the blanks : **8**
- 1) CSS stands for _____
 - 2) DTD stands for _____
 - 3) The Applet class is in _____ package.
 - 4) To display text on the applet _____ method is used.
 - 5) Servlets are _____ side programs run inside a java capable HTTP server.
 - 6) HTTP is a request _____ protocol.
 - 7) A cookie is a small text file that is stored in the _____ machine.
 - 8) Once a servlet is initialized, the servlet container invokes its _____ method.
2. a) What are the attributes of Applet tags ? Explain. **6**
 b) What is servlet ? Explain servlet mapping. **6**
 c) Write a note on session handling. **4**
3. a) What is Applet ? Explain life cycle of Applet. **6**
 b) What is XML ? Explain XML CSS with suitable example. **6**
 c) Write a note on CGI. **4**
4. a) Write a program in java to insert record name, address, city and age and print in mysql table using prepared statement. **8**
 b) Write a program in java to search a given record in a mysql table and delete it. **8**
5. a) Write a XML document which shows the validation. **6**
 b) What is cookies ? Write advantages and disadvantages of cookies. **6**
 c) Write a note on include () and forward () in servlet. **4**
6. a) Write a servlet program to demonstrate cookies. **8**
 b) Explain different types of drivers in JDBC. **8**
7. Write short notes on : **16**
- a) Hidden form field
 - b) Callable statement
 - c) Uses of Applet
 - d) Execute Query () method.
-



- 7) Exception class is the _____ class for all exceptions in C#.
- a) Base b) Derived
c) Intermediate d) None of above
- 8) _____ event occurs when control is double clicked by mouse.
- a) MouseClick b) MouseDoubleClick
c) MouseDown d) MouseEnter

b) State **true/false** :

8

- 1) A class may inherit several interface.
- 2) Get accessor returns a value of property type.
- 3) Write only property only has a set accessor.
- 4) Delegate is not a similar to a function pointer in C or C++.
- 5) We can define multiple behaviours to an operator which is also known as operator overloading.
- 6) Queue class works on the principle Last In First Out.
- 7) In C#, multiple inheritance is not possible.
- 8) In exception, try block must follow catch or finally block.

2. a) Explain value type and reference type. 6
- b) What is delegates ? Explain its types. 6
- c) Explain different types of polymorphism. 4
3. a) What is assemblies ? Explain its types. 6
- b) Explain boxing and unboxing in detail. 6
- c) Explain virtual keyword. 4
4. a) What is properties ? Explain its types. 6
- b) Write a difference between interface and abstract. 6
- c) Explain ADO.Net benefits. 4



5. a) Write a program to copy the contents of one file into another file. **8**
b) What is event ? Explain different types of events in detail. **8**
6. a) What is constructor ? Explain different types of constructor in detail. **8**
b) Write a program for implementation of Hash Table and Sorted List. **8**
7. Write short notes on **(any four)** : **16**
- a) Common Language Runtime (CLR)
 - b) Multithreading
 - c) ComboBox and ListBox
 - d) CTS
 - e) Difference between SDI and MDI.
-



Seat No.	
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B.C.A. – III (Semester – V) (New) Examination, 2014
COMPUTER SCIENCE
Linux and Shell Programming

Day and Date : Monday, 17-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- N. B. :** 1) Q. 1 and Q. 7 are **compulsory**.
2) Solve **any two** questions from Q. 2 to Q. 4.
3) Solve **any one** question from Q. 5 and Q. 6.
4) **All** questions carry **equal** marks.

1. Choose the correct alternatives :

16

- 1) DHCP stands for _____
 - a) Dynamic Host Connect Protocol
 - b) Dynamic Host Configuration Protocol
 - c) Dual Host Connect Protocol
 - d) Dual Host Connect Program
- 2) Which of the following is the main Apache configuration file ?
 - a) /etc/apache.conf
 - b) /etc/httpd/config.ini
 - c) /etc/httpd/conf/httpd.conf
 - d) /etc/config.ini
- 3) FTP works on a client-server model.
 - a) True
 - b) False
- 4) _____ command is used in vi editor to save file and remains in the editing mode.
 - a) :x
 - b) :9
 - c) :9X
 - d) :W
- 5) _____ is structure which has the description of all the files and pointers to the data blocks of files stored in it.
 - a) Node
 - b) Inode
 - c) Vnode
 - d) Block
- 6) Which of the following is not a communication command ?
 - a) mail
 - b) mesg
 - c) grep
 - d) write

P.T.O.



- 2. a) What is open source ? Give the advantages of open source. **6**
 - b) What is shell ? What is shell script ? Give its advantages. **6**
 - c) Give the meaning and syntax of cd and cp command. **4**

 - 3. a) Explain the concept of Linux distributions. **6**
 - b) Explain standard I/O redirection with examples. **6**
 - c) What is pipes ? Explain use of pipes. **4**

 - 4. a) What do you mean by a filter and explain any two filter command ? **6**
 - b) Explain different boot loaders. **6**
 - c) Differentiate between Linux and Windows. **4**

 - 5. a) Write a shell script to check entered number is perfect or not. **8**
 - b) Explain in detail different modes of vi editor. **8**

 - 6. a) Explain archive and compress files with suitable example. **8**
 - b) Write a shell script to check entered number is armstrong or not. **8**

 - 7. Write short notes on (**any four**) : **16**
 - i) Chkconfig command
 - ii) Chown and chgrp command
 - iii) Role of system administrator
 - iv) LVM
 - v) NIS.
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Seat No.	
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B.C.A. – III (Semester – V) (New) Examination, 2014
COMPUTER SCIENCE
Introduction to Data Mining and Warehousing

Day and Date : Wednesday, 19-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- Instructions :** 1) Q. 1 and Q. 7 are **compulsory**.
2) Solve **any two** questions from Q. 2 to Q. 4.
3) Solve **any one** question from Q. 5 to Q. 6.

1. A) Choose the correct alternative :

8

- 1) The _____ operation is used for reducing data cube by one or more dimensions.
a) Drilling b) Rolling c) Dicing d) Slicing
- 2) Any subset of frequent set is frequent. This is _____
a) Upward closure property b) Downward closure property
c) Maximal frequent set d) Border set
- 3) Data found in data warehouse is _____
a) Subject oriented b) Time variant
c) Integrated d) All of the above
- 4) Type of relationship in star scheme is _____
a) Many to many b) One to one
c) One to many d) Many to one
- 5) Dimensionality reduction reduces the data set size by removing _____
a) Relevant attributes b) Irrelevant attributes
c) Derived attribute d) Composite attributes

P.T.O.



- 4. a) What is association rule mining ? Explain multidimensional association rule mining in detail. 6
 - b) What is data warehouse ? Explain need of data warehouse. 6
 - c) Explain drill up and drill down operations in detail. 4
 - 5. a) Explain different task primitive of data mining. 8
 - b) What is data preprocessing ? Explain need of data preprocessing and steps in data preprocessing in detail. 8
 - 6. a) Using Apriori algorithm, generate association rule from following table having min-support = 2 and confidence threshold is 70%. 8

TID	Items
10	A,B,D
20	A,C,D
30	A,D,E
40	B,E, F
50	B,C,D, E,F.
 - b) Explain operational V/s informational system in detail. 8
 - 7. Write short note on **(any 4)** : 16
 - 1) Data fusion
 - 2) Data mart
 - 3) Multirelational OLAP
 - 4) Mapping data warehouse
 - 5) Discretization
 - 6) Spatial data mining.
-



4. Write the answers of the following questions (**any two**) : **14**
- a) Applications are invited from young computer graduates/postgraduates for software development to Tata Softwares; Das Chambers, 16 Dalal Street, Mumbai, 400 021.
 - b) Write the bio-data for above application letter.
 - c) What is communication ? Write the elements of communication.
5. Write the answers of the following questions : **14**
- a) Write the types/channels of communication.
 - b) Write the report on 'the welcome function' conducted in your college.
6. Write the answers of the following questions : **14**
- a) What are the characteristics of communication ?
 - b) Write a letter of complaint to the Om Computers, Appa Balwant Chowk, Pune about the computer you have purchased is not working properly.
7. Write the short notes on the following (**any two**) : **14**
- a) You attitude
 - b) Grapevine
 - c) Physical barrier
 - d) Downward communication.
-



Seat No.	
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**B.C.A. – III (Semester – V) Examination, 2014
MANAGEMENT INFORMATION SYSTEM (New)**

Day and Date : Friday, 21-11-2014

Total Marks : 80

Time : 11.00 a.m. to 2.00 p.m.

- Instructions:** 1) Q. 1 and Q. 7 are **compulsory**.
2) Solve **two** questions from Q. 2 to Q. 4.
3) Solve **one** Question from Q. 5 and Q. 6.

1. A) Solve the multiple choice questions :

8

- i) Controls of Data Communication deal with _____
a) Communication Channal b) The Computer
c) Terminals d) All of the above
- ii) Long form of CRM is _____
a) Cost Realiable Management
b) Customer Relationship Management
c) Crime Relationship Management
d) Customer Redirection Management
- iii) ESS/EIS is developed to support decision making processing at _____
level.
a) Lower Management b) Top Management
c) Middle Management d) Process Management
- iv) OAS is the short form of _____
a) Office Action System
b) Office Automation System
c) Office Automation Service
d) None of these



4. a) Write the role of IS in Organization. **6**
 - b) Write down types of Management Information. **6**
 - c) Describe the decision making life cycle. **4**
 5. a) What is meant by MIS ? Explain the characteristic of MIS. **8**
 - b) Explain the Application in Hospital Management. **8**
 6. a) Explain advantages and disadvantage of SCM. **8**
 - b) Explain the Application in MIS in Manufacturing. **8**
 7. Write a short notes (**any 4**) : **16**
 - a) Evolution of ERP
 - b) Information System
 - c) Component of MIS
 - d) Feedback Control
 - e) System Vulnerability.
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Seat No.	
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**B.C.A. (Part – III) (Semester – VI) Examination, 2014
ADVANCED JAVA AND WAP**

Day and Date : Thursday, 13-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Total Marks : 80

Instructions: 1) Q. 1 and Q. 7 are **compulsory**.
2) Solve **any two** from Q. 2 to Q. 4.
3) Solve **any one** from Q. 5 to Q. 6.

1. A) Choose the correct alternative : 8
- 1) It is essential to have both java file and html file of an applet in the same directory.
a) True b) False
 - 2) The <PARAM> tag contains two attributes namely _____ and _____
a) value, name b) name, text
c) name, value d) text, value
 - 3) What tags are mandatory when creating HTML to display an applet ?
a) name, height, width b) code, name
c) code base, height, width d) code, height, width
 - 4) Suppose that, you want to have an object to handle the Text Event of Text Area object t. How should you add the event handler for t ?
a) t.add text listener (); b) add text listener (t);
c) te.add text listener (); d) add text listener () ;
 - 5) Which of the following are correct event handling methods ?
a) mouse pressed (Mouse Event e) { }
b) mouse pressed (Mouse clicked e) { }
c) function key (Key Pressed k) { }
d) component added (Container Event e) { }



- 4. A) Explain the classes and interfaces in RMI. 6
 - B) List out and explain the implicit object used in JSP. 6
 - C) Discuss the life cycle of servlet. 4

 - 5. A) What is JDBC ? What are the types of JDBC-Driver model ? Explain any two. 8
 - B) Write a program to add cookies using servlet. 8

 - 6. A) What is session tracking ? How do you track a user session in servlet ? 8
 - B) Write a program to create connection to an access database through a java application and display the list of table in database. Assume suitable data. 8

 - 7. Write a short note on (**any four**) : 16
 - a) Parameter passing techniques
 - b) Message driven beans
 - c) Advantages of an Applet
 - d) Bluetooth
 - e) WAP Gateway.
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Seat No.	
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B.C.A. – III (Semester – VI) Examination, 2014
COMPUTER SCIENCE
Software Project Management

Day and Date : Tuesday, 18-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- N.B. :*** 1) *Q. 1. and Q. 7 are compulsory.*
2) *Solve any two questions from Q. 2 to Q. 4.*
3) *Solve any one question from Q. 5 to Q. 6.*

1.a) Choose the correct alternatives :

8

- 1) Prototypes can be classified as _____
 - a) Throw-away prototypes
 - b) Evolutionary prototypes
 - c) Both a) and b)
 - d) None of these

- 2) Which of the following is the content of a project plan ?
 - a) Organizational responsibilities
 - b) Risks to the project
 - c) Project objectives
 - d) All of these

- 3) _____ consists of listing all of the risks that can adversely affect the successful execution of the project.
 - a) Risk identification
 - b) Risk estimation
 - c) Risk evaluation
 - d) Risk planning



- 4) CMM stands for _____
- a) Critical Maturity Modes
 - b) Capability Maturity Model
 - c) Critical Maintenance Model
 - d) Capability Maintenance Model
- 5) Which of the following is not component on the basis of function point analysis ?
- a) External input types
 - b) External output types
 - c) External process types
 - d) Logical internal file types
- 6) _____ quality factor describe the extent to which a program can be used in other application.
- a) Portability
 - b) Re-usability
 - c) Integrity
 - d) Testability
- 7) The _____ organization structure is expressed in the staff hierarchy chart.
- a) Formal
 - b) Informal
 - c) Both a) and b)
 - d) None of these
- 8) Groups of methods or techniques are often referred as _____
- a) Plans
 - b) Activities
 - c) Group plans
 - d) Methodologies

b) Fill in the blanks :

4

- 1) _____ model used to represent the project activities and their relationships as a network.
- 2) SLOC refers to _____
- 3) _____ is often referred to in the literature on software project management.
- 4) The objective of backward pass is _____



- c) State whether statements are **true** or **false** : 4
 - 1) A project network may have only one end node.
 - 2) Waterfall model is an elaboration of the V-process model.
 - 3) BCWS refers to budgeted cost of work scheduled.
 - 4) The critical path is a combination of all paths.

 - 2. a) Explain cash flow forecasting. 6
 - b) What is project ? Explain with examples. 6
 - c) Write short note on requirement specification. 4

 - 3. a) Explain different categories of resources. 6
 - b) State the strengths and weaknesses of waterfall model. 6
 - c) Give the contents list for a feasibility study. 4

 - 4. a) Explain time and materials contracts and its advantages. 6
 - b) Explain the terms : 6
 - i) Free float
 - ii) Interfering float
 - c) Write short note on Function Point Mark II. 4

 - 5. a) Explain different stages in contract management. 8
 - b) Describe spiral model. 8

 - 6. a) Explain in detail ISO 9126. 8
 - b) Explain stepwise overview of project planning. 8

 - 7. Write short notes on **(any four)** : 16
 - a) Leadership
 - b) Gantt chart
 - c) Forward pass
 - d) Cost benefit analysis
 - e) Software quality measures.
-



Seat No.	
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B.C.A. – I (Sem. – I) (CGPA Pattern) Examination, 2014
MATHEMATICS
Discrete Mathematics

Day and Date : Friday, 21-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 70

- N. B. :** 1) Question No. 1 and 7 are **compulsory**.
2) Attempt **any two** questions from Q. No. 2, 3 and 4.
3) Attempt **any one** questions from Q. No. 5 and 6.
4) Figures to the **right** indicate **full** marks.
5) Use of **calculator** is allowed.

1. a) Choose the correct alternative :

7

- 1) $(A \cup B)'$ = _____
- a) $A \cup B$ b) $A' \cap B'$ c) $A' \cup B'$ d) $(A \cap B)'$
- 2) If aRb and $bRa \Rightarrow a = b$ then the relation R is called _____ relation.
- a) Antisymmetric b) Symmetric
c) Reflexive d) Transitive
- 3) If $f(x) = (x - 1)(x - 2)(x - 3)$ then $f(4) =$ _____
- a) 12 b) 6 c) 24 d) 0
- 4) The g.c.d. of 7 and 11 is _____
- a) 77 b) 7 c) 11 d) 1
- 5) If $A = \{0, 1, 2, 3, 4\}$, $B = \{0, 1, 3, 5, 6, 7\}$ then $|A \cup B| =$ _____
- a) 7 b) 8 c) 11 d) 0
- 6) The statement $(p \wedge \sim p) \vee (p \vee \sim p)$ is _____
- a) Tautology b) Contradiction
c) Neither d) Contingent
- 7) If $*$ is a binary operation defined in a set A and $a * b = b * a$, $\forall a, b \in A$ then $*$ is _____
- a) Associative b) Commutative
c) Distributive d) None of these

P.T.O.



b) Fill in the blanks :

7

- 1) If $A = \{a, b\}$, then power set $P(A) =$ _____
- 2) If aRb and $bRc \Rightarrow aRc$ then the relation R is called _____
- 3) If $f(x) = (x - 1)(x - 2)(x - 3)$ then $f(3) =$ _____
- 4) If $a \equiv b \pmod{n}$ and $c \equiv d \pmod{n}$ then $(a + c) \equiv$ _____ \pmod{n} .
- 5) The cardinality of set $A = \{1, 2, 3, 5, 6, 7, 8\}$ is _____
- 6) The contrapositive of the conditional statement $p \rightarrow q$ is _____
- 7) In a Boolean algebra B , $\forall x, y \in B$, De Morgan's law $(x \vee y)' =$ _____

2. Attempt **any two** of the following :

14

- a) Define with suitable example
 - i) Union of two sets.
 - ii) Intersection of two sets.
 - iii) Complement of a set.
- b) Define Cartesian product. If $A = \{1, 2, 3, 4\}$, $B = \{a, b, c\}$ then find $A \times B$, $B \times A$ and is it true $A \times B = B \times A$.
- c) Define one-one function and onto function. If $f : \mathbb{R} \rightarrow \mathbb{R}$ is a function defined as $f(x) = \frac{3x-5}{2}$ then show that f is one-one.

3. Attempt **any two** of the following :

14

- a) Prove that $p \wedge (q \vee r) \equiv (p \wedge q) \vee (p \wedge r)$.
- b) Define the cardinality of set. If A and B are any two sets then show that $|A \cup B| = |A| + |B| - |A \cap B|$.
- c) Find g.c.d. of 315 and 330 by using Euclidean algorithm and express it in the form $330m + 315n$, $m, n \in \mathbb{Z}$.



4. Attempt **any two** of the following : 14
- a) Test the validity of the following argument by using truth table.
 $P \rightarrow q, q \rightarrow r \vdash p \rightarrow r.$
 - b) Construct the switching circuits for the following Boolean function.
 - i) $[(x \wedge y') \wedge z] \vee [(z \vee y) \wedge x']$
 - ii) $(x \wedge y') \vee (x \wedge y)$
 - c) Let $U = \{p, q, r, s, t, x, y, z\}$ be a universal set. If $A = \{p, q, x, z\}$ and $B = \{p, r, s, x\}$ are the subsets of U . Then find
 - i) A' ii) B'
 - iii) $A \oplus B$ iv) $A - B$
 - v) $A \cup B$ vi) $(A \cup B)'$.
5. A) Let $R = \{(a, a), (d,b), (a, c), (b,c),(c,b)\}$ be a relation on a set $A = \{a, b, c\}$. Find a transitive closure of R by using Warshalls algorithm. 7
- B) Show that 17 and 24 are relatively prime integers and express g.c.d. of 17 and 24 in the form $24m - 17n$, where $m, n \in \mathbb{Z}$. 7
6. A) Test the validity of the following argument $p \rightarrow q, nq, r \vdash \sim(p \vee r)$ 7
- B) State Fermat's theorem. Find the remainder when 4^{39} is divisible by 7. 7
7. Attempt **any two** of the following : 14
- a) If $f(x) = x^2 - 5x + 3$, find $f(x + 3)$ and $f(-4x)$.
 - b) Let $A = \{p, q, r\}$ be a set and R be relation on A .
 $R = \{(p, p), (p,q), (p, r), (q, p), (q, q), (q, r),(r, p), (r, q), (r, r)\}$
Find matrix of R . Draw digraph of R . Also find indegree and outdegree of each vertex.
 - c) Define tautology and contradiction, check whether the following statement is either tautology or contradiction.
 $(p \wedge \sim q) \leftrightarrow (\sim p \vee q).$
-



Seat No.	
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B.C.A. – I (Semester – I) Examination, 2014
COMPUTER SCIENCE (Old)
Procedural Programming Through ‘C’

Day and Date : Friday, 14-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- N. B. :** 1) Question No. 1 and Question No. 7 are **compulsory**.
2) Attempt **any two** questions from Question No. 2 to Question No. 4.
3) Attempt **any one** question from Question No. 5 to Question No. 6.
4) Figures to the **right** place indicate **full** marks.

1. Choose correct alternatives :

16

- 1) _____ is the user defined data type in ‘C’.
a) int b) float c) union d) char
- 2) The multidirectional conditional control structure is _____.
a) if-else b) goto c) switch case d) none
- 3) Which of the following would compute the square of x in c.
a) pow (2, x) b) pow (x, 2) c) x**2 d) power (x, 2)
- 4) _____ function causes immediate termination of the entire program.
a) break () b) stop () c) exit () d) getch ()
- 5) _____ function is used to calculate the length of the string.
a) strlen () b) strstr () c) length () d) len ()
- 6) The maximum number of dimensions an array can have is _____.
a) 3 b) 4
c) 5 d) compiler dependent
- 7) Which is not a loop in C ?
a) for b) while c) repeat-until d) do-while



- 8) Parameter passed at function definition are called _____
a) formal parameter b) receiving parameter
c) local parameter d) actual parameter
- 9) By default a function has _____ return type.
a) void b) char c) int d) none
- 10) Which file is included for mathematics related operations ?
a) string.h b) math.h c) maths.h d) stdio.h
- 11) Which operator is used to access the value of the variable by using pointer ?
a) * b) & c) → d) **
- 12) _____ operator is used to access the individual element of structure.
a) → b) . c) →** d) both a) and b)

13) Void main ()

```
{  
    int x, *ptr;  
    x = 2;  
    ptr = &x;  
    printf(“%d”, * (ptr ++));  
}
```

what would be output of the program ?

- a) 3 b) 4 c) 2 d) none of above
- 14) _____ function is used to write entire string in the file.
a) fputc () b) fputs () c) fput () d) all
- 15) _____ mode opens the file in write mode.
a) r b) w c) rw d) both a) and b)
- 16) The file input-output operations are defined in _____ file.
a) stdio.h b) stdio.c c) io.h d) conio.h

2. A) Write an algorithm and draw flowchart to find out largest number between two. **6**
B) Which are looping statements in C ? Explain. **6**
C) What are the features of 'C' language ? **4**



- 3. A) What is ternary operator ? What are its advantages ? Write a program to print smallest number between three numbers using it. **6**
 - B) What is file ? Explain different types of file opening modes. **6**
 - C) What is difference between break and continue ? Explain with example. **4**
 - 4. A) Write a program to check entered number is palindrome or not. **6**
 - B) What is array ? Write syntax for declaring, accessing and printing one dimensional array. What are its advantages ? **6**
 - C) Explain any three library functions in 'C'. **4**
 - 5. A) Write a program for printing sorted array and finding largest element within given array. **8**
 - B) What is function ? Explain call by value and call by reference. **8**
 - 6. A) What is structure ? Explain with suitable example. **8**
 - B) Define algorithm and flowchart. Explain different symbols used in flowchart with example. **8**
 - 7. Write short note on following (**any four**) : **(4×4=16)**
 - a) Static variables
 - b) Pointer arithmetic
 - c) Recursion
 - d) Else-if ladder
 - e) Data types in 'C'.
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Seat No.	
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**B.C.A. – I (Semester – I) (Old) Examination, 2014
FUNDAMENTALS OF FINANCIAL ACCOUNTING**

Day and Date : Monday, 17-11-2014
Time : 11.00 a.m. to 2.00 p.m.

Max. Marks : 80

- N. B. :**
- 1) Q. No. 1 and 7 are **compulsory**.
 - 2) Attempt **any two** questions from question No. 2, 3 and 4.
 - 3) Attempt **any one** question from Question No. 5 and 6.
 - 4) **Use of calculator is allowed.**
 - 5) Figures to the **right** indicate **full** marks.

1. A) Choose the correct alternatives :

8

- 1) Amount or goods taken by proprietor for his personal use should be debited to _____ A/C.
A) Drawing B) Capital C) Bank D) Goods
- 2) Goodwill is an _____ asset.
A) Intangible B) Current C) Long term D) Secured
- 3) _____ profit is ascertained by trading account.
A) Gross B) Net C) Capital D) Revenue
- 4) _____ is the permanent and continuing diminution in the quality or quantity of the value of an asset.
A) Depreciation B) Expenses C) Cost price D) Asset
- 5) List of balances of all the accounts in ledger is called _____
A) Balance sheet B) Trial balance
C) Accounts D) Posting
- 6) Recording the transactions in ledger from journal it is called as _____
A) Balancing B) Ledger posting
C) Reconciliation D) Entry
- 7) _____ is maintained by store keeper.
A) Store ledger B) Bin card
C) Cost sheet D) Profit and loss A/c
- 8) Closing stock is valued at cost price or market price whichever is _____
A) More B) Less C) Excess D) Good



B) Fill in the blanks :

8

- 1) Depreciation is provided on _____ asset.
- 2) _____ discount is not recorded in books of accounts.
- 3) Amount which is not recoverable from customers is known as _____
- 4) Explanation of journal entry passed is called _____
- 5) Asset account always show _____ balance.
- 6) In _____ method materials are issued in the order in which they are received in the store.
- 7) _____ account shows gross profit or gross loss.
- 8) The statement which shows the assets and liabilities of the business is called _____

2. Record the following transactions in journal of Pandurang for January 2013. **16**

- Jan. 3 – Purchased goods on credit from Laxman for Rs. 1,00,000
- Jan. 5 – Cash sales for Rs. 1,10,000
- Jan. 7 – Salary paid Rs. 20,000
- Jan. 10 – Furniture purchased for cash of Rs. 15,000
- Jan. 15 – Goods purchased from Ram on cash for Rs. 40,000
- Jan. 20 – Goods returned to Laxman of Rs. 5,000
- Jan. 25 – Goods sold on credit to Bharat for Rs. 50,000
- Jan. 31 – Wages paid to worker Rs. 7,000.

3. From the following information prepare Store Ledger Account of product XYZ on the basis of First in First Out method. **16**

Date	Particulars	Units	Rate per unit Rs.
1-12-12	Opening stock	500	1.90
3-12-12	Receipts	4,000	2.00
14-12-12	Receipts	2,500	2.10
15-12-12	Issues	3,000	–



20-12-12	Receipts	4,000	2.30
21-12-12	Issues	6,000	–
23-12-12	Receipts	7,000	2.20
28-12-12	Issues	4,500	–
31-12-12	Issues	2,200	–

4. Write short notes on **any two** : **16**
- 1) Methods of pricing of issues of materials.
 - 2) Accounting concepts.
 - 3) Bank reconciliation statement.
5. A) What is book keeping ? Explain the objectives of book keeping. **8**
- B) Explain the important terms relating to ledger and give specimen of ledger. **8**
6. Sonali purchased a machinery of Rs. 95,000 on 1-1-2006 and spent Rs. 5,000 for its installation immediately. She purchased one more machinery for Rs. 60,000 on 30-06-2006. On 31-3-2008 she sold the machinery purchased on 1-1-2006 for Rs. 75,000. On the same day she purchased new machinery for Rs. 80,000. Sonali charged depreciation at 10% p.a. under straight line method on 31st December every year. **16**
- Prepare Machinery A/c and Depreciation A/c for the year 2006 to 2008.
7. From the following trial balance of Shri Ganesh prepare trading and profit and loss A/c for the year ended 31-3-2005 and balance sheet on that date. **16**

Trial Balance

Particulars	Debit Rs.	Credit Rs.
Opening stock	2,40,000	
Salary and wages	24,000	
Railway freight	10,000	
Purchases	2,40,000	
Bills receivable	2,400	
Rent	15,000	



Sales		5,06,000
Reserve for bad debts		2,000
Sundry creditors		65,200
Return outwards		3,000
Bad debts	600	
Plant and machinery	40,000	
Travelling expenses	12,000	
Commission		2,000
Repairs to plant	2,400	
Cash at bank	4,800	
Building	1,00,000	
Return inward	2,000	
Sundry debtors	70,000	
Office expenses	10,000	
Drawings	13,000	
Capital		1,00,000
Maharashtra Bank loan		1,08,000
Total	7,86,200	7,86,200

Adjustments :

- 1) Closing stock is Rs. 70,000.
 - 2) Office expenses due but not paid Rs. 600.
 - 3) Unexpired insurance amounting to Rs. 1,000 is included in office expenses.
 - 4) Make provision for unpaid salary Rs. 2,400.
 - 5) Commission received but not earned Rs. 800.
 - 6) Depreciate plant and machinery @ 5% and building @ 2¹/₂% p.a.
 - 7) Provide reserve at 5% for bad debts.
-



6) Face to face communication become more effective if accompanied with appropriate _____

- a) Feeling
- b) Attitude
- c) Body language
- d) Behaviour

7) Which is not the principle of communication _____

- a) Clarity
- b) Information
- c) Timeliness
- d) Prosperity

8) An individual report is written by _____ person.

- a) One
- b) Two
- c) Three
- d) Many

1. B) State whether it is **true** or **false**.

4

- 1) Communication outside the organization is more important than communication inside the organization.
- 2) Receivers may respond to a message through words, actions or both.
- 3) E-mail has facilitated the growth of informal written messages.
- 4) Choosing words that are too easy for your receiver can be a communication barrier.

1. C) Fill in the blanks.

4

- 1) Communication is a passing of _____ from one person to another.
- 2) The _____ marks the end of a complete sentence.
- 3) _____ is a list of items to be discussed at the meeting.
- 4) F. I. R. stands for _____

2. A) State the difference between Downward, Upward and Horizontal Communication. 8

B) What do you mean by meeting ? State its various types. 8

3. A) What do you mean by a barrier ? State the various barriers in communication. 8

B) Define communication with its various types. 8



4. A) Write a letter on behalf of Comfort Cycle Mart, Pune to Hero Cycles Ltd., Bangalore enquiring about the latest prices of their cycles. Ask also for the catalogue and terms of sale. **8**
- B) Write an application letter to Syntel Private Ltd., Pune for the post of Software Engineer with bio-data. **8**
5. A) What are various modern medias of communication ? **8**
- B) State the various components of mechanism of writing. **8**
6. A) What do you mean by report ? What are the types of report ? **8**
- B) Explain the concept of notice and agenda with suitable examples. **8**
7. Write short notes **any four** : **16**
- a) Signification of communication
 - b) Process of communication
 - c) Common features of report
 - d) Advantages of Internet
 - e) Punctuation marks.
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