

(6 pages)

Reg. No. :

Code No. : 22969 E Sub. Code : JCSB 5 A

U.G. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Fifth Semester

Part IV — Common Skilled

PERSONALITY DEVELOPMENT

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

1. Personality refers to the sum total of enduring _____.
(a) Attitude (b) Behaviour
(c) Attributes (d) None
2. From the following which is not a personality theory?
(a) Type (b) Trait
(c) Humanism (d) Forced Choice

3. Who developed psychoanalytical Theory?
(a) F.W. Taylor (b) Berne
(c) A. Maslow (d) Sigmund Freud
4. Psychoanalytical Theory deal the level of Consciousness of
(a) ID (b) Ego
(c) Super Ego (d) All the above
5. _____ refers to those factor that are determined at conception.
(a) Cognitive (b) Heredity
(c) Environmental (d) None of the above
6. _____ reflect a person's comfort level with relationship.
(a) Extroversion (b) Judging
(c) Both (d) None of the above
7. _____ refers to a person's ability to cop with stress.
(a) Introversion (b) Emotions
(c) Personality (d) All the above

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8. Locus of control is a component of personality

- (a) Stage (b) Mode
(c) Traits (d) Performance

9. _____ is the process of encouraging helping others to work towards objectives.

- (a) Leadership (b) Motivation
(c) Personality (d) Behaviour

10. Who developed Type A & B personality?

- (a) Friedman (b) Erikson
(c) Jean Piaget (d) Chris argyris

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 250 words.

11. (a) Write a short note on adolescence.

Or

(b) Briefly explain the consequences faced by adulthood.

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12. (a) What is Conscientiousness? Explain.

Or

(b) Briefly explain the term Extraversion.

13. (a) Briefly explain the low self esteem.

Or

(b) Explain the various steps of better Self Esteem.

14. (a) Enumerate the factors effecting heredity theory.

Or

(b) Write a short note on psycho analytical theory.

15. (a) Briefly explain the important steps of problem solving.

Or

(b) Write a short note on Leadership.

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[P.T.O.]



PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 600 words.

16. (a) Reuben Hill's the nine important stages model of the family cycle?

Or

- (b) Explain the associated Consequences of Family Violence across the life course.

17. (a) Explain the Dimension of personality.

Or

- (b) State the importance of communication.

18. (a) Explain the steps for maintaining Positive Attitude.

Or

- (b) How does the self concept gets formed during difference stages of human development?

19. (a) "The period of adolescence is the period of storm and stress" – Explain this Stanley's statement.

Or

- (b) How Environment influence on Personality Development?

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20. (a) Distinguish between Type A and Type B Behaviour.

Or

- (b) Elucidate the qualities of leadership.
-

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Reg. No. :

Code No. : 41296 E Sub. Code : JMCA 51

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018

Fifth Semester

Computer Application – Main

SOFTWARE ENGINEERING

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. _____ is the process of creating a representing of the domain or the software
- (a) Modelling
 - (b) Design
 - (c) Programming
 - (d) Deployment

2. _____ is defined using the lengths of two axes the longer one is called the major axis and the shorter one the minor axis

- (a) Regular polygon
- (b) Arbitrary polygon
- (c) Ellipse
- (d) Rotate

3. A _____ is a label that describes the criteria used into specialize a superclass into two or more subclasses

- (a) Generalization
- (b) Instance
- (c) Aggregation
- (d) discriminator

4. _____ is measured as the average amount of time that a server is running and available to respond to user

- (a) Reliability (b) Availability
- (c) Resource (d) Recovery

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5. _____ is a detailed language with many built in keywords designed to formally specify constraints in software models
- (a) OCL (b) XML
(c) WML (d) UML
6. MVC stands for
- (a) Mode view controller
(b) Model video controller
(c) Model view controller
(d) Mode video controller
7. A _____ diagram is another way of expressing dynamic information about a system
- (a) Activity diagram
(b) state diagram
(c) collaboration diagram
(d) sequence diagram
8. A _____ is a situation where two or more threads are stopped waiting for each other to do something
- (a) Livelock (b) critical races
(c) Deadlock (d) none

9. The _____ approach decisions are made by consensus this can lead to more creative solutions
- (a) egoless approach
(b) hierarchical approach
(c) multi process approach
(d) single process approach
10. A _____ chart is used to graphically present the start and end dates of each software engineering task
- (a) earned value chart
(b) Gantt chart
(c) PERT chart
(d) Tracking chart

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What is modelling?
- Or
- (b) Explain the following
- (i) methods
(ii) operations
(iii) polymorphism?



12. (a) Write about requirements?

Or

(b) Describe in detail about observation.

13. (a) Explain about the Directionality in associations.

Or

(b) Explain the Collaboration diagrams.

14. (a) Discuss about Routine call coupling.

Or

(b) What are the different types of cohesion?

15. (a) Discuss about spiral model.

Or

(b) What is Gantt charts?

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain about the software quality.

Or

(b) Discuss briefly about Risk in software engineering in detail.

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17. (a) Explain about Interviewing.

Or

(b) Describe about the Non functional requirements.

18. (a) Discuss about Generalizations.

Or

(b) Give a brief note on Instance diagrams.

19. (a) Explain about the Design for flexibility.

Or

(b) Give a brief note on Broker architectural pattern.

20. (a) Explain the Blackbox testing.

Or

(b) Explain about phased release model.

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Reg. No. :

Code No. : 41297 E Sub. Code : JMCA 52

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Fifth Semester

Computer Application – Main

WEB TECHNOLOGY

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer:

1. Which of the following is transport layer protocol in the TCP/IP protocol suite?
(a) HTTP (b) UDP
(c) SMTP (d) FTP

2. A web browsers runs on
(a) linux only
(b) web-client computers
(c) window only
(d) Web-server computers
3. Which of these following tag is used to add a row to a table?
(a) <td> and </td>
(b) <row> and </row>
(c) <tablerow> and </tablerow>
(d) <tr> and </tr>
4. Which one oldie following is the correct syntax for importing a stylesheet in CSS?
(a) @importurl("example.css")
(b) @import-cssurl("example.css")
(c) @import styleurl("example.css")
(d) @import stylesheeturl("example.css")
5. Which of the following keywords is used to return a value from a function?
(a) return (b) pass
(c) send (d) set

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6. Which of the following characters is used as a choice operator?

- (a) / (b) ^
(c) | (d) \$

7. Which of the following is not a correct name for an XML document?

- (a) <para>
(b) <line>
(c) <1st>
(d) all three names are incorrect

8. Which of the following element declarations is valid?

- (a) <!ELEMENT root(#CDATA)>
(b) <!ELEMENT root(#PCDATA)>
(c) <!ELEMENT root(#ANY)>
(d) <!ELEMENT root (#PCDATA)">

9. Which of the following is a compiled Language?

- (a) C++ (b) Perl
(c) Python (d) Shell

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10. Which of the following packages contains Servlet interface?

- (a) Javax.server.servlet
(b) javax.servelet
(c) Java.server.servlet
(d) javax.servelet server

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What are the various types of websites? Discuss websites briefly.

Or

(b) How will you write header in HTTP?

12. (a) Create a HTML Page containing a text area maximum of 100 words with suitable tags.

Or

(b) Write about the browser compatibility in CSS.

13. (a) How will you use an array as a stack in javascript?

Or

(b) What strings does this regular expression match? August | April 5, 2018.

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[P.T.O.]



14. (a) What is XML Prolog and its parts?

Or

(b) What is CDATA?

15. (a) What is Server side Programming? Explain.

Or

(b) What are the servlet Alternatives?

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) What are the major issues in web solution Development?

Or

(b) Explain in detail about URL and its anatomy.

17. (a) How will you create forms in HTML? And explain all form elements.

Or

(b) What is attribute selectors and what are the various types of attributes selectors in CSS?

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18. (a) How are objects created in javascripts?

Or

(b) Distinguish between regular expression-directed engine. What is meant by Lazy regular Expression engine?

19. (a) How will you validate an XML?

Or

(b) Write a java program to validate an XML document against a DTD.

20. (a) Write in detail about CGI security?

Or

(b) Explain about servlet filters.

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Reg. No. :

Code No. : 41298 E Sub. Code : JMCA 53

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Fifth Semester

RDBMS

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. When two transactions will happen at the same on one table is known as
- (a) optimistic locking
 - (b) transaction log
 - (c) table locking
 - (d) none

2. The binary large object data type is used to store binary data up to _____ giga bytes.
- (a) 1 (b) 2
 - (c) 3 (d) 4
3. The _____ function is used to suppress duplicate values.
- (a) DISTINCT (b) INSERT
 - (c) SELECT (d) RESTRICT
4. The order by clause is used with the _____ query to sort rows in a table.
- (a) ROW (b) WHERE
 - (c) EDIT (d) SELECT
5. The set operator _____ returns all rows that appear in both queries results.
- (a) INTERSECT (b) UNION
 - (c) UNION ALL (d) MINUS
6. The _____ is an oracle object that is used for faster retrieval of rows from a table.
- (a) Synonym (b) Select
 - (c) Index (d) Alter

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7. The _____ block is a block of code without name.

- (a) nameless
- (b) synchronous
- (c) asynchronous
- (d) anonymous

8. _____ statement to add a new row in a table.

- (a) ADD (b) UPDATE
- (c) INSERT (d) APPEND

9. In a _____ cursor the contents are known at compile time.

- (a) implicit (b) static
- (c) dynamic (d) explicit

10. A table is like the _____ but is unbounded.

- (a) record (b) array
- (c) graph (d) loop

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Describe about personal databases.

Or

(b) Explain the creation of an oracle table with an example.

12. (a) Explain arithmetic operations with example.

Or

(b) Define HAVING clause. Explain with example.

13. (a) Write short notes on Top-N analysis with example.

Or

(b) Define synonyms. Explain with example.

14. (a) Describe PL/SQL block structure.

Or

(b) Create a table called ITEM with one column called ItemNum with the NUMBER byte. Write a PL/SQL program to insert values of 1 to 5 for ItemNum.

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[P.T.O.]



15. (a) Write the types of cursors and give a short account of cursor variables.

Or

- (b) What is meant by exceptions? Write about the types of exceptions.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write about the data types in the oracle table and explain.

Or

- (b) Explain altering an existing table in detail.

17. (a) Give any five DML statements and explain with example.

Or

- (b) Explain BUILT-IN functions in detail.

18. (a) Write short notes on join condition and discuss the various types of table joins.

Or

- (b) Explain controlling access. Write about the privileges of database administrator.

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19. (a) Explain PL/SQL data types in detail.

Or

- (b) Give the three basic control structures and explain about the selection structure.

20. (a) Describe the attributes of the explicit cursor and implicit cursor with example.

Or

- (b) What are composite data types? Explain.
-

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Reg. No. :

Code No. : 41304 E Sub. Code : JMCA 5 C

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Fifth Semester

Computer Application – Main

Elective II — DATA MINING

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. What is the principle of sorting through large amounts of data and picking out relevant Information?
 - (a) databases
 - (b) knowledge discovery
 - (c) data mining
 - (d) extraction

2. Which type of tasks characterize the general properties of the database?
 - (a) descriptive mining
 - (b) predictive mining
 - (c) data mining
 - (d) knowledge mining
3. Which one appear frequently in a dataset?
 - (a) itemset
 - (b) correlations
 - (c) frequent patterns
 - (d) data
4. Which algorithm is a seminal algorithm for mining frequent itemsets for Boolean Association rules?
 - (a) Correlation
 - (b) Apriori
 - (c) K-means
 - (d) Association rule
5. What is a form of data analysis that extracts models describing important databases?
 - (a) classification
 - (b) correlation
 - (c) association
 - (d) pattern

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6. Which classifier uses a set of IF-THEN rules in classification?
(a) Decision tree (b) Bayes method
(c) Naive method (d) Rule-based
7. What is the process of partitioning a set of data objects into subsets?
(a) cluster analysis (b) classification
(c) association (d) rule-mining
8. Which method creates a hierarchical decomposition of the given set of data objects?
(a) Association
(b) Clustering
(c) Hierarchical method
(d) Pattern
9. Which mining contains a rich and dynamic collection of Information about web page contents with hypertext structures and multimedia?
(a) Text Data (b) Web Data
(c) Structure Data (d) Global Data
10. Which mining is the process of extracting useful Information from server logs?
(a) web data (b) text data
(c) content (d) web usage

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What are all the applications of Data mining? Explain it.
Or
(b) Write short note on Data Mining software.
12. (a) Write short note on the basics of Association Rule Mining.
Or
(b) Explain briefly on the performance evaluation of Algorithms.
13. (a) Write short note on Decision Tree rules.
Or
(b) Write short note on classification methods.
14. (a) Explain the types of data.
Or
(b) Write short note on partitional methods.

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[P.T.O.]



15. (a) Write short note on Web Technology and its characteristics.

Or

- (b) Write short note on Web usage mining.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Describe the process of Data Mining.

Or

- (b) Explain in detail about Data Mining techniques.

17. (a) Discuss elaborately about the Apriori Algorithm.

Or

- (b) Explain Mining frequent pattern without candidate generation.

18. (a) Explain split Algorithm based on the Information theory.

Or

- (b) Explain Evaluation criteria for classification methods.

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19. (a) Describe desired features of cluster analysis.

Or

- (b) How to deal with large databases? Explain the process.

20. (a) Explain Web content mining.

Or

- (b) Explain Web structure mining.

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Reg. No. :

Code No. : 41351 E Sub. Code : JMCA 61

B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Sixth Semester

Computer Application — Main

OPERATING SYSTEM

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. _____ programs, define the ways in which the system resources are used to solve the computing problems of the users.
- (a) Application (b) System
(c) Device (d) Utility

2. A program loaded into memory and executing is called a
- (a) Data (b) Record
(c) Database (d) Process
3. _____ process state, when instructions are being executed.
- (a) New (b) Running
(c) Waiting (d) Ready
4. _____ counter indicates the address of the next instruction to be executed for this process.
- (a) Location (b) Register
(c) Program (d) Timer
5. If process P_i is executing in its critical section, then no other processes can be executing in their critical sections is
- (a) dead lock (b) critical
(c) mutual exclusion (d) bankers problem
6. _____ two or more processes are waiting indefinitely for an event that can be caused by only one of the waiting processes.
- (a) Mutual exclusion (b) Deadlock
(c) Semaphore (d) Sharing

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7. Logical address generated by the CPU; also referred to as _____ address.
(a) Virtual (b) Physical
(c) Logical (d) Monitor
8. System maintains a _____ queue of ready-to-run processes which have memory images on disk.
(a) Running (b) Blocked
(c) Priority (d) Ready
9. _____ method information in the file is processed in order, one after the other.
(a) Random (b) Relative
(c) Hashing (d) Sequential
10. A file system must be _____ before it can be accessed.
(a) Unmount (b) Existing
(c) Mounted (d) Partition

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

11. (a) Define the essential properties of the operating systems.

Or

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- (b) Under what circumstances would a user be better off using a time-sharing system, rather than a personal computer or single-user workstation?
12. (a) Write note on Threads.

Or

- (b) Explain about Process creation.

Or

- (b) Explain the Reader-Writer Classical problem of synchronization.

Or

- (b) What are problems associated with Dynamic storage allocation?

Or

- (b) Discuss the Sequential file access methods.

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[P.T.O.]



PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

16. (a) Describe the advantages and disadvantages multiprocessor systems.

Or

- (b) Write note on Mainframe systems.

17. (a) Explain about Cooperating process.

Or

- (b) Discuss FCFS and SJF scheduling algorithm.

18. (a) Write note on Critical Section Problem.

Or

- (b) How to prevent the Dead lock? Explain.

19. (a) Describe the Segmentation Memory-management scheme that supports user view of memory.

Or

- (b) Write note on Virtual Memory.

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20. (a) Explain the Contiguous file allocation methods.

Or

- (b) Write note on Disk Structure.

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PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

16. (a) Discuss about network hardware.
Or
(b) Write note on TCP/IP reference model.
17. (a) Explain the characteristics of Twisted pair and coaxial cable.
Or
(b) Discuss the importance of properties of Geostationery satellites.
18. (a) Illustrate about an unrestricted simplex protocol.
Or
(b) Describe the working one-bit sliding window protocol.
19. (a) Write note on distance vector routing algorithm.
Or
(b) Compare the data link layer with transport layer.
20. (a) Discuss the Domain Name system.
Or
(b) Mention the usage of MIME.

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B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Sixth Semester

Computer Application — Main

COMPUTER NETWORKS

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

- _____ networks consists of many connections between individual pairs of machines.
(a) point-to-point (b) broad cast
(c) unicast (d) multicast.
- _____ are privately-owner networks within a single building or campus of up to a few kilometers in size.
(a) WAN (b) MAN
(c) LAN (d) Internet.
- _____ media, which are those that provide a conduct from one device to another.
(a) unguides (b) guided
(c) wireless (d) unbounded.



4. Which transmission media is the most secure ()
 (a) wire (b) fiber
 (c) wireless (d) guides.
5. _____ layer regulates the flow of data so that slow receivers are not Swamped by fast Senders.
 (a) physical (b) datalink
 (c) network (d) transport.
6. Data link layer to break that bit stream up into discrete _____.
 (a) bits (b) bytes
 (c) frames (d) flag.
7. _____ algorithm operate by having each router maintain a table giving the best known distance to each destination and which line to use to get there.
 (a) Flooding
 (b) Dijkstra's
 (c) Distance Vector routing
 (d) Shortest-Path.
8. _____ routing algorithm, each router computer a spanning tree covering all other routers.
 (a) shortest path (b) multicast
 (c) distance vector (d) flooding.
9. Which DNS client-maps an address to a name or a name to an address especially when required by host.
 (a) resolver (b) mapper
 (c) primary server (d) secondary server.
10. Which application level protocol plays a crucial role in carrying out the data definition and manipulation in addition to X 500 features.
 (a) TCP (b) LDAP
 (c) FTP (d) SMTP.

PART B — (5 × 5 = 25 marks)
 Answer ALL questions choosing either (a) or (b).

11. (a) Write note on wide area networks.
 Or
 (b) What are the design issues occur in computer networks?
12. (a) Describe the characteristics of Electromagnetic spectrum.
 Or
 (b) Write note on Radio transmission.
13. (a) How to use a Hamming code to correct burst errors?
 Or
 (b) Discuss the algorithm for check sum error detection code.
14. (a) Distinguish between Datagram subnet and virtual circuit subnet.
 Or
 (b) Explain the shortest path routing algorithm.
15. (a) Write note on public key digital signature.
 Or
 (b) Explain how data encryption standard works.



15. (a) Discuss the classification of Interactive multimedia.
Or
(b) Describe the header information appears at the beginning of a MIDI file.
PART C — (5 × 8 = 40 marks)
Answer ALL questions choosing either (a) or (b).
16. (a) Describe the operations of computer graphics.
Or
(b) Explain the working of CRT monitors.
17. (a) Write note on Bresenham's line drawing algorithm.
Or
(b) How to determine whether a point is inside or outside a given polygon? Explain.
18. (a) Explain the 2D Translation and Rotation transformation.
Or
(b) Write note on homogenous coordinate system.
19. (a) Describe the algorithm for Cohen-Sutherland Clipping.
Or
(b) Discuss about Polygon Clipping.
20. (a) Mention the applications of Multimedia.
Or
(b) Explain the compression standard for still images.

Reg. No. :

Code No. : 41353 E Sub. Code : JMCA 63

B.C.A. (CBCS) DEGREE EXAMINATION,
APRIL 2019.

Sixth Semester

Computer Application— Main
COMPUTER GRAPHICS AND MULTIMEDIA
(For those who joined in July 2016 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

- _____ devices provide position information to the computer.
(a) Selectors (b) Locators
(c) Event (d) CRT
- _____ device, has a rolling ball, a handle is used as a lever to change the potentiometer settings.
(a) Track ball (b) Mouse
(c) Joystick (d) Light pen
- In Bresenham's circle generation algorithm, if (x, y) is the current pixel position then the y value of the next pixel position is
(a) y or $y + 1$ (b) y alone
(c) Polygon (d) y or $y - 1$



4. Bresenham's Algorithm seeks to select the optimum raster location that represent a
 (a) Straight line (b) Curve line
 (c) Polygon (d) Circle
5. The matrix representation of reflection about $y = -x$ is
- | | | | |
|-----|--------|-----|--------|
| | 1 0 0 | | -1 0 0 |
| (a) | 0 -1 0 | (b) | 0 1 0 |
| | 0 0 1 | | 0 0 1 |
| | 0 1 0 | | 0 -1 0 |
| (c) | 1 0 0 | (d) | -1 0 0 |
| | 0 0 1 | | 0 0 1 |
6. In 2D graphics, of S_1 and S_2 are two scaling matrix and T_1 and T_2 are two translation matrices then
 (a) $S_1 S_2 = S_2 S_1$ (b) $S_1 T_1 = S_2 T_2$
 (c) $T_2 S_2 = T_1 S_1$ (d) $S_1 T_1 = T_2 S_1$
7. In the Cohen Sutherland line clipping algorithms, if the codes of the two point P and Q 0101 and 0001 then the line segment joining the points P and Q will be _____ the clipping.
 (a) Totally outside (b) Partially outside
 (c) Totally inside (d) Orgin
8. In view - port clipping of 3D viewing, a region code contains _____ number of bits.
 (a) 6 (b) 4
 (c) 5 (d) 7

9. The format of storing digital audio in multimedia application is
 (a) JPEG (b) TIFF
 (c) WAV (d) BMP
10. MIDI is
 (a) Musical Instrument Digital Interface
 (b) Multiple Instrument Digital Interface
 (c) Musical Interchangeable Digital Interface
 (d) Multiple Interchangeable Digital Interface.

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

11. (a) List out the graphics adapter cards along with their characteristic features.
 Or
 (b) Describe the architecture of a raster scan display with a clear block diagram.
12. (a) Illustrate the procedure for DDA algorithms.
 Or
 (b) Write an algorithm for Bresenham circle.
13. (a) Explain about Inverse of basic transformations.
 Or
 (b) Write note on shearing.
14. (a) What do you understand by windows and viewports?
 Or
 (b) Give a brief note on viewing transformation matrix.



PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

16. (a) Define :
(i) Quality
(ii) Quality Assurance
(iii) Verification
(iv) Validation
Or
(b) Explain :
(i) Waterfall
(ii) Model
(iii) The V model
17. (a) Explain any two code coverage testing.
Or
(b) Explain top-down and bottom - up integration.
18. (a) Write the guideline of selecting test cases for Acceptance testing.
Or
(b) Write the criteria to select test cases for regression testing.
19. (a) Write the checklist of Fake language and Language testing.
Or
(b) Explain activities of XP Work Flow.
20. (a) Explain shortly Risk Management.
Or
(b) Write the test case Specification of test process.

Reg. No. :

Code No. : 41354 E Sub. Code : JMCA 64

B.C.A. (CBCS) DEGREE EXAMINATION,
APRIL 2019.

Sixth Semester

Computer Application – Main

SOFTWARE TESTING

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. _____ is like designing the right pesticides to catch and kill the pests.
(a) Testing (b) Design
(c) Coding (d) Requirement
2. _____ is meeting the requirements expected of the software, consistently and predictably.
(a) Verification (b) Testing
(c) Quality (d) Design
3. _____ testing also known as glass box testing.
(a) Red box (b) White box
(c) Green box (d) Black box



4. _____ testing is done to verify the known test conditions.
(a) Black (b) White
(c) Positive (d) Negative
5. _____ testing to ensure the system does not break down unexpectedly.
(a) System (b) Stress
(c) White box (d) Block box
6. Number of types of regression testing is _____.
(a) 4 (b) 2
(c) 5 (d) 6
7. _____ is a byte representation for characters that is used in computers.
(a) Unicode (b) Byte code
(c) ASCII (d) DBCS
8. Testing done without using any formal testing technique is called _____ testing.
(a) Stress (b) System
(c) Unit (d) ad hoc
9. SCM stands for _____.
(a) Software Configuration Management
(b) Small Complete Machine
(c) Software Complete Machine
(d) Small Configuration Machine
10. The purpose of _____ is to find defects early in the test cycle.
(a) testing (b) designing
(c) coding (d) risk

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Explain the attributes of life cycle model.
Or
(b) Explain the prototyping models activities.
12. (a) Write the advantages of static testing by humans.
Or
(b) Write the combinations of Requirement based testing.
13. (a) Write any five difference-between functional and non-functional testing.
Or
(b) Write any five points considerations in mind for resetting the test cases for regression testing.
14. (a) Write any five checklist for I_{18a} validation.
Or
(b) Write short notes on buddy testing.
15. (a) Explain Activity Breakdown and scheduling.
Or
(b) Write any five steps for Tool Selection and deployment.



(7 pages)

Reg. No. :

Code No. : 41362 E Sub. Code : JMCA 6 B

B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Sixth Semester

Computer Application — Main

Elective III — SOFTWARE PROJECT MANAGEMENT

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The process each manager follows during the life of a project is known as
 - (a) Project Management
 - (b) Manager life cycle
 - (c) Project Management Life Cycle
 - (d) System Life Cycle

2. Which of the following is/are main parameters that you should use when computing the costs of a software development project?
 - (a) Travel and training costs
 - (b) Hardware and software costs
 - (c) Effort costs (the costs of paying software engineers and managers)
 - (d) All of the mentioned
3. Which one of the following is not a fundamental activity for software processes in software engineering?
 - (a) Software Verification
 - (b) Software Validation
 - (c) Software design and implementation
 - (d) Software evolution
4. Which of the following is not project management goal?
 - (a) Keeping overall costs within budget
 - (b) Delivering the software to the customer at the agreed time
 - (c) Maintaining a happy and well-functioning development team
 - (d) Avoiding customer complaints

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5. In the classical chief programmer team approach, the team member responsible for maintaining the detailed design and coding is
- (a) The chief programmer
 - (b) The programming secretary
 - (c) A specialized function that exists outside 'the team'
 - (d) The individual coder (i.e. programmer)
6. Quality planning is the process of developing a quality plan for
- (a) team (b) project
 - (c) customers (d) project manager
7. What is related to the overall functionality of the delivered software?
- (a) Function-related metrics
 - (b) Product-related metrics
 - (c) Size-related metrics
 - (d) Project-related metrics
8. Identify the sub-process of process improvement
- (a) Process introduction
 - (b) Process analysis
 - (c) De-processification
 - (d) Process distribution

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9. Which one of the following is not a fundamental activity for software processes in software engineering?
- (a) Software verification
 - (b) Software validation
 - (c) Software evolution
 - (d) Software specification
10. Which two requirements are given priority during Requirement Management of a product?
- (a) User and Developer
 - (b) Functional and Non-functional
 - (c) Enduring and Volatile
 - (d) System and User

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Write a note on conventional software management.

Or

- (b) Explain about team effectiveness.

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[P.T.O.]



12. (a) Discuss about transition phases.

Or

(b) Write about Pragmatic artifacts.

13. (a) Explain about software process workflows.

Or

(b) Describe about cost and schedule estimation process.

14. (a) Briefly explain about the project environment.

Or

(b) Explain about the life cycle expectations.

15. (a) Write about the evolutionary requirements.

Or

(b) Explain about software management principles.

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PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

16. (a) Discuss in detail about Waterfall model.

Or

(b) Explain about reducing software product size.

17. (a) Give an overview about life cycle phases.

Or

(b) Briefly explain about the artifact sets.

18. (a) Explain about work breakdown structures.

Or

(b) Describe about iteration planning process.

19. (a) Explain in detail about the seven core metrics.

Or

(b) Illustrate the quality indicators.

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20. (a) Explain the methods for managing a modern process.

Or

(b) Briefly explain about the modern process transitions.



(6 pages)

Reg. No. :

Code No. : 30149

Sub. Code : J 1 TL 11/
S 1 TL 11

U.G. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

First Semester

Part I — Tamil

பொதுத்தமிழ் — I

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

பகுதி அ — (10 × 1 = 10 மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் விடை தருக.

சரியான விடையைத் தேர்ந்தெடு.

1. கவிமணியின் இயற்பெயர்
(அ) வெ. ராமலிங்கம் பிள்ளை
(ஆ) முத்தையா
(இ) தேசிய விநாயகம் பிள்ளை
(ஈ) சுப்பையா

2. வைரமுத்து எழுதிய நூல்
(அ) ஆசியஜோதி
(ஆ) கொஞ்சம் தேனீர் நிறைய வானம்
(இ) பாஞ்சாலி சபதம்
(ஈ) மிசிராந்தையார்
3. நாகியாது – இலக்கணக் குறிப்பு தருக.
(அ) குற்றியலிகரம் (ஆ) குற்றியலுகரம்
(இ) பண்புத்தொகை (ஈ) வினைத்தொகை
4. பொருள் தருக. மாரி
(அ) மலை (ஆ) மழை
(இ) உணவு (ஈ) உலகம்
5. இராமனையும் இலக்குவனையும் வேள்வியைக் காப்பதற்காக அழைத்துச்சென்றவர்
(அ) வசிட்டன்
(ஆ) கலைக்கோட்டு முனிவர்
(இ) வால்மீகி
(ஈ) விகவாமித்திரன்
6. காய்களைக் கொண்டு விளையாடும் விளையாட்டு
(அ) தெள்ளேணம் (ஆ) பாவையாடல்
(இ) அம்மாளை (ஈ) ஊசல்



7. சிறுகதையின் மன்னன் யார்?
 (அ) புதுமைப்பித்தன் (ஆ) ஜெயகாந்தன்
 (இ) பாவண்ணன் (ஈ) பாட்டாளி
8. பொன்னீலன் எழுதிய சிறுகதை
 (அ) மனோபாவம் (ஆ) ஆறு
 (இ) வசக்குதல் (ஈ) ஐஸ்பிரியாணி
9. பரமார்த்த குருகதையை எழுதியவர்
 (அ) பாரதியார் (ஆ) ந. பிச்சமூர்த்தி
 (இ) கால்டுவெல் (ஈ) வீரமாமுனிவர்
10. தமிழ்நாட்டின் வால்டர் ஸ்காட் என்று புகழப்பட்டவர்
 (அ) தமிழ்வாணன் (ஆ) எஸ் ஏபி
 (இ) சுஜாதா (ஈ) கல்கி
- பகுதி ஆ — (5 × 5 = 25 மதிப்பெண்கள்)
 அனைத்து வினாக்களுக்கும் விடையளி (அ) அல்லது
 (ஆ) தேர்ந்தெடு.
 பின்வரும் வினாக்களுக்கு 250 சொற்களில் விடை தருக.
11. (அ) ஒன்று எங்கள் ஜாதியே கவிதையில் கண்ணதாசன்
 கூறும் கருத்துக்களை ஆய்க.
 (அல்லது)
 (ஆ) கல்யாண்குறிப்பிடும் 'கண்டும் காணாமல்'
 குறித்து ஆராய்க.

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12. (அ) முதல் எழுத்துக்களைச் சான்றுடன் விளக்குக.
 (அல்லது)
 (ஆ) தமிழில் வழங்கும் கிரந்த எழுத்துக்களை விவரிக்க.
13. (அ) அன்பு, அடக்கம், ஒழுக்கம் பற்றிய வள்ளுவர்
 கருத்துக்களைத் தருக.
 (அல்லது)
 (ஆ) சிறுபஞ்சமூலம் தரும் சூழலியல் செய்திகளைத்
 தருக.
14. (அ) பொன்னகரம் தலைப்புப் பொருத்தத்தை ஆய்க.
 (அல்லது)
 (ஆ) ஆறு சிறுகதையின் கதைக் கருவினைப்
 புலப்படுத்துக.
15. (அ) புதுக்கவிதை எழுத்தாளர்களைக் குறிப்பிடுக.
 (அல்லது)
 (ஆ) தமிழ் நாடக வகைகளைப் புலப்படுத்துக.

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 [P.T.O.]



பகுதி இ — (5 × 8 = 40 மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் விடையளி (அ) அல்லது
(ஆ) தேர்ந்தெடு.

பின்வரும் வினாக்களுக்கு 600 சொற்களில் விடை தருக.

16. (அ) கைத்தொழில் குறித்து நாமக்கல் கவிஞர் கூறும் கருத்துக்களை ஆய்க.

(அல்லது)

(ஆ) தேசப்பிதாவிற்கு ஒரு தெருப்பாடகனின் அஞ்சலி கவிதையில் மு. மேத்தா குறிப்பிடும் செய்திகளைத் தெளிவுறுத்துக.

17. (அ) மொழி முதல், மொழி இறுதி எழுத்துக்களைச் சான்றுடன் விளக்குக.

(அல்லது)

(ஆ) ஒலிப்பு மாறுபாடுகள் மற்றும் பொருள் மாறுபாடுகள் ஆகியவற்றைச் சான்றுடன் விளக்குக.

18. (அ) கம்பராமாயணத்தில் உறவுகள் என்னும் தலைப்பில் முனைவர் பே. மகேஸ்வரி தரும் கருத்துக்களை எழுதுக.

(அல்லது)

(ஆ) அற இலக்கியங்களில் இடம்பெற்றுள்ள மேலாண்மைச் செய்திகளை விளக்குக.

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19. (அ) ராஜா வந்திருக்கிறார் சிறுகதையில் சித்தரிக்கப்பட்டுள்ள குழந்தைகளின் உலகத்தினைத் தெளிவுறுத்துக.

(அல்லது)

(ஆ) வசக்ருதல் சிறுகதையில் பொன்னீலன் குறிப்பிடும் சமூக நிலையினைப் புலப்படுத்துக.

20. (அ) தமிழில் சிறுகதையின் தோற்றமும் வளர்ச்சியும் பற்றி எழுதுக.

(அல்லது)

(ஆ) புதின இலக்கியத்தின் தோற்றம் வளர்ச்சி குறித்து எழுதுக.

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(8 pages)

Reg. No. :

Code No. : 32142

Sub. Code : J 2 EN 11/
S 2 EN 11

U.G. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

First Semester

Part II — English

GENERAL ENGLISH — I

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. Khushwant Singh's grand mother enjoyed when she
(a) sat by her spinning wheel
(b) saw her grandson come home from school
(c) was in prayer
(d) fed the sparrows

2. The third beggar who met the man in black is a
(a) Mother with two children
(b) an ageing prostitute
(c) a small girl
(d) a widow
3. In 1950, Mother Teresa, founded _____.
(a) a school
(b) Nirmal Hriday
(c) the missionaries of charity
(d) two hospital
4. _____ always spoke to Kalam about brave new world.
(a) His father
(b) S.T.R. Manickam
(c) Jallaluddin
(d) His school teacher
5. Sonnet 116 is a poem of _____ lines.
(a) fourteen
(b) sixteen
(c) ten
(d) eleven
6. The village school lies beside the _____.
(a) sparkling stream
(b) straggling fence
(c) neat farm
(d) factory
7. The proprietor of the framing shop is _____.
(a) Chandimal
(b) Deepu
(c) Datta
(d) R.K. Laxman



8. Nathu is a _____.
- (a) a washer boy (b) a sweeper
(c) an accountant (d) a barber
9. "Hero funny that sight was !" is a/an _____ sentence.
- (a) exclamatory (b) assertive
(c) negative (d) imperative
10. One who works and fights for equal rights of women is _____.
- (a) aristocrat (b) feminist
(c) socialist (d) sadist

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. Explain with reference to the context the following passages : (2 × 2½ = 5)
- (a) (i) She could never have been pretty ; but she was always beautiful.
- (ii) The misery painted in the woman's visage was not half so strongly expressed as the agency in his.

Or

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- (b) (i) She makes you climb mountains for her.
- (ii) Half a century later, I can still feel the surge of pride in earning my own money for the first time.
12. (a) (i) Love is not love
Which alters when it alteration finds.
- (ii) There, in his mansion, skill'd to rule,
The village master taught his little school.
- Or
- (b) (i) Yet knowing how way leads on to way
I doubted if I should ever come back.
- (ii) And I, with moan
Kissing away his tears, left others of my own
13. (a) How did Datta damage the photograph?
Or
- (b) Describe the scene in front of the bank and the incidents that followed.
14. (a) Fill in the blanks using a, an, some or any :
- (i) There are _____ oranges on the table.
- (ii) Raju bought _____ bottle of water.

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[P.T.O.]



- (iii) Do you have _____ food in your bag?
- (iv) Please buy me _____ apple.
- (v) Stella bought _____ furniture.

Or

(b) Give the plural forms of the following :

- (i) Child (ii) Man
- (iii) Mouse (iv) Thesis
- (v) Foot.

15. (a) Add question tag to the following sentences :

- (i) It is dark _____.
- (ii) Shanthi loves apples _____.
- (iii) You can drive a car _____.
- (iv) They were going to the lake _____.
- (v) Ram killed the snake _____.

Or

(b) Fill in the blanks with the right form of adjectives in the brackets.

- (i) Mala is a _____ (good) singer than me.
- (ii) This task is _____ (urgent) than all others.
- (iii) Savitha is the _____ (childish) of all my friends.

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- (iv) This is the _____ (busy) road in the city.
- (v) He is as _____ (brave) as a lion.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b) in about 600 words each.

16. (a) How did Khushwant singh portray his grandmother?

Or

(b) Who are the people who had influenced Kalam in his younger days?

17. (a) Describe the village school master's character.

Or

(b) How does Shakespeare picture true love?

18. (a) What is the main theme of 'The Last Leaf'?

Or

(b) Consider 'Lottery Ticket' as a satire on human greed.

19. (a) Fill in the blanks with suitable articles :

- (i) _____ gold you buy here is of excellent quality.
- (ii) This _____ is brightest star in _____ sky.

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- (iii) He is fond of _____ honey.
- (iv) I met _____ one eyed beggar.
- (v) _____ Vaigai is in spate.
- (vi) This is a painting of _____ western Ghats.
- (vii) _____ hour ago, I met him in the market.

Or

(b) Fill in the blanks with pronouns :

- (i) Churchill _____ was the prime minister of England, was a great orator.
- (ii) I like rottis _____ are hot.
- (iii) Ismael constructed the house _____.
- (iv) The dog hurt _____.
- (v) This is the house _____ I lived once.
- (vi) _____ is going to pay for all this?
- (vii) Roopa and Savitha never believed _____.
- (viii) Are _____ your shoes?

20. (a) Complete the sentences with a correct word choosing from the two in brackets :

- (i) Let us _____ (proceed, precede) to the stadium
- (ii) This is a _____ (moot, mute) point, so we have to discuss it.

- (iii) He was busy _____ (pouring, poring) over the costs.
- (iv) Did you see the new _____ (stationary, stationery) shop?
- (v) You are very _____ (photographic, photogenic).
- (vi) Nothing can _____ (alter, altar) the situation.
- (vii) I get milk regularly from _____ (diary, dairy).
- (viii) Do not interfere in my _____ (personal, personnel) matters.

Or

(b) Write one-word substitutes for the following :

- (i) One who believes that God does not exist.
- (ii) One who pursues noble principles.
- (iii) An expert on matters like art, food or music.
- (iv) One who believes in economic equality.
- (v) One who believes in peace.
- (vi) One who always believes in good things.
- (vii) One who studies insects.
- (viii) One who studies about birds.



(6 pages)

Reg. No. :

Code No. : 41305 E Sub. Code : JACA 11/
SACA 11

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

First Semester

Computer Application — Allied

DIGITAL DESIGN

(For those who joined in July 2016 and afterwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

- Output of AND gates in SOP is Connected to
(a) NOT gates (b) OR gates
(c) AND gates (d) XOR gates
- If 1's represents minterms then 0's represents
(a) maxterms (b) minterms
(c) midterms (d) medians

- Enable input of shift register is called a
(a) load (b) store
(c) reset (d) strobe
- Control of shift register labeled as SH/LD = 0 will
(a) shift (b) store
(c) load (d) add
- In a map values are picked having
(a) 1's (b) 0's
(c) 2's (d) 9's
- A circuit that converts n inputs to 2^n outputs is called
(a) encoder (b) decoder
(c) comparator (d) carry look ahead
- Exclusive-OR is an
(a) prime function (b) undefined function
(c) even function (d) odd function
- Decimal number system represent decimal number in form of
(a) hexadecimal (b) binary coded
(c) octal (d) decimal

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9. BCD counter is also known as
- (a) parallel counter
 - (b) decade counter
 - (c) synchronous counter
 - (d) VLSI counter

10. $X + y = z$ represents operation that is
- (a) AND
 - (b) OR
 - (c) NOT
 - (d) XOR

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Distinguish between diminished Radix complement and Radix complement.
- Or
- (b) Subtract with 10's complement
- (i) 98342-1271
 - (ii) 3412-10525 and describe the steps involved in detail.

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12. (a) Explain the evolution of integrated circuits in three stages.

Or

- (b) Simplify the boolean functions

(i) $F(x, y, z) = \sum (2,3,4,5)$

(ii) $F(x, y, z) = \sum (3,4,6,7)$.

13. (a) Define wired logic with AND-OR-INVERT and OR-AND-INVERT.

Or

- (b) Show how Exclusive-OR is implemented in odd functions uses of Exclusive OR in error detection and correction codes.

14. (a) Describe the implementation of boolean function with a multiplexer.

Or

- (b) Explain the construction and working of multiplexers with three state gates.

15. (a) Describe the characteristics of universal shift register.

Or

- (b) Define binary ripple counter with block diagram.

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[P.T.O.]



PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Elaborate the basic theorems and properties of boolean algebra.

Or

- (b) What are the boolean functions and explain the two types of boolean function and their properties?

17. (a) Describe the following:-

- (i) Map-method
- (ii) Two variables Map
- (iii) Three variable Map
- (iv) $F = A'C + A'B + AB'C + BC$ express it in sum of minterms.

Or

- (b) Simplify the boolean function

- (i) $F(w,x,y,z) = \sum(0,1,2,4,5,6,8,9,12,13,14)$
- (ii) $F = A'B'C' + B'CD' + A'BCD' + ABC'$.

18. (a) Explain implementing Exclusive -OR in odd functions and parity generation and error checking.

Or

- (b) Explain in detail the methods to perform arithmetic operations in binary-adder-subtractor.

19. (a) Define the circuit that takes one or many input lines and directs to a single output line.

Or

- (b) Explain the latches as a storage element and its types.

20. (a) Describe the four different synchronous counters in flipflops.

Or

- (b) Define Random access memory its write and read operations and types of memories.



(6 pages)

Reg. No. :

Code No. : 41364 E Sub. Code : SACA 31

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Third Semester

Computer Applications – Allied

DATA STRUCTURE

(For those who joined in July 2017 onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. _____ Searches requires an ordered list.
(a) Sequential (b) binary
(c) hashed list (d) None
2. The efficiency of binary search is _____.
(a) 0 (b) $o(\log 2n)$
(c) $o(n^2)$ (d) $O(c^n)$

3. _____ list is a linked list with two or more logical lists.
(a) multilinked list
(b) circularly linked list
(c) doubly linked list
(d) singly linked list
4. A linear list is in which each element has _____.
(a) a general
(b) a unique successor
(c) a restricted
(d) a linked list
5. A queue is a _____ structure.
(a) Enqueue
(b) Dequeue
(c) LIFO
(d) FIFO
6. A stack is a list in _____.
(a) meta data
(b) descending chronological sequence
(c) LIFO
(d) back tracking



7. A tree consists of finite set of elements ———.
- (a) Root
 - (b) Leaf
 - (c) Node
 - (d) Branches
8. A leaf is a node with an ———.
- (a) out degree of zero
 - (b) indegree of one
 - (c) out degree branch
 - (d) indegree branch
9. The maximum degree of any vertex in a simple graph with n vertices is
- (a) N
 - (b) $n-1$
 - (c) $n+1$
 - (d) $2n-1$
10. ——— is a graph whose are weighted.
- (a) spanning tree
 - (b) network
 - (c) Minimum spanning tree
 - (d) Undirected graph

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PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What do you mean by Pseudo Code?

Or

- (b) Write about ADT. Give an example.

12. (a) Explain the concept of linear list.

Or

- (b) Explain the linked representation of binary tree.

13. (a) Write about queue operation.

Or

- (b) Explain the array representation of stack.

14. (a) Explain the linked representation of binary tree.

Or

- (b) Write about expression trees with an example.

Page 4 Code No. : 41364 E

[P.T.O.]



15. (a) Explain the basic concepts of sorting.

Or

(b) Explain the graph Storage Structure.

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write about binary search with algorithm.

Or

(b) Describe about hashed list search with examples.

17. (a) Write the algorithms of linked list operations. Discuss it.

Or

(b) Write about Complex linked list structures.

18. (a) Discuss about basic stack operations.

Or

(b) Describe about queue linked list implementation.

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19. (a) Explain binary search tree algorithm with examples.

Or

(b) What is heap? Explain about basic heap algorithm.

20. (a) Write an algorithm and explain about quick sort.

Or

(b) Explain in details about graph storage structure.

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SECTION C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

16. (a) Explain about Final accounts with adjustment.

Or

- (b) Write a steps to create stock item group and category in Trail Balance.

17. (a) Explain about VAT Classification.

Or

- (b) Explain about Voucher Entry.

18. (a) What are the features of TDS, TCS and ST?

Or

- (b) Explain about TDS Deduction for advance payment and Balance Payment.

19. (a) Explain about Excise Stock Register.

Or

- (b) Explain about ledger creation and effective Date for Reconciliation.

20. (a) Explain Pay Slip and Pay Roll Statement.

Or

- (b) Explain Pay Roll with PF and ESI.

Reg. No. :

Code No. : 41453 E Sub. Code : SACA 41

B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Computer Applications – Allied

ACCOUNTING SOFTWARE TALLY

(For those who joined in July 2017)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer:

1. Tally package is developed by
(a) Peutronics (b) Tally solutions
(c) Coral software (d) Vedika software
2. We can show bill wise details of debtors and creditor by activating
(a) Bill by bill
(b) Maintain bill wise details
(c) Maintain reference
(d) None of these
3. In general the financial year from shall be form
(a) 1st April of any year
(b) 31st March of any year
(c) All of them are true
(d) None of these



4. The shortcut key to quit from tally is
 - (a) Ctrl + L
 - (b) Ctrl + P
 - (c) Ctrl + M
 - (d) Ctrl + Q
5. To print a voucher from tally we need to press
 - (a) Ctrl + P
 - (b) Shift + P
 - (c) Alt + P
 - (d) None of these
6. To show the cheque number while reconciling bank accounts press
 - (a) F11
 - (b) F12
 - (c) Ctrl + F11
 - (d) Ctrl + F12
7. A ledger may get declaration space for its Alisa through
 - (a) F12
 - (b) F11
 - (c) Alt + F1
 - (d) Alt + F2
8. Suspense Account Group is defined under
 - (a) Income
 - (b) Expenditure
 - (c) Liabilities
 - (d) Assets
9. There are _____ Predefined Ledger
 - (a) One
 - (b) Three
 - (c) Two
 - (d) Four
10. Input vat/Output vat Ledger Created under which account?
 - (a) Duties and Taxes
 - (b) Sales
 - (c) Purchase
 - (d) Vat

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SECTION B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Explain Tally and its applications?
Or
(b) Explain the steps to creation and alteration of vouchers with suitable examples.
12. (a) How do you prepare Inventory vouchers in Tally?
Or
(b) Explain the features of VAT and its exemptions.
13. (a) What is meant by Service Tax and explain its merits to the Government.
Or
(b) How could you display TDS reports in Tally?
14. (a) Explain about Bank Reconciliation statement.
Or
(b) Explain about Dealer Excise report.
15. (a) Explain the features and types of Pay Roll.
Or
(b) Steps to create the employee Pay Roll vouchers and attendance.

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Reg. No. :

Code No. : 22740 E Sub. Code : SCDE 4 A

U.G. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Part IV – COMPUTER FOR DIGITAL ERA

(For those who joined in July 2017 onwards)

Time : One and half hours Maximum : 50 marks

Choose the correct answer :

1. _____ is the most commonly used output device.
(a) Printer (b) Scanner
(c) Monitor (d) Bar code reader
2. ASCII stands for
(a) American Stable Code for International Interchange
(b) American Standard Case for Institutional Interchange
(c) American Standard Code for Information Interchange
(d) American Standard Code for Interchange Information
3. What is the basic element of the image in your Computer Monitor?
(a) Colour (b) Resolution
(c) Pixel (d) Clarity
4. Which is the brain of the computer?
(a) Output device (b) Storage unit
(c) CPU (d) Other devices

5. _____ makes the mouse as a popular input device in the windows.
(a) API (b) Games
(c) GUI (d) Web camera
6. What is abbreviation of ROM?
(a) Real Object Memory
(b) Read Object Memory
(c) Read Only Memory
(d) None of these
7. Which one is used by the digital computer?
(a) 1 to 9
(b) Signals
(c) Microwaves Computer
(d) Binary Number
8. What type of computer is cheapest one?
(a) Mini Computer (b) All of these
(c) Micro Computer (d) Laptop Computer
9. Which one is used in small offices and business shops?
(a) Mainframe Computer
(b) Desktop Computer
(c) Mini Computer
(d) None of these
10. RAM stands for
(a) Real Advance Memory
(b) Random Access Memory
(c) Read Advance Memory
(d) None of these
11. A computer is a _____
(a) Electronic data processing device
(b) Simple device
(c) Magical device
(d) None of the above

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12. Choose a programming language from the following
(a) C (b) BC
(c) Unix (d) MS Word
13. Which of the following devices are used as input device?
(a) Keyboard (b) Monitor
(c) Speaker (d) Printer
14. An example for open source Image Editor is
(a) GIMP (b) Adobe Photoshop
(c) Both (a) and (b) (d) None of the above
15. OS manages _____
(a) Computer hardware resources
(b) Peripherals
(c) Storage space
(d) All of the above
16. _____ Operating system is used in the mobile devices.
(a) Android (b) C
(c) Java (d) Firefox
17. BIOS means _____
(a) Basic Input Output System
(b) Basic Internet Output Software
(c) Basic Input Output Software
(d) Booting Input Output System
18. Which of the following Operating System does not implement multitasking truly?
(a) Windows 98 (b) Windows NT
(c) Windows XP (d) MS DOS

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19. Which of the following is the mobile operating system?
(a) Linux (b) Unix
(c) Android (d) Windows
20. Cortana is able to recognize
(a) Natural spoken language
(b) High Level Language
(c) Low Level Language
(d) None of the above
21. MS-DOS operating system is a
(a) command line interface
(b) single user interface
(c) single tasking interface
(d) all of these
22. OSS stands for
(a) Open System Service
(b) Open Source Software
(c) Open System Software
(d) Open Synchronized Software
23. Which of the following is not essential to shut down your computer?
(a) Save all opened file
(b) Close all running applications
(c) Switch off monitor
(d) Cut off the power supply
24. What is operating system?
(a) collection of programs that manages hardware resources
(b) system service provider to the application programs
(c) link to interface the hardware and application programs
(d) all of the mentioned

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[P.T.O.]



25. Text-styling feature of MS word is
 (a) Word Color (b) Word Font
 (c) Word Art (d) Word Fill
26. To create a new table, in which method you don't need to specify the field type and size?
 (a) Create table in Design View
 (b) Create Table using wizard
 (c) Create Table by Entering data
 (d) All of above
27. MS Excel Based on _____ Software
 (a) WINDOWS (b) DOS
 (c) UNIX (d) LINUX
28. MS-Office is
 (a) Application Software
 (b) System Software
 (c) Operating System
 (d) All of Above
29. An extension of the file created in MS-Word 2003.
 (a) .doc (b) .docx
 (c) .ppt (d) .exe
30. The name of the font used by default in MS-Word
 (a) Times New Roman (b) Algerian
 (c) Arial (d) None of these
31. Copied Data in MS-Word is shown in _____
 (a) Task bar (b) Task pane
 (c) Clip art (d) None of these
32. Computer Network is
 (a) Collection of hardware components and computers
 (b) Interconnected by communication channels
 (c) Sharing of resources and information
 (d) All of the Above

33. The first Network
 (a) CNNET (b) NSFNET
 (c) ASAPNET (d) ARPANET
34. In which topology there is a central controller or hub?
 (a) Star (b) Mesh
 (c) Ring (d) Bus
35. Data communication system within a building or campus is _____
 (a) LAN
 (b) WAN
 (c) MAN
 (d) None of the mentioned
36. Expand WAN
 (a) World Area Network
 (b) Wide Area Network
 (c) Web Area Network
 (d) None of the mentioned
37. The Internet was originally a project of which agency?
 (a) ARPA (b) NSF
 (c) NSA (d) None of these
38. Verification of a login name and password is known as
 (a) Configuration (b) Accessibility
 (c) Authentication (d) Logging in
39. DISNIC stands for the
 (a) Digital India System by National Information Center
 (b) District Information System programme of the National Informatics Centre
 (c) Disseminating information of National important Councils
 (d) None of the above



40. The term NIC stands for
(a) National Informatics Center
(b) National Internet Center
(c) Nation India Country
(d) National Institute of Commerce
41. UID-Unique Identity Number is
(a) Aadhaar Number (b) Staff ID number
(c) PAN Card Number (d) None of the above
42. SDC stands for the
(a) State Data Center
(b) Storage of Data for Commercialization
(c) State data compiler
(d) Signal Disseminating Centre
43. Agriculture MMP will provide sophisticated interface to the farmers for making informed decisions by connecting the
(a) Krishi Vigyan Kendras and farmers
(b) Kisan Call Centres and farmers
(c) Agri-Clinics and farmers
(d) All the above
44. Data analytics has application in
(a) Testing data
(b) Analysis of Variance
(c) Probabilistic methods
(d) All the above
45. NPTEL stands for _____
(a) National Programme for Television Enabled Learning
(b) National Programme for Time Enabled Learning
(c) National Programme for Technology Enabled Learning
(d) National Programme for Training Enabled Learning

46. Ethical hacking means
(a) The process that finds the weakness in computer or network
(b) The process that finds the weakness in computer
(c) The process that finds the weakness
(d) The process that finds the weakness in computer
47. Social networks are the systems that use the computer networks and _____
(a) WWW (b) Face book
(c) Whats up (d) Data
48. Wifi is a short name for _____
(a) Wired fidelity (b) Wireless fidelity
(c) Wireless frequency (d) None of the above
49. Computer virus program is usually hidden in a
(a) Operating system
(b) Application program
(c) Disk driver
(d) Both (a) and (b)
50. edX is an online platform _____ destination
(a) Self learning (b) Writing
(c) Emailing (d) None of these



Reg. No. :

Code No. : 22963 B Sub. Code : GEVS 11/
JEVS 11/SEVS 11

U.G. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

First Semester

Part IV — ENVIRONMENTAL STUDIES

(For those who joined in July 2012 and afterwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. காட்டின் ஒரு பகுதி அல்லது வாழும் மரங்களை அதனிடத்திலிருந்து அகற்றி அவ்விடத்தினை காடு அல்லாத பயன்பாட்டிற்கு உட்படுத்துவது
- (அ) காடாக்குதல்
(ஆ) காடு
(இ) காடழிப்பு
(ஈ) இவைகளில் எதுவுமில்லை

20. (அ) புவி வெப்பமடைதலை விவரி.
Describe global warming.

Or

- (ஆ) சுற்றுச்சூழல் (பாதுகாப்பு) சட்டம் மற்றும் மக்கள் தொகை வெடிப்பு பற்றி எழுதுக.

Write in detail on Environment (Protection) Act and Population Explosion.



The removal of a forest or stand of trees where the land is thereafter converted to a non-forest use is

- (a) reforestation
 - (b) afforestation
 - (c) deforestation
 - (d) none of them
2. கீழே குறிப்பிட்டவனவற்றில் புதுப்பிக்கக் கூடிய ஆற்றல் வளம் எது?

- (அ) சூரிய ஒளி
- (ஆ) காற்று
- (இ) மழை
- (ஈ) நிலக்கரி

Which one is non-renewable energy resource?

- (a) sunlight
 - (b) wind
 - (c) rain
 - (d) coal
3. எந்த சுற்றுச்சூழலில் முதன்மை உற்பத்தியாளர்கள் ஏறக்குறைய ஒத்தவகையாக உள்ளது?

- (அ) பாலைவனத்தில்
- (ஆ) புல்வெளி
- (இ) காட்டில்
- (ஈ) அவர்களில் எவரும் இல்லை

Which ecosystem has more or less similar type of primary producers?

- (a) desert
- (b) grassland
- (c) forest
- (d) none of them

4. கீழ்க்கண்டவற்றில் எதில் அதிக மிகுந்த வேலைப்பாடுகளை பார்க்க முடியும்?

- (அ) ஆறுகள்
- (ஆ) கடல்கள்
- (இ) முகத்துவாரங்கள்
- (ஈ) இவைகளில் எதுவும் இல்லை

Where you can see rich diversity?

- (a) rivers
- (b) oceans
- (c) estuaries
- (d) none of them

5. அச்சுறுத்தும் பிரிவுகளை ஒதுக்குவது

- (அ) உலக பாதுகாப்பு சங்கம்
- (ஆ) உணவு மற்றும் வேளாண்மை அமைப்பு
- (இ) உலகளாவிய நிதியம்
- (ஈ) உலக சுகாதார நிறுவனம்



Threat categories are assigned by

- (a) World Conservation Union
- (b) Food and Agriculture Organization
- (c) World Wide Fund
- (d) World Health Organization

6. புலி எந்த அச்சுறுத்தல் பிரிவை வகிக்கிறது?

- (அ) அழிந்தது
- (ஆ) கடுமையான
- (இ) அபாயகரமான
- (ஈ) பாதிக்கப்படக்கூடிய

Tiger belongs to which threat category?

- (a) extinct
- (b) critically endangered
- (c) endangered
- (d) vulnerable

7. எரியும் அழுகலால் பெரும்பாலும் பாதிக்கப்படுவது

- (அ) காற்று
- (ஆ) நீர்
- (இ) மண்
- (ஈ) இவைகள் எதுவும் இல்லை

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Stubble burning largely affects

- (a) air
- (b) water
- (c) soil
- (d) none of them

8. கீழ்க்கண்டவனவற்றில் பச்சை ஆற்றல் எது?

- (அ) இரும்பு மற்றும் எஃகு ஆலைகள்
- (ஆ) அணு உலைகள்
- (இ) மின் உற்பத்தி நிலையங்கள்
- (ஈ) சூரியத் தகடு

Which one is green energy?

- (a) iron and steel plants
- (b) nuclear reactors
- (c) electric power plants
- (d) solar panel

9. போபால் சோகத்தை அடுத்து இந்திய அரசாங்கத்தால் இயற்றப்பட்ட சட்டம்

- (அ) சுற்றுச்சூழல் (பாதுகாப்பு சட்டம்) 1986
- (ஆ) காற்று (தடுப்பு மற்றும் மாசு கட்டுப்பாடு சட்டம்) 1981
- (இ) நீர் (தடுப்பு மற்றும் மாசு கட்டுப்பாடு சட்டம்) 1981
- (ஈ) வன விலங்கு பாதுகாப்பு சட்டம் 1972

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In the wake of the Bhopal Tragedy, the Government of India enacted

- (a) The Environment (Protection) Act, 1986
- (b) Air (Prevention and Control of Pollution) Act, 1981
- (c) Water (Prevention and Control of Pollution) Act, 1981
- (d) Wildlife Protection Act, 1972

10. காடழிப்புக்கான காரணங்களில் இதுவும் ஒன்று

- (அ) காற்று ஆற்றல்
- (ஆ) சூரிய ஆற்றல்
- (இ) நீர்மின் திறன்
- (ஈ) மக்கள் தொகை வெடிப்பு

One of the causes of deforestation is

- (a) wind energy
- (b) solar energy
- (c) hydroelectricity
- (d) population explosion

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 250 words.

11. (அ) அதிக பயன்பாட்டினை பற்றி கருத்துரைக்க.
Comment on over-exploitation.

Or

- (ஆ) பாலைவனமாதல் பற்றி எழுது.
Write on desertification.

12. (அ) குளம் சுற்றுச்சூழல் பற்றி விளக்கு.
Explain pond ecosystem.

Or

- (ஆ) உணவு வலைகள் விவரி.
Describe food webs.

13. (அ) உலகின் மாபெரும் வேறுபாடுகள் நிறைந்த காடுகள் பற்றி எழுதுக.
Write on megadiversity countries of the world.

Or

- (ஆ) உயிர்ப்புவியியல் வகைப்பாட்டினை விவரி.
Describe biogeographical classification of India.

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14. (அ) வெப்ப மாசுபாட்டால் ஏற்படும் தீங்குகளை விளக்குக.

Explain the harmful effects of thermal pollution.

Or

- (ஆ) அமில மழை பற்றி கருத்துரைக்க.

Comment on acid rain.

15. (அ) ஒசோன் சிதைவு பற்றி கருத்துரைக்க.

Comment on ozone depletion.

Or

- (ஆ) வனவுயிர்கள் பாதுகாப்பு சட்டத்தை பற்றி எழுதுக.

Write on Wildlife Protection Act.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Answer should not exceed 600 words.

16. (அ) உர-பூச்சிக்கொல்லி பிரச்சினைகளை பற்றி எழுதுக.

Write on fertilizer-pesticide problems.

Or

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- (ஆ) புதுப்பிக்கப்படாத ஆற்றல் வளங்களை விவரி.

Describe non-renewable energy resources.

17. (அ) வன சூழலை விளக்குக.

Explain forest ecosystem.

Or

- (ஆ) சூழியல் பிரமிடுகளைப் பற்றி ஒரு குறிப்பு வரைக.

Give an account on ecological pyramids.

18. (அ) பல்லுயிர் வெப்ப புள்ளிகள் பற்றி விளக்கு.

State hotspots of biodiversity.

Or

- (ஆ) பல்லுயிரியலின் வெளியிடப் பாதுகாப்பினைப் பற்றி விளக்குக.

Explain ex-situ conservation of biodiversity.

19. (அ) கடல் மாசுபாடு விவரி.

Narrate marine pollution

Or

- (ஆ) பேரழிவு மேலாண்மை உத்திகளை விளக்குக.

Explain disaster management strategies.

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Reg. No. :

Code No. : 41356 E Sub. Code : SMCA 11

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

First Semester

Computer Applications — Main

PROGRAMMING IN 'C'

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The increment and decrement operators can be used _____ type.
(a) int, long (b) short
(c) float (d) both (a) and (b)
2. Every statement in a C program must end with
(a) ; (b) :
(c) , (d) .

3. _____ statement branch unconditionally one point to another in a program.
(a) abort (b) if
(c) switch (d) goto
4. Which is exit control loop?
(a) for (b) do..while
(c) while (d) none
5. Array is _____ data type.
(a) fundamental (b) user-defined
(c) derived (d) none
6. The strcmp function returns _____ when two strings are equal.
(a) null (b) zero
(c) true (d) positive
7. _____ reduce the length and complexity of program.
(a) array (b) union
(c) structure (d) function

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8. A main program can have at most _____ number of functions.

- (a) 2 (b) 5
(c) 10 (d) no limit

9. Pointer declaration should start with the symbol

- (a) # (b) @
(c) & (d) *

10. In pointer the operator * indicates _____ of variable

- (a) address (b) location
(c) content (d) none of these

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write a C program to check whether the given year is LEAP or not.

Or

(b) Discuss data types in C.

Page 3 Code No. : 41356 E

12. (a) Explain conditional operator in C.

Or

(b) Explain any two forms of if statement.

13. (a) Write a C program to check whether two string are equal or not.

Or

(b) Write a C program to find the smallest element in an array.

14. (a) Write a C program to find the factorial of given number using recursion.

Or

(b) How to declare and call a function in C?

15. (a) Explain the concept of Pointers in C

Or

(b) Write a C program to implement call by value.

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[P.T.O.]



PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain all operators in C.

Or

- (b) Write a C program to check whether the given number is Armstrong or not.

17. (a) Write a C program to find the sum of first N Even natural numbers using while statement.

Or

- (b) Explain switch statement with suitable example.

18. (a) Write a C program to find the sum of diagonals of a matrix.

Or

- (b) Explain any five string handling functions.

19. (a) Write a C program to implement user defined functions.

Or

- (b) Explain the scope and life time of variables.

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20. (a) Explain array of pointers with suitable example.

Or

- (b) Write a program using pointers to determine the length of a character string.

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Reg. No. :

Code No. : 41358 E Sub. Code : SMCA 31

B.C.A (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Third Semester

Computer Application — Main

JAVA PROGRAMMING

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. How many primitive data types are there in java?
(a) 6 (b) 7
(c) 8 (d) 9
2. Which of these operations is used to allocate memory for an object?
(a) malloc (b) alloc
(c) calloc (d) new

3. What is the return type of a method that does not returns any value?
(a) int (b) float
(c) void (d) double
4. Which of the following is a method having same name as that of its class?
(a) finalize (b) delete
(c) class (d) construction
5. Variables included within an interface are
(a) final (b) finally
(c) finalize (d) private
6. The _____ method waits for the thread to die.
(a) join() (b) wait()
(c) notify() (d) stop()
7. The animation loop is usually written in _____ method.
(a) init() (b) start()
(c) run() (d) stop()

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8. The event listener corresponding to handling keyboard events is the

- (a) Key Listener
- (b) Keyboard Listener
- (c) Keys Listener
- (d) KB Listener

9. The user interface component to display a text string

- (a) Event
- (b) Field
- (c) String
- (d) Label

10. The _____ class represents individual items in a menu.

- (a) Menu
- (b) Menu Bar
- (c) Menu Item
- (d) Menu Edit

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain about the two types of java programs.

Or

(b) Discuss about lexical issue.

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12. (a) Give an overview about constructors.

Or

(b) Write a note on command line arguments. Give example java program.

13. (a) List down the most common types of exceptions that might occur in Java. Give examples.

Or

(b) What is finally block? When and how it is used? Give a suitable example.

14. (a) Discuss about the Byte stream classes.

Or

(b) Explain about Adapter classes.

15. (a) Explain about the class hierarchy for panel and frame.

Or

(b) Discuss about the draw line () method.

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[P.T.O.]



PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss about the three OOP principles.

Or

- (b) Explain about the bitwise operators in java.

17. (a) Discuss in detail about method overloading.

Or

- (b) Explain about the Keyword 'Super'.

18. (a) Discuss in detail about package.

Or

- (b) Write a java program to create multiple trends.

19. (a) Explain about the Applet display methods.

Or

- (b) Discuss about the mouset listener interface.

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20. (a) Explain about Frame windows.

Or

- (b) Discuss about the different types of controls supports AWT.

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Reg. No. :

Code No. : 41359 E Sub. Code : SMCA 32

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Third Semester

Computer Application — Main

FINANCIAL ACCOUNTING

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

The principle of accountancy which recognizes the double aspect of a business transaction is known as _____ concept.

- (a) entity concept
- (b) dual aspect
- (c) accrual concept
- (d) objectivity concept



2. The rule for Real Account is
- (a) debit what comes in credit what goes out
 - (b) debit the receiver credit the given
 - (c) debit all expenses and losses and credit all gains and incomes
 - (d) none of the above
3. Purchase Return Book is prepared on the basis of _____.
- (a) debit note (b) credit note
 - (c) invoice notes (d) requisition notes
4. Journal is also called as _____.
- (a) book of original entry
 - (b) books of subsidiary record
 - (c) books of prime entry
 - (d) all the above
5. A schedule of balances drawn from the ledger is called
- (a) trial balance (b) balance sheet
 - (c) income statement (d) trading a/c

6. Appearing in the Trial Balance are shown in the balance sheet
- (a) prepaid expenses
 - (b) outstanding expenses
 - (c) outstanding income
 - (d) all the above
7. Which of the following is the aim of manufacturing account?
- (a) to disclose the operating profit
 - (b) to find out total cost
 - (c) to ascertain the factor cost of production
 - (d) cost control and ascertainment of cost
8. The first part of the income statement is called
- (a) profit and loss a/c
 - (b) balance sheet
 - (c) trading a/c
 - (d) trading profit and loss a/c
9. Income and expenditure account is a nature of
- (a) Real a/c
 - (b) Personal a/c
 - (c) Nominal a/c
 - (d) Representative of personal a/c



10. Donations received for a specific purpose is
(a) capital receipts (b) revenue receipts
(c) liability (d) asset

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) What is Double Entry System of Book-Keeping?
What are its advantages?

Or

- (b) Explain Personal a/c, Real a/c and Nominal a/c.

12. (a) Journalise the following transactions :
- (i) Started business with cash Rs. 9,000
 - (ii) Purchased goods for cash Rs. 2,100
 - (iii) Sold good for cash Rs. 700
 - (iv) Deposited into Canara Bank Rs. 3,000
 - (v) Cash received from Rajan Rs. 400
 - (vi) Cash paid to Ananda Traders Rs. 1,000
 - (vii) Paid salary Rs. 300
 - (viii) Paid rent Rs. 400
 - (ix) Received commission Rs. 200
 - (x) Withdrew from Canara Bank Rs. 1,200.

Or

- (b) What is meant by Subsidiary Books? Explain the different types of Subsidiary Books.

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13. (a) From the following balance of accounts prepare Trial Balance :

Capital a/c Rs. 40,000, Building a/c Rs. 6,000, Bank a/c Rs. 4,000; Interest a/c Rs. 350; B/R a/c Rs. 8,000; Debtors a/c Rs. 30,000; B/P a/c Rs. 15,900; Furniture a/c Rs. 6,500; Discount received a/c Rs. 1,200; Discount allowed a/c Rs. 2,100; Machinery a/c Rs. 8,000; Creditors a/c Rs. 7,850.

,Or

- (b) What are the errors that affect the agreement of Trial Balance?

14. (a) Explain the different stages in Financial Accounts.

Or

- (b) From the following information ascertain Gross Profit and Net Profit.

Stock at beginning Rs. 2,400; Purchases Rs. 15,205; Sales Rs. 20,860; Closing stock Rs. 3,840; Return outward Rs. 185; Return inwards Rs. 860; Carriage inward Rs. 524; Manufacturing wages Rs. 2,800; Manufacturing wages outstanding Rs. 96; Loss due to fire Rs. 1,000; Indirect expenses Rs. 200.

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15. (a) Explain Receipts and Payments account.

Or

(b) What amount will be shown in the Income and Expenditure a/c

Subscription outstanding on 1.1.99 to Rs. 1,500

Subscription received during 1999 Rs. 16,500

Subscription received in advance on 1.1.99 Rs. 2,500

Subscription outstanding on 31.12.1999 Rs. 3,500

Subscription received in advance Rs. 6,000 on 31.12.1999.

SECTION C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the various accounting concepts and conventions.

Or

(b) Explain the objectives and functions of accounting.

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17. (a) Journalise the following transactions :

(i) Sold goods for cash Rs. 1,300

(ii) Purchased goods Rs. 400

(iii) Purchased goods from Kumar Rs. 300

(iv) Sold goods to Prabu Rs. 2,000

(v) Received cash from Prabu Rs. 1,200

(vi) Paid to Kumar Rs. 1,000

(vii) Paid salary Rs. 700

(viii) Received rent from Arun Rs. 500

(ix) Purchase a machinery from Babu for Rs. 15,000 for cash

(x) Furniture sold to Chandran Rs. 5,000 on credit.

Or

(b) What is Ledger? How is it maintained? Explain its significance.

18. (a) Prepare a Trial Balance :

Opening stock Rs. 10,600; Wages Rs. 2,200; Carriage inwards Rs. 200; Commission (Dr) Rs. 300; Purchases Rs. 12,000; Return inwards Rs. 440; Trade expenses Rs. 580; Rent Rs. 200; Plant Rs. 2,600; Repairs to plant Rs. 460; Cash in hand Rs. 200; Cash at bank Rs. 1,000; Debtors Rs. 3,000; Income tax Rs. 500; Drawings Rs. 700; Return outwards Rs. 150; Sales Rs. 25,200; Discount received Rs. 400; Capital Rs. 70,000; Creditors Rs. 830; Loan (Cr) Rs. 1,400.

Or

(b) What is Trial Balance? Explain the objectives of Trial Balance.

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19. (a) From the following trial balance, you are required to prepare Trading, Profit and Loss a/c and Balance sheet for the year ended 31.12.2017.

| Trial Balance | | | |
|------------------|---------------|------------------|---------------|
| Debit | Rs. | Credit | Rs. |
| Drawings | 4,000 | Capital | 20,000 |
| Cash at bank | 1,700 | Sales | 16,000 |
| Cash in hand | 6,500 | Sundry creditors | 4,500 |
| Wages | 1,000 | | |
| Purchases | 2,000 | | |
| Stock (1.1.2017) | 6,000 | | |
| Buildings | 10,000 | | |
| Sundry debtors | 4,400 | | |
| Bills receivable | 2,900 | | |
| Rent | 450 | | |
| Commission | 250 | | |
| General expenses | 800 | | |
| Furniture | 500 | | |
| | <u>40,500</u> | | <u>40,500</u> |

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Adjustments :

- (i) Closing stock Rs. 4,000
- (ii) Interest on capital at 6%
- (iii) Interest on drawing at 5% to be provided
- (iv) Wages yet to be paid Rs. 100
- (v) Rent prepaid Rs. 50.

Or

- (b) From the following trial balance, prepare trading, profit and loss and balance sheet as on 31.12.2017 :

| Trial Balance | | | |
|------------------|---------------|-----------|---------------|
| | Rs. | | Rs. |
| Purchases | 15,000 | Capital | 40,000 |
| Salaries | 2,000 | Sales | 25,000 |
| Rent | 1,500 | Creditors | 1,000 |
| Insurance | 300 | | |
| Drawings | 5,000 | | |
| Machinery | 28,000 | | |
| Bank balance | 4,500 | | |
| Cash | 2,000 | | |
| Stock (1.1.2017) | 5,200 | | |
| Debtors | 2,500 | | |
| | <u>66,000</u> | | <u>66,000</u> |

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Adjustments :

- (i) Closing stock Rs. 4,900
- (ii) Salaries unpaid Rs. 300
- (iii) Rent paid in advance Rs. 200
- (iv) Insurance prepaid Rs. 90.

20. (a) Distinguish between Income and Expenditure and Receipts and Payments account.

Or

(b) Prepare Income and Expenditure account from the following receipts and payments a/c

| Receipts | Rs. | Payments | Rs. |
|------------------|--------------|-------------------------|--------------|
| To Balance b/d | 1,000 | By Rent | 400 |
| To Donations | 520 | By Sundry expenses | 420 |
| To Subscriptions | 6,600 | By Postage and telegram | 140 |
| | | By Stationary | 60 |
| | | By Investments | 2,000 |
| | | By Balance c/d : | |
| | | Cash in hand | 4,350 |
| | | Cash at bank | 750 |
| | <u>8,120</u> | | <u>8,120</u> |

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Additional Information :

- (i) 31.12.2015 subscription from members outstanding Rs. 400
- (ii) Rent due but not paid on 31.12.2015 Rs. 120
- (iii) Donation is to be capitalised.

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Reg. No. :

Code No. : R 41360.E Sub. Code : SMCA 33

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018

Third Semester

Computer Application – Main

INTRODUCTION TO INTERNET WITH HTML

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The first network that planted the seeds of internet was _____
(a) ARPANET
(b) NSFNET
(c) UNET
(d) Both (b) and (c)

2. _____ is used to read a HTML page and render it.

- (a) Web browser
- (b) Web server
- (c) Web Matrix
- (d) None of the above

3. _____ tag tells the browser where the page starts and steps.

- (a) <body>
- (b) <html>
- (c) <head>
- (d) <title>

4. A _____ is a fixed part of the page that will stay on the screen when we scroll the text of the page.

- (a) Link
- (b) Image
- (c) Style
- (d) Banner

5. There are _____ attributes to the <hr> tag.

- (a) 1
- (b) 2
- (c) 3
- (d) 4

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6. The data in each cell is aligned _____ by default.

- (a) Right (b) Left
(c) Justify (d) Center

7. _____ style sheet is stored in a separate file. This style sheet can be linked to any number of HTML documents.

- (a) In - Line (b) Internal
(c) External (d) Both (a) and (b)

8. A _____ sheet is a list of statements which declares the styles of various components such as headings, paragraphs, etc.

- (a) Style (b) In - Line
(c) Internal (d) External

9. A set of frames is defined using the _____ tag.

- (a) <frame> (b) <frame set>
(c) <forms> (d) <set frame>

10. _____ are used to get input from users.

- (a) <frame> (b) <forms>
(c) <frame set> (d) <input>

Page 3 Code No. : R 41360 E

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain about E - mail.

Or

(b) Discuss about internet.

12. (a) Briefly explain about history of html.

Or

(b) Write short notes on comment lines.

13. (a) Explain about paragraph tag in HTML with example.

Or

(b) How to insert images and pictures in HTML document and explain its attributes?

14. (a) Discuss about External style sheet.

Or

(b) Explain about how to define styles.

Page 4 Code No. : R 41360 E

[P.T.O.]



15. (a) Describe about nested frameset. with examples.

Or

(b) Write a HTML program to display the application form using form elements.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss about Internet Technologies.

Or

(b) Explain about Internet Browsers.

17. (a) Discuss about the Header section in HTML.

Or

(b) Describe about Links in HTML.

18. (a) Explain about lists in HTML with example.

Or

(b) Discuss about Tables in HTML with example.

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19. (a) Explain types of style sheets with example.

Or

(b) Explain the elements of styles.

20. (a) Discuss about Frames with example.

Or

(b) Explain the elements of forms with example.

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(6 pages)

Reg. No. :

Code No. : 41347 E Sub. Code : JMCA 41/
SMCA 41

B.C.A. (CBCS) DEGREE EXAMINATION,
APRIL 2019.

Fourth Semester

Computer Application — Main

VISUAL BASIC

(For those who joined in July 2016 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. From files are saved with the extension
(a) .form (b) .frm
(c) .vbfrm (d) vbform
2. The _____ contains of the tile bar, menu bar, and tool bar
(a) Toolbox
(b) Properties window
(c) Project explorer window
(d) Main window

3. _____ array size can he changed at run-time
(a) Preserve (b) Multidimensional
(c) Fixed-size (d) Dynamic array
4. _____ is the process of clicking the mouse button in a control and moving the mouse while holding down the mouse button.
(a) Dropping (b) Cutting
(c) Moving (d) Dragging
5. A _____ object represents a Connection to a remote database used as a data source for the associated commands.
(a) Connection (b) RDO
(c) ADO (d) Fixed
6. The _____ object contains the information to be saved and loaded when Active X control that is built is created or destroyed.
(a) Property value (b) Property bag
(c) Property variable (d) Property reference
7. Active X controls can be included to a project in _____ different ways.
(a) 1 (b) 2
(c) 3 (d) 4

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8. The _____ allows us to browse through the various properties, events and methods that are made available to us.
- (a) Project explorer (b) Object browser
(c) Properties window (d) Form window
9. A _____ access file is like a database
- (a) Random (b) Sequential
(c) Dynamic (d) Static
10. Any _____ typed in one text box can be cut, copied and pasted in the other textbox
- (a) Label (b) Data
(c) Text (d) Word

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain about visual basic variables and declarations.
- Or
- (b) Discuss about procedures in visual basic.

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12. (a) Write note on MsgBox () function with an example program.

Or

- (b) Write mouse events.

13. (a) Explain about evolution of computer architecture.

Or

- (b) Discuss about remote data objects.

14. (a) Write note on OLE Automation object.

Or

- (b) Explain about Connection and Command object with an example.

15. (a) How to create a User Control in VB? Explain.

Or

- (b) How will you link the controls on a form to the ADO data control?

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[P.T.O.]



PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Discuss about VB Programming Environment.

Or

- (b) Write a note on User Defined Procedures and functions in VB.

17. (a) Discuss about various ways to add a dialog box in our applications.

Or

- (b) Discuss about multiple document interface using flex grid control.

18. (a) Calculate a database for an employee and to access it with DAO using ODBC.

Or

- (b) Write about Remote Data objects.

19. (a) Discuss about OLE drag and drop with example program.

Or

- (b) Explain about Data Report.

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20. (a) Explain sequential file creations in VB with an example.

Or

- (b) Create a database containing the following fields to hold the address of 10 students.

(i) Name (ii) Door NO

(iii) Street (iv) Place

(v) Pin code.

Create form with ADO to view and accesses the Addresses.

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(8 pages)

Reg. No. :

Code No. : 41447 E Sub. Code : SMCA 43

B.C.A. (CBCS) DEGREE EXAMINATION,
APRIL 2019.

Fourth Semester

Computer Application — Main

RESOURCE MANAGEMENT TECHNIQUES

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Linear programming model which involves fund allocation of limited investment is classified as
 - (a) Ordination Budgeting Model
 - (b) Capital Budgeting Model
 - (c) Funds Investment Model
 - (d) Fund Origin Models

2. In Linear programming, lack of points for a solution set is said to
 - (a) have no feasible solution
 - (b) have a feasible solution
 - (c) have single point method
 - (d) have infinite point method
3. In maximization cases, _____ are assigned to the artificial variables as their coefficients in the objective function.
 - (a) +m
 - (b) -m
 - (c) 0
 - (d) None of the above
4. In Assignment problem the value of decision variable x_{ij} is _____
 - (a) no restriction
 - (b) one or zero
 - (c) two or one
 - (d) none of them

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5. The solution to a transportation problem with m -rows and n -columns is feasible if number of possible allocations are
- (a) $m + n$
 - (b) $m + n - 1$
 - (c) $m \times n$
 - (d) All of the above
6. Activity which does not require any resources or time is called _____.
- (a) Dummy
 - (b) Successor
 - (c) Predecessor
 - (d) None of them
7. What is not an example of cost of conformance to quality?
- (a) Legal liabilities
 - (b) Planning
 - (c) Quality audits
 - (d) Field Testing

8. The company has to repair or replace a product. This will be taken as a?
- (a) Recall cost
 - (b) Warranty cost
 - (c) Scrap and rework cost
 - (d) Inspection and testing cost
9. The Nash equilibrium in a Bertrand price setting game in which firms first choose output capacities resembles the equilibrium in
- (a) the competitive model
 - (b) the cournot model
 - (c) the cartel model
 - (d) the price leadership model
10. Which of the following is a zero_sum game?
- (a) Prisoner's dilemma
 - (b) Chess
 - (c) A Cartel member's decision regarding whether or not to cheat
 - (d) All of the above



PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

11. (a) Write the advantages of Linear programming problem.

Or

- (b) How will you plot inequalities of LPP?

12. (a) Give mathematical form of assignment problem.

Or

- (b) What is feasible solution and non-degenerate solution in travelling salesman problem?

13. (a) How will you allocate jobs in a sequence if two jobs on first machine have same processing time?

Or

- (b) Give two types of events used in network analysis.

14. (a) What are all the techniques followed in project planning?

Or

- (b) Give the similarities and differences in CPM and PERT.

Page 5 Code No. : 41447 E

15. (a) List out the rules of Dominance.

Or

- (b) Give some advantages of Inventory.

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

16. (a) Solve the following LPP by graphical method.

- (i) Maximize $Z = 25x_1 + 20x_2$

Subject to $16x_1 + 12x_2 \leq 100$

$$8x_1 + 16x_2 \leq 80$$

$$x_2 \geq 2, x_1, x_2 \geq 0$$

- (ii) Maximize $Z = 3x_1 + 2x_2$

Subject to $-2x_1 + 3x_2 \leq 9$

$$-x_1 + 5x_2 \leq 20$$

$$x_1, x_2 \geq 0$$

Or

- (b) What is the standard form of the LPP? State its characteristics.

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17. (a) Write the steps for solving an Assignment problem by Hungarian method.

Or

- (b) Find the assignment of salesman to various districts which will result minimum cost.

| Salesman | District | | | |
|----------|----------|----|----|----|
| | 1 | 2 | 3 | 4 |
| A | 16 | 10 | 14 | 11 |
| B | 14 | 11 | 15 | 15 |
| C | 15 | 15 | 13 | 12 |
| D | 13 | 12 | 14 | 15 |

18. (a) Solve following cost minimizing problem.

| Machines | Jobs | | | | |
|----------|------|----|-----|----|----|
| | I | II | III | IV | V |
| A | 45 | 30 | 65 | 40 | 55 |
| B | 50 | 30 | 25 | 60 | 30 |
| C | 25 | 20 | 15 | 20 | 40 |
| D | 35 | 25 | 30 | 30 | 20 |
| E | 80 | 60 | 60 | 70 | 50 |

Or

- (b) Write short note on travelling salesman problem.

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19. (a) Discuss about the steps to be followed in allocating tasks and due date in project management.

Or

- (b) How can you assume expected length of a project? Explain it with some example.

20. (a) Analyze the following game using dominance considerations and write the corresponding pair(s) strategy to its solution(s). Write each strategy pair in the form R_x, C_y , where x and y are integers corresponding to row and column numbers, respectively.

| | C_1 | C_2 | C_3 | C_4 |
|-------|-------|-------|-------|-------|
| R_1 | 5 | 4 | 4 | 6 |
| R_2 | 5 | 6 | 9 | 2 |
| R_3 | 7 | 6 | 8 | 7 |

R_3, C_2

Or

- (b) Write the formula for the quantity to order and lead time and find the solution with some examples.

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Reg. No. :

Code No. : 41388 E Sub. Code : SNMA 4 B

U.G. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Mathematics

Non-Major Elective — FUNDAMENTALS OF
STATISTICS — II

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. For the two attributes A and B the 2×2 contingency table is given

| | | | |
|-----------------|-----|-----------------|--|
| | B | $\text{Non } B$ | |
| A | a | b | |
| $\text{Non } A$ | c | d | |

Then the expected frequency of attribute AB is

- (a) $\frac{(a+b)(b+d)}{a+b+c+d}$ (b) $\frac{(a+b)(a+c)}{a+b+c+d}$
(c) $\frac{(c+d)(a+c)}{a+b+c+d}$ (d) $\frac{(c+d)(b+d)}{a+b+c+d}$



2. Given n attributes, the total number of positive class frequencies is _____.
- (a) 3^n (b) 2^n
(c) 2^{n-1} (d) 3^{n-1}
3. In the computation of an index number, if the base year used for comparison is kept constant throughout, then it is called _____ method.
- (a) Chain base
(b) Aggregate
(c) Average of price relative
(d) Fixed base
4. If the current year quantities are taken as weights then that index number is called _____ index number.
- (a) Laspeyre's (b) Paasche's
(c) Marshall's (d) Bowley's
5. The arithmetic mean of Laspeyre's and Paasche's index number is defined as _____ index number.
- (a) Bowley's (b) Marshall's
(c) Fisher's (d) Kelley's

6. According to _____ method, the weight is the sum of the quantities of the base period and current period.
- (a) Bowley's (b) Marshall's
(c) Fisher's (d) Kelley's
7. Which one of the following is not involve in the Fisher's index number?
- (a) Fisher's (b) Laspeyre's
(c) Paasche's (d) Bowley's
8. Which one of the following is an ideal index number?
- (a) Laspeyre's (b) Paasche's
(c) Bowley's (d) Fisher's
9. The process of finding a functional relationship between two variables is called _____.
- (a) Scatter diagram
(b) Curve fitting
(c) Principle of least square
(d) Normal equations
10. Best fit of a curve is achieved by _____.
- (a) Scatter diagram
(b) Principle of least square
(c) Normal equations
(d) Curve fitting



PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) In a very hotly fought battle 70% of the soldiers atleast lost an eye 75% atleast lost an ear, 80% atleast an arm and 85% atleast lost a leg. How many atleast must have lost all the four?

Or

- (b) In a class in which 135 candidates were examined for proficiency in English and Maths. It was discovered that 75 students failed in English, 90 failed in Maths and 50 failed in both. Find how many candidates

- (i) have passed in Maths
- (ii) have passed in English, failed in Maths
- (iii) have passed in both.

12. (a) Construct index numbers of prices from the following data by applying

- (i) Laspeyre's method
- (ii) Paache's method.

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| Commodities | Base Year | | Current Year | |
|-------------|-----------|----------|--------------|----------|
| | Price | Quantity | Price | Quantity |
| A | 2 | 8 | 4 | 6 |
| B | 5 | 10 | 6 | 5 |
| C | 4 | 14 | 5 | 10 |
| D | 2 | 19 | 2 | 13 |

Or

- (b) Calculate Laspeyre's index number for the following data :

| Commodities | Base Year | | Current Year | |
|-------------|-----------|----------|--------------|----------|
| | Price | Quantity | Price | Quantity |
| A | 6 | 50 | 10 | 56 |
| B | 2 | 100 | 2 | 120 |
| C | 4 | 60 | 6 | 60 |
| D | 10 | 30 | 12 | 24 |
| E | 8 | 40 | 12 | 36 |

13. (a) Find Bowley's index number from the following data :

| Commodities | Base Year | | Current Year | |
|-------------|-----------|----------|--------------|----------|
| | Price | Quantity | Price | Quantity |
| 1 | 60 | 30 | 90 | 25 |
| 2 | 16 | 20 | 25 | 15 |
| 3 | 140 | 10 | 250 | 5 |
| 4 | 160 | 3 | 200 | 2 |

Or

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- (b) Find Marshall's index number from the following data : (Consider 1993-94 as base year)

| Commodity | 1993-1994 | | 2000-2001 | |
|-----------------------|-----------|----------|-----------|----------|
| | Price | Quantity | Price | Quantity |
| Medical | 20 | 8 | 40 | 6 |
| Dress | 50 | 10 | 60 | 5 |
| Fruits and vegetables | 40 | 15 | 50 | 15 |
| Food | 20 | 29 | 20 | 25 |
| Location | 60 | 1 | 75 | 1 |

14. (a) Calculate Fisher's index number for 1992 for the following data :

| Year | Rice | | Wheat | | Flour | |
|------|-------|----------|-------|----------|-------|----------|
| | Price | Quantity | Price | Quantity | Price | Quantity |
| 1988 | 9.3 | 100 | 6.4 | 11 | 5.1 | 5 |
| 1992 | 4.5 | 90 | 3.7 | 10 | 2.7 | 3 |

Or

- (b) Compute Fisher's index number from the following data :

| Year | Tomato | | Brinjal | | Onion | |
|------|--------|----------|---------|----------|-------|----------|
| | Price | Quantity | Price | Quantity | Price | Quantity |
| 1980 | 4 | 50 | 3 | 10 | 2 | 5 |
| 1990 | 10 | 40 | 8 | 8 | 4 | 4 |

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15. (a) Fit a straight line to the following data :

| X-Years | 1911 | 1921 | 1931 | 1941 | 1951 |
|--------------|------|------|------|------|------|
| Y-Production | 10 | 12 | 8 | 10 | 14 |

Or

- (b) Fit a straight line to the following data :

| x | 0 | 1 | 2 | 3 | 4 |
|----|-----|-----|-----|-----|-----|
| y: | 2.1 | 3.5 | 5.4 | 7.3 | 8.2 |

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Given the following positive class frequencies. Find the remaining class frequencies. $N = 20$, $(A) = 9$; $(B) = 12$; $(C) = 8$, $(AB) = 6$; $(BC) = 4$; $(CA) = 4$; $(ABC) = 3$.

Or

- (b) A company produces tube lights and conducts a test on 5000 lights for production defects of frames (F), Chokes (C), Starters (S) and tubes (T). The following are the records of defects.

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(F) = 130; (C) = 120; (S) = 115; (T) = 86;
 (FC) = 100; (CS) = 130; (ST) = 75; (FT) = 60;
 (CT) = 54; (FS) = 37; (FCS) = 90; (CST) = 85;
 (FST) = 112; (FCT) = 108; (FCST) = 5.

Find the percentage of the tube light which passes all four tests.

17. (a) Calculate :

- (i) Laspeyre's index number
 (ii) Paasche's index number for the following data given below.

| Commodities | Base Year 1990 | | Current Year 1992 | |
|-------------|----------------|----------|-------------------|----------|
| | Price | Quantity | Price | Quantity |
| A | 2 | 10 | 3 | 12 |
| B | 5 | 16 | 6.5 | 11 |
| C | 3.5 | 18 | 4 | 16 |
| D | 7 | 21 | 9 | 25 |
| E | 3 | 11 | 3.5 | 20 |

Or

(b) Find :

- (i) Laspeyre's
 (ii) Paasche's index number from the following data .

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| Commodities | Base Year | | Current Year | |
|-------------|-----------|----------|--------------|----------|
| | Price | Quantity | Price | Quantity |
| 1 | 60 | 30 | 90 | 25 |
| 2 | 16 | 20 | 25 | 15 |
| 3 | 140 | 10 | 250 | 5 |
| 4 | 160 | 3 | 200 | 2 |

18. (a) Find

- (i) Bowley's index number
 (ii) Marshall's index number from the following data :

| Commodity | Base Year | | Current Year | |
|-----------|-------------|----------|--------------|----------|
| | Price (Rs.) | Quantity | Price (Rs.) | Quantity |
| Food | 20 | 3 | 40 | 5 |
| Cloth | 25 | 4 | 50 | 6 |
| Fuel | 30 | 2 | 60 | 3 |
| House | 10 | 1 | 20 | 2 |

Or

(b) Find

- (i) Bowley's
 (ii) Marshall's index numbers from the following data :

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| Commodity | Base Year | | Current Year | |
|-----------|-----------|----------|--------------|----------|
| | Price | Quantity | Price | Quantity |
| A | 16 | 5 | 20 | 6 |
| B | 12 | 10 | 12 | 12 |
| C | 14 | 6 | 16 | 6 |
| D | 20 | 3 | 22 | 2 |
| E | 18 | 4 | 22 | 3 |

19. (a) Consider 1996 year as base year and 2004 year as current year. Find Fisher's index number from the following data :

| Commodity | Quantity | | Price | |
|-----------|----------|------|-------|------|
| | 1996 | 2004 | 1996 | 2004 |
| A | 100 | 150 | 600 | 1400 |
| B | 80 | 100 | 350 | 600 |
| C | 60 | 75 | 250 | 550 |
| D | 30 | 35 | 350 | 250 |

Using these values find its satisfies time reversal test.

Or

- (b) Construct, with the help of data given below, Fisher's index number and show that it satisfies the time reversal test.

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| Commodity | Base year | | Current year | |
|-----------|-------------|----------|--------------|----------|
| | Price (Rs.) | Quintals | Price (Rs.) | Quintals |
| A | 5 | 50 | 7 | 60 |
| B | 6 | 40 | 8 | 50 |
| C | 4 | 120 | 5 | 110 |
| D | 3 | 30 | 4 | 35 |

20. (a) Fit a straight line to the following data :

| Year | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|--------------------|------|------|------|------|------|------|------|
| Monthly production | 64 | 73 | 93 | 73 | 84 | 106 | 110 |

Or

- (b) Fit a straight line to the following data and estimate the value of y corresponding to $x = 6$.

| | | | | | | |
|-----|----|----|----|----|----|----|
| x | 0 | 5 | 10 | 15 | 20 | 25 |
| y | 12 | 15 | 17 | 22 | 24 | 30 |

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Reg. No. :

Code No. : 41361 E Sub. Code : SSCA 3 A

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Third Semester

Computer Application – Main

Skill Based Subject – PROGRAMMING WITH PHP
AND MYSQL

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Expand PHP

- (a) Processor Home Page
- (b) Hypertext Processor
- (c) Pretext Hypertext Processor
- (d) Preprocessor Home Page

2. PHP scripts are enclosed with in _____.

- (a) <php>...</php>
- (b) <?php....?>
- (c) <php...<php
- (d) <p>...</p>

3. Which built-in function will add a value to end of an array?

- (a) array-unshift()
- (b) into-array()
- (c) inend-array()
- (d) array-push()

4. PHP sessions are created using the _____ function.

- (a) session-starts()
- (b) sessions-start()
- (c) session-start()
- (d) none

5. Which one of the following function is capable of reading a specific number of characters from a file?

- (a) fgets()
- (b) fget()
- (c) fileget()
- (d) filegets()

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6. The _____ function checks if the "end-of-file" (EOF) has been reached.

- (a) `f_eof()` (b) `f_of()`
(c) `feofs_()` (d) `feof()`

7. Which "text-type" has minimum number of bytes?

- (a) Tiny Text (b) Text
(c) Medium Text (d) Long Text

8. What values does the count (*) function ignore?

- (a) Repetitive values (b) Null values
(c) Character (d) Integers

9. How much character are allowed to create database name?

- (a) 55 (b) 72
(c) 64 (d) 40

10. Which of the following statements can be checked for errors?

- (a) Create (b) Drop
(c) Delete (d) Insert

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write short notes about History of PHP.

Or

(b) Discuss the break and continue statements in php with example.

12. (a) Write notes about date and time functions in php.

Or

(b) Briefly explain recursive functions in php with example.

13. (a) Write about reading text from file using fgets in php with example.

Or

(b) Write notes about locking files in php with example.

14. (a) Define join in mySQL and briefly explain its types.

Or

(b) Write about sorting and filtering retrieved data in mySQL.

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[P.T.O.]



15. (a) Briefly explain about connecting mySQL with php database connectivity.

Or

(b) Discuss about debugging in php.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain about various conditional statements in php with example.

Or

(b) Define operators and explain various types of operators in php with example.

17. (a) Define arrays and explain about its processing with example.

Or

(b) Explain about sessions in php.

18. (a) Write about getting information From File using stat and fseek in php with example.

Or

(b) Explain about how to read or write binary file in php with example.

Page 5 Code No. : 41361 E

19. (a) Explain about various MySQL datatypes.

Or

(b) Explain creation and Manipulation of tables in MySQL.

20. (a) Explain about Error handling in php with example.

Or

(b) Write about various Data and Time functions in MySQL.

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PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

16. (a) Explain in detail about Machine Language, Assembly Language and High-Level Languages.
Or
(b) Explain 8085 Programming Model.
17. (a) Explain about the Classification of Memory.
Or
(b) Explain in detail about the ALU.
18. (a) Describe about the Addressing Modes of the Microprocessor.
Or
(b) Explain about the logical Rotate Operations.
19. (a) Illustrate Modulo ten counter.
Or
(b) Explain the concept of Subroutine and its instructions.
20. (a) Write a program to convert an 8-bit Binary number into a BCD number.
Or
(b) (i) Add two packed BCD numbers : 77 and 48. (And)
(ii) Registers BC contain 2793H, and registers DE contains 3182H. Write instructions to add these two 16-bit numbers, and place the sum in memory locations 2050H and 2051H.

Reg. No. :

Code No. : 41449 E Sub. Code : SSCA 4 A

B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Computer Application

Skill Based Subject : MICRO PROCESSOR

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer :

1. The microprocessor communicates and operates in the binary numbers, called _____
(a) bits (b) bytes
(c) micros (d) macros
2. The common pathway between I/O, memory and microprocessor are called a _____
(a) gate (b) bus
(c) path (d) channel
3. MPU stands for
(a) Micro Processing Unit
(b) Micro Programming Unit
(c) Macro Processing Unit
(d) Macro Programming Unit



4. The 8085 has _____ signal lines that are used as the address bus
(a) 2 (b) 4
(c) 8 (d) 16
5. Which flag is set when a carry is generated by digit D3 and passed on to digit D4?
(a) Sign flag
(b) Zero Flag
(c) Auxiliary Carry Flag
(d) Parity Carry Flag
6. The latch should be enabled when IO/M is active _____ and WR is active _____
(a) high, high (b) low, low
(c) high, low (d) low, high
7. The accuracy of the time delay depends on the accuracy of the _____
(a) Counters (b) Timers
(c) Registers (d) System's clock
8. A _____ is a group of instructions written separately from the main program to perform a function that occurs repeatedly in the main program
(a) function (b) procedure
(c) sub-function (d) subroutine
9. A BCD number between 0 and 99 is stored in a R/W memory location called the _____
(a) Buffer (b) Register
(c) INBUF (d) OUTBUF
10. DCX instruction represents _____
(a) Decrement Register Pair
(b) Decrement Accumulator Pair
(c) Declare Register Pair
(d) Define Register Pair

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Describe the evolution from Large computers to Single-Chip Microcontrollers.
Or
(b) Explain about the Data Transfer Operations.
12. (a) Explain about the Microprocessor-Initiated Operations and 8085 Bus Organization.
Or
(b) Explain the Basic Concepts in Memory Interfacing.
13. (a) Explain about Arithmetic Operations.
Or
(b) Explain about Dynamic Debugging.
14. (a) Explain about Counter and Time Delay.
Or
(b) Explain in detail about Stack.
15. (a) Convert 72_{BCD} into its binary equivalent.
Or
(b) Write a subroutine to subtract one packed BCD number from another BCD number. The minuend is placed in register B, and the subtrahend is placed in register C by the calling program. Return the answer into the accumulator

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Reg. No. :

Code No. : 22739 E Sub. Code : SYOG 3 A

U.G. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2018.

Third Semester
Part IV — YOGA

(For those who joined in July 2017 onwards)

Time : One and half hours Maximum : 50 marks

Answer ALL the questions.

Choose the correct answer :

1. The study of the structure of body parts is called _____.
(a) Cytology (b) Anatomy
(c) Histology (d) Physiology
2. The study of the function of body parts is called _____.
(a) Cytology (b) Anatomy
(c) Histology (d) Physiology
3. The urinary system consists of
(a) Kidney (b) Neuron
(c) Heart (d) Lungs

4. The ability to perform daily tasks with vigor and without undue fatigue
(a) Mental Fitness (b) Social Fitness
(c) Physical Fitness (d) Emotional Fitness
5. The ability to make judgments in a group situation
(a) Mental health (b) Social health
(c) Physical health (d) Emotional health
6. At present the highest population of youth resides in the country of
(a) China (b) USA
(c) India (d) Australia
7. The circulatory system consists of
(a) Kidney (b) Neuron
(c) Heart (d) Lungs
8. The structural and functional unit of human body is
(a) Tissue (b) Cell
(c) Organ (d) System
9. A state of physical well-being is called
(a) Mental health (b) Social health
(c) Physical health (d) Emotional health

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10. Who organized the practice of yoga into an "eight limbed path"?
- (a) Patanjali (b) B.K.S. Iyengar
(c) Agathiyar (d) Sivananda
11. _____ helps to promote physical, mental and spiritual well-being.
- (a) Exercise (b) Aerobics
(c) Yoga (d) Sports
12. International Day of Yoga celebrate on
- (a) June 21 (b) April 21
(c) July 21 (d) June 12
13. Yoga is the union of
- (a) Body, Mind and Soul
(b) Body, Mind and Prayer
(c) Body, Fitness and Stamina
(d) None
14. Attention training also known as
- (a) Wisdom (b) Meditation
(c) Asana (d) Pranayama
15. Which level of mind holds the control of the basic functions of the human body?
- (a) Subconscious mind (b) Unconscious mind
(c) Conscious mind (d) None
16. The highest frequency of brain waves is called as
- (a) Gamma (b) Beta
(c) Alpha (d) Theta

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17. Cultivating thoughts and thinking processes that support your goals is a _____ Training.
- (a) Attention (b) Insight
(c) Skillful actions (d) None
18. Memory is our ability to _____ in the human brain
- (a) Encode and store
(b) Retain and subsequently recall information
(c) Past experiences
(d) All of these
19. Which training develops the mind and its ability to direct attention where you want it to go?
- (a) Attention (b) Insight
(c) Skillful actions (d) None
20. The frequency of beta waves is
- (a) 1-4 Hz (b) 4-7 Hz
(c) 8-12 Hz (d) 12-30 Hz
21. The frequency of Alpha waves is
- (a) 1-4 Hz (b) 4-7 Hz
(c) 8-12 Hz (d) 12-30 Hz
22. Alpha wave denotes
- (a) Awake (b) Relaxed
(c) Mental imagery (d) Deep sleep
23. Beta wave denotes
- (a) Awake (b) Relaxed
(c) Mental imagery (d) Deep sleep

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[P.T.O.]



24. The term Asana is derived from the
 (a) Sanskrit (b) Latin
 (c) English (d) Urdu
25. A concentration technique is an exercise used to improve
 (a) Focus (b) Awareness
 (c) Mental discipline (d) All of these
26. Cultural asana also called as
 (a) Meditative asana (b) Corrective asana
 (c) Relaxative asana (d) None
27. Kapalabhati is breathing at the speed of _____ breaths per minute
 (a) 180 (b) 120
 (c) 110 (d) 100
28. Varksasana looks like a _____ Posture
 (a) Lotus (b) Palm tree
 (c) Locust (d) Tree
29. Jnana Yoga means
 (a) Action (b) Devotion
 (c) Wisdom (d) None
30. Ardha Cakrasana looks like a _____ Posture
 (a) Lotus (b) Locust
 (c) Half Wheel (d) Cobra
31. Raja yoga also called as
 (a) Action yoga (b) Devotion yoga
 (c) Classical yoga (d) Physical yoga

32. Savasana looks like a _____ Posture
 (a) Hare (b) Spinal Twist
 (c) Crocodile (d) Dead body
33. Pranayama is performed in
 (a) Shavasana (b) Makarasana
 (c) Padmasana (d) Kneeling position
34. Surya Bhedana is
 (a) Sun cleaving breath
 (b) Hissing Breath
 (c) Beak tongue breath
 (d) Sound of Bee Breath
35. Pranayama is a practice of
 (a) Exhalation (b) Inhalation
 (c) Both (a) and (b) (d) None
36. Which pranayama helps to purifies blood?
 (a) Nadisodhana (b) Sitali
 (c) Sitkari (d) Bhramari
37. Warming up increases _____
 (a) Circulation (b) Temperature
 (c) Muscle tone (d) All of these
38. The term asana is derived from the Sanskrit term Asi, Which means?
 (a) To be (b) To sit
 (c) Both (a) and (b) (d) None



39. Which one given below cleanses the entire respiratory passage?
 (a) Asanas (b) Kapalabhati
 (c) Mudras (d) Bhandas
40. Which Asana brings stability in the body, helps to clear up congestion of the spinal nerves, and corrects faulty posture?
 (a) Tadasana (b) Vakrasana
 (c) Bhujangasana (d) Pada Hastasana
41. Which Asana Prevents flat foot?
 (a) Tadasana (b) Trikonasana
 (c) Bhujangasana (d) Pada Hastasana
42. Which asana increases blood circulation to the head and cardiac region?
 (a) Bhujangasana (b) Trikonasana
 (c) Bhadrasana (d) Ardhastrasana
43. _____ asana Stimulates pancreas and helps in the management of diabetes.
 (a) Bhujangasana (b) Sasakasana
 (c) Vakrasana (d) Ardhastrasana
44. _____ asana Tones the hip muscles and those in the kidney region.
 (a) Bhujangasana (b) Sasakasana
 (c) Vakrasana (d) Ardhastrasana

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45. _____ asana Stretches abdominal organs, improves digestion and helps to relieve constipation.
 (a) Pavanamutasana (b) Salabhasana
 (c) Makarasana (d) Sethubandhasana
46. _____ asana Helps to relieve all kinds of tensions and gives rest to both body and mind.
 (a) Savasana (b) Salabhasana
 (c) Makarasana (d) Sethubandhasana
47. How many types in Kapalabhati?
 (a) 5 (b) 4
 (c) 7 (d) 6
48. Meditation is a great way to
 (a) Reduce stress (b) Burn Calories
 (c) Develop strength (d) None
49. Makarasana looks like a _____ Posture.
 (a) Hare (b) Spinal Twist
 (c) Crocodile (d) Dead body
50. How many types in Pranayama?
 (a) 7 (b) 8
 (c) 9 (d) 6

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