

Total No. of Questions : 5]

SEAT No. :

P2129

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[5803]-301

**S.Y. B.B.A. (Computer Application)
CA 301 : DIGITAL MARKETING
(2019 CBCS Pattern) (Semester - III)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat diagrams must be drawn wherever necessary.*

Q1) Attempt any Eight of the following.

[8×2=16]

- a) What is digital marketing in E-commerce?
- b) What is Internet marketing?
- c) What is Search Engine Results Pages (SERP)
- d) Which are types of internet marketing?
- e) What is Resource planning?
- f) What is CRM?
- g) What is digital marketing plan?
- h) What is SEO.
- i) Define cost budgeting?
- j) What is upload and download?

Q2) Attempt any Four of the following.

[4×4=16]

- a) What is social media marketing?
- b) What is difference between SEO & SEM?
- c) Explain digital marketing and list its advantages.
- d) Explain E-Marketing plan?
- e) Explain the SWOT Analysis?

P.T.O.

Q3) Attempt any Four of the following.

[4×4=16]

- a) Write advantages and disadvantages of CRM?
- b) Write phases in content management lifecycle?
- c) Write 5 D's of digital marketing?
- d) Write introduction of webpage?
- e) Write advantages of E-mail marketing?

Q4) Attempt any Four of the following.

[4×4=16]

- a) Write difference between traditional (Real) marketing advantages?
- b) Write CRM platform in detail?
- c) Write Video sharing-youtube?
- d) What is SEO Content?
- e) Write on types of SEO?

Q5) Write a short note any Two of the following.

[2×3=6]

- a) Stakeholders in CRM.
- b) Facebook.
- c) Twitter.



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P2130

[5803]-302

S.Y. B.B.A. (CA)

CA - 302 : DATA STRUCTURE

(2019 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Questions : Total number of questions are 5.*
- 2) *Total Marks Assigned : 70*
- 3) *Time assigned : 3 Hours.*
- 4) *All questions are compulsory.*

Q1) Attempt any EIGHT of the following.

[8×2=16]

- a) What is self referential structure?
- b) What are the different types of graph?
- c) What are the applications of stack?
- d) List out different types of tree.
- e) What is searching?
- f) What is pointer to pointer.
- g) What is non-primitive data structure?
- h) Define Data structure.
- i) What is sorting? State the techniques of sorting.
- j) What is almost complete binary tree.

Q2) Attempt any FOUR of the following.

[4×4=16]

- a) What is hight-balanced tree? Explain LL and LR rotations with an example.
- b) Explain selection sort technique with an example.
- c) What is stack? Explain different operations used in stack.
- d) What is Graph? Explain adjacency list of graph.
- e) Write an algorithm to convert given infix expression to postfix expression.

P.T.O.

Q3) Attempt any Four of the following. **[4×4=16]**

- a) Write a function to create and display circular singly linked list.
- b) Write a function for Dynamic Implementation of stack.
- c) Write a function to traverse a graph using DFS technique.
- d) Write a function to remove given node from singly linked list and add it at the given position in singly linked list.
- e) Write a function to check whether a given string is palindrome or not (use Stack)

Q4) Attempt any Four of the following. **[4×4=16]**

- a) Sort the following data by using insertion sort.
18, 7, 22, 3, 14, 2
- b) Construct Binary search tree of following data.
15, 30, 20, 5, 10, 2, 7
- c) Construct an AVL tree of following data.
SRI, IND, AUS, FRA, CAN, DEN
- d) What is double ended queue? Explain it with an example.
- e) Write a 'C' Program to count the number of nodes from singly link list.

Q5) Attempt any TWO of the following **[2×3=6]**

- a) Convert the following expression into prefix
 - i) $p * q - rls$
 - ii) $(A + B) / (C + D * E)$
- b) Define the following terms.
 - i) Leaf node
 - ii) Cyclic graph
 - iii) Parent node
- c) What is degree of vertex? Find indegree & out degree of following graph for each vertex



Total No. of Questions : 5]

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P6135

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[5803]-303

S.Y. B.B.A. (C.A.)

CA - 303 : SOFTWARE ENGINEERING

(CBCS 2019 Pattern) (Semester - III)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat diagrams must be drawn wherever necessary.*

Q1) Attempt any eight of the following:

[8×2=16]

- a) What is feasibility study?
- b) Define RAD.
- c) What is SRS?
- d) Define an Entity.
- e) What is Pseudocode?
- f) State the principles of software testing?
- g) What is Software Reengineering?
- h) What is requirement elicitation?
- i) What is prototype?
- j) What is system?

Q2) Attempt any four of the following:

[4×4=16]

- a) Explain spiral model in detail.
- b) Differentiate between White Box and Black-Box testing.
- c) What is SDLC? Describe its phases?
- d) Explain fact finding methods in brief.
- e) Define software maintenance. Explain types of software maintenance.

P.T.O.

Q3) Attempt any four of the following.

[4×4=16]

- a) Draw decision tree for the following case. A company gives discount on the purchase of goods depending on the sales and duration of payment.
 - i) 5% discount if order amount > 50,000.
 - ii) 3% discount if order amount between 25,000 and 50,000.
 - iii) No discount if order < 10,000 or payment is not done within 8 days.
- b) Explain in detail about coupling and cohesion.
- c) Draw ER-Diagram for “Hotel Management System”.
- d) What is Decision Table? Need of Decision table.
- e) Design a screen layout for employees salary slip.

Q4) Attempt any four of the following.

[4×4=16]

- a) Material is issued to the department by considering whether the Material Requisition Note (MRN) is signed or not. It contains valid items or not and it is given within 8 Hours or not. Draw decision table for the above case.
- b) Draw first level DFD for customer order system.
- c) Differentiate between forward and reverse engineering.
- d) Explain elements of Data flow diagrams?
- e) What is Data Flow Diagram? Explain benefits of DFD, Advantages of DFD, Disadvantages of DFD.

Q5) Write a short note on any two of the following.

[2×3=6]

- a) Feasibility study.
- b) Spiral model.
- c) Software maintenance.



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[5803]-304

S.Y. B.B.A. (CA)

CA 304 : ANGULARJS

(2019 CBCS Pattern) (Semester - III)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Questions Total number of questions are 5.*
- 2) *Neat diagram must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*

Q1) Attempt any EIGHT of the following. (out of Ten)

[8×2=16]

- a) What is AngularJs?
- b) What is SPA?
- c) Write a syntax of building block of AngularJs?
- d) What is data binding in AngularJs?
- e) Explain ng-bind directives with example.
- f) How to create controller in AngularJs?
- g) What is difference between \$scope and scope?
- h) Explain date filter with syntax & example.
- i) What is \$http service?
- j) What is AngularJs factory?

Q2) Attempt any FOUR of the following. (out of Five)

[4×4=16]

- a) Explain difference between angularJS and javascript.
- b) What is module? Write advantages of modules.
- c) What are different forms of form events?
- d) Write AngularJS program for multiplication of two numbers.
- e) Write a AngularJS program to create service for finding factorial of given number.

P.T.O.

Q3) Attempt any Four of the following. (out of Five)

[4×4=16]

- a) Explain AngularJS Data Binding?
- b) Explain scope hierarchy in detail.
- c) Create a Hello world application program using AngularJS.
- d) Explain lower-case and upper-case Filter with example.
- e) Write an AngularJS program for ng-copy and ng-paste event.

Q4) Attempt any Four of the following. (out of Five)

[4×4=16]

- a) Explain the MVC Architecture.
- b) Write an AngularJS program to demonstrate ng-init directive that initializes variable of string, number, array and object.
- c) Write Advantages and disadvantages of SPA.
- d) Explain functions of AngularJS directive life cycle?
- e) Distinguish between factory, service and provider.

Q5) Write a short note on any two (out of Three)

[2×3=6]

- a) Model
- b) Event Handling
- c) Dependency Injection



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[5803]-305

Second Year B.B.A. (CA)

CA-304 : PHP

(2019 Pattern) (Semester - III)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer all questions.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any EIGHT (out of TEN)

[8×2=16]

- a) What is PHP?
- b) What is difference between “echo” and “print”?
- c) What is the use of isset () function?
- d) Which are the methods to submit form?
- e) Explain setcookie () in PHP.
- f) What is \$_SESSION in PHP?
- g) Explain split () function in PHP.
- h) What does PEAR stands for?
- i) What is the use of print_r ()?
- j) What does the unset () function mean?

Q2) Attempt any FOUR (out of FIVE)

[4×4=16]

- a) What are the different types of PHP variables?
- b) What is the difference between GET and POST method?
- c) Explain if then else in PHP.
- d) Explain cookies in PHP
- e) Explain any two string functions in PHP.

P.T.O.

Q3) Attempt any Four (out of FIVE)

[4×4=16]

- a) What are superglobals in PHP?
- b) Write the functions performed by a web browser.
- c) Write a code in PHP which accepts two strings from user and displays them after concatenation.
- d) Write a PHP function to calculate factorial of a number using recursion.
- e) Write a PHP program to print greatest number among given 3 numbers.

Q4) Attempt any Four of the following. (out of FIVE)

[4×4=16]

- a) Explain self processing form using example.
- b) How inheritance is implemented in PHP? Explain using example.
- c) Write a menu driven program in PHP to display arithmetic operations.
- d) Write a PHP program to generate random password.
- e) Write a PHP program to create login page and welcome user on next page.

Q5) Write a short note on any two (out of THREE)

[2×3=6]

- a) Form and Form elements
- b) Logical operators in PHP
- c) Validation in PHP



Total No. of Questions : 5]

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[5803]-306

S.Y. B.B.A. (CA)

CA-305 : BIGDATA

(2019 CBCS Pattern) (Semester - III)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to right indicate marks.*

Q1) Attempt any EIGHT of the following.

[8×2=16]

- a) What is big data?
- b) What is Data Analytics?
- c) What is population?
- d) Define sample.
- e) What is machine learning?
- f) What is KNN?
- g) Define EM algorithm.
- h) Define market basket analysis.
- i) What is Apriori algorithm?
- j) What is R?

Q2) Attempt any FOUR of the following.

[4×4=16]

- a) Explain the types of Data Analytics.
- b) Explain correlation with its type.
- c) Explain support vector machine with example.
- d) Explain Machine learning.
- e) Explain Association rule mining.

P.T.O.

Q3) Attempt any Four of the following.

[4×4=16]

- a) How Naive Bayes algorithm works.
- b) Explain Decision tree with example.
- c) Explain the application of big data.
- d) Explain cluster analysis with its types.
- e) What is digital data? Explain its type.

Q4) Attempt any Four of the following.

[4×4=16]

- a) What is regression? Explain with its type.
- b) Explain the five applications of machine learning.
- c) Write an R program to find the maximum and the minimum value of a given vector.
- d) Write an R program to compare two data frames to find the elements in first data frame that are not present in second data frame.
- e) Write an R program to find Sum, Mean and Product of a Vector.

Q5) Write a short note on any TWO of the following.

[2×3=6]

- a) Population and sample.
- b) Data Visualisation.
- c) Data types in R.



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[5803]-307

B.B.A. (CA)

**CA-305 : BLOCK CHAIN
(2019 Pattern) (Semester - III)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any EIGHT of the following (Out of TEN).

[8×2=16]

- a) Define hashing.
- b) Define Database.
- c) Define Cryptography.
- d) What is truffle in Ethereum?
- e) What is currency?
- f) Define Digital Signature.
- g) What is cryptocurrency?
- h) What is proof of Stake?
- i) What is fork?
- j) What is smart contract?

Q2) Attempt any FOUR of the following. (out of FIVE)

[4×4=16]

- a) Explain Components of Blockchain.
- b) What is Ethereum network? Explain with diagram.
- c) What is DAO? Explain in detail.
- d) Explain life cycle of Blockchain.
- e) What is Hyperledger Fabric? Give Benefits of Hyperledger Fabric.

P.T.O.

Q3) Attempt any FOUR of the following (Out of FIVE)

[4×4=16]

- a) Describe DApps in details.
- b) With the help of diagram describe EVM.
- c) Explain Web3 in details.
- d) What is an EVM in blockchain? Explain EVM with example.
- e) What are the advantages of Hyperledger Fabric for blockchain networks.

Q4) Attempt any FOUR of the following (Out of FIVE).

[4×4=16]

- a) What is blockchain? Explain its Importance.
- b) What is block? Explain its structure diagrammatically.
- c) Explain Types of network.
- d) Explain Actors of Blockchain.
- e) What is gas? Why it is important in Ethereum?

Q5) Write a short note on any TWO of the following (Out of THREE) **[2×3=6]**

- a) Give Limitations of Blockchain.
- b) Differentiate between private key and public key.
- c) Explain working of smart contracts.

