

Total No. of Questions : 5]

SEAT No. :

PA-1966

[Total No. of Pages : 2

[5954]-301

B.B.A. (CA) (Semester - III)

CA-301 : DIGITAL MARKETING

(2019 Pattern)

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates :*

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

**Q1) Answer the following (Any Eight) :**

**[8 × 2 = 16]**

- a) What is digital marketing?
- b) What is email marketing?
- c) Define the term Real Marketing.
- d) What is Content Management?
- e) Define web design.
- f) What is CRM platform?
- g) What is Social Media?
- h) Define YouTube Analytics.
- i) What is Resource Planning?
- j) What is Blogging?

***P.T.O.***

**Q2) Attempt the following (Any Four) :**

**[4 × 4 = 16]**

- a) Explain the search engine optimization.
- b) Describe Digital Marketing channels.
- c) Explain the concept SEO optimization.
- d) Explain CRM models in detail.
- e) Describe Digital Display Marketing.

**Q3) Answer the following (Any Four) :**

**[4 × 4 = 16]**

- a) How to understand Social Media Marketing?
- b) What is Social Media? Explain Blogging in detail.
- c) What is Web analytics? Describe the levels.
- d) Explain the concept of cost budgeting.
- e) Explain MS Expression Web.

**Q4) Answer the following (Any Four) :**

**[4 × 4 = 16]**

- a) Explain the visual identity of a facebook page.
- b) Explain the analyzing vision on Linkdin.
- c) What is email marketing? How to keep up with the conversion?
- d) Explain the concept Google Ads.
- e) How to create business account on YouTube?

**Q5) Write a short note on (Any Two) :**

**[2 × 3 = 6]**

- a) Optimization of Instagram profile.
- b) Social Networking.
- c) SWOT Analysis.



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SEAT No. :

**PA-1967**

[Total No. of Pages : 2

**[5954]-302**

**S.Y. B.B.A. (Computer Application)**

**CA - 302 : DATA STRUCTURE**

**(2019 Pattern) (Semester - III)**

*Time : 2½Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

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

**Q1)** Attempt any EIGHT of the following.

**[8×2=16]**

- a) How to measure performance of an algorithm?
- b) What is polynomial? How is it differ from structure?
- c) What is balance factor? How is it calculated?
- d) What are Abstract Data types?
- e) What is Ancestor of Node?
- f) State the types of graph.
- g) Differentiate array and structure.
- h) What is space and time complexity?
- i) What is pointer to pointer?
- j) What is spanning tree?

**Q2)** Attempt any FOUR of the following.

**[4×4=16]**

- a) Explain Insertion sort technique with an example.
- b) What is circular queue? How it is differ from static queue?
- c) What is stack? What are the various applications of stack. List operations performed on stack.
- d) Explain different types of AVL rotations with an example.
- e) Explain various types of Dynamic Memory Allocation functions.

**Q3)** Attempt any FOUR of the following.

**[4×4=16]**

- a) Write a function to create and display doubly link list.
- b) Write a recursive functions to traverse a tree by using inorder (), preorder () and postorder traversing functions.

**P.T.O.**

- c) Write a function to delete first node from singly linked list.
- d) Write a function to reverse a string using stack.
- e) Write a 'C' Program for evaluation of polynomial.

**Q4)** Attempt any FOUR of the following.

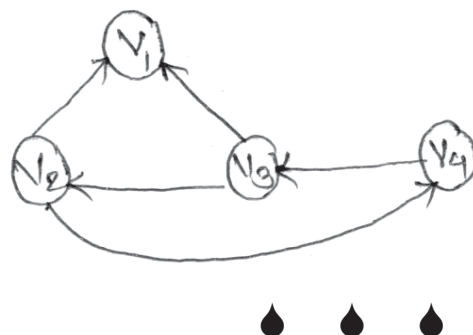
**[4×4=16]**

- a) Construct an AVL tree for following sequential data:  
Jan, Feb, Apr, May, July, Aug, June.
- b) Use merge sort technique on following data:  
45, 85, 96, 78, 34, 12, 49, 38, 18.
- c) Write a 'C' program to create link list with given number in which data part of each node contains individual digits of the numbers.
- d) What is circular queue? Explain it with example.
- e) Construct Binary search tree of following data:  
RAM, SITA, AMIT, JOEL, IVAN, ASHA

**Q5)** Attempt any TWO of the following.

**[2×3=6]**

- a) Define the following terms:
  - i) Directed graph
  - ii) Strict binary tree
  - iii) Cyclic graph
- b) Convert the following expression into postfix
  - i)  $A/B \ \$ \ CD \ * \ E - A \ * \ C$
  - ii)  $(A + B \ * \ C - D) / E \ \$ \ F$
- c) What is degree of vertex? Find the indegree and outdegree of following graph of each vertex:



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SEAT No. :

**PA-1968**

[Total No. of Pages : 2

**[5954]-303**

**S.Y. B.B.A. (Computer Application)  
CA - 303 : SOFTWARE ENGINEERING  
(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.

**[2×8=16]**

- a) What is system?
- b) Define software?
- c) Define RAD.
- d) What is SRS.
- e) State the principles of Software Testing?
- f) What is software Reengineering?
- g) State advantages of Waterfall model.
- h) State any two types of coupling.
- i) Define an Entity.
- j) What is Pseudocode?

**Q2)** Attempt any four of the following.

**[4×4=16]**

- a) Explain various types of system.
- b) Explain different McCall's quality factors.
- c) Explain spiral model in detail.
- d) Discuss different fact finding techniques.
- e) Differentiate between White - Box and Black-Box Testing.

**Q3)** 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.

**P.T.O.**

- b) Design a Input screen layout for creating user account on Internet (with personal details, user-id and password, save, cancel commands etc).
- c) Draw decision tree for the following case:  
A company gives discount on the purchase of goods depending on the sale 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 amount < 10,000 or payment is not done within 8 days.
- d) Design an screen layout for employees salary slip.
- e) Draw ER-Diagram for “College Admission System”.

**Q4)** Attempt any Four of the following.

**[4×4=16]**

- a) Draw first level DFD for Hospital Management system in which the hospital has Inpatient Department (IPD), outpatient Department (OPD) the system maintains patient records and bills of the patient.
- b) Identify all entities of online shopping system.
- c) Draw context level diagrams for online shopping system.
- d) Draw first level DFD for customer Order system.
- e) Explain elements of Data flow diagrams?

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

**[3×2=6]**

- a) Types of Cohesion
- b) Validation and Verfication Testing.
- c) Feasibility study.



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SEAT No. :

**PA-1969**

**[5954]-304**

[Total No. of Pages : 2

**Second Year B.B.A. (C.A.)  
CA - 304 : ANGULAR JS  
(2019 Pattern) (Semester-III)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) All questions are compulsory.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right indicate full marks.*

**Q1)** Attempt any EIGHT of the following.

**[8×2=16]**

- a) What is SPA?
- b) Explain ng-controller directive
- c) Write any two features of AngularJS.
- d) Explain two-way data binding.
- e) What is Controller?
- f) Explain \$http Services.
- g) Explain uppercase filter.
- h) What is Dependency Injection?
- i) Explain \$timeout Service.
- j) Explain Customer Validation.

**Q2)** Attempt any Four of the following.

**[4×4=16]**

- a) Explain most common directives used in AngularJS.
- b) Explain MVC architecture in detail.
- c) Explain built-in Services of AngularJS.
- d) Write an AngularJS program to create Service for finding factorial of a number.
- e) Write an AngularJS program for using \$filter service.

**Q3)** Attempt any Four of the following:

**[4×4=16]**

- a) Give difference between AngularJS and Javascript.
- b) Explain the ways to implement custom directives in AngularJS.
- c) Write advantage of creating Modules.
- d) Write a Program that Can show the use of ng-repeat.
- e) Write a program to demonstrate use of factory function.

**P.T.O.**

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

- a) What is the difference between \$Scope and Scope?
- b) Write a program to create a Service to calculate are of a circle.
- c) Explain life cycle of a Module.
- d) Write a Program to display name, qualification and address using MVC architecture.
- e) Explain \$document service, \$logservice and \$root service in brief.

**Q5)** Write short note on any Two of the following. **[2×3=6]**

- a) Data binding.
- b) Ng new, ng upadate.
- c) angular. module.





Total No. of Questions: 5]

SEAT No. :

**PA-1970**

**[5954]-305**

[Total No. of Pages : 2

**B.B.A. (Computer Application)**

**PHP**

**(2019 Pattern) (Semester-III) (CA-304)**

*Time : 2 ½ Hours*

*[Max. Marks : 70*

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

**[8×2=16]**

- List the types of array.
- What are different arithmetic operators in PHP?
- What is abstract class in PHP?
- Define sticky form.
- What is validation?
- What is use of array-slice () in PHP?
- What are the databases supported by PHP?
- what is the use of session?
- Which attribute is used for multiple selections in select tag?
- What is the purpose of break statement?

**Q2)** Attempt any Four of the following (out of Five).

**[4×4=16]**

- Explain multidimensional array in PHP with example.
- Write a PHP Program to check whether given year is leap year or not (use if else)
- Write a PHP script to define an interface which has methods area () volume (). Define constant PI. Create a class cylinder which implements this interface and calculate area and volume
- What are the built in functions of string?
- Write a PHP program to reverse an array

**Q3)** Attempt any FOUR of the following (out of FIVE)

**[4×4=16]**

- What is variable in PHP? Explain its scope with example.
- What is the difference between for and for each in PHP?
- Write a PHP Program to display reverse of a string.
- How to create cookies? Give an example.
- Explain passing values by reference with an example.

**P.T.O.**

**Q4)** Attempt any four of the following (out of Five) **[4×4=16]**

- a) What is array? Explain different types of array in PHP.
- b) What is the difference between a while loop and do while loop in PHP.
- c) Write a PHP program to find the sum of digit of a given number.
- d) Write a PHP program to use multiple checkbox to select hobbies
- e) List various MYSQL Queries with their Syntax.

**Q5)** Write a short note on Any Two of the following (out of Three) **[2×3=6]**

- a) Explain advantages of PHP built in functions
- b) Explain GET Method
- c) List Advantages of PHP.



Total No. of Questions : 5]

SEAT No. :

[Total No. of Pages : 2

**PA-1971**

**[5954]-306**

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

**CA- 305 : BIG DATA**

**(2019 CBCS Pattern) (Semester-III)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instruction to the candidates:*

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

**Q1)** Attempt any EIGHT of the following.

**[16]**

- a) What is big data?
- b) What is data manipulation?
- c) What is data science?
- d) What is statistical Inference?
- e) Enlist the stages of data science?
- f) Define Machine Learning.
- g) Define SVM?
- h) What is the use of histogram?
- i) What is data analysis?
- j) What is the use of themes?

**Q2)** Attempt any FOUR of the following.

**[16]**

- a) Explain different types of data analytics.
- b) Give advantages and Disadvantages of Machine Learning.
- c) Explain the process of data analysis.
- d) Explain probability distribution modeling.
- e) Explain applications of big data.

**P.T.O.**

**Q3)** Attempt any FOUR of the following. **[16]**

- a) State advantages and disadvantages of SVM.
- b) Explain Data frame with example.
- c) Explain types of regression models.
- d) What is histogram? Explain with example in R.
- e) Explain functions included in “dplyr” package

**Q4)** Attempt any FOUR of the following. **[16]**

- a) Explain Naive Bayes with the help of example.
- b) What is data visualization? Explain with example in R.
- c) Write a R program to accept temperatures in Fahrenheit (F) and print it in Celsius (C).
- d) Accept three dimensions length (l), breadth (b) and height (h) of a cuboid and print its volume.
- e) Write a R program accept any year as input and check whether the year is a leap year or not.

**Q5)** Write a short note on Any TWO of the following. **[6]**

- a) Tools used in Big Data.
- b) Advantages of Big data.
- c) Advantages and Disadvantages of EM algorithms.



Total No. of Questions : 5]

SEAT No. :

**PA-1972**

[Total No. of Pages : 2

**[5954]-307**

**S.Y. B.B.A. (Computer Application)**

**CA-305 : BLOCK CHAIN**

**(2019 Pattern) (Semester-III)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instruction to the candidates:*

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

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

**[8×2=16]**

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

**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) 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?

**Q4)** 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.

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

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

