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M – 2058

Reg. No. : .....

Name : .....

**Fifth Semester B.C.A. Degree Examination, December 2021**

**Career Related First Degree Programme Under CBCSS**

**Group 2(b) – COMPUTER APPLICATIONS**

**Core Course**

**CP 1544 — SOFTWARE TESTING**

**(2018 and 2019 Admission)**

Time : 3 Hours

Max. Marks : 80

**SECTION – A**

(Very Short Answer type)

**One word to maximum of one sentence, Answer all questions. Each question carries 1 marks.**

1. What is a software bug?
2. What is a software?
3. What is jmeter?
4. What is decision table?
5. What is win runner?
6. What is requirement based test?
7. What is output testing?

P.T.O.

8. Is SonarQube code review tool?
9. What is the other name of black box testing?
10. What is BVA and ECP in testing?

**(10 × 1 = 10 Marks)**

**SECTION – B**

**(Short Answer)**

Not to exceed **one** paragraph, Answer any **eight** questions. Each question carries **2** marks.

11. What is KV chart?
12. What are the inputs for testing?
13. What are some examples of bugs in software?
14. What is a test execution report?
15. What is the object of path testing?
16. What is level testing?
17. What is code complexity in testing?
18. Why control flow graph is used in testing?
19. What is loop testing?
20. What is path testing with example?
21. What is V-model in software testing?
22. How do you calculate Boundary value analysis?
23. What is meant by path instrumentation in software testing?

24. What is unit testing?
25. What is regression testing?
26. What do you mean by Test Matrix?

**(8 × 2 = 16 Marks)**

**SECTION – C**

**(Short essay)**

Not to exceed **120** words. Answer any **six** questions. **Each** question carries **4** marks.

27. What is non-functional testing?
28. What is manual testing?
29. What is black-box testing?
30. What is white-box testing?
31. What is alpha testing?
32. What is beta testing?
33. What is achievable paths in software testing?
34. What is the purpose of static analysis tools?
35. What tools are used to code quality?
36. What is positive testing with example?
37. What is functional testing?
38. What is automated testing?

**(6 × 4 = 24 Marks)**

## SECTION – D

(Long essay)

Answer any **two** questions. **Each** question carries **15** marks.

39. Explain the role of testing in software development.
40. What is the software testing life cycle?
41. What are the differences between manual and automated testing?
42. What is a bug report?
43. Explain the difference between Quality Control(QC) and Quality Assurance(QA)?
44. List and Explain any two software testing tools?

**(2 × 15 = 30 Marks)**

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M – 2054

Reg. No. : .....

Name : .....

**Fifth Semester B.C.A. Degree Examination, December 2021**

**Career Related First Degree Programme under CBCSS**

**Group 2(b) – Computer Applications**

**Core Course**

**CP 1544 : SYSTEM ANALYSIS AND DESIGN**

**(2016 & 2017 Admission)**

Time : 3 Hours

Max. Marks : 80

PART – A

*(Very short answer type)*

**One** word to maximum of **one** sentence. **Each** question carries **1** mark.

1. What is the use of DFD?
2. Define MIS.
3. Who is considered as an agent of change?
4. List out six elements of system.
5. Define system.
6. Which phase of SDLC is most creative and challenging?
7. What is data dictionary?

P.T.O.

8. What are the different type of feasibility study?
9. What are the two phases of system design?
10. What is meant by bench marks?

**(10 × 1 = 10 Marks)**

**PART – B**

(Short answer type)

Answer any **eight** questions. **Each** question carries **2** marks.

11. Who is system analyst?
12. What are the characteristic of a system?
13. List some tools that help in systems analysis and design.
14. What is structured analysis?
15. List out the advantages of data dictionary.
16. What are the different information gathering tools?
17. Describe feasibility study.
18. Differentiate between logical and physical design
19. Distinguish between schema and sub schema.
20. Explain open system.
21. Which are the three elements of structured designing?
22. Describe form.

**(8 × 2 = 16 Marks)**

PART – C

(Short Essay)

Answer any **six** questions. **Each** question carries **4** marks.

23. To reconstruct a system what are the key elements must be considered by system analyst? Explain each elements
24. What are the three levels of information required in an organization?
25. Write note on characteristics of a system.
26. When does an analyst terminate a project?
27. Describe different role of system analyst.
28. What is the difference between managerial and operational MIS planning? Discuss.
29. List and explain the primary advantages of the interviewing.
30. Why do we test systems? How important is testing? Elaborate.
31. What is implementation? What are the different steps involved? Explain.

**(6 × 4 = 24 Marks)**

PART – D

(Long essay)

Answer any **two** questions. **Each** question carries **15** marks.

32. Explain software development life cycle.
33. Why do system fail? Explain in detail.
34. Discussed various data collection techniques used for data collection. Elaborate each one.
35. Explain different types of testing.

**(2 × 15 = 30 Marks)**

Reg. No. : .....

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**Fifth Semester B.C.A. Degree Examination, December 2021**

**Career Related First Degree Programme under CBCSS**

**Group 2 (b) - Computer Applications**

**Core Course**

**CP 1543 : VISUAL PROGRAMMING**

**(2018 and 2019 Admission)**

Time : 3 Hours

Max. Marks : 80

**SECTION – A (Very Short Answer Type)**

(One word to maximum of one sentence, Answer **all** questions)

1. Write the use of CSS properties window.
2. State event handler.
3. Mention the purpose of using access keys.
4. Write the function which used to remove all items from the view state collection.
5. Write any two names of search sites that use query string.
6. Write the role of 'Connection String' property.
7. Write the feature that reduces database access and improves the overall performance.
8. Write the function of DataSourceMode attribute.

P.T.O.



9. What is role?
10. Write the four tabs of Website administration tool.

**(10 × 1 = 10 Marks)**

**SECTION – B (Short answer)**

(Not to exceed one paragraph, answer **any eight** questions. **Each** question carries **2** marks)

11. Differentiate Check box and Radio Button.
12. Enumerate attribute for formatting radio button and check box list.
13. Write the ASP tag for image control.
14. Write the statement to add and update a view state item.
15. Write the aspx code for an anchor element with a URL that include a query string.
16. List out the options for tracking session IDs.
17. Write the common methods of SqlCommand class.
18. Write the syntax of Eval and Bind methods.
19. Enumerate the list control attributes for data binding.
20. Write the purpose of access rule.
21. Create an aspx code for the login control.
22. Define deployment.
23. Write any four elements used to create and format fields in Grid view control.
24. List the types of Digital secure attributes.
25. Differentiate between authentication and Authorization.
26. What is Concurrency?

**(8 × 2 = 16 Marks)**

### SECTION – C (short essay)

(Not to exceed **120** words, answer **any six** questions. **Each** question carries **4** marks)

27. Illustrate the use of Command Event.
28. Write the aspx code for adding check boxes and radio buttons.
29. Discuss the ways to create our own regular expressions.
30. Write the four options for storing session state data.
31. Write short notes on SqlDataAdapter class.
32. Write the ways to save the connection string in the web.config file.
33. Write the steps to determine if a digital secure certificate is installed on a server.
34. Sketch the HTTP request and response flow with form based authentication.
35. Express how to create and manage users.
36. Write the steps to add style rules from design view.
37. Discuss any four tabs of ASP.NET configuration settings and dialog boxes.
38. What are the tasks performed by mod-10 validation algorithm.

**(6 × 4 = 24 Marks)**

### SECTION – D (long essay)

(Answer **any two** questions. **Each** question carries **15** marks)

39. Explain the three types of Button control.
40. Write an application that counts the times the user clicks the Button and describe the same.
41. Demonstrate the functions of data list control in detail.

42. Discuss the ways to deploy an ASP.NET application.
43. Illustrate about concurrency and disconnected data architecture.
44. Summarize the general procedure for getting and using digital secure certificates.

**(2 × 15 = 30 Marks)**

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M – 2055

Reg. No. : .....

Name : .....

**Fifth Semester B.C.A. Degree Examination, December 2021**

**Career Related First Degree Programme under CBCSS**

**Group2(b) - Computer Applications**

**Core Course**

**CP 1541 – DATA ANALYTICS**

**(2018 and 2019 Admission)**

Time : 3 Hours

Max. Marks : 80

**SECTION – A**

(Very short answer type)

(One word to maximum of one sentences, Answer **all** questions.)

1. What is big data according to O'Reilly Open Source Convention?
2. Which risk professionals are stakeholders in key decisions that address all aspects of a business?
3. What are data artisans?
4. Which approach makes sense for massive quantities of data when the value of that data is unknown?
5. What is called Analytics Platform?
6. Which combines together to form behavioural sciences?
7. What is privacy?

P.T.O.

8. What is YARN?
9. Which method returns an array of FileStatus objects?
10. What is the use of HBaseConfiguration class?

**(10 × 1 = 10 Marks)**

**SECTION – B**

(Short answer type)

(Not to exceed one paragraph, answer **any eight** questions. Each question carries **2** marks.)

11. What is unstructured data?
12. What are the two scenarios described by Lucas in real time data analytics?
13. What is called marketing automation?
14. How does Singer explain big data in terms of geography?
15. What are the two foundational concepts of new data analytics?
16. What are the challenges with mobile business intelligence?
17. What do you mean by spark?
18. What is the use of message passing interface in data analytics?
19. What is the use of R in data analytics?
20. What is Prescriptive analytics?
21. What is the role of Federal Trade Commission?
22. What is CI concept?
23. Compare traditional RDBMS and MapReduce.

24. What is the role of Hadoop's in data analytics?
25. How can you remove file permanently from a file system?
26. Which package is used for MapReduce jobs in Hbase?

**(8 × 2 = 16 Marks)**

### SECTION – C

(Short essay)

(Not to exceed **120** words, answer **any six** questions. Each question carries **4** marks.)

27. Describe the various varieties of advanced analytics used in big data analytics.
28. Explain the risk management types in big data analytics.
29. Explain the use of social network analysis in big data.
30. How is the health care data transformed into big data? Explain.
31. Explain about Inter- and Trans-Firewall Analytics.
32. How is cloud used for big data analytics? Explain.
33. Explain the limitations of Big Data computing platform.
34. Explain the stages in Communication Cycle.
35. Explain the three major activities that must occur to ensure organizational success.
36. Discuss the characteristics of Decision Sciences.
37. Explain the concepts of grid computing.
38. Discuss the nodes used in HDFS cluster

**(6 × 4 = 24 Marks)**

**SECTION – D**

**(Long essay)**

**(Answer any two questions. Each question carries 15 marks.)**

39. Explain about the Fraud Detection Powered by Near Real-Time Event Processing Framework.
40. Discuss in detail about the parallel computing environments for data analytics.
41. Explain the major skills required for data scientists.
42. Illustrate the various Analytic Team Models.
43. Explain the Hadoop File systems in detail.
44. Explain in detail about the writable class in Hadoop system.

**(2 × 15 = 30 Marks)**

Reg. No. : .....

Name : .....

**Fifth Semester B.C.A. Degree Examination, December 2021**

**Career Related First Degree Programme Under CBCSS**

**Group 2(b) – Computer Applications**

**Core Course**

**CP 1542 – INFORMATION SYSTEMS AND KNOWLEDGE MANAGEMENT**

**(2018 & 2019 Admission)**

Time : 3 Hours

Max. Marks : 80

**SECTION – A (Very short Answer type)**

(One word to maximum of one sentence, Answer all questions. Each question carries 1 mark)

1. Is Apple a learning organization?
2. In computer terminology, information means?
3. What is SECI model
4. Who is the father of Computer?
5. A list of instruction used by a computer is called \_\_\_\_\_?
6. What is knowledge?
7. Operating system is used in which generation of computer first time?
8. What is UCT?

P.T.O.



9. What is WiMAX Technology?
10. What are the levels of organizational learning?

**(10 × 1 = 10 Marks)**

**SECTION – B (Short Answer)**

(Not to exceed one paragraph, Answer **any eight** questions. Each question carries **2** marks)

11. What is modern information system?
12. What are the benefits of knowledge sharing?
13. How do you calculate intellectual capital?
14. What do you mean by knowledge management?
15. What are the four stages of quality management?
16. How do you validate knowledge?
17. What are the three types of learning organization?
18. What are the advantages of knowledge management?
19. Why is knowledge management important?
20. What is paradigm shift in human resource management?
21. What is an example of knowledge management?
22. Why are knowledge management tools important?
23. What is the Skandia Navigator model?
24. What are the four types of intellectual property?
25. What are the two functions of HRM?
26. What is the process of knowledge acquisition?

**(8 × 2 = 16 Marks)**

### SECTION – C (Short essay)

(Not to exceed **120** words, Answer **any six** questions. Each question carries **4** marks)

27. How do humans process information?
28. What do you mean by knowledge Organisation?
29. What are the attributes of knowledge management?
30. Explain the main features of knowledge management.
31. Explain the knowledge life cycle.
32. What is KMS Life Cycle,
33. What is knowledge sharing and transfer?
34. What is the relationship between knowledge management and human resource management?
35. What are the five core disciplines a learning organization?
36. What is the purpose of artificial intelligence?
37. What is deployment in information technology?
38. What are information processing technologies?

**(6 × 4 = 24 Marks)**

### SECTION – D (Long essay)

(Answer **any two** questions. **Each** question carries **15** marks).

39. What are the major development of the generation of computer? Explain.
40. What types of information systems are used by organizations? Explain
41. Explain the different information and communication technologies

42. Explain knowledge management tools
43. How the KM is improving in the manufacturing process?
44. Explain different challenges of knowledge management.

**(2 × 15 = 30 Marks)**

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M – 2045

Reg. No. : .....

Name : .....

**Fifth Semester B.Sc./B.C.A Degree Examination, December 2021**

**Career Related First Degree Programme under CBCSS**

**Group 2(b)/Group 2(a) – Computer Science/Computer  
Applications/Physics and Computer Applications**

**Open Course**

**CS 1551.2/CP 1551.2/PC 1551.2 – INTERNET AND WWW**

**(2018 AND 2019 Admission)**

Time : 3 Hours

Max. Marks : 80

PART – A

(Very Short Answer Questions)

Answer **all** questions. Each question carries **1** mark.

1. Define the term malware.
2. Expand HTTP.
3. What is a search engine?
4. Write use of search tool.
5. What is TELNET?
6. What do you mean by Internet security?
7. Expand IIS.

P.T.O.

8. Name any two web browsers.
9. What is point-to-point connection?
10. Define Network Topology.

**(10 × 1 = 10 Marks)**

**PART – B**

**(Brief Answer Questions)**

Answer **any eight** questions. Each Question carries **2** marks.

11. What is IPAddress?
12. List the advantages of computer networks.
13. What are the features of Apache Web Server?
14. Write the use of modems.
15. Write notes on Email.
16. What is the use of personal web server?
17. Write note about various Network modes.
18. Write notes on intranet.
19. What are the different parts of an email?
20. Write note on book marks.
21. What is network security?
22. Explain purpose of FTP.
23. Write note on Internet Information server.

24. What are the benefits of a communication software?
25. What are the advantages of extranet?
26. What do you mean by search generalization?

**(8 × 2 = 16 Marks)**

### PART – C

(Short Essay Type Questions)

Answer **any six** questions. Each question carries **4** marks.

27. Write notes on Dial up connectivity.
28. Write short note on Web servers.
29. Explain various types of internet addressing used.
30. Explain search engines in detail.
31. Write short note on URL.
32. Explain the concept of Chat rooms.
33. Explain Internet Service Providers.
34. Write notes of Search tools.
35. Write short note on PWS.
36. Explain how to delete an email.
37. Explain network topologies.
38. Compare internet and computer networks.

**(6 × 4 = 24 Marks)**

PART – D

Answer **any two** questions. Each question carries **15** marks.

39. Explain various types of networks.
40. Explain various types of Internet security issues.
41. Explain various layers of TCP/IP reference model.
42. Explain the following — SMTP and WWW.
43. Explain various network protocols in detail.
44. Explain briefly how to work with email.

**(2 × 15 = 30 Marks)**

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M – 2050

Reg. No. : .....

Name : .....

**Fifth Semester B.C.A. Degree Examination, December 2021**

**Career Related First Degree Programme under CBCSS**

**Group 2(b) – Computer Applications**

**Core Course**

**CP 1543: INTERNET PROGRAMMING**

**(2014, 2016 and 2017 Admission)**

Time : 3 Hours

Max. Marks : 80

**SECTION – A [Very Short Answer Type]**

(One word to maximum of one sentence, Answer all questions)

1. VRML stands for \_\_\_\_\_
2. The \_\_\_\_\_ element defines a large heading.
3. \_\_\_\_\_ specifies the space between the cell content and its borders.
4. The \_\_\_\_\_ tag defines a header cell in an HTML table.
5. JavaScript supports a composite data type known as \_\_\_\_\_.
6. In JavaScript the \_\_\_\_\_ is very useful when you want to pop-up a text box to get user input.

P.T.O.



7. \_\_\_\_\_ statement in Pearl causes the loop to skip the remainder of its body and immediately retest its condition prior to reiterating.
8. \_\_\_\_\_ is the language we use to style an HTML document.
9. The servlet is initialized by calling the \_\_\_\_\_ method.
10. \_\_\_\_\_ is a component in servlet architecture which is responsible for communicating with the servlets.

**(10 × 1 = 10 Marks)**

### SECTION – B [Short Answer]

(Not to exceed one paragraph, answer any **eight** questions. Each question carries **2** marks)

11. Write short notes on XML.
12. How to add music on a web page?
13. List any four text formatting tags with example.
14. What is a cookie?
15. Write down any four form demerits.
16. What are the major differences between GET and POST methods?
17. What are the primitive data types in JavaScript?
18. How to declare an array in JavaScript?
19. With an example show how to define and call a function in JavaScript.
20. Write short note on session.
21. What are the components of servlet's architecture?
22. How to invoke a servlet?

**(8 × 2 = 16 Marks)**

### SECTION – C [Short Essay]

(Not to exceed **120** words, answer any **six** questions. Each question carries **4** marks)

23. Explain the advantages of CSS.
24. Write short note on DHTML and VRML.
25. Explain ASP and JSP.
26. Explain server side includes.
27. What is an Event? Explain on Load() event with an example script.
28. Explain JavaScript object and its properties.
29. Explain layer tag with an example.
30. Explain Response and Request objects in Servlets.
31. Explain various dialog boxes in JavaScript.

**(6 × 4 = 24 Marks)**

### SECTION – D [Long Essay]

(Answer any **two** questions. Each question carries **15** marks)

32. Explain the following tags with suitable examples
  - (a) Table tags
  - (b) Link tags
  - (c) Frame tags

33. Explain control structures available in Perl.
34. Discuss various control structures available in JavaScript with example.
35. Explain life cycle of servlet.

**(2 × 15 = 30 Marks)**

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