

(Pages : 4)

P – 3111

Reg. No. :

Name :

Fifth Semester B.C.A. Degree Examination, December 2022

Career Related First Degree Programme under CBCSS

Group 2(b) – Computer Applications

Core Course

CP 1541 – DATA ANALYTICS

(2018 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A [Very short answer type]

In **one** word to maximum of **one** sentence. Answer **all** questions. Each carries **1** mark.

1. What is big data?
2. What are clusters?
3. Expand GPU.
4. What is BI?
5. HADOOP stands for?
6. Data size for RDBMS is in gigabytes while data size for MapReduce is in _____.
7. What is data integrity?
8. What is ACID in databases?

P.T.O.

9. What is done in big data analysis?

10. What is MapReduce?

(10 × 1 = 10 Marks)

SECTION – B (Short Answer)

Not exceeding **one** paragraph. Answer any **eight** questions. Each carries **2** marks.

11. What is parallel programming?

12. Define data science.

13. What is the need of big data?

14. What is market risk analysis?

15. What do you mean by data privacy?

16. What is Comparative Effectiveness Research?

17. What is digital marketing?

18. List out any four application areas of big data.

19. Define cloud computing.

20. What are the challenges with mobile BI?

21. What do you mean by organizational alignment in business?

22. How storage of big data is done?

23. What are the seven global privacy principles?

24. What is HDFS?

25. Write pros and cons of centralized analytics.

26. What do you mean by geospatial intelligence?

(8 × 2 = 16 Marks)

SECTION – C (Short Essay)

Not exceeding **120** words. Answer any **six** questions. Each carries **4** marks.

27. Briefly explain about Hbase.
28. Write a note on the application of big data in health care.
29. What do you know about data discovery in business intelligence?
30. Explain holistic view of analytics.
31. How big data helps in business?
32. What is SaaS? What are its features?
33. Compare old and new approaches for big data technology.
34. What are the skills needed for a data scientist?
35. Write a note on evolution of data science.
36. Explain about grid computing.
37. Differentiate learning and knowing.
38. Why multidisciplinary talent is important regarding data science?

(6 × 4 = 24 Marks)

SECTION – D (Long Essay)

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

39. Explain the role of big data in marketing.
40. Discuss about credit risk framework with suitable diagram.
41. What do you know about ethics in big data analysis?

42. Explain different kinds of analytics in detail.
43. Discuss in detail about Hadoop Distributed File system.
44. Write brief notes on Hadoop related tools.

(2 × 15 = 30 Marks)

(Pages : 4)

P – 3112

Reg. No. :

Name :

Fifth Semester B.C.A. Degree Examination, December 2022

Career Related First Degree Programme under CBCSS

Group 2(b) – Computer Applications

Core Course

CP 1542 – INFORMATION SYSTEMS AND KNOWLEDGE MANAGEMENT

(2018 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A (Very Short Answer Type)

In **One** word to maximum of **one** sentence. Answer **all** questions.

1. What is total quality management?
2. What is intelligence?
3. Give an example for declarative knowledge.
4. Name two components of Knowledge management network.
5. What are knowledge centres?
6. Mention two goals of KMS training.
7. Give the four categories of people who are resistant to switch over to KMS.
8. What do you mean by validation of knowledge?

P.T.O.

9. What do you mean by mental models?
10. Expand UCT.

(10 × 1 = 10 Marks)

SECTION – B (Short Answer)

Not exceeding **one** paragraph, answer any **eight** questions. Each questions carries **2** marks.

11. What do you mean by semantic knowledge?
12. What is meant by business intelligence?
13. Mention the key features of tacit knowledge.
14. What is knowledge asset?
15. What is the use of workflow management tools?
16. What is the role of information cycle in Knowledge management?
17. Which are the different layers in KM system architecture?
18. What is knowledge acquisition?
19. Mention various knowledge acquisition technique by knowledge type.
20. What is structural capital?
21. What do you mean by personal mastery?
22. What is meant by corporate culture?
23. What is the advantage of Unified Communication Technology?
24. What is the purpose of WiMAX technology?
25. What is knowledge mapping?
26. Explain intellectual capital according to Skandia's view?

(8 × 2 = 16 Marks)

SECTION – C (Short Essay)

Not exceeding **120** words, answer any **six** questions. Each question carries **4** marks.

27. Explain human thinking and learning process.
28. Explain explicit knowledge with examples.
29. What are the problems addressed by knowledge management?
30. Explain the knowledge development and management cycle.
31. Explain the characteristics of a knowledge network.
32. Explain the SECI model of knowledge creation.
33. Explain the key features of knowledge management system.
34. Give various mechanisms of transferring tacit knowledge.
35. Differentiate single loop learning and double loop learning.
36. Explain the factors involved in organizational learning.
37. What are the potential capabilities of ICT?
38. Write notes on blended learning.

(6 × 4 = 24 Marks)

SECTION – D (Long Essay)

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

39. Explain attributes of knowledge with examples.
40. Explain knowledge as a driver for creativity and innovation.
41. Explain tools for knowledge management.

42. Explain the application cycle of knowledge management system.

43. Explain the challenges in developing KMS.

44. Explain the five core disciplines of a learning organization.

(2 × 15 = 30 Marks)

(Pages : 4)

P – 3113

Reg. No. :

Name :

Fifth Semester B.C.A. Degree Examination, December 2022

Career Related First Degree Programme Under CBCSS

Group 2(b) – Computer Applications

Core Course

CP 1543 – VISUAL PROGRAMMING

(2018 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A [Very Short Answer type]

[One word to maximum of one sentence, Answer all questions]

1. ASP stands for _____.
2. Mention the default property of the HttpSessionState class.
3. Name the base class for all validation controls.
4. ODBC stands for _____
5. ADO stands for _____
6. Name the agency which issues digital certificate.
7. Give the syntax for creating a bulleted list in ASP.NET.
8. _____ property indicates whether insertion is allowed on the underlying data source.

P.T.O.

9. _____ control is used to display a single record from a data source.
10. _____ is a set of SQL statements with an assigned name, stored in an RDBMS as a group, so that it can be reused and shared by multiple programs.

(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 a cookie?
12. What is a digital certificate?
13. What is the use of a master page?
14. How to create a hyperlink in ASP.NET?
15. Explain StateBag class.
16. What is a server object?
17. What is an event?
18. What is Compare Validator control used for?
19. What is the purpose of ADO connection object?
20. Mention any four controls with default event SelectIndexChanged.
21. Explain ExecuteInsert command.
22. Mention the properties of HttpSessionState.
23. What is a Calender control?
24. Explain a Button control.

25. Write down the syntax for creating a RadioButton.
26. List any four controls that are capable of simple data binding.

(8 × 2 = 16 Marks)

SECTION – C [Short Essay]

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

27. How can you edit records using FormView control?
28. What are the properties of DataTable class in ADO.NET?
29. Explain the need for Session object.
30. Explain the use of RadioButton. List four properties of Radiobuttons.
31. Write an example code for creating ADO Table Recordset.
32. Mention various steps to enable authentication in ASP.NET.
33. Explain the purpose of login controls in ASP.NET.
34. Describe FileUpload control and Data View control.
35. Explain ListItemCollection.
36. Explain the use of view state.
37. Explain ValidationSummary control and ObjectDataSource control.
38. How will you give UPDATE command in SqlDataSource?

(6 × 4 = 24 Marks)

SECTION – D [Long Essay]

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

39. Explain the following.
- (a) Secure Sockets Layer
 - (b) Grid View Control
40. Explain different types of data binding.
41. Explain with an example code how to fetch contents from a table with ADODB connection.
42. Explain the following.
- (a) SqlDataSource
 - (b) DataList
43. Explain in detail various server controls used in ASP.NET.
44. Elaborate on different validation controls.

(2 × 15 = 30 Marks)

(Pages : 4)

P – 3114

Reg. No. :

Name :

Fifth Semester B.C.A. Degree Examination, December 2022

Career Related First Degree Programme Under CBCSS

Group 2(b) – Computer Applications

Core Course

CP 1544 – SOFTWARE TESTING

(2018 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A [Very Short Answer Type]

One word to maximum of one sentence. Answer **all** questions.

1. What do you mean by testing software?
2. What do you mean by logical error?
3. What do you mean by a test case?
4. What do you mean by ugly domain?
5. What is a flow graph?
6. What is the purpose of debugging?
7. What is a transactional flow graph?
8. What do you mean by control flow path?

P.T.O.

9. What is power of a matrix?
10. What do you mean by range?

(10 × 1 = 10 Marks)

SECTION – B [Short Answer]

Not exceeding one paragraph, answer **any eight** questions. Each question carries **2** marks.

11. What is branch testing?
12. What are compound predicates?
13. What is testing blindness?
14. What are path predicates?
15. What is path instrumentation?
16. What is unit testing?
17. What is acceptance testing?
18. What is beta testing?
19. Explain multi way branches in a path predicate.
20. What are link counters?
21. Differentiate static analysis and dynamic analysis.
22. Explain case statements.
23. What is structural testing?
24. What do you mean by non-functional testing?
25. What is equivalence class testing?
26. What do you mean by test automation?

(8 × 2 = 16 Marks)

SECTION – C [Short Essay]

Not exceeding **120** words, answer **any six** questions. Each question carries **4** marks.

27. Write short notes on data flow machines.
28. What are systematic boundaries?
29. Explain with a diagram the model for testing.
30. Write short notes on coding bugs.
31. Differentiate functional testing with structural testing.
32. Explain the concept of transaction flows.
33. Write down reduction procedure algorithm.
34. Explain domain errors.
35. Explain the path testing criteria.
36. Write notes on desk checking.
37. Explain code walkthrough.
38. Explain a test report.

(6 × 4 = 24 Marks)

SECTION – D [Long Essay]

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

39. Explain KV charts in detail with diagrams.
40. Explain in detail path products and path expressions.
41. Describe the dataflow testing.

42. Explain in detail domain testing.
43. Explain different methods of static testing by humans.
44. Explain the concept of black box testing.

(2 × 15 = 30 Marks)

(Pages : 3)

P – 3101

Reg. No. :

Name :

Fifth Semester B.Sc./B.C.A. Degree Examination, December 2022

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 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

(Very Short Answer Type) Answer **all** questions. **Each** question carries 1 mark.

1. Define Computer Network
2. What is Network Topology?
3. Write the use of WWW.
4. Denote the importance of HTTP.
5. What is URL?
6. Write the expansion of TCP/IP.
7. What is Webserver?
8. Expand IIS.

P.T.O.

9. What is the Purpose of Modem?
10. Expand SMTP.

(10 × 1 = 10 Marks)

SECTION – B

(Short Answer) Answer any **eight** questions. **Each** question carries **2** marks.

11. Denote the Concept of Intranet.
12. What do you know about Communication Software?
13. What is Telnet?
14. Mention the importance of web pages.
15. Illustrate the use of Bookmarks.
16. Draw the block diagram of TCP/IP model.
17. Write any two uses of Chat rooms.
18. What is Network Protocol?
19. Mention any two Benefits of Webserver.
20. How security is getting much role in Networks?
21. What are the steps for deleting a mail?
22. Describe DNS.
23. Write a note on the types of Networks.
24. What is IPV6?
25. Give two examples of Web Browsers.
26. How do we identify Network Stations?

(8 × 2 = 16 Marks)

SECTION – C

(Short Essay) Answer any **six** questions. **Each** question carries **4** marks.

27. Explain the role of ISP.
28. Write the brief History of Internet.
29. Describe Search Generalization and Search Specialization.
30. Briefly explain the Search Fundamentals.
31. Explain the basics of Chat rooms.
32. Illustrate the working of SMTP.
33. What do you know about Apache Web server?
34. Explain Personal Webserver.
35. Write a note on modes of Connecting to Internet.
36. Briefly describe FTP.
37. Explain IIS.
38. What are the disadvantages of E mail?

(6 × 4 = 24 Marks)

SECTION – D

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

39. Explain the types of Topologies in detail.
40. Write a note on the importance of Search Engines today.
41. Briefly explain Email as a Powerful tool.
42. Describe the Internet Security Threats.
43. Explain different Internet Addressing Schemes.
44. Illustrate about the concept of Network Protocols.

(2 × 15 = 30 Marks)