

QP CODE: 21101075



Reg No :

Name :

BCA DEGREE (CBCS) EXAMINATION, APRIL 2021

Sixth Semester

Bachelor of Computer Applications

CORE - CA6CRT04 - CLOUD COMPUTING

2017 Admission Onwards

AEA83604

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What is service-oriented computing?
2. What is object-oriented style of architecture?
3. What is point-to-point message model?
4. What do you mean by server consolidation?
5. What is paravirtualization?
6. What is Pure PaaS?
7. Mention the different pricing strategies in Cloud Computing.
8. List the services hosted in a master node.
9. List the open challenges in data-intensive computing.
10. What is Amazon Dynamo?
11. What is Amazon Virtual Private Cloud?
12. What is blobs?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain Cloud Computing? What are the characteristics of Cloud Computing?
14. Write the advantages of virtualization.





15. Explain VMware full virtualization reference model.
16. Explain the different layers of IaaS solution.
17. Briefly explain the different types of applications provided by SaaS.
18. Write a note on Aneka application and service Model.
19. Explain some of the variations or extensions to MapReduce.
20. Discuss how cloud computing technology can be used for protein structure prediction.
21. Discuss the media applications of cloud computing.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain the architecture of Microsoft Hyper-V. Discuss its use in cloud computing and infrastructure management.
23. What is a cloud? Write a note on types of clouds.
24. Explain in detail the various services installed in the Aneka container.
25. Discuss the different services offered by Google AppEngine.

(2×15=30)





21101077

QP CODE: 21101077

Reg No :

Name :

B.Sc / BCA DEGREE (CBCS) EXAMINATION, APRIL 2021

Sixth Semester

Choice Based Core Course - CS6CBT02 - DATA MINING

Common for B.Sc Information Technology Model III, Bachelor of Computer Application & B.Sc
Computer Applications Model III Triple Main

2017 Admission Onwards

BBB4C225

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What do you mean by data mining?
2. What do you mean by interestingness?
3. List two methods for dimensionality reduction.
4. What are the functions of a load manager?
5. What do you mean by frequent itemset mining?
6. What is accuracy of a classifier?
7. What is posterior probability?
8. What is eager learning? Name a classification method that belongs to eager learning.
9. Mention any two algorithms for hierarchical method of clustering.
10. What is BIRCH?
11. What is spatial autocorrelation?
12. What are content-based retrieval systems in multimedia mining?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Differentiate classification and prediction.
14. Explain the illustration of a data cube.
15. Explain the concept of metadata repository.
16. Differentiate single dimensional and multi-dimensional association rules with examples.
17. Explain issues in classification and prediction.
18. Explain the contingency table for binary variables.
19. Differentiate the concept of CLARA and CLARANS.
20. Write notes on document classification analysis.
21. What are the deficiencies for a keyword-based search engine?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain major issues in data mining.
23. Explain various schema involved in conceptual modelling of a data warehouse.
24. Explain the concept of support vector machines with examples.
25. Explain the concept of DBSCAN algorithm.

(2×15=30)





QP CODE: 21101395



Reg No :

Name :

B.Sc DEGREE (CBCS) EXAMINATION, APRIL 2021

Sixth Semester

Choice Based Core Course - CS6CBT01 - DIGITAL IMAGE PROCESSING

Common for B.Sc Information Technology Model III, B.Sc Computer Science Model III, B.Sc
Computer Applications Model III Triple Main & Bachelor of Computer Application

2017 Admission Onwards

F4C0F68F

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Define pixel. Describe array representation for a digital image.
2. What is the use of knowledge base in digital image processing?
3. What is PPI?
4. Briefly describe digital image formation.
5. What is brightness discrimination?
6. What is $N_4(P)$ and $ND(P)$?
7. Describe any two basic intensity transformation.
8. Explain an application of image negative.
9. What is histogram of a digital image?
10. Write short note on opening and closing.
11. What are the gradient operators?
12. What is thresholding?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. What is the goal of digital image processing? Compare image processing and Computer





Graphics.

14. Write short note on MRI and X rays imaging system.
15. What are the fundamental steps in image processing system?
16. What is log transformation? How does it useful in image processing?
17. Explain in detail Fourier Transform in frequency domain.
18. Briefly explain Power law transformation.
19. Explain the use of structuring elements in image processing.
20. Explain a method to detect line in an image.
21. Explain the concept of region growing with suitable example.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain the basic components of an image processing system.
23. Explain the basic operations of correlation and convolution using image filters.
24. Explain hit-or-miss transformation.
25. A) Explain region splitting and merging with a suitable example.
B) What is the use of region splitting and merging.

(2×15=30)





QP CODE: 21101076



21101076

Reg No :

Name :

B.Sc / BCA DEGREE (CBCS) EXAMINATION, APRIL 2021

Sixth Semester

CORE - CS6CRT15 - MOBILE APPLICATION DEVELOPMENT- ANDROID

Common for B.Sc Information Technology Model III & Bachelor of Computer Application

2017 Admission Onwards

028813E0

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What is Android application Framework?
2. What comprises ADT Bundle?
3. What is Android Virtual Device?
4. Why 'Id' is important for UI controls in Android?
5. How do we setup an AutoCompleteTextView?
6. Define Service.
7. Define Multimedia.
8. Why we cannot say that SQLite is the replacement of Oracle, but it is the replacement of fopen()?
9. Explain any two methods that are used to iterate through the cursor.
10. Write a function to move records in cursor.
11. Why JSON is language independent?
12. What are the permissions required for setting up the Google maps app in AndroidManifest.xml file?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Who are the stakeholders of Android? Explain.





14. Explain Table Layout with example.
15. Write a detailed note on Progress Bar with syntax and example.
16. Write a short note on image view and scroll view.
17. Briefly explain the functions i) onCreate() ii) onPause() iii) onDestroy() iv) onStop()
18. Write java and xml code to play an audio file.
19. How do we setup SQLite database connection?
20. Explain sending SMS with an example.
21. Write the syntax and rule of JSON with example.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Distinguish between a) .apk and .jar b) JVM and DVM
23. Write java and xml code to find total price of a fruit when fruits name and quantity are entered. Keep the unit price of fruits in memory and a autocomplete text view is used to enter fruit name.
24. a) Explain activity in detail. b) Explain the use of intent with suitable program.
25. Explain parsing JSON and XML.

(2×15=30)

