Turn Over

QP CODE: 24000571

Reg No : Name :

B.Sc / BCA DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024

Sixth Semester

CHOICE BASED CORE COURSE - CS6CBT02 - DATA MINING

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

2017 Admission Onwards

0F635CE6

Time: 3 Hours

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. Mention the 4 categories of data preprocessing.
- 4. What is technical metadata in a data warehouse?
- 5. What do you mean by scalability of a classifier?
- 6. What is the objective of SVM?
- 7. What is lazy learning? Give an example.
- 8. What is regression?
- 9. What is a continuous ordinal variable? Give example.
- 10. What do you mean by partitioning methods of clustering?
- 11. What do you mean by feature descriptor?
- 12. What is text mining?

(10×2=20)

Part B

Answer any **six** questions. Each question carries **5** marks.

13. Explain tight coupling and semi-tight coupling in data mining systems.



Max. Marks : 80

|**|||||||||** 71

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- 14. Explain the features of a data warehouse.
- 15. Compare and contrast ROLAP and MOLAP servers.
- 16. Explain the concept of uniform support and reduced support in multi-level association rules.
- 17. Explain issues in classification and prediction.
- 18. Differentiate the concept of CLARA and CLARANS.
- 19. Explain the concept of direct and indirect density reachability.
- 20. Explain spatial association rules.
- 21. Explain the challenges in knowledge discovery in WWW.

Part C

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

- 22. Explain data transformation and data reduction in detail.
- 23. Explain with diagrams, various OLAP operations.
- 24. Explain with an example, how to perform correlation using lift.
- 25. Explain hierarchical method of clustering.

Turn Over

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QP CODE: 24001325

Name :

B.Sc/BCA DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024

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 Applications

2017 Admission Onwards

5A704623

Time: 3 Hours

Part A

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

- 1. Write short note on grey level image.
- 2. What is the storage requirement for a 1024*1024 binary image.
- 3. Distinguish between image enhancement and restoration.
- 4. Describe feature selection in image processing.
- 5. Describe DPI.
- 6. What is N4(P) and ND(P)?
- 7. Describe any two operations in set theory.
- 8. Describe image enhancement in spatial domain.
- 9. What is gamma correction?
- 10. Define dilation.
- 11. What is the use of image segmentation?
- 12. Describe region splitting in image segmentation?

(10×2=20)

Part B

Answer any **six** questions. Each question carries **5** marks.

13. Elaborate on any two application areas that use digital image processing.



Max. Marks : 80



- 14. Explain optical illusion.
- 15. Explain the two processes that are used to convert the continuous sensed data into digital form.
- 16. What is image negative? Write short note on its applications.
- 17. Explain with diagram the four basic image histograms.
- 18. Explain in detail Fourier Transform in frequency domain.
- Opening and closing are duals with respect to set complementation and reflection. Elaborate on your view.
- 20. How can we perform basic edge detection using gradient operators?
- 21. Describe basic global thresholding.

Part C

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

- 22. What is the goal of digital image processing? Explain the basic components of digital image processing.
- 23. Explain the basic operations of correlation and convolution using image filters.
- 24. Explain hit-or-miss transformation.
- 25. A) Explain the concept of region growing with suitable example. B) Specify application of region growing.



QP CODE: 24000568

Reg No	:	
Name	:	

B.Sc / BCA DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024

Sixth Semester

CORE COURSE - CS6CRT15 - MOBILE APPLICATION DEVELOPMENT- ANDROID

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

2017 Admission Onwards

7ED28D2B

Time: 3 Hours

Max. Marks : 80

Part A

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

- 1. Write notes on OHA.
- 2. What is .apk file ?
- 3. What is Dalvik Byte Code ?
- 4. What is the use of Buttons in Android?
- 5. Write a short note on Spinner.
- 6. What are the uses of pending intent?
- 7. Write the use of onStop() and onDestroy() methods in Activity life cycle.
- 8. How do SQLite provide database features with a compressed library?
- 9. What are the parameters used in insert () method?
- 10. Explain packages needed for SMS telephony
- 11. Why JSON is language independent?
- 12. What is the use of Google Maps in Android?

(10×2=20)

Part B

Answer any **six** questions. Each question carries **5** marks.

13. Write Short Note on Emulators.



- 14. Explain Frame Layout with Example.
- 15. What is custom toast alert? How can we implement it state with example?
- 16. Create an application that will pass one number to the next screen, and on the next screen shows the double of that number.
- 17. Explain the android hierarchy inheritance of multimedia
- 18. Write a java code to implement text to speech.
- 19. What do you mean by transactions? What are the different methods available in transaction?
- 20. Write a java and xml code to list all records from a Sqlite table contact(mobno, name)
- 21. How do we retrieve the location address using the location services from android? Explain with an example

Part C

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

- 22. Explain in detail about Android architecture and components with needed diagram
- 23. Explain the following a.Check Box b.Radio Button c.Radio Group d.Toggle Button e.Progress Bar
- 24. Explain in detail Service and Broadcast life cycle with a neat diagram.
- 25. Write short note on a. JSON name b.JSON values c. JSON Objects d. JSON Arrays

Turn Over



QP CODE: 24000566

Reg No : Name :

BCA DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024

Sixth Semester

Bachelor of Computer Applications

CORE COURSE - CA6CRT04 - CLOUD COMPUTING

2017 Admission Onwards

85D2CD01

Time: 3 Hours

Max. Marks : 80

Part A

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

- 1. What is mainframe computing?
- 2. What is Hadoop?
- 3. Explain SISD architecture.
- 4. Explain the use of Xen technology.
- 5. What is server virtualization?
- 6. What does the acronym XaaS stands for?
- 7. List the various application sectors for community clouds.
- 8. What are the functions of Aneka SDK?
- 9. What is Data-Intensive computing?
- 10. What is Apache MongoDB?
- 11. What is Amazon CloudWatch?
- 12. What is SQL Azure?

(10×2=20)

Part B

Answer any **six** questions. Each question carries **5** marks.

Page 1/2

- 13. Write the advantages cloud computing.
- 14. What is virtualization and what are its benefits?







- 15. Write the disadvantages of virtualization.
- 16. Explain the different pricing models for cloud computing.
- 17. Write a note on the various open challenges in cloud computing.
- 18. Write the function and services of master node and worker node in Aneka cloud.
- 19. Explain the working of MapReduce Programming model.
- 20. Discuss the development technologies currently supported by AppEngine.
- 21. Discuss how cloud computing technology can be used for protein structure prediction.

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. Explain in detail the cloud computing reference models.
- 24. Explain in detail the various services installed in the Aneka container.
- 25. Discuss the different business and consumer applications of cloud computing.