Sub. Code	
96413	

B.Sc. DEGREE EXAMINATION, APRIL 2019

First Semester

Computer Science

PROGRAMMING IN C

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Give out the basic structure of C Program.
- 2. Mention the use of ternary operator.
- 3. Why do we avoid 'goto' statements? Give reason.
- 4. Can we use 'continue' statement inside loop? Why?
- 5. What is the use of *strcmp()* function?
- 6. Define function prototype? Give out its syntax.
- 7. What is '*far*' pointer?
- 8. Define structure.
- 9. List different type of file modes.
- 10. What are compiler control directives?

Answer **all** questions.

11. (a) Write a C program to swap two numbers using call by reference.

Or

- (b) What are the primitive data types in C?
- 12. (a) Briefly explain about ELSE-IF ladder with example.

Or

- (b) Differentiate between 'break' and 'continue' statements.
- 13. (a) Write a function in C to reverse string of characters using arrays.

Or

- (b) How will you define and call parameterised function? Explain.
- 14. (a) Briefly explain about structure within structure with example.

Or

- (b) How will you define array of pointers? Explain.
- 15. (a) Write short note on: Error Handing during I/O Operations.

Or

(b) Write short note on: Command Line Arguments.

 $\mathbf{2}$

C-0319

Sp1

Part C $(3 \times 10 = 30)$

Answer **all** questions.

- 16. (a) (i) Briefly explain about formatted input and output statements. (6)
 - (ii) List any four mathematical functions in C. (4)

 \mathbf{Or}

- (b) Write a C program to sort n given numbers in ascending order.
- 17. (a) Define Recursion. What are its characteristics? Give example.

 \mathbf{Or}

- (b) Write a C program to display your date of birth using structure.
- 18. (a) Explain in detail about 'for' loop with suitable example.

Or

- (b) Write short note on:
 - (i) malloc() and
 - (ii) calloc() function.

3

Sub.	Code
964	15

B.Sc. DEGREE EXAMINATION, APRIL 2019

First Semester

Computer Science

ALGEBRA AND CALCULUS

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

- 1. State division algorithm.
- 2. State Rolle's theorem.
- 3. Find the rank of the matrix $A = \begin{bmatrix} 1 & 2 \\ 4 & -1 \end{bmatrix}$.

4. Find the eigen values of the matrix $A = \begin{bmatrix} 3 & 4 \\ 4 & -3 \end{bmatrix}$.

- 5. Define maximum value of a function.
- 6. Find $\frac{dy}{dx}$ if $y = x \cos^2 x$.
- 7. Evaluate $\int \sin^2 3x \, dx$.

8. Define odd and even function.

9. Solve:
$$e^x \tan y \, dx + (1 - e^x) \sec^2 y \, dy = 0$$
.

10. Solve: $(D^2 + 5D + 6)y = 0$.

Part B $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) If one root of the equation $2x^3 - 11x^2 + 38x - 39 = 0$ is 2 - 3i, solve the equation.

Or

(b) If α, β, γ are the roots of $x^3 - \alpha x + b = 0$, find the value of $\sum \left(\frac{\alpha}{\beta\gamma}\right)$, $\sum \frac{1}{\beta + \gamma}$ and $\sum \alpha^3$.

12. (a) Find the inverse of the matrix $A = \begin{bmatrix} 1 & 5 & -1 \\ 2 & 1 & 3 \\ -1 & 0 & 1 \end{bmatrix}$.

Or

(b)	Find	the	eigen	values	of	the	matrix
	[e	31	4				
	A = 0) 2	6 .				
	[(0 0	5				

- 13. (a) Examine the maximum and minimum values of the function $f(x) = x^3 9x^2 + 15x$.
 - Or
 - (b) Find the points of inflexion on the curve $y = x^4 4x^3$.

14. (a) Evaluate
$$\int \frac{dx}{3x^2 - 4x - 5}$$
.

Or

(b) Find the half-range Fourier cosine series for $f(x) = x^2$ in the interval $(0, \pi)$.

15. (a) Solve:
$$(x+1)\frac{dy}{dx} + 1 = 2e^{-y}$$
.

 \mathbf{Or}

(b) Solve:
$$(x^2 + 5D + 6)y = e^{-2x}$$
.

Part C

 $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Find the multiple roots of
$$x^5 - x^4 + 2x^3 - 2x^2 + x - 1 = 0$$
 and hence solve it.

Or

(b) Solve the equation, if consistent:

 $\begin{aligned} x_1 + 2x_2 - x_3 - 5x_4 &= 4 \\ x_1 + 3x_2 - 2x_3 - 7x_4 &= 5 \\ 2x_1 - x_2 + 3x_3 &= 3 \end{aligned}$

17. (a) Find the eigen values and eigen vectors of the matrix $A = \begin{bmatrix} 2 & 2 & 1 \\ 1 & 3 & 1 \\ 1 & 2 & 2 \end{bmatrix}$.

 \mathbf{Or}

(b) Prove that the largest rectangle which can be inscribed in the curve $x^{2/3} + y^{2/3} = a^{2/3}$ is a square.

3

18. (a) Find the Fourier series for the function $f(x) = x^2$ in $-\pi \le x \le \pi$ and hence deduce that $\frac{1}{1^2} + \frac{1}{2^2} + \frac{1}{3^2} + \dots = \frac{\pi^2}{6}$.

Or
(b) Solve:
$$(D^2 - 4D + 3)y = e^x \cos 2x + \cos 3x$$
.

Sub. Code	
96423	

B.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Computer Science

PROGRAMMING IN C++

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

 $(10 \times 2 = 20)$

Part A

- 1. What is inline function?
- 2. What is the use of scope resolution '::' operator?
- 3. How member function of a class defined?
- 4. How do we invoke constructor function?
- 5. What is abstract class?
- 6. How do we make a class virtual?
- 7. What are the advantages of saving file in binary form?
- 8. Define file.
- 9. What is generic programming? How is it implemented in C++?
- 10. When should a program throw an exception?

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Discuss the waterfall model of type conversion.

Part B

Or

- (b) What do you mean by dynamic initialisation of a variable? Give example.
- 12. (a) What do you mean by overloading of a function? When do we use this concept?

Or

- (b) Can we have more than one constructor in a class? Explain.
- 13. (a) What are different forms of inheritance? Give example for each.

Or

- (b) How will you declare and use array of pointers? What are its advantages?
- 14. (a) What is a file mode? Describe the various file mode options available.

Or

- (b) Describe about the various iostram file classes.
- 15. (a) Write a C++ program to illustrate class templates with multiple parameters

Or

(b) How will you rethrow an exception? Give example.

Answer **all** questions.

16. (a) Write a C++ program to count the number of vowels in a given string using switch statement.

 \mathbf{Or}

- (b) Demonstrate the use of friend functions as bridge between classes.
- 17. (a) Explain in detail about formatted console I/O operations? Give example.

Or

- (b) What are different error handlings functions during file Operators? Explain.
- 18. (a) How will you handle multiple catch clauses in exception? Explain with example.

 \mathbf{Or}

(b) What is operator overloading? Write a C++ program to illustrate unary operator overloading.

B.Sc. DEGREE EXAMINATION, APRIL 2019

Second Semester

Computer Science

NUMERICAL ANALYSIS AND STATISTICS

(2016 onwards)

Time: 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. When Newton's backward interpolation formula is used?
- 2. Prove that $\Delta \nabla = \Delta \nabla$.
- 3. In Gauss elimination method, the coefficient matrix is transformed to form.
- 4. What is the condition to apply Jacobi's method to solve a system of equations?
- 5. Write down Milne's predictor corrector formula.
- 6. Compare Taylor series and Runge-Kutta methods.
- 7. Define mean and mode.
- 8. What is the regression coefficient of X on Y?
- 9. Define normal distribution.
- 10. Write any two relations between binomial and Poisson distribution.

Part B $(5 \times 5 = 25)$

Answer all questions.

11. (a) Find the real root of $3x - \cos x - 1 = 0$ by Newton-Raphson method.

Or

(b) Evaluate
$$\Delta[x(x+1)(x+2)(x+3)]$$
.

12. (a) Given :

Using Simpson's rule find $\int_{0}^{4} e^{x} dx$. Compare it with the exact value of the integer.

Or

- (b) Evaluate $\int_{0}^{1} x^{2} dx$, by dividing it into 4 equal intervals.
- 13. (a) Find y(0.1) by Taylor series method if $\frac{dy}{dx} = 3x + \frac{y}{2}$ and y(0) = 1.

Or

- (b) Using Runge-Kutta method of second order, find y(0.1) and y(0.2) given that $\frac{dy}{dx} = xy + y^2$, y(0) = 1.
- 14. (a) Obtain the median for the following :

 $\mathbf{5}$ Х 1 2 3 4 6 78 9 Y 8 16 20 10 11 2515 9 6 Or

2

(b) Find the equation of line of regression of Y on X from the following data.

Х	65	66	67	67	68	69	70	72
Y	67	68	65	68	72	72	69	71

15. (a) Let X be a continuous random variable with p.d.f. given by :

$$f(x) = \begin{cases} Kx \ if \ 0 \le x < 1 \\ K \ if \ 1 \le x < 2 \\ 0, \ if \ x \ge 3 \end{cases}$$

Determine :

- (i) the constant K and
- (ii) the e.d.f. F(x).

Or

(b) The mean of a binomial distribution is 20 and standard deviation is 4. Find the parameters of the distribution.

$$Part C \qquad (3 \times 10 = 30)$$

Answer **all** questions.

16. (a) Find the value of y when x = 0, using Newton's backward formula from the table :

\mathbf{Or}

(b) Find the value of y when x = 2, using Lagranges interpolation formula from the following data.

3

Wk ser

17. (a) Solve the following system of equation by Gaussian elimination method.

$$x_1 - x_2 + x_3 = 1$$

- 3x₁ + 2x₂ - 3x₃ = -6
2x₁ - 5x₂ + 4x₃ = 5
Or

(b) Using Adam's method find y(0.4) given $\frac{dy}{dx} = \frac{xy}{2}$, y(0.1) = 1.01, y(0.2) = 1.022, y(0.3) = 1.023.

18. (a) A deck of n numbered cards is shuffled and the cards are inserted into n numbered cells one by one. If the card number "*i*" falls in the cell "*i*", we count it as a match, otherwise not. Find the mean and variance of total number of such matches.

Or

(b) A communication system consists of a components each of which will functions independently with probability p. The whole system will be in effective operation if atleast half of its components function. For what value of p is a 4 component system more likely to function than a 2 component system.

4

Sub. Code	
96451	

B.Sc. DEGREE EXAMINATION, APRIL 2019

Fifth Semester

Computer Science

WEB TECHNOLOGY

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Write the format of html program.
- 2. What do you mean by column spanning and row spanning?
- 3. Mention the advantages of java/java script.
- 4. Define cascading.
- 5. How scripting language is differs from html?
- 6. What are the three types of statements in JavaScript?
- 7. List out some of the built-in objects of JavaScript.
- 8. What are the two components of JavaScript implementation?
- 9. What is an operator in VB SCRIPT?
- 10. Define cookies.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the attributes of table tag with an example.

Or

- (b) What is the use of frames in html give the syntax of frames?
- 12. (a) Write a JavaScript program to demonstrate the JavaScript events.

Or

- (b) Define the cookies and explain how it works.
- 13. (a) Describe about number objects in JavaScript.

Or

- (b) Briefly explain about while loop and draw the flow chart and mention the syntax.
- 14. (a) Define operators and explain its types briefly.

 \mathbf{Or}

- (b) Give detailed notes on JavaScript variables.
- 15. (a) Define array and mention how to he declared with the syntax.

Or

(b) What is dialogue box? And clearly explain the MsgBox function.

 $\mathbf{2}$

C-0323

 $\operatorname{Sp7}$

Part C $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) What are the necessities of using HTML forms? What is the use of HTML Forms? Create a HTML Form page for Railway Registration Form.

 \mathbf{Or}

- (b) Give detailed notes on logical operator with syntax and necessary example.
- 17. (a) Develop a simple online shopping application using JavaScript (Assume your own data).

Or

- (b) Describe about JavaScript functions with syntax.
- 18. (a) Briefly discuss about JavaScript operators.

Or

(b) Develop a JavaScript program to display a message "HI! GOOD MORNING TO YOU" when a page is loaded and displays a message "THANKS TO VISIT OUR WEB PAGE" when a page is unloaded.

Sub. Code	
96452	

B.Sc. DEGREE EXAMINATION, APRIL 2019

Fifth Semester

Computer Science

OPERATING SYSTEM

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is an Operating system?
- 2. What is meant by Batch Systems?
- 3. Define deadlock-avoidance algorithm.
- 4. Define 'Safe State".
- 5. What are the functions of device manager?
- 6. What are direct access storage devices?
- 7. List the various File Attributes.
- 8. What are the various Disk-Scheduling Algorithms?
- 9. List the application programs in Unix.
- 10. Define compiler.

Answer **all** questions.

11. (a) Differentiate local and global page replacement algorithm.

Or

- (b) Explain the operating system structure and its component.
- 12. (a) Define scheduler and Explain its types.

Or

- (b) Give detailed notes on deadlock characteristics
- 13. (a) Discuss about the symmetric or tightly coupled configuration.

Or

- (b) Define concurrent programming language. Explain in detail.
- 14. (a) Discuss in detail about file allocation methods, What are the possible structures for directory? Discuss them in detail.

Or

- (b) Give detailed note on data compression.
- 15. (a) Explain in detail the memory management in UNIX system.

Or

(b) Briefly discuss about the file system in UNIX system.

 $\mathbf{2}$

Part C $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain about the various memory hierarchies with neat block diagram.

Or

- (b) Give the detailed account of various page replacement strategies.
- 17. (a) Write about file attributes, operations, types and structure.

Or

- (b) Describe about the network structure of UNIX system.
- 18. (a) Explain the directory structure of Unix operating system.

Or

(b) Describe the life cycle of an I/O request in detail.

Sub. Code	
96453	

B.Sc. DEGREE EXAMINATION, APRIL 2019

Fifth Semester

Computer Science

SOFTWARE ENGINEERING

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. How Software Engineering is different from traditional engineering
- 2. Why large software projects often fail? Give any two reasons
- 3. What are the benefits of prototyping?
- 4. What is meant by structural analysis?
- 5. What is abstraction in design concept?
- 6. Write a note on coding styles?
- 7. Why testing is important in software?
- 8. Define black box testing strategy.
- 9. State the major issues for code inspection and reviews.
- 10. What is SQA?

Part B $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) Identify the umbrella activities in software engineering process.

Or

- (b) Write short notes on various project size categories.
- 12. (a) Write short notes on Software maintenance.

 \mathbf{Or}

- (b) Write short notes on Task scheduling with an example.
- 13. (a) Compare data flow diagram with structured charts.

 \mathbf{Or}

- (b) Write short notes on walkthrough and inspections.
- 14. (a) Describe verification and validation criteria for a software.

 \mathbf{Or}

- (b) Distinguish between black box and white box testing.
- 15. (a) Explain the software quality assurance plan in detail.

Or

(b) What is formal technical review? What are the guidelines are followed?

 $\mathbf{2}$

C-0325

 $\operatorname{Sp7}$

Part C $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in detail about SDLC activities with diagram.

Or

- (b) Write in detail about three basic programming team structures with diagram.
- 17. (a) Explain various cost estimation models and compare.

Or

- (b) Discuss various types of coupling and cohesion with example.
- 18. (a) Explain various cost estimation models and compare.

Or

(b) Discuss various types of coupling and cohesion with example.

Sub. Code	
96454A	

B.Sc. DEGREE EXAMINATION, APRIL 2019

Fifth Semester

Computer Science

MULTIMEDIA AND ITS APPLICATIONS

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define: VRML.
- 2. What are the main properties of multimedia system?
- 3. Define MIDI.
- 4. Write short notes on computer image processing.
- 5. Define Animation languages.
- 6. Write short notes on Transmission of animation.
- 7. Define Lossless compression
- 8. What are the purposes of coding Algorithm?
- 9. Explain types of editors in multimedia applications.
- 10. Explain Retrieval services of multimedia applications.

Part B $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) What is multimedia? Explain different types of transmission mode.

 \mathbf{Or}

- (b) Explain the data streams Characteristics of multimedia systems.
- 12. (a) Explain the types of speech concepts of multimedia systems.

Or

- (b) Describe in detail about computer image processing.
- 13. (a) Discuss about video signal representation systems in multimedia.

Or

- (b) Explain the features of computer based animation.
- 14. (a) Explain the mode of compression: (i) DCT based mode (ii) Hierarchical mode

Or

- (b) Explain about MPEG and video encoding.
- 15. (a) Explain the text and graphics applications of multimedia.

Or

(b) What are the usage and advantages of interactive video and media applications?

 $\mathbf{2}$

Part C $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in detailed about communication systems of Multimedia.

Or

- (b) Explain about detail methods of image processing with example.
- 17. (a) Discuss briefly about video and animation concepts.

 \mathbf{Or}

- (b) Explain various coding algorithm for data compression.
- 18. (a) Explain in detailed about audio and image encoding techniques.

Or

(b) Describe briefly about virtual reality and interactive methods in multimedia applications.

Sub. Code	
96461	

B.Sc. DEGREE EXAMINATION, APRIL 2019

Sixth Semester

Computer Science

C#.NET PROGRAMMING

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

- 1. What are the applications of C#?
- 2. What is NET framework?
- 3. List the two predefined reference types in C#.
- 4. Differentiate class with structs.
- 5. What are the basic steps in looping process?
- 6. What is an exception? Give some examples.
- 7. What is a platform invocation service?
- 8. What is the intermediate language?
- 9. What is the function of Sleep() and Join() methods of thread class?
- 10. What is thread pool?

Wk 7

Answer **all** questions.

11. (a) What are the major components of CLR?

 \mathbf{Or}

- (b) Write in detail about command line arguments with example.
- 12. (a) What do you mean by scope of variables?

Or

- (b) What is copy constructor? Why do we need such a constructor?
- 13. (a) How does the for each statement differ from the for statement? Give examples.

Or

- (b) What is the sequence of execution of switch statement? Give example.
- 14. (a) What is namespace? Explain nested namespace.

Or

- (b) List out the advantages and disadvantages of unsafe mode.
- 15. (a) Discuss about the multicast delegate with example.

Or

- (b) How do we define the following?
 - (i) try block
 - (ii) catch block
 - (iii) finally block.

 $\mathbf{2}$

Answer all questions.

16. (a) State the significant differences between C# and Java.

Or

- (b) Write a program that illustrates the application of multiple catch handlers.
- 17. (a) What is enumerator? How is it useful in C# programming?

 \mathbf{Or}

- (b) What is pointer? How will you retrieve the data value using pointers and passing pointer as parameters to methods?
- 18. (a) State and explain compile-time errors and run-time errors.

Or

(b) Describe in detail about creating and starting a thread with example.

3

Sub. Code	
96462	

B.Sc. DEGREE EXAMINATION, APRIL 2019

Sixth Semester

Computer Science

COMPUTER GRAPHICS

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What do you mean by the midpoint of a line segment?
- 2. Mention the primary the methods for character generation.
- 3. Differentiate LCD and CRT.
- 4. How polygon may be represented?
- 5. What are the basic trigonometrys of rotations?
- 6. What is the use of segment visibility attribute of a segment table?
- 7. What is a window?
- 8. What multiple window implies?
- 9. What do you mean by echoing?
- 10. List the classes of input devices.

Part B $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) How to determine the two lines are perpendicular?

Or

- (b) How does the frame buffer array directly correspond to the screen?
- 12. (a) Describe in detail the set of graphics primitive commands.

Or

- (b) Explain the method to define a polygons interior points.
- 13. (a) Write a note on Coordinate transformations.

Or

- (b) Write the algorithms for image transformations.
- 14. (a) Explain viewing transformations in detail.

 \mathbf{Or}

- (b) How can clipping be added to the System?
- 15. (a) How to model for the processing of an input device interrupt?

Or

(b) Is locator a sampled device? Explain.

 $\mathbf{2}$

Part C $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) What Vector generations deals?. Discuss.

Or

- (b) Explain various algorithms used for display file structure.
- 17. (a) Discuss homogeneous coordinates and translations.

Or

- (b) Write about the implementation of viewing transformations.
- 18. (a) Explain any three event handling function of a event driven device.

Or

(b) Explain graphics hardware elaborately.

C-0328

Sp1

B.Sc. DEGREE EXAMINATION, APRIL 2019

Sixth Semester

Computer Science

COMPUTER NETWORKS

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Expand VPN.
- 2. What is unicasting?
- 3. List down the functions of datalink layer.
- 4. Define checksum.
- 5. What is datagram?
- 6. Define flooding.
- 7. What are the two types of network services?
- 8. Expand ARQ.
- 9. Define pixels.
- 10. What is JPEG?

Part B

 $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) Write a short note on service primitives.

Or

- (b) Explain coaxial with suitable diagram.
- 12. (a) What is mean by framing? Explain?

Or

- (b) List down the key assumption for dynamic channel allocation. Explain it.
- 13. (a) Explain store and forward packet switching with neat diagram.

Or

- (b) Give a note on shortest path algorithm.
- 14. (a) Define Addressing. Explain in detail.

Or

- (b) Explain Remote procedure call.
- 15. (a) Write a note on MIME.

 \mathbf{Or}

(b) Write a short note on HTML.

Part C

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(3 \times 10 = 30)
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Answer **all** questions.

16. (a) Briefly explain OSI reference Model with neat diagram.

Or

(b) Give a brief note on sliding window protocol.

 $\mathbf{2}$

17. (a) Discuss Distance vector Routing.

Or

- (b) Give detailed explanation about TCP segment Header.
- 18. (a) Describe Domain Name System in detail.

Or

(b) Write a brief note on Error Correcting Codes.

3

B.Sc. DEGREE EXAMINATION, APRIL 2019

Sixth Semester

Computer Science

MOBILE COMMUNICATION

(2016 onwards)

Time: 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What do you mean by Mobile Communication?
- 2. Define Multiplexing.
- 3. What are abbreviation of CDMA and GSM?
- 4. What is UMTS?
- 5. List out two advantages of AD HOC Networks.
- 6. Write any two services of WATM.
- 7. Define Fast Recovery.
- 8. Write a note on Mobile IP.
- 9. What is WAP?
- 10. List out the benefits of WWW.

Part B

 $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) Describe Wireless Transmission.

Or

- (b) Explain about Spread Spectrum.
- 12. (a) Write a short note on SDMA and FDMA.

Or

- (b) Elaborate GSM.
- 13. (a) Write a short note on HIPERLAN.

 \mathbf{Or}

- (b) Explain about Mobile Quality of Services.
- 14. (a) Describe about TCP in detail.

Or

- (b) Illustrate ADHOC Networks.
- 15. (a) Discuss about WWW.

Or

(b) Short note on HTML.

Part C

 $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in details about Cellular Systems.

Or

(b) Discuss in details about MAC.

 $\mathbf{2}$

17. (a) Briefly explain WLAN.

Or

- (b) Elaborate WATM.
- 18. (a) Give the detailed note on Mobile Network Layer.

Or

(b) Explain about WAP.

3

Sub. Code	
96464B	

B.Sc. DEGREE EXAMINATION, APRIL 2019

Sixth Semester

Computer Science

DATA MINING AND DATA WAREHOUSING

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define Data warehouse.
- 2. What is Query Manager?
- 3. Write a note on Capacity planning.
- 4. What is Tuning Queries?
- 5. Define Data Mining?
- 6. List out two advantages of KDD.
- 7. Mention some of the advantages of OLAP.
- 8. Write a short note on DSS.
- 9. What is Association Rule?
- 10. Write any two names of the Association Rule Mining Algorithm.

Part B (5 × 5 = 25)

Answer all questions

11. (a) Discuss about Data Warehouse.

Or

- (b) Explain about Data Warehouse Delivery Process.
- 12. (a) Write a short note on Data warehouse process manager.

Or

- (b) Describe in detail about Capacity Planning.
- 13. (a) Write a short note on Data Mining Issues.

Or

- (b) Explain about Data Mining Metrics.
- 14. (a) Elaborate Web search engine.

Or

- (b) Describe about OLAP.
- 15. (a) Discuss about Association Rule Mining.

Or

(b) Write a short notes on Incremental Mining.

Part C

Answer all questions

16. (a) Explain in detail about Data Warehouse delivery Process.

Or

(b) Discuss in detail about Tuning the Data Warehouse.

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 $(3 \times 10 = 30)$

17. (a) Give a detailed note on Social Implication of Data Mining.

Or

- (b) Elaborate Data Mining Techniques.
- 18. (a) Give the detailed note on Genetic Algorithm.

Or

(b) Explain about Advanced Association Rule Techniques.

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