Sub. Code 11A/13711

# DISTANCE EDUCATION

Common for B.A./B.Sc./B.B.A./B.B.A. (Banking), B.C.A./M.B.A. (5 Year integrated) DEGREE EXAMINATION, DECEMBER 2022.

#### First Semester

# Part I – TAMIL PAPER – I

(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar Year onwards)

Time: Three hours Maximum: 75 marks

பகுதி அ —  $(10 \times 2 = 20$  மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் விடையளிக்க.

- 1. ஸ்ரீ கிருஷ்ண கானம் யாரால் பாடப்பட்டது?
- 2. பாரதியாரின் இயற்பெயர் என்ன?
- 3. தீராத விளையாட்டுப் பிள்ளை யார்?
- 4. பெ.தூரன் 'தளிர்க் கீற்று' என்று எதனைக் குறிப்பிடுகிறார்?
- 5. வல்லிக் கண்ணன் பிறந்த ஊர் எது?
- 6. மீரா. வின் படைப்புகள் இரண்டினைக் கூறுக.
- 7. கவிஞர் ஞானக்கூத்தனுக்கு மோசிகீரனார் மேல் அன்பு தோன்றக் காரணமென்ன?
- 8. சிலப்பதிகாரக் காண்டங்கள் எத்தனை? அவை யாவை?

- 9. "தேரா மன்னா செப்புவ துடையேன்" யார் கூற்று? யாரைக் கூறியது?
- 10. சீறாப்புராணத்தை இயற்றியவர் யார்?

பகுதி ஆ — 
$$(5 \times 5 = 25 \text{ மதிப்பெண்கள்})$$

அனைத்து வினாக்களுக்கும் விடையளிக்க.

11. (அ) "குருவாயூருக்கு வாருங்கள்" பாடலின் கருத்துக்களை விளக்குக.

# (அல்லது)

- (ஆ) செய்யும் தொழிலின் மேன்மையைப் பட்டுக்கோட்டையார் வழி நின்று விளக்குக.
- 12. (அ) பாரத மாதாவின் பழம் பெருமைகளை விளக்குக.

# (அல்லது)

- (ஆ) 'உலகப்பன் பாட்டு' வழிப் பாரதிதாசனின் பொதுவுடைமைக் கருத்துக்களை விவரி.
- 13. (அ) 'நிலாப்பிஞ்சு' கவிதையில் பெ.தூரனின் இயற்கை வருணனையை விளக்குக.

#### (அல்லது)

- (ஆ) வெறும் புகழால் என்ன பயன் என்பதை வல்லிக்கண்ணன் கவிதை வழி விளக்குக.
- 14. (அ) 'கண்ணும் எழுதேம்' கவிதையில் அப்துல் ரகுமானின் கவிச்சிறப்பை ஆராய்க.

#### (அல்லது)

(ஆ) கண்ணகியின் வரவை வாயிலோன் உரைத்த திறம் குறித்து எழுதுக.

D-7120

15. (அ) தயரதன் வினாவும் மன்னர்கள் மறுமொழியும் குறித்து விளக்குக.

(அல்லது)

(ஆ) வீரமாமுனிவரின் தமிழிலக்கியத் தாக்கத்தைத் தேம்பாவணி வழி விளக்குக.

பகுதி இ — 
$$(3 \times 10 = 30$$
 மதிப்பெண்கள்)

எவையேனும் மூன்றனுக்கு விடையளிக்க.

- 16. கண்ணனைக் குழந்தையாகப் பாவித்த கண்ணதாசனின் பாடற்கருத்துக்களைத் தொகுத்து எழுதுக.
- 17. நாமக்கல் கவிஞரின் நோயற்ற வாழ்வு குறித்துக் கட்டுரை வரைக.
- 18. பாரதிதாசனின் உலகப்பன் பாட்டு விளக்கும் சமத்துவ சமுதாயத்தைக் கட்டுரைக்க.
- 19. வழக்குரை காதை கூறும் செய்திகளைத் தொகுத்து எழுதுக.
- 20. ஈத்தங்குலை வரவழைத்த படலக் கருத்துக்களை விளக்கி எழுதுக.

D-7120

Sub. Code

11B

#### DISTANCE EDUCATION

COMMON FOR B.A./B.Sc./B.B.A./B.B.A. (Banking). B.C.A./M.B.A.( 5 Years Integrated) DEGREE EXAMINATION, DECEMBER 2022.

# First Semester

# English

# Part I - COMMUNICATION SKILLS - I

(CBCS 2018-19 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

# Answer ALL questions

- 1. What are the components of communication?
- 2. Define rhetorical communication.
- 3. How does intonation affect the meaning?
- 4. How does stress and intonation improve spoken communication?
- 5. What is the accentual function of intonation?
- 6. What is topic sentence of a paragraph?
- 7. What are the steps to be followed while drafting the matter?

- 8. Why is eye contact important in non-verbal communication?9. What is dynamic posture and static posture?
- 10. Mention some important techniques for presentation skills.

PART B —  $(5 \times 5 = 25 \text{ marks})$ 

Answer ALL questions. Choosing either (a) or (b).

11. (a) Write a short note on Intra-personal communication and Inter-personal communication.

Or

- (b) How is communication a dynamic process? Explain.
- 12. (a) What are the advantages and disadvantages of oral communication?

Or

- (b) Are tone and intonation important for communication? Discuss.
- 13. (a) Who is considered as 'effective speaker'? What are the points to be kept in mind while evaluating the ability of the speaker?

Or

- (b) Write a paragraph on "Impact of Covid-19 on world economy".
- 14. (a) Write about some facial expressions.

Or

(b) Write an application for the post of Peon in a private bank.

D-7121

15. (a) Write a report on 'Pongal Celebration' at your college.

Or

(b) Which is the very important aspect of body language?

PART C — 
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions

- 16. What are the types of communication? Explain.
- 17. Give detailed distinction between informal oral communication and formal oral communication.
- 18. What are the four types of essays? Explain.
- 19. What are the types of reports? Explain.
- 20. How do you write the purpose and objective of a meeting?

Sub. Code 12/13712

#### DISTANCE EDUCATION

COMMON FOR B.A./B.Sc./B.B.A./B.B.A. (Banking)/ B.C.A./M.B.A. (5 Year Integrated) DEGREE EXAMINATION, DECEMBER 2022.

First Semester

#### Part II - ENGLISH PAPER - I

(CBCS 2018-19 Academic Year Onwards/ 2021 Calendar Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions

- 1. Write about the power and beauty of the element, "Water".
- 2. How does the end of Mr. Packletide's big-game shooting?
- 3. List out Carl Sagan's notions of the emergence of human ancestors.
- 4. How is the picture of Gandhi potrayed in A Hero on Probation?
- Write a short note on the deficiency diseases. 5.
- 6. Define Gerunds. Give examples.
- 7. What are called prepositions?
- 8. Fill in the blanks with suitable auxiliary verbs:
  - \_ I speak to Principal, please?
  - \_\_\_\_\_I use your pen, please? (b)
- Fill in the blanks with appropriate articles: 9.
  - John eats\_\_\_\_fruits in your garden.
  - There were many flowers in the park. One flower (b) was ———Rose.
- Write a short note on formal letter. 10.

PART	B	(5	X	5 =	25	marks	١
$1 \Delta I \cup I$	$\sim$	U		<i>.</i> –	40	marks	,

Answer ALL questions. Choosing either (a) or (b).

11. (a) Write briefly about the conservation and utilization of water which is fundamental for human welfare.

 $O_1$ 

- (b) Bring out the reasons why Gardiner considers letter writing as a art which is lost.
- 12. (a) Write a short note on body building.

 $O_1$ 

- (b) Consider 'A Dead of Bravery' as a tale of courage of an ordinary villager demonstrated in rescuing his friend from the jaws of death.
- 13. (a) Comment on the title A Hero on Probation.

Or

- (b) Give an account of Our Civilization
- 14. (a) Fill in the blanks with suitable preposition:

Ι	do	not	want			feed	a	typewriter
_				streets		-		— paper
_			— los	se the	use —			— my legs
_			— tra	velling	always -			car, or
_				be sur	mmoned,	, —		or
_			v	varning	ŗ.			

Or

(b) Fill in the blanks with suitable articles:

unusual occurrence in	Chambal
Valley of — Madhya Pradesh	has baffled
government officials. —	
Elephant from — reserve fore	st that had
strayed out walked into ————	old and
abandoned railway station building ——	
week ago. Ever since then it has refuse	ed to move
out. All efforts by forest officials to	persuade
———— tusker to go back into —	
forest.	

D-7122

15. (a) Write a letter to your friend about your recent tour to Ooty.

Or

- (b) Change the voice
  - (i) The company requires staff to watch a safety video every year.
  - (ii) The teacher always answers the students' questions.
  - (iii) A forest fire destroyed the whole suburb.
  - (iv) The children have broken the window glass.
  - (v) Rita will be invited by Seetha. PART C  $(3 \times 10 = 30 \text{ marks})$  Answer any THREE questions
- 16. Write a brief note on the character of the cat by Katharine M. Wilson?
- 17. How does A.G. Gardiner argue for the preservation of the art of letter writing? Elaborate.
- 18. Write an essay on the dangers of drug abuse.
- 19. Turn the following sentences into indirect speech.
  - (a) The poor man exclaimed, 'Will none of you help me?'
  - (b) Azar said to the magician, 'What have I done to deserve so severe a punishment?'
  - (c) 'Have you anything to say on behalf of the accused?' said the judge finally.
  - (d) 'The king was impressed with the magician and asked, 'What can I do for you?'
  - (e) She asked, 'What is it that makes you stronger and braver than other men?'
- 20. Read the following and write a summary of it. Suggest a title.

There are two problems that cause great worry to our educationists, the problem of religious and moral instruction in a land of many faiths, and the problem arising out of a large variety of languages. Taking up the education of children, we see that they should be trained to love one another, to be kind and helpful to all, to be tender to the lower animals, and observe and think aright. The task of teaching them how to read and write and to count and calculate is important, but it should not make us lose sight of the primary aim of moulding personality in the right way. For this it is necessary to call into aid culture, tradition and religion. But in our country we have, in the same school, to look after boys and girls born in different faiths and belonging to families that live diverse ways of life and follow forms of worship associated with different denominations of religion. It will not do to tread the easy path of evading the difficulty by attending solely to physical culture and intellectual education. We have to evolve a suitable technique and method for servicing the spiritual needs as school children practise different faiths. We would thereby promote an atmosphere of mutual respect, a fuller understanding and helpful co-operation among the different communities in our society. Again, we must remain as one people, and we have therefore to give basic training in our schools to speak and understand more languages than one and to appreciate and respect the different religions prevailing in India. It is not right for us in India to be dissuaded from this by considerations as to overtaxing the young mind. What is necessary must be done. And it is not in fact too great a burden.

D-7122

D-7231

Sub. Code 13013

#### DISTANCE EDUCATION

# B.Sc. DEGREE EXAMINATION, DECEMBER 2022.

#### First Semester

# Computer Science

# PROGRAMMING IN C

(CBCS 2018 – 19 Academic Year onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. Give out the basic structure of C Program?
- 2. Mention the use command line arguments?
- 3. Why do we avoid 'goto' statement? Give reason.
- 4. Can we use 'break' statement inside loop? Why?
- 5. Define string. Give examples.
- 6. Define function prototype? Give out its syntax.
- 7. Compare pointer with arrays.
- 8. Distinguish between structure with union.
- 9. List different type of file organization.
- 10. What are complier control directives?

# PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

11. (a) Write a C program to find the factorial of given number N.

Or

- (b) What are the derived data type in C?
- 12. (a) Briefly explain about 'else-if ladder with example.

Or

- (b) Differentiate between 'while' and 'do-while' statements.
- 13. (a) Write a function in C to reverse given string and check for palindrome or not.

Or

- (b) How will you define and call parameterised function? Explain.
- 14. (a) Define structure. Write a C program to display date of birth using structure.

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: Pointers and character string.

D-7231

PART C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. Briefly explain about formatted input and output statements with examples.
- 17. Write a C program to sort *n* given numbers in descending order using 'for' loop.
- 18. Discuss in detail about how dynamic memory allocation is performed using malloc(),calloc()realloc() and free() functions.
- 19. Write a C program to illustrate array of strucure.

20. Explain in detail about 'for' loop with suitable example.

Sub. Code

21A

# DISTANCE EDUCATION

Common for B.A./B.Sc./B.B.A./B.B.A. (Banking)/B.C.A./M.B.A. (5 Year integrated) DEGREE EXAMINATION, DECEMBER 2022.

#### Second Semester

# Part I – TAMIL PAPER – II

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

பகுதி அ —  $(10 \times 2 = 20$  மதிப்பெண்கள்)

அனைத்து வினாக்களுக்கும் விடையளிக்க.

- 1. தேம்பாவணி ஆசிரியர் குறிப்புத் தருக.
- 2. நீலபத்மநாபன் எழுதிய 'தாய்' என்னும் கதையின் மையப் பாத்திரம் யார்?
- 3. உழிஞைத்திணை குறிப்பு வரைக.
- 4. சார்பெழுத்துகளின் வகைகளைச் சுட்டுக.
- 5. அன்மொழித்தொகை விளக்கம் தருக.
- 6. 'ஆறில் ஒரு பங்கு' என்னும் சிறுகதையை எழுதியவர்?
- 7. ஓரங்க நாடகம் குறிப்பு வரைக.
- 8. இந்தியாவின் முதல் வானொலி நிலையம் எங்கு அமைக்கப்பட்டது?

- 9. பெரியபுராணத்தின் காப்பிய நாயகன் யார்?
- 10. பெண்களின் பாதுகாப்பிற்காகத் தமிழகக் காவல்துறை உருவாக்கியுள்ள 'செயலி' யாது ?

பகுதி ஆ — 
$$(5 \times 5 = 25 \text{ மதிப்பெண்கள்})$$

பின்வரும் வினாக்களுக்கு ஒரு பக்க அளவில் விடை தருக.

11. (அ) சாந்தி உள்ளம் உருகிப் போற்றி நின்றதை வீரமாமுனிவர் எங்ஙனம் விவரிக்கின்றார்?

#### (அல்லது)

- (ஆ) இறைவன் பொறை, மிடி, தாழ்வு கொண்டதன் காரணங்களைத் தேம்பாவணி வழி விளக்குக.
- 12. (அ) நீலபத்மநாபனின் 'சாளரத்தின் ஊடே' சிறுகதைச் சுருக்கத்தை எழுதுக.

## (அல்லது)

- (ஆ) தடாகை வதையால் இராமன் பெற்ற பயன்கள் யாவை?
- 13. (அ) ஆகுபெயர் வகைகளை எடுத்துக்காட்டுகளுடன் விவரிக்க.

# (அல்லது)

- (ஆ) மொழிமுதல் எழுத்துக்களைச் சான்றுகளுடன் விளக்கி எழுதுக.
- 14. (அ) மகாகவி பாரதியாரின் தேசப்பற்றைப் பாராட்டியுரைக்க.

# (அல்லது)

(ஆ) தமிழ்ச் சிறுகதை வரலாற்றை நும் பாடப்பகுதியால் சுருக்கி வரைக.

D-7123

15. (அ) குணங்குடி மஸ்தான் படைப்புகளின் சிறப்புகளைத் தருக.

(அல்லது)

(ஆ) சமூக வளர்ச்சியில் வானொலியின் பங்கு குறித்து விளக்கிடுக.

பகுதி இ — 
$$(3 \times 10 = 30$$
 மதிப்பெண்கள்)

பின்வரும் வினாக்களில் மூன்றனுக்குக் கட்டுரை வடிவில் விடை தருக.

- 16. சாந்தி உள்ளம் மகிழ்ந்து குழந்தை ஏசுவைப் போற்றுமாற்றை விவரிக்க.
- 17. நீலபத்மநாபனின், 'விமோசன்' கதை உணர்த்தும் பெண்கள் நிலையைக் கட்டுரைக்க.
- 18. ஒற்றெழுத்து மிகுதல் மிகாமைக்கான வரையறைகளை விளக்கி வரைக.
- 19. கம்பராமாயணத்தில் காணப்படும் போர் குறித்த செய்திகளைத் தொகுத்துரைக்க.
- 20. மக்கள் வாழ்வியல் பயன்பாட்டில் இணையத்தின் பங்கு குறித்து விவரித்து எழுதுக.

Sub. Code

21B

# DISTANCE EDUCATION

Common for B.A. / B.Sc. / B.B.A. / B.B.A. (Banking) / B.C.A. / M.B.A. (5 Years Integrated)
DEGREE EXAMINATION, DECEMBER 2022.

#### Second Semester

#### Part I - COMMUNICATION SKILLS - II

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. What are the basic elements of communication?
- 2. Explain the process of encoding.
- 3. What are the ways to improve one's pronunciation?
- 4. Explain front vowels.
- 5. Define plosive sounds with examples.
- 6. What are the sub-skills of listening?
- 7. What is meant by informational mode of conversation?
- 8. What is an opening statement in a resume?
- 9. Explain problem letters with illustrations.
- 10. What is the importance of interview skills?

# PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions choosing either (a) or (b).

11. (a) Write a note on the significance of communication skills.

Or

- (b) Discuss the different types of codes of communication skills.
- 12. (a) What are the ways to improve fluency of speaking English.

Or

- (b) Write a note on diphthongs.
- 13. (a) Elaborate the barriers of listening skills.

Or

- (b) Enumerate the significance of soft skills.
- 14. (a) Write a paragraph on the topic "COVID 19".

Or

- (b) Explain the structure of an interview.
- 15. (a) Discuss the guidelines that are to be followed in writing business letters.

Or

(b) Comment on the role played by the Chief-Editor of a leading newspaper.

2

D-7124

PART C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. Write an essay on the stimulus and response adopted while communicating.
- 17. Elaborate on the pronunciation etiquetes in communication.
- 18. Discuss the different modes of conversations.
- 19. You are building a house. Place an order for supplying electric fittings with a firm in Hyderabad.
- 20. Write a resume for the post of a sub-editor in a sports magazine.

Sub. Code 22/13722

#### DISTANCE EDUCATION

COMMON FOR B.A./B.Sc./ B.B.A./B.B.A. (Banking)/ B.C.A./M.B.A./ (5 Year Integrated) DEGREE EXAMINATION, DECEMBER 2022.

# Second Semester

# Part II - ENGLISH PAPER - II

(CBCS 2018-19 Academic Year Onwards/ 2021 Calendar Year onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

# Answer ALL the questions

- 1. Discuss the structure of "Lines composed upon Westminister Bridge" by William Wordsworth.
- 2. What is an ode?
- 3. Describe the setting of the poem "The Road Not Taken".
- 4. What is the symbolic element of Stephen Spender's "The Express".
- 5. How is Shylock punished for seeking to take Antonio's life?
- 6. What does Bassanio offer the young law clerk who saves Antonio? Why?

10.	What is the basic idea of the poem 'Gitanjali".					
		PART B — $(5 \times 5 = 25 \text{ marks})$				
	An	swer ALL questions. Choosing either (a) or (b).				
11.	(a)	Comment on the Characteristics of a sonnet.				
		$\operatorname{Or}$				
	(b)	Discuss the themes of "Lines composed upon Westminister Bridge".				
12.	(a)	Write a note on the symbolic elements of "The Road Not Taken".				
		$\operatorname{Or}$				
	(b)	Bring out the message of "Strange meeting".				
13.	(a)	Discuss the character of Portia in "The Merchant of Venice".				
		$\operatorname{Or}$				
	(b)	Analyse the trial or court scene of "The Merchant of Venice".				
14.	(a)	Write a report on the road accident that you have witnessed.				
		${ m Or}$				
	(b)	Discuss the structure of note-making.				
		2 <b>D-7125</b>				

Mention two tips to write an essay effectively.

Who is Andrea? What is the meaning of the title "Andrea Del Sarto".

7.

8.

9.

What is a report?

15. (a) Write an essay on the topic "COVID 19".

Or

(b) Discuss the different forms of writing reports.

PART C — 
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE of the following

- 16. Consider "Andrea Del Sarto" as a dramatic monologue.
- 17. In what way is "Gitanjali" considered a song offering.
- 18. Critically analyse Sorojini Naidu's "The coromandel Fishers".
- 19. Discuss the background and themes of "The Merchant of Venice".
- 20. Opera refers to a dramatic art form, originating in Europe, in which the emotional content is conveyed to the audience as much through music, both vocal and instrumental, as it is through the lyrics. By contrast, in music theatre an actor's dramatic performance is primary, and the music plays a lesser role. The drama in opera is presented using the primary elements of theatre such as scenery, costumes, and acting. However, the words of the opera, or liberetto, are sung rather than spoken. The singers are accompanied by a musical ensemble ranging from a small instrument ensemble to a full symphonic orchestra.
  - (a) What is the importance of an opera?
  - (b) We can understand from the reading that

D-7125

- (i) People are captivated more by opera than musical theatre.
- (ii) Drama in opera is more important than the music
- (iii) Orchestra is operas can vary considerably in size
- (iv) Musical theatre relies above all on music.
- (v) There is argument over whether the music is important to the words in opera.
- (c) How is the acting in opera displayed?
- (d) Discuss the performance in an opera.
- (e) Give a suitable title and justify it.

Sub. Code

13023

# DISTANCE EDUCATION

# B.Sc. DEGREE EXAMINATION, DECEMBER 2022

Second Semester

Computer Science

#### OBJECT ORIENTED PROGRAMMING AND C++

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. Give some features of Object Oriented Programming.
- 2. What is Dynamic Binding?
- 3. Define Call by Reference.
- 4. Explain the Array of Objects.
- 5. What is Function Overloading?
- 6. Discuss in Virtual Function.
- 7. What is mean by stream with files?
- 8. Define the Inheritance of Class Template.
- 9. What are the uses of exceptions in operator overloaded function?
- 10. Exception in constructor and destructor.

# PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

11. (a) Explain the characteristics of Object Oriented Programming concepts.

Or

- (b) What are the Pros and Cons of Procedure Oriented Language.
- 12. (a) Write a short note on:
  - (i) Function Prototype
  - (ii) Return by reference

Or

- (b) Write short note on Dynamic objects.
- 13. (a) What is Inheritance? Explain with example the concept of multiple inheritance.

Or

- (b) Compare the Operator Overloading and Operator Overriding.
- 14. (a) Explain in detail about Function template with Arguments with suitable Example.

Or

- (b) Illustrate the file pointers and their Manipulators.
- 15. (a) Distinguish between throwing and catching mechanism.

Or

(b) What are the exceptions handlings are available in C++ with syntax.

D-7232

PART C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. List out difference between procedures oriented and Object Oriented Programming.
- 17. Describe brief note on friend function, constant parameter and member function with examples.
- 18. Explain the conversion between objects and basic data types.
- 19. Elaborate the concept of class template with multiple arguments.
- 20. Discuss about how to handling uncaught exceptions.

Sub. Code 31A/13731

# DISTANCE EDUCATION

# Common for B.A./B.Sc./B.C.A. DEGREE EXAMINATION, DECEMBER 2022.

# Third Semester

#### Part I – TAMIL PAPER III

(CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar Year onwards)

Time: Three hours Maximum: 75 marks

பகுதி அ — ( $10 \times 2 = 20$  மதிப்பெண்கள்) அனைத்து வினாக்களுக்கும் விடையளிக்க.

- 1. ஐங்குறுநூற்றின் குறிஞ்சித்திணைப் பாடல்களைப் பாடியவர் யார்?
- 2. 'நெடுந்தொகை' என்னும் சிறப்புப் பெயர் கொண்ட சங்க இலக்கியம் யாது ?
- 3. நற்றிணை பெயர்க்காரணம் கூறுக.
- 4. பாசறையின் வகைகளைக் குறிப்பிடுக.
- 5. சங்க இலக்கியத்தில் அதிகப் பாடல்களைப் பாடியவர்?
- 6. 'இற்செறிப்பு' என்றால் என்ன?
- 7. புறநானூறு நூற் குறிப்பு வரைக.
- 8. திருக்குறளின் சிறப்புக்களைப் போற்றி எழுந்த நூல்?
- 9. இராசராசசோழன் நாடகத்தை இயற்றியவர் யார்?
- 10. சுவடுகள் நாவலில் காந்தியக் கொள்கையைப் பேசும் பாத்திரம்?

# பகுதி ஆ — $(5 \times 5 = 25 \text{ மதிப்பெண்கள்})$

பின்வரும் வினாக்களுக்கு ஒரு பக்க அளவில் விடை தருக.

11. (அ) ஊடல் பொருளுக்கான திணை யாது? ஐங்குறுநூற்றின் வழி விளக்குக.

# (அல்லது)

- (ஆ) கபிலர் பாடல்களின் தனிச் சிறப்புகளைத் தொகுத்துரைக்க.
- 12. (அ) ஐங்குறுநூற்று நூல் தொகுப்பு வரலாற்றை எடுத்துரைக்க.

#### (அல்லது)

- (ஆ) அகநானூற்றின் நூல் அமைப்பும் பகுப்பும் குறித்து விளக்கி வரைக.
- 13. (அ) நற்றிணையில் காணப்படும் மணிமணியான கருத்துக்களைத் தொகுத்துரைக்க.

# (அல்லது)

- (ஆ) தலைமகன் பாசறையிலிருந்து சொல்லிய செய்தியைச் சேந்தம்பூந்தனார் வழி விளக்குக.
- 14. (அ) அறிவுடையார் குறித்து வள்ளுவர் உரைக்குமாற்றை எழுதுக.

# (அல்லது)

- (ஆ) நான்மணிக்கடிகையிலுள்ள எளிமையான கருத்துக்களை எடுத்துரைக்க.
- 15. (அ) இராசராசசோழன் நாடகக் கதைக்களத்தைச் சுருக்கி வரைக.

#### (அல்லது)

(ஆ) சுவடுகள் நாவல் கதைக்கருவை விளக்கி எழுதுக.

D-7126

# பகுதி இ — $(3 \times 10 = 30$ மதிப்பெண்கள்)

பின்வரும் வினாக்களில் மூன்றனுக்குக் கட்டுரை வடிவில் விடை தருக.

- 16. கபிலரின் கவித்திறத்தை நும் பாடப் பகுதியால் நிறுவுக.
- 17. மஞ்ஞைப்பத்துப் பாடல்களின் கருத்துக்களைத் தொகுத்துரைக்க.
- 18. அகநானூற்றுப் பாடல்களால் அறியவரும் வரலாற்றுச் செய்திகளை விவரிக்க.
- 19. திருக்குறளின் அமைப்பும் சிறப்பும் குறித்துக் கட்டுரை வரைக.
- 20. சுவடுகள் நாவலின் ராசாத்தி பாத்திரப் படைப்பைச் சான்றுகளுடன் பாராட்டியுரைக்க.

Sub. Code 31B

#### DISTANCE EDUCATION

# COMMON FOR B.A./B.Sc./B.C.A. DEGREE EXAMINATION, DECEMBER 2022.

# Third Semester

# Part I – HUMAN SKILLS DEVELOPMENT – I

(CBCS 2018-19 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL the questions

- 1. What are the different types of human skills?
- 2. What is meant by interpersonal relationship?
- 3. Mention any two factors for building positive personality.
- 4. Define self-esteem.
- 5. Why the goal setting skill is important?
- 6. What are the steps to be followed in decision in decision making skills?
- 7. What is the structure of negotiating skills?
- 8. How can you create positive attitudes in human relations?

10.	Write	Write any two qualities of a good leader.				
		PART B — $(5 \times 5 = 25 \text{ marks})$				
Answer ALL questions choosing either (a) or (b).						
11.	(a)	Differentiate interpersonal relationship and interpersonal behaviour.				
		$\operatorname{Or}$				
	(b)	Write a short note on significance of thinking ahead.				
12.	(a)	Write short note on self efficacy.				
		$\operatorname{Or}$				
	(b)	Illustrate the importance of goal setting skills.				
13.	(a)	What are the basic elements of negotiating skills?				
		$\operatorname{Or}$				
	(b)	Write a note on the types of attitudes.				
14.	(a)	Why coping with change is necessary for the development of human relations?				
		$\operatorname{Or}$				
	(b)	What are the different styles of selecting a leader?				
15.	(a)	What are the duties of a counsellor?				
		$\operatorname{Or}$				
	(b)	Write a note on anger management.				
		2 <b>D-7127</b>				

What are the different types of stress?

9.

# PART C — $(3 \times 10 = 30 \text{ marks})$

# Answer any THREE of the following

- 16. Write an essay on different levels of mind functions.
- 17. Explain the need of developing personality and the ways of developing personality.
- 18. Explain briefly about different types of skills in developing personality.
- 19. Write briefly on the qualities of a good leader.
- 20. What is meant by conflicts? Explain its types and causes.

Sub. Code

32/13732

# DISTANCE EDUCATION

# COMMON FOR B.A. / B.Sc. / B.C.A. DEGREE EXAMINATION, DECEMBER 2022.

#### Third Semester

#### Part - II ENGLISH PAPER - III

(CBCS 2018 – 2019 Academic Year Onwards / 2021 Calender years Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL the questions.

- 1. Why did Swami feel relieved at the end?
- 2. What did Matilda suffer from?
- 3. What kind of person is Lomov in "The Proposal"?
- 4. White a few lines about the character of Mrs. Meldon.
- 5. Who opens the door when Jean goes to get the tart?
- 6. What is the main idea of "The Refugee"?
- 7. Who are all the friends in the play "Reunion"?
- 8. Who is the author of the play "A Kind of Justice"?
- 9. Define verb with examples.
- 10. What is Agenda?

# PART B — $(5 \times 5 = 25 \text{ marks})$

Answer the following questions, choosing either (a) or (b).

11. (a) Narrate how a coward boy Swami became a hero overnight?

Or

- (b) Describe the circumstances under which the verger had to lose his job.
- 12. (a) What is the importance of dream in the play "The Boy Comes Home"?

Or

- (b) Write a brief character sketch of Lomov from "The proposal"?
- 13. (a) Sketch the character Betty in "The Silver Idol"?

Or

- (b) What happened at Comilla University?
- 14. (a) Describe how Jean and Pierre managed to get the Pie.

Or

- (b) Write a short note on the treatment of Partition in "The Refugee".
- 15. (a) How do you prepare minutes of a meeting?

Or

(b) What are the basic formats for writing an essay?

2

D-7128

# PART C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE of the following questions.

- 16. Discuss the comic elements in the play "The Boy comes Home".
- 17. Write an essay on the Westerner's view of Eastern countries as illustrated in "The Silver Idol"?
- 18. Comment on the view of justice according to Margaret Wood in "A King of Justice".
- 19. To what extent does yassin become a representative of all refugees?
- 20. Write an essay on advantages and disadvantages of Mobile Phone.

Sub. Code 13033/13233

# DISTANCE EDUCATION

B.Sc. (Comuter Science)/ B.Sc. (CS) (Lateral Entry) DEGREE EXAMINATION, DECEMBER 2022.

#### Third Semester

# DATA STRUCTURES AND ALGORITHMS

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

1. Define: Space Complexity.

2. Define: Multi Dimensional Array.

- 3. What will be the basic principle of Doubly Linked List?
- 4. In which way the queue will differ from stack?
- 5. Define: Tree Traversal.
- 6. What is meant by Binary Search tree?
- 7. List out the disadvantages for linear searching.
- 8. Enumerate the necessities for searching techniques.
- 9. What is meant by selection sort?
- 10. Define: Radix Sort.

# PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions by choosing either (a) or (b).

11. (a) Describe the concept of Time and Space Complexity.

Or

- (b) Analyzing the Primitive data types in Data Structures.
- 12. (a) Describe about prefix expression evaluation in stack with an example.

Or

- (b) Write the insertion and Deletion of single linked list with an example.
- 13. (a) Illustrate the types of Binary Search Tree.

Or

- (b) Describe: Binary tree traversal.
- 14. (a) Describe the Linear searching algorithm. Give example.

Or

- (b) List out the difference between Searching and Sorting.
- 15. (a) Write an algorithm for Bubble Sort. Explain with example.

Or

2

(b) What is the principle of selection sort and give an example.

D-7233

PART C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. Explain in detail about the Two dimensional and Multidimensional array with an example.
- 17. Illustrate the doubly Linked List representations with example.
- 18. Explain in detail about insertion and deletion operation on Binary Tree.
- 19. Explain the Linear Search algorithm with example and analyze its time complexity.
- 20. Write the algorithm for quick sort with examples and discuss their complexities.

Sub. Code 41A/13741

## DISTANCE EDUCATION

# Common for B.A./B.Sc./B.C.A. DEGREE EXAMINATION, DECEMBER 2022.

## Fourth Semester

#### Part I: TAMIL PAPER - IV

# (CBCS 2018 – 2019 Academic Year Onwards/2021 Calendar Year onwards)

Time: Three hours Maximum: 75 marks

பகுதி அ —  $(10 \times 2 = 20 \text{ மதிப்பெண்கள்})$  அனைத்து வினாக்களுக்கும் விடையளிக்க.

- 1. யாப்பியல் கூறும் அசை வகைகளை எழுதுக.
- 2. அகவல் பா என அழைக்கப்படும் 'பா' எது?
- 3. சிந்து எத்தனை இசை உறுப்புகளால் ஆனது?
- 4. ஊடல் சார்ந்த நிகழ்ச்சிகளைப் பேசும் அகத்திணை யாது?
- 5. கையறுநிலை குறிப்பு வரைக.
- 6. மதி போன்ற முகம் இத்தொடரில் உவமை எது?
- 7. ஐங்குறுநூற்றில் மருதப் பாடல்களைப் பாடியவர் யார்?
- 8. புலவராற்றுப்படை என அழைக்கப்படும் நூல் யாது?
- 9. 'இராமாவதாரம்' என்னும் காப்பியத்தை இயற்றியவர் யார்?
- 10. 'பாண்டியன் பரிசு' காப்பியத்தின் கதைத் தலைவன்?

# பகுதி ஆ — $(5 \times 5 = 25 \text{ bb}$ ப்பெண்கள்)

பின்வரும் வினாக்களுக்கு ஒரு பக்க அளவில் விடை தருக.

11. (அ) சீர் எத்தனை வகைப்படும்? அவற்றைச் சான்றுகளுடன் விளக்குக.

## (அல்லது)

- (ஆ) படிமம் என்றால் என்ன? புதுக்கவிதையில் பெறுமிடத்தைச் சுட்டி வரைக.
- 12. (அ) முல்லைத்திணையின் கருப்பொருட்களைப் பட்டியலிடுக.

## (அல்லது)

- (ஆ) ஆநிரை கவர்தல் என்றால் என்ன? அத்திணையை விரிந்துரைக்க.
- 13. (அ) எல்லா விளக்கும் விளக்கல்ல சான்றோர்க்குப் பொய்யா விளக்கே விளக்கு - இக்குறளில் பயின்று வரும் அணியை விளக்குக.

#### (அல்லது)

- (ஆ) சிலேடை அணியைச் சான்று காட்டி விளக்கி வரைக.
- 14. (அ) தொல்காப்பியம் தமிழரின் அடையாளமாக விளங்குவதை நிறுவுக.

#### (அல்லது)

- (ஆ) நாலடியார் நூல் வரலாற்றையும் சிறப்பியல்புகளையும் எழுதுக.
- 15. (அ) ஐம்பெருங்காப்பியங்கள் யாவை? அவற்றின் சிறப்புகளை எழுதுக.

#### (அல்லது)

(ஆ) இயேசு காவியம் கூறும் செய்திகளை எடுத்துரைக்க.

D-7129

2

# பகுதி இ — $(3 \times 10 = 30$ மதிப்பெண்கள்)

பின்வரும் வினாக்களில் மூன்றனுக்குக் கட்டுரை வடிவில் விடை தருக.

- 16. வெண்பாவின் இலக்கணத்தை வகைகளுடன் விளக்குக.
- 17. அன்பின் ஐந்திணைகள் குறித்த செய்திகளைத் தொகுத்துரைக்க.
- 18. தற்குறிப்பேற்ற அணியின் இலக்கணத்தைச் சான்றுகள் காட்டி விவரிக்க.
- 19. சிலப்பதிகாரம் ஏன் தமிழ்க்காப்பியம் என்று அழைக்கப்படுகின்றது? விவரிக்க.
- 20. பாஞ்சாலி சபதத்தின் கதைக் களத்தை விரிந்துரைக்க.

Sub. Code 41B

#### DISTANCE EDUCATION

# COMMON FOR B.A./B.Sc./B.C.A. DEGREE EXAMINATION, DECEMBER 2022.

# Fourth Semester

## Part I - HUMAN SKILLS DEVELOPMENT - II

(CBCS-2018-19 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

# PART A — $(10 \times 2 = 20 \text{ marks})$

## Answer ALL questions

- 1. What are the different types of counselling techniques?
- 2. Why managerial skill is important for human skills development?
- 3. What are the ways to develop our communication skills?
- 4. Define conceptual skills.
- 5. Mention any two practices in developing technical skills.
- 6. What is the role of preparation in presentation skills?
- 7. What are the various types of organizational skills?
- 8. How can you select a leader?
- 9. What are the major qualities for formal interactions?
- 10. What is the role of eye contact in problem solving skills?

# PART B — $(5 \times 5 = 25 \text{ marks})$

Answer the following questions choosing either (a) or (b).

11. (a) Write a short note on the salient aspects of counselling.

Or

- (b) Differentiate interpersonal and intrapersonal communication.
- 12. (a) Illustrate the tools and procedure in technical skills.

Or

- (b) Write the function of delivery in presentation skills.
- 13. (a) What are the important qualities of a multi-tasking skills?

Or

- (b) Write some ways to select a leader for a HR organization.
- 14. (a) Write a note on the etiquettes of interactions in a group discussion.

Or

- (b) What are the salient aspects of understanding skills in developing human relationships?
- 15. (a) What is the role of cooperative learning skills in human skills development?

Or

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(b) Write a note on causes of making social responsibilities.

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# PART C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE of the following questions.

- 16. Explain briefly on importance and techniques of counselling.
- 17. Write an essay on different types of technical skills.
- 18. List out the types of communication skills. Explain briefly.
- 19. Write briefly on understanding skills in group communication.
- 20. Explain the role of handling and facing situations in problem solving skills.

Sub. Code

42/13742

## DISTANCE EDUCATION

# Common for B.A./B.Sc./B.C.A. DEGREE EXAMINATION, DECEMBER 2022.

#### Fourth Semester

English

Part II – ENGLISH Paper – IV

(CBCS 2018 – 2019 Academic Year Onwards/ 2021 Calendar Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL the questions.

- 1. What surprise was in store for lalajee before he left Mokameh Ghat?
- 2. What is the pontoon bridge? Why has it been made?
- 3. How does Eliza dress herself up when she visits Higgins to ask to take speech lessons?
- 4. Shortly describe about Swami's four friends.
- 5. Why did Bassanio approach Antonio?
- 6. What similies does Romeo use to convey Juliet's beauty?
- 7. What were Martin Luther King's dreams?
- 8. When was the first meeting occured between Nehru and Toynbee?

		PART B — $(5 \times 5 = 25 \text{ marks})$
	Answer ALL questions, choosing either (a) or (b).	
11.	(a)	Explain the qualities of Lalajee as described by Jim Corbelt.
		$\operatorname{Or}$
	(b)	Why was schatz sad? Explain.
12.	(a)	What is the significance of the title "Pygmalion"?
		$\operatorname{Or}$
	(b)	Swami and Friends a realistic drama. Elaborate.
13.	(a)	Why does Antonio agree to shylock's terms for the loan?
		$\operatorname{Or}$
	(b)	Sketch the character of Romeo.
14.	(a)	What sort of discrimination did Martin Luther King Jr. fight against?
		$\operatorname{Or}$
	(b)	Describe the first meeting of Toynbee and Nehru.
		2 <b>D-7131</b>

9.

10.

(a)

(b)

Write the correct question tag?

The weather in really bad today

They are not in Mumbai at the moment.

Expand the Proverb, "A stitch in time saves nine".

- 15. (a) Identify the sentence for clause or phrase.
  - (i) He works hard everyday
  - (ii) Before the next light
  - (iii) In a dark and dangerous hallway
  - (iv) If I need to call you
  - (v) After a good day
  - (vi) Because it's the right thing to do
  - (vii) As quickly as possible
  - (viii) This car's not working
  - (ix) Working for himself
  - (x) Whenever it gets cold

Or

(b) Explain Group Discussion.

PART C — 
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 16. Give the summary of 'Lalajee'.
- 17. Discuss the relationship between Higgins and his mother.
- 18. Character sketch of Antonio in Merchant of venice.
- 19. Write about the racial discrimination prevailed during the tone of Martin Luther king.Jr.

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20. Illustrate the final meeting of Toynbee with Nehru.

Sub. Code 13043/13243

## DISTANCE EDUCATION

B.Sc. (Computer Science)/ B.Sc. (CS) (Lateral Entry) DEGREE EXAMINATION, DECEMBER 2022.

## Fourth Semester

## JAVA PROGRAMMING

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. Expand WWW.
- 2. Define Constant.
- 3. What is meant by instance variable?
- 4. List out the types of Looping statements.
- 5. Define Constructor.
- 6. Give the use of final keyword in java.
- 7. Define Package.
- 8. List out any two pre- defined Exception.
- 9. Define Applet.
- 10. List out any two uses of Graphics class.

## PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

11. (a) Elucidate "Command-line arguments" with a suitable example.

Or

- (b) Write a short note on Type casting in Java.
- 12. (a) Discuss increment and decrement operators in Java with Example.

Or

- (b) Differentiate between class and interface in Java.
- 13. (a) Describe method overloading in Java with Example.

Or

- (b) Write a short note on Strings in Java.
- 14. (a) Write a short note on Life cycle of Thread in Java.

Or

- (b) Discuss multiple Catch in Exception.
- 15. (a) Write a short note on Applet Tags with example.

Or

(b) Write a Java program to draw Line using Graphics class.

PART C — 
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 16. Discuss in detail about Features of Java.
- 17. Elaborate in detail about branching statements in Java with example.

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- 18. Explain Hierarchical inheritance with a program example.
- 19. Describe about Exception Handling in Java with example.
- 20. Discuss in detail about Virtual function in Java with example.

Sub. Code

13051/13251

## DISTANCE EDUCATION

B.Sc. (Computer Science)/ B.Sc. (CS) (Lateral Entry) DEGREE EXAMINATION, DECEMBER 2022.

## Fifth Semester

#### OPERATING SYSTEMS

(CBCS – 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL the questions.

- 1. What is Operating System?
- 2. What are the different types of Interrupts?
- 3. What are the methods to solve mutual exclusion in operating systems?
- 4. Define concurrent programming.
- 5. How did you prevent the deadlock?
- 6. What is semaphore with example?
- 7. What do you mean by real memory in OS?
- 8. What are the types of memory allocation in operating system?

- 9. Define the use of Free space management?
- 10. Write short note on file optimization and file allocation?

PART B — 
$$(5 \times 5 = 25 \text{ marks})$$

Answer ALL the questions by choosing either (a) or (b).

11. (a) What are the goals of Operating System in detail.

Or

- (b) Elaborate Process Management Interrupts and Inter process Communication.
- 12. (a) Explain in detail the concurrent Programming.

Or

- (b) Discuss Asynchronous concurrent execution.
- 13. (a) What are the conditions for Deadlock in detail.

Oı

- (b) Give some related problem indefinite postponement.
- 14. (a) Distinguish between continuous and non-continuous memory allocation.

Or

- (b) How operating systems manage the Real memory and Virtual memory.
- 15. (a) Discuss the concept of data hierarchy in file system.

Or

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- (b) Write short note on
  - (i) Rotational Optimization
  - (ii) Disk Scheduling strategies

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PART C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. What are the Process Concept in Operating System in Detail.
- 17. Discuss the concept of mutual exclusion.
- 18. How to avoid the deadlock and what are the steps to recover?
- 19. Difference between the Real Memory and Virtual Memory?
- 20. Explain the concept of file system in operating systems.

Sub. Code 13052/13252

## DISTANCE EDUCATION

B.Sc., (Computer Science)/ B.Sc. (CS) (Lateral Entry) DEGREE EXAMINATION, DECEMBER 2022.

#### Fifth Semester

# RELATIONAL DATABASE MANAGEMENT SYSTEMS (RDBMS)

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. List the disadvantages of file processing system?
- 2. Define Entity.
- 3. Write the steps for querying a database.
- 4. Name the various types of joins.
- 5. What is a UNIQUE constraint?
- 6. List the four important properties of transaction that must ensure to maintain database.
- 7. What is commit point of a transaction?
- 8. State the types of locks.
- 9. Define hashing.
- 10. What are the two categories of primary index?

## PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

11. (a) List out the main characteristics of the database approach and specify how it differs from traditional file system.

Or

- (b) Distinguish between primary and super keys.
- 12. (a) Describe the concept of Referential Integrity.

Or

- (b) Write short notes on natural join operation in relational algebra.
- 13. (a) Why 4NF is a normal form more desirable than BCNF?

Or

- (b) Explain the role of functional dependency in DBMS.
- 14. (a) What are the ACID properties of a transaction? Explain.

Or

- (b) Briefly describe the timestamp-based concurrency control protocol.
- 15. (a) Compare the different types of file organizations.

Or

(b) What is indexed sequential access method (ISAM)? What are its advantages and disadvantages.

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Part C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. Explain the various notations used in E-R diagram with example.
- 17. What do you mean by Views? How view is created. Explain in detail.
- 18. How the multi-valued dependencies form the basis of fourth normal form? Explain.
- 19. Describe in detail database recovery techniques based on deferred and immediate update.
- 20. Briefly explain the following:
  - (a) Structure of B+ tree
  - (b) Insertion and deletion in B+ tree.

Sub. Code 13053/13253

## DISTANCE EDUCATION

# B.Sc. (CS)/ B.Sc. (CS) (Lateral Entry) DEGREE EXAMINATION, DECEMBER 2022.

#### Fifth Semester

## Computer Science

## COMPUTER ARCHITECTURE

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

# Answer ALL questions.

- 1. Define Computer Architecture.
- 2. What are the floating point instructions in MIPS?
- 3. What is Multiple Issue? Write any two approaches.
- 4. What is meant by Pipeline Stall?
- 5. Define VLIM.
- 6. What is meant by Speculation?
- 7. What are the writing strategies in Cache Memory?
- 8. Write the structure of Memory Hierarchy?
- 9. Why serialization of reads and writes are important in a Multi-Processor Environment?
- 10. What is fine grained Multithreading?

## PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

11. (a) Explain about Measuring and Improving the Performance of computer.

Or

- (b) Write in detail about Various Addressing Modes?
- 12. (a) Write about the classification of Data Hazards.

Or

- (b) Define IP6 Micro Architecture.
- 13. (a) Briefly explain about creating a single Data Path with neat diagram.

Or

- (b) Describe about Static Branch Prediction.
- 14. (a) Write a short notes on Storage Devices and its types?

Or

- (b) Describe in detail the Process involved in designing an I/O system.
- 15. (a) Explain in detail about Multithreading.

Or

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(b) Describe about Static Branch Prediction.

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# PART C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

- 16. Explain in detail about Operands and Operations for Media and Signal Processing.
- 17. Describe about Dynamic Hardware Prediction in detail.
- 18. Discuss the following:
  - (i) Hardware Speculation
  - (ii) Software Speculation
- 19. Discuss Reliability, Availability and Dependability for storage devices in detail.
- 20. Discuss the Synchronization mechanisms for larger scale multiprocessors.

Sub. Code

13061/13261

## DISTANCE EDUCATION

B.Sc. (Computer Science)/ B.Sc. (CS) (LATERAL ENTRY) DEGREE EXAMINATION, DECEMBER 2022.

#### Sixth Semester

#### COMPUTER NETWORK

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. List the metrics that influence the performance of computer Networks.
- 2. What is the difference between port address, logical address and physical address?
- 3. Mention the advantage and disadvantage of error correction by receiver, as compared to error detection.
- 4. Write short notes on CSMA/CD?
- 5. Compare circuit switching and virtual circuit based packet switching.
- 6. How do routers differentiate the incoming unicast, multicast and broadcast IP Packets.
- 7. What are TCP and UDP protocols?

- 8. Write down the present information contained in a DNS Resource record.
- 9. Is a cryptographic hash function, an irreversible mapping? Justify your answer.
- 10. How the authentication is provided based on shared secret key?

PART B — 
$$(5 \times 5 = 25 \text{ marks})$$

Answer ALL questions, choosing either (a) or (b).

11. (a) What are the transmission modes in Computer Networks. Explain.

Or

- (b) Give explanation in the various categories of networks.
- 12. (a) With an example explain the process of Error detection using VRC.

Or

- (b) Discriminate ALOHA and CDMA. Make outline its advantages and Disadvantages.
- 13. (a) Give an example explain the Dynamic routing algorithms used in computer networks.

Or

- (b) Differentiate the open loop congestion control and closed loop congestion control.
- 14. (a) List out the transport layer service primitives and their meaning.

Or

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- (b) Write short notes on:
  - (i) Mail Exchange
  - (ii) SNMP
- 15. (a) What are the fundamental cryptographic principles? Explain.

Or

- (b) Specify the differences between;
  - (i) Block cipher and stream cipher
  - (ii) Cryptanalytic attack and brute force attack.

PART C — 
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 16. Explain the ISO/OSI reference model with neat diagram.
- 17. With an example explain the shortest path routing algorithms used in computer networks.
- 18. Determine the significance of switching? What are different switching techniques used in computer networks? Discuss.
- 19. Elaborate on TCP Congestion Control Mechanism. Discriminate these mechanisms.
- 20. Explain RSA algorithm and give example of generation of public, private keys, ciphertext.

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Sub. Code 13062/13262

## DISTANCE EDUCATION

# B.Sc. (Computer Science) B.Sc. (CS) (LATERAL ENTRY) DEGREE EXAMINATION, DECEMBER 2022.

#### Sixth Semester

#### VISUAL BASIC PROGRAMMING

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. Define event in Visual Basic.
- 2. State the various methods to execute a VB program.
- 3. Differentiate between the explicit and implicit declarations giving example.
- 4. What is Error value?
- 5. Differentiate between procedures and functions.
- 6. State the three states for loading and unloading forms.
- 7. What are the function of a Toolbar?
- 8. Write the syntax to access the child form.
- 9. Define arguments of AddNew method
- 10. Write the services provided by OLE DB.

# PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

11. (a) What are the various features of Visual Basic?

Or

- (b) List any five properties of VB Form.
- 12. (a) Discuss the static variables and different scopes for static variables giving appropriate examples.

Or

- (b) How can we select multiple items in a list box? Explain.
- 13. (a) Define recursive function and write the program for recursive function.

Or

- (b) What is control array? How array elements can be processed in VB program?
- 14. (a) Elaborate on the control menu commands.

Or

- (b) How to modify and delete menu items? Explain with an example.
- 15. (a) Write the advantages and disadvantage of DAO, RDO and ADO.

Or

(b) Describe about creating a query dynamically, using a parameterized query and action queries giving appropriate example codes.

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PART C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. Explain any eight visual basic toolbox controls.
- 17. Design an application to display traffic lights. The red and green lights should display for 12 seconds and the yellow light should be on for 5 Seconds.
- 18. How to handle string in VB? Explain different string handling functions and methods.
- 19. Briefly discusses about the MDI forms along with their properties used in Visual Basic.
- 20. Describe the five move methods that could be used for record navigation, Explain with examples.

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Sub. Code

13063/13263

## DISTANCE EDUCATION

B.Sc. (Computer Science)/ B.Sc. (CS) (Lateral Entry) DEGREE EXAMINATION, DECEMBER 2022.

#### Sixth Semester

#### SOFTWARE ENGINEERING

(CBCS 2018 – 2019 Academic Year Onwards)

Time: Three hours Maximum: 75 marks

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. Write Short notes of Software Myths.
- 2. If you have to develop a word processing software product, what process model will you choose? Justify.
- 3. Differentiate verification and validation. Give an example.
- 4. Mention the objectives of Analysis modeling?
- 5. How does the Data Flow Diagram help in design of software system?
- 6. What is the use of User Interface prototyping?
- 7. List the steps followed in testing?
- 8. Define: Reverse Engineering.

- 9. Compare: Project Risk vs. Business Risk.
- 10. State Productivity and how cost related to function points?

PART B — 
$$(5 \times 5 = 25 \text{ marks})$$

Answer ALL questions, choosing either (a) or (b).

11. (a) State the major differences between system engineering and software engineering? Discuss.

Or

- (b) Explicate the different Models and capability Levels of CMMI.
- 12. (a) Distinguish between functional and non-functional requirements.

Or

- (b) Discuss about the cardinality and modality with suitable example.
- 13. (a) What is Structured design? Illustrate the structured design process from DFD to structured chart with a case study.

Or

- (b) (i) Explain in detail about the characteristics and criteria for a good design.
  - (ii) Describe the golden rules for interface design.
- 14. (a) Classify automated testing tools. How test cases are generated? Discuss when to stop testing? What is performance testing? Describe.

Or

(b) What are the various testing strategies to software testing?

15. (a) Summarize the Software Reviews and Formal Technical reviews.

Or

- (b) Write short notes on:
  - (i) Risk Projection
  - (ii) Risk refinement
  - (iii) Risk Mitigation
  - (iv) Risk Monitoring and Risk Management.

PART C — 
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 16. Illustrate the necessities of Life cycle model. Elaborate on the various issues of Software life cycle.
- 17. Inscribe a detailed note on scenario-based modeling.
- 18. (a) Discuss in detail about the design process in software development process.
  - (b) Justify "Design is not coding and coding is not design".
- 19. What are the various testing strategies to software testing? Discuss them briefly.
- 20. Explain in detail about the various clauses in ISO 9000 series. Analyze the internal quality system framework of ISO 9000-3.

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