Sub. Code	
11F	

B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022

First Year – First Semester

Part – I – LANGUAGE FRENCH

(Common for all UG)

(2016/2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

Answer **all** questions.

- 1. Comment allez-vous traduire en Français :
 - (a) English
 - (b) French
- 2. Comment allez-vous traduire en anglais :
 - (a) Grammaire
 - (b) Nom
- 3. Qu'est-ce que le Français?
- 4. Quelle est la différence entre l'anglais et le Français
- 5. Deux types de lettre commerciale?
- 6. Qu'est-ce quine lettre?
- 7. définir la communication?

- 8. Type de communication?
- 9. Ecrivez en Français.
 - (a) 100
 - (b) 200
- 10. Ecrivez en anglais :
 - (a) Quarante
 - (b) Cinquante

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

Answer **all** questions.

11. (a) Présentez votre famille en Français.

Ou

- (b) Parler de vois loisirs en Français.
- 12. (a) Écrire des jours dans une semaine en Français.

Ou

(b) D'ecrire votre ville natale.

13. (a) Traduire les articles indéfinis an anglais :

- (i) un garçon
- (ii) des garçons
- (iii) une fille
- (iv) un homme
- (v) une femme

Ou

 $\mathbf{2}$

- (b) Traduire les articles définis en anglais :
 - (i) Lepére
 - (ii) le Frére
 - (iii) la mére
 - (iv) l'homme
 - (v) l'oiseau
- 14. Remplir les banques avec le, la, l'et les :
 - (a) (i) ——— hommes
 - (ii) ——— oreille
 - (iii) ————femme
 - (iv) ——filles
 - (v) _____ garcon.

Ou

- (b) (i) ______ sœur
 - (ii) _____ père
 - (iii) mère
 - (iv) ——frères
 - (v) ——— horloge
- 15. Lister les signes en français :

(a) (i)
$$\cdot \rightarrow$$

(ii) ,
$$\rightarrow$$

- (iii) ; \rightarrow
- (iv) : \rightarrow
- (v) ? \rightarrow

Ou

3

(b) (i) $- \rightarrow$ (ii) $- \rightarrow$ (iii) "" \rightarrow (iv) () \rightarrow (v) ! \rightarrow

Part C (3 >

 $(3\times 10=30)$

Answer **all** questions.

16. (a) D'ecrivez l'autre fête que vous savez.

Ou

(b) D'ecrivez votre journée

17. (a) Formater une lettre de congé

Ou

- (b) rédiger une lettre d'excuse.
- 18. (a) Écrire l'alphabet en français.

Ou

(b) Écrire les nombres de 1 á 20 en Français

4

Sub. Code	
11H	

B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022

First Year – First Semester

Part I – Hindi

STORY, NOVEL, GRAMMAR AND TRANSLATION

(Common for all U.G. Degree Courses)

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

 $(10 \times 2 = 20)$

खंड – क

सभी प्रश्नों के उत्तर संक्षेप में लिखिए।

- 1. प्रेमचन्द के उपन्यासों में किन्हीं चार का नाम लिखिए।
- 2. लहनासिंह ने बोधासिंह को कैसे बचाया?
- 3. मोहनलालजी महता 'वियोगी' का संक्षिप्त परिचय दीजिए।
- 4. कौन किस के लिये क्या प्रायश्चित करता हैं?
- 5. उदयभानुलाल को किसने मार डाला और क्यों?
- 6. भुवनमोहन सिन्हा का संक्षिप्त परिचय दीजिए।
- 7. कृष्णा का संक्षिप्त परिचत दीजिए।
- 8. भालचन्द्र सिन्हा का संक्षिप्त परिचय दीजिए।

- 9. लिंग किसे कहते हैं? उनके कितने प्रकार हैं?
- 10. वचन कैसे कहते हैं? उनके कितने प्रकार है?

खंड - ख

 $(5 \times 5 = 25)$

सभी प्रश्नों के उत्तर दीजिए। उत्तर संक्षेप में हो।

11. (a) लाल बिहारी का संक्षिप्त परिचय दीजिए।

(या)

- (b) 'प्रायश्चित्त' कहानी की शीर्षक की सार्थकता पर विचार कीजिए।
- 12. (a) 'उसने कहा था' इस कहानी में कौन किससे क्या कहा था?

(या)

- (b) पाँच मिनट की मुलाकात में गोपाल ने बाबूजी से क्या कहा?
- 13. (a) तोताराम के साथ निर्मला की शादी किस हालत में हुई?

(या)

- (b) जियाराम ने आत्महत्या क्यों की?
- 14. (a) सियाराम किसके साथ भाग गया और क्यों?

(या)

- (b) कल्याणी और उदयभानुलाल के बीच में झगडा क्यों हुआ?
- 15. (a) 'कारक' किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए।

(या)

(b) संज्ञा किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए।

 $\mathbf{2}$

खंड - ग (3 × 10 = 30)

किन्हीं **तीन** प्रश्नों के उत्तर दीजिए। उत्तर विस्तार से हो।

16. (a) कहानी कला के तत्वों के आधार पर 'उसने कहा था' कहानी का सारांश लिखिए।

(या)

- (b) 'निर्मला' का चरित्र-चित्रण कीजिए।
- 17. (a) 'निर्मला' उपन्यास में चित्रित सामाजिक समस्याओं पर विचार कीजिए।

(या)

(b) सर्वनाम किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए।

18. (a) अंग्रेज़ी में अनुवाद कीजिए।

अक्सर लड़के अपने से बड़ों की नकल करते हैं। बचपन में लड़के अधिक समय माता-पिता के पास रहते हैं। इसलिए वे उनकी अच्छाइयों और बुराइयों का अनुकरण करने लगते हैं। यह मानी हुई बात है कि अच्छाई की अपेक्षा बुराई का अनुकरण लोग आसानी से करते हैं। जो बात बचपन से लड़के सीख लेते हैं, आगे चलकर वही आदत बन जाती है। इसलिए जो अपने बाल-बच्चों का चरित्र बिगाड़ना नहीं चाहते, उनको चाहिए कि वे खुद भी अच्छा आचरण करें। शिक्षा का असली उद्देश्य चरित्र का निर्माण ही है।

(या)

(b) कृष्णा का चरित्र-चित्रण कीजिए।

3

Sub. Code		
11 T		

B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022.

First Year / First Semester

Part – I

தமிழ்ச்செம்மொழியும் தமிழா்களின் பன்முகத்திறனும்

(Common for all U.G. Degree Courses)

(2016 to 2018 onwards)

Duration: 3 Hours

Maximum : 75 Marks

பகுதி அ (10×2 = 20)

அனைத்து வினாக்களுக்கும் விடையளிக்கவும்.

- 1. ஓட்டுநிலை மொழி என்றால் என்ன?
- தமிழின் செம்மொழித் தகுதிகளைச் சான்றுகளுடன் எடுத்துக் காட்டி விளக்கியவர் யார்?
- 3. செம்மொழி தகுதிபெற்றக் காப்பியங்கள் கூறுக.
- 4. தழை ஆடை என்பதென்ன?
- கழல் என்னும் அணிகலன் பண்டைகாலத்தில் இருந்தமைக்கு இலக்கியச் சான்று ஒன்று காட்டுக.
- 6. குகை காவியங்கள் பற்றிக் குறிப்புரைக்க.
- 7. களிமண் சிற்பங்கள் பற்றிக் கூறுக.
- 8. பண்டைக் காலத்தில் காணப்பட்ட வாணிபப் போக்குவரத்து முறைகள் இரண்டினைக் சுட்டுக.
- 9. மருந்துகளால் பெயர்பெற்ற இரண்டு அறநூல்கள் தருக.
- 10. விருந்தோம்பல் குறித்த வள்ளுவரின் சிந்தனை ஒன்றைத் தருக.

பகுதி ஆ (5 × 5 = 25)

அனைத்து வினாக்களுக்கும் விடை தருக.

11. (அ) இந்தியச் செம்மொழிகள் பற்றி எடுத்துரைக்க.

(அல்லது)

- (ஆ) தமிழ்ச் செம்மொழி இலக்கியங்கள் வரிசைப்படுத்தி அத்தகுதி பெற்றமைக்கானச் காரணங்களை சுருக்கி விளக்குக.
- 12. (அ) நடலாடை , பட்டாடைக் குறித்த இலக்கியப் பதிவுகளைத் தருக.

(அல்லது)

- (ஆ) ஆடைக்கும் பண்பாட்டிற்கும் உள்ள தொடர்பு குறித்து எடுத்துரைக்க.
- (அ) காப்பியங்கள் காணலாகும் அணிகலன்கள் பற்றிய பதிவுகளைத் தருக.

(அல்லது)

- (ஆ) பெண்கள் அணியும் அணிகலன்களாக இலக்கியங்கள் வழி
 அறியப்படுவனவற்றைச் சான்றுடன் தருக.
- 14. (அ) இலக்கியங்கள் வழி அறியலாகும் சிற்பக்கலை குறித்து எடுத்துரைக்க.

(அல்லது)

(ஆ) கட்டடக்கலைக்கும் காப்பியங்கள் சான்றுகளை எடுத்துரைக்க.

 $\mathbf{2}$

15. (அ) பண்டை இலக்கியங்கள் வழி அறியப்படும் மருத்துவக் குறிப்புகளைத் தருக.

(அல்லது)

(ஆ) பண்டைத் தமிழ் மக்கள் போற்றிய விருந்தோம்பலை விரித்துரைக்க.

அனைத்து வினாக்களுக்கும் விடை தருக.

16. (அ) தமிழின் சிறப்புகளையும், அதன் இலக்கிய வளமை குறித்தும் கட்டுரை வரைக.

(அல்லது)

- (ஆ) தமிழ்ச் செம்மொழி நூல்களின் தனித்தன்மைகளை விளக்கி ஆராய்க.
- 17. (அ) ஆடை வகைகளை இலக்கியச் சான்று காட்டி விரித்துரைக்க.

(அல்லது)

- (ஆ) தமிழா்களின் அணிகலன் பயன்பாடு குறித்துக் கட்டுரைக்க.
- (அ) இசைக்கலை குறித்துச் செம்மொழிச் இலக்கியக் பதிவுகள் சான்றுடன் விளக்கியுரைக்க.

(அல்லது)

(ஆ) இலக்கியங்கள் வழி அறியலாகும் பண்பாடு பழக்க வழக்கங்கள் பற்றிக் கட்டுரை வரைக.

3



Common for all U.G. B.Sc./B.B.A. DEGREE **EXAMINATION, APRIL 2022**

First Year/First Semester

English

Part II - ENGLISH PROSE AND COMMUNICATION SKILLS

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$ Answer **all** questions.

- 1. What is vocational education?
- 2. What it is it that Indira Gandhi does not demand?
- 3. What did Stevenson ride on?
- What was the boy's reaction to the punishment? 4.
- What was remarkable about Ernest Thompson Seton's 5. Wild Animals I have Known?
- 6. What are the tree visions that Sarojini Naidu talks of?
- 7. _____ my uncle yesterday. (Use correct form of He verb)
- 8. Define Noun.
- Seenu is a boy _____ poor family. (use appropriate 9. preposition)
- 10. _ you like to have tea or coffee? (Use correct auxiliaries)

Part B (5 × 5 = 25)

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

11. (a) Write a short note on how to attain Excellence I education emphasized by Livingstone.

Or

- (b) Substantiate Indira Gandhi's view that the youth are the backbone of India.
- 12. (a) What is the usefulness of forming habits?

Or

- (b) How does the teacher try to repair the damage done and with what result?
- 13. (a) What books did Margaret Atwood enjoy reading?

Or

- (b) What does Sarojini Naidu say about the vision of patriotism?
- 14. (a) Write a short note on types of sentences.

Or

- (b) Fill in the blanks using Present Perfect Continuous Tense:
 - (i) The _____ (work) all day.
 - (ii) He eyes were red because she _____ (cry).
 - (iii) She _____ (sing) upto that morning.
 - (iv) They _____ (wait) for her since 8 0' clock.
 - (v) Mani _____ (read) this book for the past three hours.

 $\mathbf{2}$

- 15. (a) Write the correct sentence pattern.
 - (i) I finished the work.
 - (ii) She worked in a reputed company.
 - (iii) Our headmaster Sideline was a lending library.
 - (iv) They made David Chairman of the Rotary Club.
 - (v) We wish you happy new year.

 \mathbf{Or}

- (b) Fill in the blanks using appropriate Prepositions:
 - (i) He came _____ the office _____ a big hurry.
 - (ii) We drove _____ the store.
 - (iii) Four armed men held _____ the bank.
 - (iv) We finally lived ______ that incident.

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

Answer **all** questions.

16. (a) What, according to Livingstone, are the essentials of education?

Or

- (b) Write an essay on personality of Indira Gandhi as revealed in her speeches.
- 17. (a) What are Gardiner's views on the desirability or otherwise of forming habits?

 \mathbf{Or}

(b) Write an essay in 500 words about the relationship between the rich student and the poor teacher.

3

18. (a) Write an essay on present tenses.

Or

(b) Fill in the blanks with correct preposition.

Nehru was called	to say a few words
the occ	easion the
assassination	Gandhi an
utter sense	_ shame, Nehru expressed
his regret	the failure out country
give prote	ction the life
this grea	t man, as well as that
many an i	innocent man, woman and
child.	

4

Sub. Code	
21F	

B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022

${\bf Second \ Year-Second \ Semester}$

Part 1 – FRENCH

(Common for all UG Degree courses)

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

Answer **all** questions.

- 1. Que savez-vous du français ?
- 2. Trouvez les réponses :
 - (a) Comment tu t'appelles ? _____
 - (b) Comment allez-vous ? ———
- 3. Dites les nombres :
 - (a) les filles dans la classe : _____
 - (b) les garçons dans la classe : _____
- 4. C'est quoi les accents ?
- 5. Quels sont les trois types d'accents ?
- 6. C'est quoi les articles ?
- 7. Types d'articles ?

- 8. Types de pronoms.
- 9. La monnaie de la France est :
- 10. Le drapeau français est :

Part B (5 × 5 = 25)

Answer **all** questions.

- 11. Donnez les mots français :
 - (a) (i) Hello:
 - (ii) Good Morning :
 - (iii) Good Evening :
 - (iv) Fine Thank You :
 - (v) How are you ?:

Ou

- (b) (i) See You Tomorrow :
 - (ii) What is Your Name :
 - (iii) Goood Afternoon :
 - (iv) Excuse Me :
 - (v) Madam :

 $\mathbf{2}$

- 12. Ecrivez les nombres suivants en chiffres :
 - (a) (i) seize :
 - (ii) dix-neuf:
 - (iii) douze :
 - (iv) neuf:
 - (v) treize :

Ou

- (b) (i) cinq :
 - (ii) quinze :
 - (iii) vingt:
 - (iv) onze :
 - (v) quatre :
- 13. Ecrivez les nombres en lettres :

(a) (i) 39-

- (ii) 46 -
- (iii) 41 -
- (iv) 64 -
- (v) 25 -

Ou

3

- (b) (i) 62 -
 - (ii) 70 -
 - (iii) 53 -
 - (iv) 48 -
 - (v) 37 -
- 14. Ecrivez le nomdes couleurs en français :

(a) (i) Black :

- (ii) White:
- (iii) Rose :
- (iv) Blue :
- (v) Grey :

Ou

- (b) (i) Green
 - (ii) Yellow
 - (iii) Violet
 - (iv) Purple
 - (v) Orange.
- 15. (a) Décrivez votre mère en 5-6 lignes.

Ou

(b) Décrivez votre famille.

4

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

Answer all questions.

- 16. Give the French Equivalent for the following countries.
 - (a) (i) England \rightarrow
 - (ii) Africa \rightarrow
 - (iii) America \rightarrow
 - (iv) China \rightarrow
 - (v) Egypt \rightarrow
 - (vi) Iran \rightarrow
 - (vii) India \rightarrow
 - (viii) France \rightarrow
 - (ix) Italy \rightarrow
 - (x) Rome

Ou

(b) (i) Dubai \rightarrow

- (ii) Muscut \rightarrow
- (iii) Norway \rightarrow
- (iv) Switzerland \rightarrow
- (v) Mascow \rightarrow
- (vi) Singapore \rightarrow
- (vii) Spain \rightarrow
- (viii) London \rightarrow
- (ix) Paris \rightarrow
- (x) Japan \rightarrow

 $\mathbf{5}$

17. (a) Ecrivez dix noms de Legumes en Français.

Ou

- (b) Ecrivez n'importe quel nom de dix fruits en Français.
- 18. (a) Presentez vous en français.

Ou

(b) Décrire une station de montagne en français.

6

Sub. Code	
21H	

U.G. DEGREE EXAMINATION, APRIL 2022

Second Year – Second Semester

Part I – Hindi

HINDI II – PROSE, GRAMMAR AND TRANSLATION – II

(Common for all UG Degree courses)

(2016/2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

सभी प्रश्नों के उत्तर संक्षेप में लिखिए।

- 1. वैज्ञानिक युग में भारत का दायित्व क्या है?
- 2. घृणा और भय में क्या सम्बन्ध है?
- 3. रजिया ने लेखक को पहली मुलाकात में क्यों प्रभावित किया?
- 4. मक्रील के वातावरण पर प्रकाश डालिए।
- 5. भ्रमण के लिए नक्शे से क्या मदद मिलती है?
- राष्ट्रपिता महात्मा गाँधी पाठ का लेखक कौन है और यह पाठ किस विधा की रचना है?
- 7. किसी विदेशी को भारत अनेक देशों का समूह क्यों प्रतीत होता है?
- 8. घृणा का समाज में क्या महत्व है?

- 9. लेखक ने रजिया को अन्तिम बार किस रूप में देखा?
- 10. 'बहता पानी निर्मला पाठ का निष्कर्ष क्या है'?

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

सभी प्रश्नों के उत्तर दीजिए।

संदर्भ सहित व्याख्या कीजिए।

 (a) हमारी सामूहिक चेतना ऐसे नैतिक आधार पर ठहरी हुई है, जो पहादों से भी मजबूत, समुद्रों से भी गहरी और आकाश से भी अधिक व्यापक है।

(या)

- (b) जिस वस्तु का जीवन में इतना मूल्य है, उसे शिथिल होने देना, अपने पाँव में कुल्हाड़ी मारना है।
- 12. (a) फिर जरा-सा रुककर बोली-सुना था, आप यहीं रहते हैं। कहाँ रहते हैं मालिक? मैं तो अकसर आया करती हूँ।

(या)

- (b) मेरे सुख को बाँटनेवाला कोई नहीं, इसलिए वह विकास न या, तीव्र दाह बन जाता है।
- 13. (a) ''जनाब, अपना बोरिया-विस्तर समेटिए और जरा चलते-फिरते नजर
 आइये''। यह आपका अपमान नहीं है।

(या)

(b) जहाँ स्नियों को वही अधिकार है जो पुरुषों को, यह मेरे स्वप्नों का भारत है।

 $\mathbf{2}$

व्याकरण :

14. (a) 'ने' विधि का प्रयोग समझाइए।

(या)

- (b) वर्तमानकाल के भेदों को उदाहरण सहित समझाइए।
- 15. (a) भूतकाल के भेदों को उदाहरण सहित समझाइए।

(या)

(b) भविष्यत्काल के भेदों को उदाहरण सहित समझाइए।

Part C

 $(3 \times 10 = 30)$

किन्हीं **तीन** प्रश्नों का उत्तर दीजिए।

उत्तर विस्तार से हो।

16. (a) 'भारतीय संस्कृति' पाठ का सारांश लिखिए।

(या)

'बहता पानी निर्मला' पाठ का सारांश लिखिए। (b)

17. (a) क्रिया विशेषण किस कहते हैं? अर्थ के अनुसार इसके कितने भेद हैं?
 उदाहरण सहित समझाइए।

(या)

(b) कारक किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए।

3

18. (a) हिन्दी में अनुवाद कीजिए।

One day Prince Siddhartha was playing in the palace-garden. He saw some wild swans flying in the sky. He loved these fine birds very much. Suddenly one of the swans dropped down form the sky and fell at his feet. there was an arrow in its side. Blood was coming out of its body. The prince felt very unhappy. He took the arrow out of the bird gently. He puts some green leaves on the wounded part.

(या)

(b) King Dasaratha had three queens, Kausalya, Kaikeyi and Sumithra. Rama was the son of the eldest queen Kausalya, Bharata was the son of Kaikeyi; while Sumitra had two sons, Lakshmana and Sathrughna. Lakshmana was devoted to Rama and was always in his company; while Sathrughna was specially devoted to Bharatha. The four brothers lived in great friendship, and the three younger brothers worshipped their eldest brother Rama.

4

Sub. Code		
21T		

Common for B.Sc./B.B.A DEGREE EXAMINATION, APRIL2022

Second Year / Second Semester

Common for all U.G. Degree Course

Part – I இலக்கணமும், படைப்பிலக்கியமும்

(2016-2018 onwards)

Duration: 3 Hours

Maximum : 75 Marks

பகுதி அ

ஓரிரு வரிகளில் விடை தருக. (10 × 2 = 20)

- 1. மெய்யெழுத்துக்களின் வகைகளைக் கூறுக.
- 2. உடம்படுமெய் என்றால் என்ன?
- மு.மேத்தா எதன்மூலம் எதையும் அடைந்துவிட முடியும் என்கிறார்?
- வைரமுத்துவின் விதைச்சோளம் கவிதையின் அடிநாதமாக விளங்குவது யாது?
- 5. அசோகமித்ரன் 'பள்ளியில் ஒரு நாய்க்குட்டி' எனச் சுட்டுவது யாது?
- 6. 'தந்தை மகனுக்கு ஆற்றும் நன்றி' என்னும் சிறுகதையின் கரு யாது?
- 7. இணைய முகவரி என்றால் என்ன?
- 8. இணைய இதழ்கள் இரண்டின் பெயர்களைச் சுட்டுக.
- 9. புதுக்கவிதை உத்திகளுள் இரண்டினைக் கூறுக.
- 10. தமிழ்ச் சிறுகதைகளின் முன்னோடி எது? அதனை எழுதியவர் யார்?

பகுதி ஆ $(5 \times 5 = 25)$

ஒரு பக்க அளவில் விடை தருக.

11. (அ) மொழி முதலெலுத்துக்களை எழுதுக.

(அல்லது)

- (ஆ) சார்பெழுத்துக்களின் வகைகளைக் கூறுக.
- 12. (அ) புத்தகசாலை நாட்டில் ஏற்படுத்தும் மாற்றங்களாகப் பாரதிதாசன் கூறுவனவற்றை விளக்குக.

(அல்லது)

- (ஆ) மீராவின் கவிதை உத்திகைள 'சாகாதவானம்' கவிதை கொண்டெழுதுக.
- (அ) புராணத்தைப் புதிய கண்ணோட்டத்தில் படைத்துக் காட்டும் புதுமைப்பித்தனின் போக்கை விளக்குக.

(அல்லது)

- (ஆ) அர்ச்சனை ரூபாய் சிறுகதையில் கு.ப.ரா. வெளிப்படுத்தும் வாழ்வியல் உண்மையை எழுதுக.
- 14. (அ) மின்னஞ்சல் முகவரி உருவாக்கும் முறை குறித்தெழுதுக.

(அல்லது)

- (ஆ) தமிழ் வளர்ச்சித் துறையின் இணையதளம் பற்றி எழுதுக.
- 15. (அ) மரபுக்கவிதை என்றால் என்ன? விளக்குக.

(அல்லது)

(ஆ) சிறுகதை வடிவம் குறித்தெழுதுக.

 $\mathbf{2}$

பகுதி இ $(3 \times 10 = 30)$

கட்டுரை வடிவில் விடை தருக.

16. (அ) மொழியிறுதி எழுத்துக்களை விவரி.

(அல்லது)

- (ஆ) வல்லினம் மிகும் இடங்களைத் தொகுத்துரைக்க.
- 17. (அ) சிறுகதையின் தோற்றமும் வளர்ச்சியும் குறித்துக் கட்டுரைக்க.

(அல்லது)

- (ஆ) மின்நூலகங்கள் தமிழ் வளர்க்கும் பாங்கை விவரி.
- (அ) "மனிதநேயம் போற்றுவோம்" என்னும் தலைப்பில் கவிதை இயற்றுக.

(அல்லது)

(ஆ) சுற்றுச்சூழலைப் பேணுதல் என்னும் கருவை மையமிட்டு சிறுகதை படைத்திடுக.

3

B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022

Second Year/Second Semester

Common for all UG Degree Courses

Part II – ENGLISH - PROSE, EXTENSIVE READING AND COMMUNICATION SKILLS

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

Answer **all** questions.

- 1. Kalam is proud of having worked with three great men. Who are they?
- 2. What kind of society did we have in the pre-war period?
- 3. What are the two ways in which science benefits man?
- 4. Why does Nehru regard Gandhi as the sun?
- 5. What experiences do students in schools and colleges have in arguing?
- 6. What was the agreement between Bob and Jimmy twenty years before, when they parted?
- 7. How did the Quick man explain it away?

- 8. What did the stranger want to know?
- 9. What are the types of adjective clause?
- 10. What is Sub-ordinate Conjunctions? Give example.

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

Answer **all** questions.

11. (a) What does Kalam say about the passivity of Indians?

Or

- (b) What are the contradictory views of Plato on the artist's role in society?
- 12. (a) How does Nehru reconciles himself with Gandhi's death?

Or

- (b) What is Lynd's conversion to socialism and nationalism?
- 13. (a) How does the true friendship reflect in *After Twenty Years*?

Or

- (b) How did the conjuror take his revenge on the Quick Man?
- 14. (a) How did the father test the skills of his sons?

Or

(b) How do Phrase help in making of Simple sentence?

 $\mathbf{2}$

15. (a) Jot down the changes/ rules while transforming the Exclamatory sentences of Direct speech into Indirect speech.

Or

(b) Write a paragraph on the 'Formation of Positive and Superlative Degrees'.

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

Answer **all** questions.

16. (a) Write an essay on Kalam's three visions.

Or

- (b) What does Holt say about ballet training? What does he deduce from it?
- 17. (a) How are the two friends contrasted?

 \mathbf{Or}

- (b) Elucidate how the conjuror's tricks and the Quick Man's deflationary comments for it.
- 18. (a) What are the kinds of Conjunctions? Explain in detail.

Or

(b) What are the Degrees of comparison? Explain with examples.

3

B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022

Third Semester

$Part \ II-ENGLISH-COMMUNICATIVE \ SKILLS$

(Common for all U.G. Degree Courses)

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

Answer **all** questions.

- 1. Mention two barriers to communication.
- 2. Give two examples for negative gestures.
- 3. What are homonyms? Give an example.
- 4. Replace the infinitives in the given sentences with gerunds:
 - (a) Bheema loves to eat.
 - (b) Sandhya's hobby is to make dolls.
- 5. Choose the right adjectives to fill in the blanks:
 - (a) There isn't milk, left in the fridge. (much/many)
 - (b) Karkuzhazhi is a <u>girl.</u> (handsome/beautiful)
- 6. Choose the right prepositions to fill in the blanks:
 - (a) The discussion was politics.(on/ about)
 - (b) Isai is junior Arun. (than/to)

- 7. What is primary stress?
- 8. What are the kinds of intonation?
- 9. What is SQ3R?
- 10. What is scanning?

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

Answer **all** questions.

11. (a) Write briefly on the ways of challenging the barriers of communication.

Or

- (b) Define communication and mention the types of communication.
- 12. (a) Distinguish between active voice and passive voice with examples.

Or

- (b) What are phrasal verbs and prepositional phrases? Give examples.
- 13. (a) Write briefly on unnecessary articles and prepositions with examples.

Or

- (b) Put the adverbs in the given sentences in the right position:
 - (i) Jenny cries without sometimes a reason.
 - (ii) Selvi comes often early to office.
 - (iii) The lark sings in the morning happily.
 - (iv) Do not forget regularly to take your medicines.
 - (v) Dr. Salim Ali lovingly spoke to his students.

 $\mathbf{2}$

14. (a) Distinguish between primary and secondary stress with examples.

Or

- (b) Use appropriate intonation symbols for the given expressions.
 - (i) Where do you live?
 - (ii) Thanks, my friend,
 - (iii) Are you happy?
 - (iv) What a beautiful picture!
 - (v) God is love.
- 15. (a) Write a paragraph on the characteristics of good handwriting.

Or

(b) Write briefly on the mechanics of hand-writing.

 $(3 \times 10 = 30)$

Answer all questions.

Part C

16. (a) Write in detail on the kinds of verbal and non-verbal communication.

Or

- (b) Frame questions to suit the following responses:
 - (i) There are twenty- nine states in India
 - (ii) May is the hottest month in our country.
 - (iii) I would like to have some coffee.
 - (iv) Raji is my friend.
 - (v) Kodai is my favourite tourist location.
 - (vi) My mother is a doctor.
 - (vii) This chair costs Rs. 500.

3

- (viii) Rithika works in a dance school.
- (ix) Ameer's father is a famous poet.
- (x) The Quran is the holy book of the Muslims.
- 17. (a) Identify the sentences as simple, compound and complex:
 - (i) I believe that God exists.
 - (ii) Seeing the snake, Ravi shouted.
 - (iii) Tell me the truth and you won't be punished.
 - (iv) He worked, while I sang.
 - (v) When Shree came in, Gautam was playing the piano.
 - (vi) Pravin and Valli are working on a new project.
 - (vii) The bird cannot fly unless it has wings.
 - (viii) Rahul loves dancing, therefore he has joined a dance school.
 - (ix) Nikil hates garlic, but his mother forces him to eat it.
 - (x) Being slim and agile, Krishil climbs the mango tree easily.

Or

- (b) How are nouns, verbs, adjectives and adverbs often confused? Explain in detail and give examples.
- 18. (a) Write an essay on 'the importance of reading'.

Or

(b) Write in detail on vowel and consonant sounds.

4

COMMON FOR ALL U.G. DEGREE COURSES B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022

Fourth Semester

EMPLOYABILITY SKILLS

(2016 to 2018)

Duration: 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

Answer all questions.

- 1. What is meant by telephone etiquettes?
- 2. What are the different types of interview?
- 3. Mention few techniques for formal letter writing.
- 4. What are the key elements for writing resume?
- 5. Why do we great people / others?
- 6. What is meant by review writing?
- 7. What are the different types of composition?
- 8. How do we develope our creative competency?
- 9. What is meant by non-verbal communication?
- 10. How does personal appearance help non verbal communication?

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

Answer **all** questions.

11. (a) What are the different ways to express our opinions?

 \mathbf{Or}

- (b) Write a short note on techniques of interview.
- 12. (a) Describe the steps to be followed while filling a bank challan.

 \mathbf{Or}

- (b) What are the steps to be followed to write a resume?
- 13. (a) What are the different types of greetings? Write short note on it.

Or

- (b) Write a short note on developing topic sentences into paragraph.
- 14. (a) Write a paragraph on controlled composition.

Or

- (b) Write a note on different steps to develope creative competency.
- 15. (a) Write a short note on different types of non-verbal communication.

Or

(b) What are the uses of visual aids?

 $\mathbf{2}$
Part C $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Describe in detail on interview skills and its techniques.

Or

- (b) Write a letter to your father about your health issues at the hostel
- 17. (a) Write a short note on the following
 - (i) Note-making.
 - (ii) Note-taking.

 \mathbf{Or}

(b) Prepare a report of your annual project.

18. (a) Write an essay on different kinds of composition.

Or

(b) Write an essay on merits and demerits of visual aids.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

First Semester

Computer Science

PROGRAMMING IN C

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is the difference between '=' and '==' operator? Give an example.
- 2. What is type casting?
- 3. Write a C program code segment using break statement.
- 4. Define the term Dynamic Array.
- 5. Write a C program to receive a string from user and display it on the screen.
- 6. What is a use of 'return' Keyword?
- 7. How to declare structure variable?
- 8. What is Union?
- 9. What is the job of pre-processor directives?
- 10. List out any two functions related to dynamic memory allocation.

Part B (5 ×

 $(5 \times 5 = 25)$

Answer **all** questions.

- 11. (a) Write short notes on:
 - (i) Keywords
 - (ii) Identifiers

Or

- (b) Discuss on constants and expressions in C.
- 12. (a) Explain two dimensional arrays with suitable examples.

Or

- (b) Explain the following looping statements with suitable example:
 - (i) while
 - (ii) for
- 13. (a) What is a string? How is string declared and initialized?

Or

- (b) Write a C program to perform basic arithmetic operations using functions.
- 14. (a) What is pointer? What are the uses of pointers in C? Or
 - (b) Write a C program to read five numbers and store them in an array using pointers. Print their sum and average.
- 15. (a) What are different types of file operation in C? Illustrate with examples.

Or

(b) Discuss on command line arguments.

 $\mathbf{2}$

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

Answer **all** questions.

16. (a) Explain the various data types available in C.

Or

- (b) Elaborate on formatted input and output operations giving examples.
- 17. (a) Explain about the various decision making statements in 'C' language.

 \mathbf{Or}

- (b) How to pass arrays to function? Explain with suitable example.
- 18. (a) Discuss on arrays of structures.

Or

(b) How to handle an error during I/O operations? Explain with examples.

3

Sub. Code								
96415								

B.Sc. DEGREE EXAMINATION, APRIL 2022

First Semester

Computer Science

ALGEBRA AND CALCULUS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

Answer all questions.

- 1. If α and β are the roots of the equation $x^2 4x + 2 = 0$, find the value of $\alpha^2 + \beta^2$.
- 2. Form an equation whose roots are cubes of the roots of equation $ax^3 + bx^2 + cx + d = 0$.
- 3. If 2 and 3 are the eigen values of $A = \begin{bmatrix} 3 & 10 & 5 \\ -2 & -3 & -4 \\ 3 & 5 & 7 \end{bmatrix}$, find

the eigen values of A^{-1} and A^{3} .

- 4. State Cayley Hamilton's theorem.
- 5. What are the methods of integration?
- 6. Define definite integral.
- 7. Define partial derivatives of f(x, y).

- 8. When a function f(x, y) is said to be maximum?
- 9. Solve $D^2 9 = 0$.
- 10. Define variable separable.

Part B (5 × 5 = 25)

Answer all questions.

11. (a) If the roots of the equation $x^3 + px^2 + qx + r = 0$ are in arithmetic progression, Show that $2p^3 - 9pq + 27r = 0$.

Or

- (b) Solve the equation $x^4 5x^3 + 4x + 8x 8 = 0$. Given that one the roots is $1 \sqrt{5}$.
- 12. (a) Find the Eigen values and Eigen vectors of the matrix $A = \begin{pmatrix} 4 & 1 \\ 3 & 2 \end{pmatrix}$.

Or

- (b) Solve the following system of equations if consistent x+y+z=3; x+y-z=1; 3x+3y-5z=1.
- 13. (a) If $u = \sin^{-1}(x y)$, x = 3t, $y = 4t^3$, Show that $\frac{dy}{dt} = \frac{3}{\sqrt{1 t^2}}$.

Or

 $\mathbf{2}$

(b) If
$$Z = u^2 + v^2$$
, $x = u^2 - v^2$, $y = uv$ find $\frac{\partial z}{\partial x}$.

14. (a) Evaluate the integral $\int 2x^3 \sqrt{x^2+1} \, dx$.

(b) Evaluate
$$\int_{1/4}^{1/2} \frac{\cos(\pi t)}{\sin^2(\pi t)} dt$$
.

15. (a) Solve
$$(D^2 + 5D + 4)y = e^{-x} \sin 2x$$
.

Or

(b) Solve $(D^4 - 1)y = \cos 2x \cos hx$.

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

Answer **all** questions.

16. (a) Solve the equation
$$6x^5 - x^4 - 43x^2 + x - 6 = 0$$
.

Or

(b) If one of the roots of the equation $x^3 + px^2 + qx + r = 0$ is equal to the sum of the other two roots, then prove that $p^3 + 8r = 4 pq$.

17. (a) Verify the Cayley Hamilton theorem for the matrix $A = \begin{bmatrix} 1 & 3 & 7 \\ 4 & 2 & 3 \end{bmatrix}.$

$$\mathbf{I} = \begin{bmatrix} 4 & 2 & 3 \\ 1 & 2 & 1 \end{bmatrix}.$$

Or

(b) Determine the rank of the matrix

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 1 & 4 & 2 \\ 2 & 6 & 5 \end{bmatrix}.$$

3

18. (a) Find the Half range cosine series for the function $f(x) = x^2$ in $(0, \pi)$.

Or

(b) Find the first and second partial derivatives of $Z = x^3 + y^3 - 3axy$.

4

B.Sc. DEGREE EXAMINATION, APRIL 2022

Second Semester

Computer Science

PROGRAMMING IN C++

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is the difference between break and continue statements?
- 2. Write the rules for naming identifier.
- 3. Write the general form of a class definition.
- 4. How the objects are initialized dynamically?
- 5. List any two uses of keyword virtual.
- 6. What is manipulator? Differentiate between manipulators and ios Function?
- 7. List some predefined streams.
- 8. Write statements to open and close a file.
- 9. What are the advantages of using Template?
- 10. What is meant by Uncaught Exception?

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

Answer **all** questions.

11. (a) With examples, explain in detail about different data types.

Or

- (b) Write a C++ program to find the sum of individual digits of a five digit number.
- 12. (a) Write a C++ program to calculate sum of distances in two objects and display the results using friend function.

 \mathbf{Or}

- (b) What are static data members? How they are used in static function? Explain with suitable illustrations.
- 13. (a) Explain multiple and hierarchical inheritances with suitable example.

Or

- (b) Discuss on unformatted I/O operations.
- 14. (a) Explain the file pointers and file manipulators.

Or

- (b) Write a program which uses command line argument to copy the contents of a file *A.txt* into another file *B.txt* by reversing case of the characters. *E.g. File A.txt: aBCd File B.txt: AbcD*.
- 15. (a) Explain catch all exception and multiple catch exception with example.

Or

(b) Explain in detail about function template with multiple arguments.

 $\mathbf{2}$

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

Answer all questions.

16. (a) Describe the format and its functionality with an example about looping statements in C++.

Or

- (b) Write short notes on :
 - (i) Arrays of Objects
 - (ii) Objects as function arguments.
- 17. (a) Explain various types of constructor with example for each.

Or

- (b) Discuss the following with suitable example :
 - (i) Pointers to objects
 - (ii) Pure virtual function.
- 18. (a) Explain various file mode parameters in C++. Write a program to copy the contents of a source file student1.txt to a destination file student2.txt character by character.

 \mathbf{Or}

(b) What is the purpose of using template in C++? Explain template function and template class with examples.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Second Semester

Computer Science

NUMERICAL ANALYSIS AND STATISTICS

(2016 onwards)

Duration: 3 Hours

Maximum : 75 Marks

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

- 1. When does Newton-Raphson formula converge?.
- 2. Find $\nabla^4 y_4$.
- 3. Write Simpson's $\frac{1}{3}$ rule.
- 4. What is complete pivoting?
- 5. Give the Taylor's series of f(x) at $x = x_0$.
- 6. State Milne's predictor Corrector formulae for the solution of the problem y' = f(x, y), $y(x_0) = y_0$.

- 7. Show that the A.M. of the first n natural numbers is $\frac{1}{2}(n+1)$.
- 8. Find the median of the heights in c.m. of eleven students given by 66, 65, 64, 70, 61, 60, 56, 63, 60, 67, 62.
- 9. A random variable X has the probability function $p(x) = \frac{1}{2}x$; x = 1, 2, 3... find its mean.
- 10. State whether the following probability distribution are admissible or not

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

Answer all questions.

11. (a) Find a real root of the equation $x^3 = 1 - x^2$ on the interval [0, 1] with an accuracy of 10^{-4} .

Or

(b) Find the missing term in the following table :

Explain why the result differ from $3^3 = 27$.

 $\mathbf{2}$

12.From the following table of values of x and y(a) obtain $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$ for x = 1.2: 1.41.21.62.02.21.01.8х $3.3201 \quad 4.0552$ 4.9530 6.0496 2.71837.3891y 9.0250

Or

- (b) Use Gauss elimination with partial pivoting to solve the system $2x_1 + x_2 - x_3 = 1$; $x_1 - 2x_2 + 3x_3 = 9$; $3x_1 - x_2 + 5x_3 = 14$.
- 13. (a) Given the differential equation $\frac{dy}{dx} = x + y$ with y(0) = 0 computes y(0.2) and y(0.4) by Euler's method.

Or

- (b) Use Runge-Kutta fourth order formula to find y(1.2) given $\frac{dy}{dx} = \frac{3x + y}{x + 2y}$, y(1) = 1.
- 14. (a) From the following data calculate the percentage of workers getting wages.
 - (i) More than Rs. 44
 - (ii) Between Rs. 22 and Rs. 58

 Wages in Rs.
 0-10 10-20 20-30 30-40 40-50 50-60 60-70 70-80

 No. of workers : 20
 45
 85
 160
 70
 55
 35
 30

Or

3

- (b) If x = 4y + 5 and y = kx + 4 are the regression lines of x on y and y on x respectively (i) show that $0 \le k \le \frac{1}{4}$ (ii) If $k = \frac{1}{8}$ find the mean of x and y and correlation coefficient between them.
- 15. (a) Six dice are thrown 729 times. How many times do you expect at least 3 dice to show a five or six?

Or

(b) Assuming that one in births is a case of twins calculated the probability of 2 or more births of twins on a days when 30 birth occur using (i) binomial distribution (ii) Poisson approximation.

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

Answer all questions.

16. (a) Find the Lagrange interpolating polynomial of degree 2 approximating the function $y = \log_e x$ defined by the following table of values hence determine the value of log 2.7.

(b) Evaluate $\int_{0}^{1} \frac{1}{1+x} dx$ by Simpson's $\frac{1}{3}$ -rule, Simpson's $\frac{3}{8}$ -rule and trapezoidal rule with $h = \frac{1}{6}$.

17. (a) Using Taylor's series, find y(0.1), y(0.2) and y(0.3)

given that
$$\frac{dy}{dx} = xy + y^2$$
, $y(0) = 1$.

Or

(b) The following data relate to the ages of husband and wives.

Age of husband	26	29	31	33	35	34	38	39	41	45
Age of wife	22	26	27	31	29	19	29	36	35	46

Obtain the regression equations and determine

- (i) the most likely age of husband for age of wife 30 years
- (ii) the most likely age of wife for age of husband 32 years.
- 18. (a) In two sets of variables x and y with 50 observation each of the following data were observed. $\bar{x} = 10$; $\bar{y} = 6$; $\sigma_x = 3$; $\sigma_y = 2$; $\gamma = 0.3$. But on subsequent verification it was found that one value of x = 10and y = 6 were found in accurate and hence weeded out. With the remaining 49 pairs of values how is the original value of γ affected?

Or

 $\mathbf{5}$

- (b) If X is normally distributed with mean 8 and S.D 4 find
 - (i) $P(5 \le X \le 10)$
 - (ii) $P(10 \le X \le 15)$
 - (iii) $P(X \ge 15)$
 - (iv) $P(X \le 5)$
 - (v) $P(|x-5| \le 15)$

6

B.Sc. DEGREE EXAMINATION, APRIL 2022

Third Semester

Computer Science

DIGITAL COMPUTER FUNDAMENTALS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is the decimal equivalent of 10111_2 ?
- 2. Define Excess 3 code.
- 3. What is SOP and POS?
- 4. Reduce $\overline{A} \overline{B} \overline{C} + \overline{A} \overline{B} \overline{C} + \overline{A} BC$.
- 5. Define Clock.
- 6. List the types of flipflop.
- 7. What is register?
- 8. Write the logic equation of a binary half adder.
- 9. What is 1's complement of number?
- 10. What is Overflow and underflow?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write short note on Number System.

Or

- (b) Convert the following:
 - (i) 111011.1011_2 to decimal
 - (ii) AB to binary.
- 12. (a) Write the basic laws of Boolean Algebra.

Or

- (b) Convert the given expression in canonical SOP form Y = AC + AB + BC.
- 13. (a) With a neat sketch explain decoder.

 \mathbf{Or}

- (b) What is Counter? Explain BCD counter.
- 14. (a) Draw and explain full adder circuit.

Or

- (b) Discuss on parallel binary adders.
- 15. (a) Perform $28_{10} 15_{10}$ using 6 bit 2's complement representation.

Or

 $\mathbf{2}$

(b) Write about IEEE floating point single precision and double precision standard.

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

Answer **all** questions.

16. (a) With example, explain addition and substraction in binary number system.

Or

- (b) How will you simplify Boolean expression using K-Map? Explain with example.
- 17. (a) Explain about Quine-Mckluskey method.

Or

- (b) With block diagram explain Multiplexer.
- 18. (a) Discuss in detail on the construction of ALU.

Or

(b) What are Error detection codes? Explain.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Third Semester

Computer Science

JAVA PROGRAMMING

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. Write down the structure of a Java program.
- 2. Define the term: polymorphism.
- 3. Write the syntax of for loop.
- 4. What is the use of left shift (<<) operator?
- 5. What is a constructor'?
- 6. What is the difference between equals and compare to methods
- 7. Mention any three system packages.
- 8. Write the use of finally keyword?
- 9. What are the main attributes of applet tag?
- 10. How to draw a rectangle in Java?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss about the features of Java.

Or

- (b) How to compile and run a Java program? Explain the steps.
- 12. (a) Write a Java program to find the biggest of three numbers.

Or

- (b) Discuss about arithmetic operators with an example program.
- 13. (a) Describe method overloading with an example.

Or

- (b) Write short notes on wrapper classes in Java.
- 14. (a) Explain the usage of packages with an example program.

Or

- (b) Describe the life cycle of a thread and its states.
- 15. (a) What are the methods in applet's life cycle? Explain them.

Or

(b) How to color a string in applet? Explain.

 $\mathbf{2}$

Part C (3 × 10 = 30)

Answer **all** questions.

- 16. (a) (i) Explain any five mathematical functions in Java.
 - (ii) Write a Java program to find the factorial of a given number.

Or

- (b) Explain briefly about the usage of switch statement with an example.
- 17. (a) Explain how to do multilevel inheritance in Java with an example.

Or

- (b) Write in detail about interfaces in Java.
- 18. (a) How to create a custom exception? Discuss.

Or

- (b) With illustrations, write in detail about the following graphical methods :
 - (i) drawLine
 - (ii) drawArc
 - (iii) drawOval
 - (iv) drawRoundRect.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Third Semester

Computer Science

DATA STRUCTURES AND ALGORITHMS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. List out the various types of linear data structure.
- 2. Define the term merging.
- 3. What is meant by a circular queue?
- 4. Write postfix form of the expression -A + B C + D?
- 5. Define complete binary tree.
- 6. Define collision resolution.
- 7. What is the worst case complexity of Quick sort?
- 8. What do you mean by divide and conquer?
- 9. Define the term algorithm.
- 10. What is Asymptotic Notation?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write a short notes on traversal of a list.

Or

- (b) Briefly explain about predecessor andd successor.
- 12. (a) Brief on various representations of queues.

 \mathbf{Or}

- (b) Explain in detail about singly linked list.
- 13. (a) Write a recursive algorithm to traverse a binary tree. Give illustration.

Or

- (b) Define the term Binary search tree. Write algorithm to implement Insertion and Deletion operation in binary search tree.
- 14. (a) Explain merge sort algorithm giving illustrations.

Or

- (b) Explain in detail about binary search with suitable example.
- 15. (a) Write short notes on Big oh notation.

Or

(b) Discuss on Omega notation.

 $\mathbf{2}$

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) How to insert and delete a node in List? Explain with algorithm and example.

Or

- (b) Describe the various representations of stack.
- 17. (a) Explain in detail about queue and operations on it with an example.

 \mathbf{Or}

- (b) Write an algorithm for initializing the hash table and insertion in a separate chaining.
- 18. (a) Explain bubble sort with an example.

Or

- (b) Write short notes on:
 - (i) Theta notation
 - (ii) Little oh notations.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Third Semester

Computer Science

$\textbf{Allied}: \textbf{APPLIED} \ \textbf{PHYSICS} - \textbf{I}$

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is mean by equipotential surface?
- 2. Mention few fundamentals of electrostatics.
- 3. What is magnetostatics?
- 4. Define magnetic flux density.
- 5. What is Kirchoff's law?
- 6. Write a note on solenoid.
- 7. What is mean by eddy current?
- 8. Mention about mutual inductance.
- 9. Write a note on impedance.
- 10. What is wattless current?

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

Answer **all** questions.

11. (a) What is capacitor? Discuss about the energy of a charged capacitor.

Or

- (b) Write a note on electrostatic potential.
- 12. (a) Discuss about the relation between potential and intensity.

Or

- (b) Sketch out the relation between permeability and susceptibility.
- 13. (a) Explain the conversion of galvanometer into an ammeter and voltmeter.

Or

- (b) Explain the application of Wheatstone's bridge.
- 14. (a) How to find the self inductance? Explain.

Or

- (b) Explain the laws of electromagnetic induction.
- 15. (a) Deduce the power factor derivation.

Or

(b) Write a note on A/C circuits with single components.

 $\mathbf{2}$

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

Answer **all** questions.

16. (a) Describe the Gauss theorem and its application.

Or

- (b) Explain the finding of coercivity, retentivity and energy loss from hysteresis loop.
- 17. (a) Explain in detail the Carey Foster's bridge with neat diagram.

Or

- (b) Write a note on :
 - (i) Ballistic galvanometer
 - (ii) Fleming's right hand rule.
- (a) Give a detailed note on coefficient of coupling and transformer theory.

Or

(b) Explain the choke series and parallel resonance circuits.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fourth Semester

Computer Science

DATABASE MANAGEMENT SYSTEMS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is data model? List a few data models that you know.
- 2. What is weak entity? Give an example.
- 3. Define Atomic domain.
- 4. State the anomalies for 1NF.
- 5. What is meant by distributed database?
- 6. Define 3 tier client server architecture.
- 7. Write the syntax for creating sequence in ascending order.
- 8. List the types of single level ordered indexes.
- 9. What is PL/SQL?
- 10. List the ACID properties of transaction.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the basic architecture of a database management system with neat diagram.

Or

- (b) Briefly discuss the history of database systems.
- 12. (a) Define decomposition and explain its types with neat example.

Or

- (b) Define RDD and explain its stages.
- 13. (a) Discuss the goals of parallel database with neat sketch.

Or

- (b) Differentiate between homogeneous and heterogeneous database.
- 14. (a) Give detailed notes on data integrity and explain its types briefly.

Or

- (b) Define privilege and explain its types.
- 15. (a) Describe the architecture of PL/SQL with the neat diagram.

Or

(b) Write the syntax for how to creating the trigger with detailed example.

 $\mathbf{2}$

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

Answer **all** questions.

16. (a) Construct on ER model for student administration system. Students who apply for a course for registered in the system. Short listed candidates call for interview and their marks are recorded. Selected candidates are admitted.

Or

- (b) What is database architecture? Explain the three levels of architecture.
- 17. (a) Briefly discuss about the parallel database.

Or

- (b) Explain the third normal form and boycee code normal form with example.
- 18. (a) Give detailed notes on distributed database with the necessary diagram.

 \mathbf{Or}

(b) Illustrate the principles of deadlock avoidance and recovery in database transaction.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fourth Semester

Computer Science

VISUAL BASIC

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. How will you start visual basic?
- 2. Define the term Variable and write the syntax to declare it.
- 3. What is MDI environment?
- 4. What is the purpose of menu separator?
- 5. State the use of check box.
- 6. Write the property of command button that hides it.
- 7. Name any two data controls that connect to an external database.
- 8. How do you enter Data in a database?
- 9. State the differences between Standard and ActiveX controls.
- 10. How to auto size an OLE Control?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain about Select case statement with example.

Or

- (b) Write short notes on Subroutine and Procedures.
- 12. (a) Illustrate the use of Message box and Input box?

 \mathbf{Or}

- (b) What is Popup menu? How it is created?
- 13. (a) Give an account on Shape control.

Or

- (b) Give an account on Picture box and image box controls.
- 14. (a) Explain the method of connecting to data in a database Using controls.

Or

(b) Write short notes on DAO and ADO.

15. (a) Describe the process of testing an ActiveX control in VB.

Or

(b) How to insert an OLE object into an OLE control at runtime?

 $\mathbf{2}$

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about Arrays in VB.

Or

- (b) Explain the steps to create a menu and add menu items in a windows program.
- 17. (a) Write a VB program to Create and execute a visual basic project using basic controls.

 \mathbf{Or}

- (b) What do you mean by visual data manager? How do you enter the data using visual data manager? Explain the steps.
- 18. (a) Explain the detailed steps to create, link and embed an OLE object at design time.

Or

(b) Write a procedure in VB to call a function that prints the factors of the given number.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fourth Semester

Computer Science

APPLIED PHYSICS – II (Allied)

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is meant by semi conductor?
- 2. Define Extrinsic Semiconductor.
- 3. Draw the circuit of a transistor in CE configuration.
- 4. Establish the relation $\mu = g_m V_d$ in FET.
- 5. What is the difference between laser and maser?
- 6. Define population inversion.
- 7. What is emission spectra?
- 8. Give the uses of photo diode.
- 9. What are the applications of an op-amp?
- 10. What is meant by CMRR?
Answer **all** questions choosing either (a) or (b).

11. (a) Explain intrinsic semiconductor with a neat electron hole diagram.

Or

- (b) What is a tunnel diode? Explain its working.
- 12. (a) Describe the circuit arrangement for obtaining the output Characteristics of CB transistor.

 \mathbf{Or}

- (b) What is an N-channel FET? Explain.
- 13. (a) Discuss the basic concepts of stimulated emission.

 \mathbf{Or}

- (b) Define maser. Explain the working of ammonia maser.
- 14. (a) Write a note on various materials for LED.

 \mathbf{Or}

- (b) Explain the working of a seven segment display.
- 15. (a) Derive an expression for the voltage gain of an inverting amplifier.

Or

(b) Discuss the operation of an op-amp as a Differentiator.

 $\mathbf{2}$

Answer all questions

16. (a) Draw the equivalent circuit of an ideal zener in the break down region and explain how zener diode maintains constant voltage across the load.

Or

- (b) With a neat circuit diagram explain how the Characteristics of a FET can be studied.
- 17. (a) With a neat diagram explain the principle and working of a He-Ne laser. Give its advantages.

 \mathbf{Or}

- (b) Describe the construction, working and uses of a photo transistor.
- 18. (a) Explain the basic uses of operational amplifier as a sign and scale changer, phase shift integrator with a neat circuit diagram.

Or

(b) Discuss the principle construction and working of LCD.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fifth Semester

Computer Science

WEB TECHNOLOGY

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is the meaning of mark-up language?
- 2. What is the use of tags in HTML?
- 3. What is the difference between scripting and common programming?
- 4. What are the benefits of java script?
- 5. What is the purpose of control structures?
- 6. What are called operators in java script?
- 7. Define the term Identifier.
- 8. Define the term Class and Object.
- 9. What is called a data type?
- 10. Define the term function.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain some of the basic formatting and alignment tags used in HTML with examples.

Or

- (b) How we can insert an Image in HTML? How can we apply font style and color? Explain.
- 12. (a) Elaborate on the advantages of java script over other scripting languages.

Or

- (b) Explain the concept of memory hierarchy.
- 13. (a) Enunciate on Java script operators and its types.

Or

- (b) Describe the types of control structures in Java script.
- 14. (a) Briefly explain about recursion with an example.

Or

- (b) Explain about java script global functions.
- 15. (a) Elucidate the difference between VB script and Java script.

Or

(b) Give a brief account on string manipulation.

 $\mathbf{2}$

Answer **all** questions.

16. (a) Explain in detail about HTML ordered and unordered list with an example program.

Or

- (b) Describe in detail about HTML tables and table design.
- 17. (a) Elaborate on java script arrays and passing arrays to functions.

 \mathbf{Or}

- (b) Detail on java script user defined functions with suitable examples.
- 18. (a) Describe input box and message box in VB script.

Or

(b) Explain in detail about operator precedence with an example.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fifth Semester

Computer Science

OPERATING SYSTEMS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is the prime advantage of dynamic partitioning?
- 2. What is segmentation in operating system?
- 3. What is CPU scheduling?
- 4. Which is the best process scheduling algorithm?
- 5. What do you mean by parallel processing?
- 6. What is typical multiprocessor configuration?
- 7. What is the role of the file manager in Operating system?
- 8. What is file management in operating system?
- 9. Who invented UNIX operating system?
- 10. What are the three main objectives of an operating system design?

Answer **all** questions.

11. (a) Write short notes on the evolution of operating system.

Or

- (b) Discuss briefly about page replacement concepts and policies.
- 12. (a) List out the differences between job and CPU scheduling.

Or

- (b) Write short notes on priority scheduling.
- 13. (a) What is process synchronization? Discuss about its types.

Or

- (b) Write a brief note on concurrent programming in operating system.
- 14. (a) Discuss briefly about the process of interacting with the file manager.

Or

- (b) Explain briefly about lossy data compression in operating system.
- 15. (a) Elaborate on swapping in UNIX with a neat structure.

Or

(b) What is user interface in Unix? Discuss about its types.

 $\mathbf{2}$

Answer all questions .

16. (a) What is called an operating system? Discuss in detail about its types.

 \mathbf{Or}

- (b) Elaborate on variable partitioning concepts in operating system with a neat diagram.
- 17. (a) What is called a process scheduler? Explain in detail about its types.

 \mathbf{Or}

- (b) With a neat structure, explain in detail about the components of I/O subsystem.
- 18. (a) What is access verification? Discuss in detail about its topology and models.

Or

(b) What is memory management in UNIX? Explain in detail about various processes involved in it.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fifth Semester

Computer Science

SOFTWARE ENGINEERING

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. Mention any two important general skills of a good software engineer.
- 2. List the Project Size Categories.
- 3. What is the use of process specification?
- 4. What is the goal of requirements management?
- 5. List any two design principles.
- 6. What are Transition Tables?
- 7. What is meant by Unit Testing?
- 8. What is acceptance testing?
- 9. When software review is carried out?
- 10. What are the components of SQA plan?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss the factors to consider in project planning.

Or

- (b) Write Short Notes on: Programming Team Structure.
- 12. (a) Explain briefly on : Software Cost Factors.

 \mathbf{Or}

- (b) Explain the components of Software Requirement specification.
- 13. (a) Discuss any Four Fundamental Software Design Techniques.

 \mathbf{Or}

- (b) Explain the guidelines for coding.
- 14. (a) Differentiate between testing and debugging.

Or

- (b) Write short notes on source code metrics.
- 15. (a) Write short notes on software reviews.

Or

(b) Explain the concept of statistical quality assurance.

 $\mathbf{2}$

Answer **all** questions.

16. (a) Describe the factors that influence Quality and Productivity of a Software Product.

Or

- (b) Explain the cost estimation procedure using WORK BREAK DOWN structure.
- 17. (a) Explain modules and modularization criteria for a software design.

Or

- (b) Explain the structured coding techniques.
- 18. (a) Explain the various software testing strategies.

 \mathbf{Or}

(b) Discuss about ISO 9000 quality standards.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fifth Semester

Computer Science

MULTIMEDIA AND ITS APPLICATIONS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What do you mean by data stream?
- 2. What are the five elements of multimedia?
- 3. What are the basics of sound?
- 4. How MIDI is used in multimedia project?
- 5. What makes up a video signal?
- 6. Is television multimedia system? Justify.
- 7. What are the types of data compression?
- 8. Expand the term JPEG.
- 9. What is Graphics in multimedia?
- 10. What is meant by editing in multimedia?

Answer **all** questions.

11. (a) Discuss in brief about the characteristics of data streams.

Or

- (b) List out the information units in multimedia.
- 12. (a) Write short notes on uncompressed audio format.

\mathbf{Or}

- (b) Write short notes on image formats in multimedia.
- 13. (a) List out various video file formats in multimedia.

\mathbf{Or}

- (b) How animation can be used in multimedia? Explain.
- 14. (a) List out the characteristics of JPEG format.

\mathbf{Or}

- (b) Bring out the difference between MPEG 2 and MPEG 4.
- 15. (a) Discuss briefly about the components of multimedia.

\mathbf{Or}

(b) Write short notes on animation editors in multimedia.

2

Answer **all** questions.

16. (a) Elaborate on the classification of authoring tools in multimedia.

Or

- (b) Discuss in detail about the characteristics of data stream for continuous media based on time intervals.
- 17. (a) With a neat structure, discuss in detail about the types of MIDI devices.

 \mathbf{Or}

- (b) What is video encoding? Discuss about it in detail.
- 18. (a) What is multimedia authoring tool? Elaborate on its types.

Or

(b) "Tele Services and Multimedia" – Discuss.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fifth Semester

Computer Science

TRENDS IN COMPUTING

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. List the Various applications of Grid Computing.
- 2. Define Data Grids.
- 3. What are the Components of the Cloud Computing?
- 4. List down various Software as a Service.
- 5. What is the purpose of Cloud based Data Storage?
- 6. What are the tools available in Cloud for Web Services?
- 7. Define the term Artificial Neural Network.
- 8. What are Supervised and Unsupervised Functions?
- 9. Define the term Mutation.
- 10. What do you mean by Evolutionary Algorithm?

Answer **all** questions.

11. (a) Describe the Pros and Cons of Resource Sharing in Grid Computing paradigm.

Or

- (b) Discuss on the basic concepts and application areas of Grid Computing.
- 12. (a) List out various Cloud Types with neat illustration.

Or

- (b) Analyze in brief the Identity as a Service available in the Cloud Computing.
- 13. (a) Describe in detail about Disaster Recovery in Cloud Computing with suitable illustration.

 \mathbf{Or}

- (b) Elucidate the Web services available in the Cloud Computing paradigm.
- 14. (a) Write short notes on the job of Artificial Neural Networks.

Or

(b) Compare and contrast: Soft Computing Vs Hard Computing.

 $\mathbf{2}$

15. (a) Describe briefly about the Genetic Algorithm Operators.

Or

(b) Describe the Way of Crossover operation in Evolutionary Algorithm.

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

Answer all questions.

16. (a) With neat sketch, explain in detail about Grid Layered Architecture.

Or

- (b) How the Cloud Computing is used as 'Infrastructure as a Service'? Explain in detail.
- 17. (a) With diagram, describe in detail about Service Oriented Architecture in Cloud Computing.

Or

- (b) Illustrate the training of Artificial neural Network and explain the procedure.
- 18. (a) Compare and Contrast: Traditional Algorithm vs the Genetic Algorithm.

Or

(b) Describe various selection operators in evolutionary computing.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Sixth Semester

Computer Science

C# .NET PROGRAMMING

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

- 1. Why C# is called as type-safe language?
- 2. What is managed code?
- 3. What is meant by event?
- 4. What is unboxing?
- 5. Name different forms of if statement.
- 6. What is fall-through in switch statement?
- 7. Define the term versioning.
- 8. What do you mean by unsafe code?
- 9. List out the steps to create and use a delegate.
- 10. Differentiate between Write() and Writeline() methods.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Bring out the origins of .NET technology.

Or

- (b) With simple program, Explain about multiple main methods.
- 12. (a) Explain parameter-less constructor with examples.

Or

- (b) What is event? How to declare the delegate in C#? Explain briefly.
- 13. (a) Write a C# program to display the following output:

1

22

333

4444

55555.

Or

- (b) Discuss the use of try, catch and finally key words in C#.
- 14. (a) Write short notes on setting breakpoints.

 \mathbf{Or}

(b) Explain briefly about intermediate language disassembler.

 $\mathbf{2}$

15. (a) Discuss multicast delegates with simple program.

Or

(b) Write short notes on Thread synchronization.

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

Answer **all** questions.

16. (a) Explain in detail about .NET framework.

Or

- (b) Explain how data types are classified in C#. Give declarations for each type.
- 17. (a) With simple C# program, explain decision making and looping statements.

Or

- (b) Explain in detail about Platform invocation services.
- 18. (a) Write a C# program to find the Factorial of the given number using windows application.

Or

(b) Write a C# program to store and read data from a file.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Sixth Semester

Computer Science

COMPUTER GRAPHICS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

- 1. Define the term Point.
- 2. What is meant by vector generation?
- 3. What do you mean by text primitive?
- 4. What is meant by display control?
- 5. Write the matrix for 2 D translation transformation.
- 6. What is meant by display file?
- 7. Differentiate between viewing and clipping.
- 8. What is meant by arbitrary line?
- 9. Name any two input devices in graphics.
- 10. What is meant by Event?

Answer **all** the questions.

11. (a) Explain about antialiasing of lines.

Or

- (b) How frame buffer is displayed? Explain.
- 12. (a) Bring out the display primitives.

Or

- (b) Describe the structure of display file.
- 13. (a) Illustrate scaling transformation with examples.

Or

- (b) Illustrate rotation transformation with examples.
- 14. (a) Describe the term viewing transformation.

 \mathbf{Or}

- (b) How polygons are clipped? Explain briefly with the help of a diagram.
- 15. (a) Write short notes on sampled devices.

Or

(b) 'Simulating a Locator" – Discuss.

 $\mathbf{2}$

Answer **all** questions.

16. (a) Explain the methods that represent and handle lines.

Or

- (b) Explain the methods that represent and handle Polygons.
- 17. (a) Explain composite transformations and matrices for them.

Or

- (b) Explain in detail about segment related operations in graphics.
- 18. (a) Explain in detail about event handling in graphics.

Or

(b) Describe interactive techniques.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Sixth Semester

Computer Science

COMPUTER NETWORKS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

- 1. Expand the term ISDN and ATM.
- 2. List the transmission media.
- 3. Name error correction codes.
- 4. Expand and write a note on the term HDLC.
- 5. What is meant by IP?
- 6. What is LAN?
- 7. Expand the terms ICMP and RATP.
- 8. What is meant by multicasting?
- 9. What is DNS?
- 10. What are the multimedia elements in web?

Part B (5 × 5 = 25)

Answer **all** the questions.

11. (a) Write short notes on network standardization.

Or

- (b) Brief on the ISDN and ATM.
- 12. (a) Brief on Petri Net models.

 \mathbf{Or}

(b) Brief on ALOHA.

13. (a) Write short notes on Service categories in Network Layer.

Or

- (b) Describe IP subnets.
- 14. (a) What is Crash Recovery? Explain briefly.

 \mathbf{Or}

- (b) Brief on the functions of UDP.
- 15. (a) Differentiate between client and server side workload in network.

Or

(b) What is SNMP? Explain briefly.

 $\mathbf{2}$

Part C

 $(3 \times 10 = 30)$

Answer **all** the questions.

16. (a) Describe the telephone system.

Or

- (b) Explain the role of communication satellites.
- 17. (a) Describe the functions of Data Link Layer.

Or

- (b) Explain the functions of Network Layer.
- 18. (a) Explain the functions of Transport Layer.

Or

(b) Write and explain the secret key security algorithm.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Sixth Semester

Computer Science

MOBILE COMMUNICATION

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

- 1. List the types of Antenna.
- 2. What is Signal?
- 3. Expand the terms DECT and UMTS.
- 4. Define the term Handover.
- 5. What is meant by Radio Transmission?
- 6. What is LAN standard?
- 7. What is meant by Bluetooth?
- 8. Expand the term TCP and write a note on its use.
- 9. What is meant by timeout freezing?
- 10. What is the job of mobile transport layer?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss briefly on Signal Propagation.

Or

- (b) Give a brief account on the term Modulation.
- 12. (a) Explain briefly about SDMA.

Or

- (b) What is Digital Video Broadcasting?
- 13. (a) What is wireless ATM? Explain briefly.

Or

- (b) Write short notes on Location Management in WATM.
- 14. (a) Write short notes on AD HOC network.

 \mathbf{Or}

- (b) Brief on traditional TCP.
- 15. (a) Discuss on the capabilities of HTTP.

Or

(b) Brief on File systems consistency.

 $\mathbf{2}$

Part C

 $(3 \times 10 = 30)$

Answer **all** questions.

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

Or

- (b) Explain in detail about FDMA.
- 17. (a) Explain in detail about HIPERLAN.

 \mathbf{Or}

- (b) Discuss on Access Point Control Protocol.
- 18. (a) Describe indirect TCP.

Or

(b) Detail on wireless access approaches.

3

B.Sc. DEGREE EXAMINATION, APRIL 2022

Sixth Semester

Computer Science

DATA MINING AND DATA WAREHOUSING

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

 $(10 \times 2 = 20)$

Part A

- 1. List the major processes in data ware house.
- 2. What is Load process in data warehouse?
- 3. What is meant by testing a data warehouse?
- 4. What is capacity planning in data warehouse?
- 5. List the issues in Data Mining.
- 6. What are data mining metrics?
- 7. What is fuzzy set?
- 8. What is meant by Association Rule?
- 9. What is OLAP?
- 10. What is the role of neural network in data mining?

Answer **all** questions.

11. (a) Describe backup and archive process.

Or

- (b) Brief on clean and transform operations in data warehouse.
- 12. (a) "Tuning the query in data warehouse" Discuss.

Or

- (b) What is the job of warehouse manager?
- 13. (a) How data mining is done with database perspective? Explain briefly.

Or

- (b) Bring out the metrics in data mining.
- 14. (a) Write short notes on Information Retrieval.

Or

- (b) Brief on Decision Support System.
- 15. (a) Write and explain any basic algorithm for association rule mining.

Or

(b) Describe dimensional model.

 $\mathbf{2}$

Answer **all** questions.

16. (a) Describe the functions of various managers in data warehouse.

Or

- (b) Explain in detail about data warehouse delivery method.
- 17. (a) Describe the steps in data mining.

 \mathbf{Or}

- (b) How genetic algorithms are used in data mining? Explain.
- 18. (a) Explain how parallel algorithms are employed in data mining.

Or

(b) Explain how distributed algorithms are employed in data mining.

3

Sub. Code 17/18/19/24/25 /26/27/28

Common for all UG B.Sc./B.B.A DEGREE EXAMINATION, APRIL 2022

First Year/ Second Semester

ENVIRONMENTAL STUDIES

(2016 onwards)

Duration: 3 Hours

Maximum : 75 Marks

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

- 1. Define Nature.
- 2. Name any two non renewable energy resources.
- 3. What is conflicts?
- 4. Define overgrazing.
- 5. Write a note on sustainable life style.
- 6. What is Mega Diversity?
- 7. Define Hot spot.
- 8. What is Eutrophication'?
- 9. Make a note on noise pollution.
- 10. What is pollution?

Answer **all** questions.

11. (a) Give an account on the importance of environmental studies.

Or

- (b) How do you make public awareness on environmental issues? Explain.
- 12. (a) Write about the future problems upon over utilization of ground water.

 \mathbf{Or}

- (b) How the modern agriculture practices affects the quality of food resources? Explain.
- 13. (a) Give a detailed account on the problems in using fertilizer and pesticides on environment.

Or

- (b) Write a note on the concepts of ecosystem.
- 14. (a) Explain the energy flow in a forest ecosystem.

 \mathbf{Or}

- (b) Briefly explain the value of Biodiversity.
- 15. (a) What are the major threats to the Biodiversity? Explain.

Or

(b) How do you document an environmental issue during the field visit? Explain.

 $\mathbf{2}$

Answer **all** questions.

16. (a) Give an account on utilization of renewable and non renewable energy resources.

Or

- (b) Discuss on the use of alternate energy resources for the future of the nation.
- 17. (a) Describe the in-situ and ex-situ method of Conservation of biodiversity.

Or

- (b) Give a detailed account on the status of Biodiversity at National and Global levels.
- 18. (a) Explain the control measures of Water pollution.

Or

(b) Write in detail about hazards of radiation raised from Nuclear wastes.

3