Sub. Code	
11F	

COMMON FOR ALL U.G. DEGREE COURSES EXAMINATION, NOVEMBER 2022

First Year — First Semester

Part I - FRENCH

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

Answer **all** questions.

- 1. La capitale de la France C'est (Berlin/Paris)
- 2. Pour saluer le matin (Bonfour/Merci)
- 3. Pour Lundi en englose ——— (Tuesday/Monday)
- 4. Nous ——— (I/we)
- 5. Name two monuments in France ?
- 6. Why is Paris is known as "VILLE LUMIERE"?
- 7. What is the currency of France ?
- 8. Why is the flag of France called "Tricolore"?
- 9. Why is France referred to as the "Hexagone"?
- 10. Ecrivez les nombres en lettres :
 - (a) 100 ———
 - (b) 200 ———

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Ecrivez les jours de la remanie.

OU

- (b) Ecrivez les mois de l'annee.
- 12. (a) Conjuguez le verbe "etre".

OU

- (b) Conjuguez le verbe "avoir".
- 13. (a) Conjuguez le verbe "Rester".

OU

- (b) Conjuguez le verbe "S"appler.
- 14. (a) Lister deractio en français.

OU

- (b) Liste hors saison en français.
- 15. (a) Enumerer Cinq Legumes en français.

OU

(b) Enumerer Cinq fruits en français.

Part C

 $(3 \times 10 = 30)$

Answer **all** questions.

- 16. Ecrivez les nombres
 - (a) 1 to 25

OU

(b) 25×50

 $\mathbf{2}$

17. (a) Decrit un paya "france".

OU

- (b) Ecrivez dix couleurs en française.
- 18. (a) Presente toi en minimum 03 paragraphe.

OU

(b) Decrivez votre jeu préféré au minimum 03 paragraphe.

3

Sub. Code	
11H	

U.G. DEGREE EXAMINATION, NOVEMBER 2022

First Year/First Semester

Part I – Hindi

STORY, NOVEL, GRAMMAR AND TRANSLATION – I

(Common for all U.G. Degree Courses/First Semester)

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

सभी प्रश्नों के उत्तर संक्षेप में लिखिए।

- 1. आनन्दी ने लालबिहारी की क्या शिकायत की थी?
- 2. रामू की माँ ने क्यों पंडितजी के पैर पकड़े?
- 3. लहनासिंह ने नकली लपटन को कैसे पहचाना?
- 4. मोहनलालजी महतो 'वियोगी' का संक्षिप्त परिचय दीजिए।
- 5. उदयभानुलाल और कल्याणी के बीच झगड़ा क्यों हुआ?
- 6. निर्मला से रुक्मणि का व्यवहार कैसा था?
- 7. नयनसुखराम ने तोताराम को क्या सलाह दिया?
- 8. कृष्णा की शादी किससे हुई ? और क्यों?

9. लिंग बदलिए।

(a)	मालिक	(b)	कवि
(c)	ठाकुर	(d)	विधवा

10. वचन बदलिए

- (a)
 लड़की
 (b)
 आँख
- (c) जू (d) माला

Part B

 $(5 \times 5 = 25)$

सभी प्रश्नों के उत्तर दीजिए।

11. (a) बेनिमाधव सिंह से श्रीकंठ का व्यवहार कैसा था?

या

- (b) मिसरानी का चरित्र-चित्रण कीजिए।
- 12. (a) 'उसने कहा था' इस कहानी में किसने किससे क्या कहा था?

या

- (b) 'पाँच मिनट' कहानी का संदेश क्या है?
- 13. (a) मंसाराम की मृत्यु का जिम्मेदार कौन हैं? स्पष्ट कीजिए।

या

- (b) भुवनमोहन सिन्हा ने क्यों आत्महत्या कर लिया?
- 14. (a) सियाराम साधू के जाल में कैसे फँस गया?

या

(b) रंगीलीबाई का चरित्र-चित्रण कीजिए।

 $\mathbf{2}$

15. (a) सर्वनाम किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए।

या

(b) पुल्लिंग से स्त्रीलिंग बनान्ने के नियमों को उदाहरण सहित समझाइए।

Part C (3 × 10 = 30)

सभी प्रश्नों के उत्तर विस्तार से लिखिए।

16. (a) प्रायश्चित कहानी का सारांश लिखकर विशेषताएँ बताइए।

या

- (b) निर्मला का चरित्र-चित्रण कीजिए।
- 17. (a) संज्ञा किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए।

या

- (b) विशेषण की परिभाषा देकर उसके भेदों को सोदाहरण समझाइए।
- 18. (a) पाँच मिनट कहानी का सारांश लिखिए।

या

(b) अंग्रेजी में अनुवाद कीजिए।

वही समाज श्रेष्ठ है और वही राष्ट्र सुखी है जिसकी जनता का चरित्र अच्छा हो। आज के बालक कल के नागरिक हैं। इसलिए उनके चरित्र का निर्माण करना समाज और राष्ट्र का पहला कर्तव्य है।

3

मैं पिताजी की बहुत इज्ज़त करता था। मैं उन्हें बल, साहस और होशियारी की मूर्ति समझता था और दूसरों के मुकाबले में उन्हें बहुत ही ऊँचा और बढ़ा–चढ़ा पाता था।

कौए के संबन्ध में एक रोचक कथा है। कहते है, एक बार वह कोयल का बाना धारण करके चारों ओर लोगों की आँखों में धूल झोंकता फिरा। कई मास ऐसे ही बीते। जब वसंत आया, तो असली कोयल ने तो पंचम स्वर में गाना आरंभ कर दिया, पर कोयल चुप रहा।

4

Sub. Code	
11T	

U.G. DEGREE EXAMINATION, NOVEMBER 2022.

First Year / First Semester

Tamil – Part-I

தமிழ்ச் செம்மொழியும் தமிழா்களின் பன்முகத்திறனும்

(Common for all UG Degree courses)

(2016 to 2018 onwards)

Duration : 3 Hours Maximum : 75 Marks

பகுதி அ $(10 \times 2 = 20)$

அனைத்து வினாக்களுக்கும் விடையளிக்கவும்.

- 1. தனிநிலைமொழி என்றால் என்ன?
- தமிழைச் செம்மொழி என்று முதலில் கூறிய வெளிநாட்டு அறிஞர் யார்?
- 3. செம்மொழி நூல்களில் உள்ள இலக்கணநூல்களைக் கூறுக.
- 4. வண்ண ஆடை என்பதென்ன?
- குழந்தைகளின் அணிகலன்களைக் குறிப்பிடும் இலக்கியச்சான்று ஒன்று காட்டுக.
- தமிழ் இலக்கியங்கள் காட்டும் இசைக்கருவிகள் இரண்டினைச் சுட்டுக.
- 7. நடுகல் குறிப்பு வரைக.
- நாள், கோள் பற்றிய நம்பிக்கைகள் பண்டைக் காலத்தில் இருந்தமைக்குச் சான்று ஒன்று காட்டுக.

- 9. உடற்பயிற்சி பற்றிக் கூறும் அறநூலைச் சுட்டுக.
- 10. புல்லரிசி என்பதென்ன?

பகுதி ஆ $(5 \times 5 = 25)$

அனைத்து வினாக்களுக்கும் விடை தருக.

11. (அ) மொழிக்குடும்பங்கள் பற்றி எடுத்துரைக்க.

(அல்லது)

- (ஆ) செம்மொழிக்களைத் தகுதிகளை விரித்துரைக்க.
- 12. (அ) ஒற்றை ஆடை, இரட்டை ஆடை, என்பதென்ன? சான்றுடன் விளக்குக.

(அல்லது)

- (ஆ) காலத்திற்கு ஏற்ற உடை என்பது குறித்து எடுத்துரைக்க.
- (அ) சங்க இலக்கியங்கள் வழி அறியப்படும் அணிகலன்களுக்குச் சான்று காட்டி விரித்துரைக்க.

(அல்லது)

- (ஆ) ஆண்கள் அணியும் அணிகலன்களாக இலக்கியங்கள் குறிப்பிடுவற்றைச் சான்றுடன் எடுத்துரைக்க.
- (அ) ஓவியக்கலை பண்டைக்காலத்தில் சிறப்புற்றிருந்தமைக்கு இலக்கியச் சான்று காட்டுக.

(அல்லது)

- (ஆ) சிலம்பில் மாதவி ஆடும் ஆடல்களை விரித்துரைக்க.
- 15. (அ) செம்மொழி இலக்கியங்களில் காணலாகும் அறிவியல் சிந்தனைகள் எடுத்துரைக்க.

(அல்லது)

(ஆ) இலக்கியங்கள்வழி அறியலாகும் நீர்மேலாண்மை குறித்து எடுத்துரைக்க.

 $\mathbf{2}$

பகுதி இ $(3 \times 10 = 30)$

அனைத்து வினாக்களுக்கும் விடை தருக.

16. (அ) தமிழன் தொன்மை குறித்துக் கட்டுரைக்க.

(அல்லது)

- (ஆ) சங்க இலக்கியங்கள் செம்மொழித் தகுதி பெற்றிருப்பதனைச் சான்றுடன் றிறுவுக.
- 17. (அ) பண்பாட்டைப் போற்றுவதில் செம்மொழி இலக்கியங்கள் பெறும் இடம்குறித்துக் கட்டுரை வரைக.

(அல்லது)

- (ஆ) இலக்கியங்களில் ஆடைகள் கட்டுரை வரைக.
- (அ) அணிகலன்கள் பற்றிய பழந்தமிழ் இலக்கியப் பதிவுகளைச் சான்றுடன் விளக்கி வரைக.

(அல்லது)

(ஆ) நடனக்கலை சிறப்புற்றிருந்தமைக்குச் சிலப்பதிகாரம் சான்றாதலை விளக்கியுரைக்க.

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, NOVEMBER 2022.

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

Part I – 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. Comment vas-tu?
- 2. Ça fait longtemps, comment vas-tu?
- 3. Comment t'appelles-tu?
- 4. Je m'appelle Peter. Comment t'appelles-tu?
- 5. Quel est ton numéro de téléphone?
- 6. J'aimeraist'appeler. Quelest ton numéro de téléphone ?
- 7. Quel âge as-tu?
- 8. Tudoisavoir 21 ans pour rentrerici. Quelâge as-tu ?
- 9. D'où venez-vous?
- 10. Voussemblezêtrebritannique. D'oùvenez-vous?

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) enumerer 05 legumes en francais.

Ou

- (b) Lister 05 fruits en francais.
- 12. (a) Ecrire la saison en francais.

Ou

- (b) Ecrire les instruction en francais.
- 13. Ecrire les noms de pays en francais :
 - (a) (i) India
 - (ii) Japan
 - (iii) China
 - (iv) Italy
 - (v) Rome.

Ou

- (b) (i) Denmark
 - (ii) London
 - (iii) Australia
 - (iv) Europe
 - (v) Sweden.
- 14. Ecrire des nombres en francais :
 - (a) (i) 100
 - (ii) 200
 - (iii) 300
 - (iv) 400
 - (v) 500.

Ou

 $\mathbf{2}$

- (b) (i) 50
 - (ii) 65
 - (iii) 70
 - (iv) 80
 - (v) 90.
- 15. (a) Ecrire les membres de la famille en français.

Ou

- (b) Ecrire les joursd'unesemaine en francais.
 - **Part C** $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Ecrire des alphabets en francais.

Ou

- (b) Ecrire les mois de l'annee en francais.
- 17. (a) Ecrivez les nombres de 1 a 25 en français.

Ou

- (b) Ecrivez les nombres de 25 a 50 en français.
- 18. (a) Presentetoi en francais.

Ou

(b) Expliquervotrevillenatale en francais.

3

Sub. Code	
21H	

U.G. DEGREE EXAMINATION, NOVEMBER 2022

Second Year/Second Semester

Part I – Hindi – II

HINDI II — PROSE, GRAMMAR AND TRANSLATION – II

(Common for all U.G. Degree Courses)

(2016 to 2018 onwards)

Duration: 3 Hours

Maximum : 75 Marks

Part A

 $(10 \times 2 = 20)$

सभी प्रश्नों के उत्तर संक्षेप में लिखिए।

- 1. वह कौन-सी वस्तु है जो विभिन्नता में एकता बनाये हुए हैं?
- 2. घृणा और भय में क्या सम्बन्ध है?
- 3. लेखक ने रजिया को अंतिम बार किस रूप में देखा?
- 4. 'मक्रील' कहानी की भाषा पर प्रकाश डालिए।
- 5. 'बहता पानी निर्मला' पाठ का निष्कर्ष क्या है?
- 6. गाँधीजी के प्रधान सिद्धांत क्या है?
- 7. यात्रा के कौन-कौन तरीके हैं? वे क्या है?
- 8. भारत के सम्बन्ध में गाँधीजी की कल्पना क्या थी?

- 9. चुड़िहारिन के पेशे में क्या विशेषतायें होनी चाहिए?
- 10. घृणा किस प्रकार की मनोवृत्ति है और यह किसके लिए सिरजी गयी है?

Part B सभी प्रश्नों के उत्तर लिखिए। संदर्भ सहित व्याख्या कीजिए।

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

या

- (b) कौन नहीं जानता कि वही विष, जो प्राणों का नाश कर सकता है, प्राणों का संकट भी दूर कर सकता है।
- 12. (a) और गोरे चेहरे तो मिले हैं, किंतु इनकी आँखों में जो एक अजीब किस्म का नीलापन दिखा, वह कहाँ?

या

- (b) समीप खड़ी एक युवती को देख, भद्रता से टोपी छूते हुए उसने पूछा, 'आप भी इसी होटल में ठहरी हैं'।
- 13. (a) 'जनाब, अपना बोरिया-बिस्तर समेटिका और ज़रा चलते-फिरते नज़र आइये' यह आप का अपमान नहीं है।

या

- (b) वे झोपडियों में रहते, नंगे पैर चलते, एक धोती-भर पहनते।
 व्याकरण
- 14. (a) अपूर्ण क्रिया से क्या मतलब है? उदाहरण दीजिए।

या

(b) काल की दृष्टि से क्रिया के भेदों को उदाहरण सहित स्पष्ट कीजिए।

 $\mathbf{2}$

C-7022

 $(5 \times 5 = 25)$

15. (a) 'ने' विधि का प्रयोग समझाइए।

या

(b) संभाव्य भविष्यत् काल किन अर्थों में प्रयुक्त होता है?

Part C

 $(3 \times 10 = 30)$

सभी प्रश्नों के उत्तर दीजिए। उत्तर विस्तार से हो।

16. (a) 'जीवन में घृणा का स्थान' पाठ का सारांश लिखिए।

या

- (b) 'राष्ट्रपिता महात्मा गाँधी' पाठ का सारांश लिखिए।
- 17. (a) 'क्रिया विशेषण' किसे कहते हौं? अर्थ के अनुसार इसके कितने भेद हैं? उदाहरण सहित समझाइए।

या

- (b) 'कारक' किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए।
- 18. हिन्दी में अनुवाद कीजिए।
 - (a) Many people say that the climate of England and that of Kodaikanal are almost the same. You do not have as much heat at Kodaikanal, as you have at Ooty during the day-time. The temperature at night is also not so cold as at Ooty. The natural scenery of Kodaikanal is just like that of England. But on account of better travel facilities more people go to Ooty. Hence there is more calm at Kodaikanal than at Ooty.

या

3

(b) Everyone has a right to have enough good food to eat, if he earns it by his work. Here the state has a great responsibility. It must try to find food for all the people, to be sold at prices which they can afford to pay. The Government should, therefore, try to improve food production by helping the farmers in many ways.

4

UG DEGREE EXAMINATION, NOVEMBER 2022

Second Year / Second Semester

Part I – இலக்கணமும் படைப்பிலக்கியமும்

Tamil

Common for all UG Degree Course

(2016 to 2018 onwards)

Duration: 3 Hours

Maximum : 75 Marks

பகுதி அ

 $(10 \times 2 = 20)$

அனைத்து வினாக்களுக்கு விடையளி.

- 1. முதலெழுத்துக்கள் என்பவை எவை?
- 2. மொழியிறுதி எழுத்துக்கள் யாவை?
- 3. புதுக்கவிதையின் இலக்கணம் பற்றி வரைக.
- 4. மீராவின் கவிதைத் திறன் குறித்துரைக்க.
- 5. தமிழ்ச் சிறுகதைத் தோற்றம் குறித்து எழுதுக.
- 6. அசோகமித்ரனின் சிறுகதைப் பாங்கு யாது?
- 7. 'வலைப்பூ' விளக்குக.
- 8. கவிதையின் அமைப்பு பற்றி எழுதுக.
- 9. இணையமும் தமிழும் குறிப்பு வரைக.
- 10. படைப்பில் கற்பனை பெறும் இடம் யாது?

பகுதி ஆ

 $(5 \times 5 = 25)$

அனைத்து வினாக்களுக்கு விடையளி.

11. (அ) சார்பெழுத்துக்களின் வகைகளை விவரி.

(அல்லது)

- (ஆ) வல்லினம் மிகா இடங்களைக் காட்டுக.
- 12. (அ) மு. மேத்தா வைகறை கவிதையில் உரைப்பனவற்றைத் தருக.

(அல்லது)

- (ஆ) வைரமுத்துவின் கவிதைச் சிறப்பினைத் தருக.
- 13. (அ) சாபவிமோசனம் கதைக் கருவை விவரி.

(அல்லது)

- (ஆ) பரிசு கதையில் காணப்படும் சமூக உணர்வுகளைத் தெளிவுபடுத்துக.
- 14. (அ) மின் நூலகம் குறிப்பு வரைக.

(அல்லது)

- (ஆ) இணையமும் தமிழ் வளர்ச்சித் துறையும் பற்றி விளக்குக.
- 15. (அ) இன்றைய சிறுகதைகளின் நிலை யாது?

(அல்லது)

(ஆ) இணைய வளர்ச்சி குறித்து ஆய்க.

 $\mathbf{2}$

பகுதி இ

 $(3 \times 10 = 30)$

அனைத்து வினாக்களுக்கு விடையளி.

16. (அ) உடம்படுமெய் பற்றி விவரிக்க.

(அல்லது)

- (ஆ) மொழிமுதல் எழுத்துக்களைச் சான்றுடன் விளக்குக.
- 17. (அ) சிறுகதை வளர்ச்சி குறித்து மதிப்படுக.

(அல்லது)

- (ஆ) புதுக்கவிதையின் தோற்றமும் வளர்ச்சியும் பற்றி ஆய்க.
- 18. (அ) மின்னஞ்சல் என்பதனை விளக்குக.

(அல்லது)

(ஆ) 'மூத்தோர் சொல்' எனும் தலைப்பில் சிறுகதை படைக்க.

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

COMMON FOR ALL U.G. DEGREE COURSES EXAMINATION, NOVEMBER 2022

Third Semester/Third Year

Part II - ENGLISH

COMMUNICATIVE SKILLS

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

Answer **all** questions.

- 1. What is meant by non-verbal communication?
- 2. How do you manage noise situation on your presentation?
- 3. Frame Question for the following sentences.
 - (a) I would like to become an investigating agent.
 - (b) He had worked here for the past ten years.
- 4. Define Homophones.
- 5. Give two example for wrong position of adverb.
- 6. What is the main use of interjections?
- 7. What are called consonants?
- 8. What is meant by rising intonation?
- 9. What are the benefits of skimming?
- 10. Mention any two mechanics of good handwriting.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write a paragraph on non-verbal communication.

Or

- (b) What are the ways of challenging the barriers of communication?
- 12. (a) Write a short note on homophones with examples.

\mathbf{Or}

- (b) Change the following active sentences into passive voice.
 - (i) I did not beat her.
 - (ii) I will never forget this experience.
 - (iii) Mother made a cake yesterday.
 - (iv) The tiger was chasing the deer.
 - (v) She has written a novel.
- 13. (a) Write a note on wrong position of adverbs.

Or

- (b) Write in short on some confused use of adjectives.
- 14. (a) Write a note on primary stress with proper examples.

Or

(b) Describe the general use of intonation.

 $\mathbf{2}$

15. (a) What are the uses of silent reading?

Or

(b) What is the role of SQ3R in communication?

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Discuss in detail on effective ways of communication.

 \mathbf{Or}

- (b) Write an essay on barriers to communication and effective ways to overcome the barriers.
- 17. (a) Write briefly on the following :
 - (i) Phrasal verbs
 - (ii) Conditional clause.

Or

- (b) Write an essay on common confusions of parts of speech.
- 18. (a) Write an essay on the types of reading and developing reading strategies.

 \mathbf{Or}

(b) Explain briefly on mechanics of good handwriting.

3

U.G. DEGREE EXAMINATION, NOVEMBER 2022

Fourth Semester

Part II — English

EMPLOYABILITY SKILLS

(Common for all UG Degree Courses)

(2016 to 2018 onwards)

Duration: 3 Hours

Maximum : 75 Marks

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

Answer **all** following questions.

- 1. How do you introduce a person in a public meeting?
- 2. What is meant by head to foot appearance?
- 3. Why do we write letters?
- 4. What are the basic elements for writing job application?
- 5. What are the different types of greetings?
- 6. Define portfolio.
- 7. What is meant by oral composition?
- 8. What are the three main parts of a composition?
- 9. Define kinesics.
- 10. What are the technical elements for using video aids for communication?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in short on telephonic etiquettes.

Or

- (b) Describe in short on head to foot appearance.
- 12. (a) What are the important aspects on resume writing?

Or

- (b) Write a letter to the editor about your street road's poor condition.
- 13. (a) Write in short on merits of e-mail.

Or

- (b) Write in short on developing topic sentences into paragraph.
- 14. (a) Write briefly on written composition.

Or

- (b) Write a paragraph on 'e-waste'.
- 15. (a) Write in short on gesture.

Or

(b) Describe in short on the uses of visual aids.

 $\mathbf{2}$

Part C (3 × 10 = 30)

Answer all questions.

16. (a) Write an essay on interview techniques and head to foot appearance while attending interview.

Or

- (b) Write a letter to the manager for the post of sales officer along with your resume.
- 17. (a) Write an essay on preparing portfolios and its various types.

Or

- (b) Write a review for two books that you recently read.
- 18. (a) Read the passage below and then answer the following questions.

One day, my father talked to his phone for a long time his airtime got used up before he could end his talk. He was conversing with his workmate, Mr. Obadiya. He decided to send me to buy more airtime.

Using My bicycle, I rode as fast as a horse. I returned within ten minutes with airtime. When I reached home, I found my father busy listening to the news on radio. He was so attentive that he did not want any disturbance. He therefore, gave me the mobile phone to load the airtime for him.

I was excited because I was going to do so for the first time. I got the airtime card and scratched it. Since I did not know what to do after scratching, I opened the phone. Then I took it to my father thinking I had done the right thing.

3

My father immediately tried to call his friend. He dialed repeatedly but the call could not go through. "Have you loaded the airtime"? he asked me. I responded happily that I had loaded it. As he removed the battery, the airtime card dropped on the floor. "Oh my son! you did not know how to load airtime !" he laughed. I was disappointed that I did not load airtime for my father. He realized that I was sad. He held me in his arms and said, "don't worry my son. Let's do it together". Then he loaded as I was watching. I was very happy to learn how to load airtime.

Questions for composition :

- (i) What happened to the airtime of the father?
- (ii) Why did the writer go to the shop?
- (iii) When the writer brought airtime, what was his father doing?
- (iv) Why was the writer excited?
- (v) Why did the writer get disappointed?

Or

(b) Write an essay on different types of visual aids.

4



U.G. DEGREE EXAMINATION, NOVEMBER 2022

First Year / First Semester

Part II – English

PROSE AND COMMUNICATION SKILLS

(Common for All U.G. Degree Courses)

(2016 to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

 $(10 \times 2 = 20)$

Part A

Answer **all** questions.

- 1. Who is compared to the man who stumbles through his lessons?
- 2. What are the leadership quality according to Indira Gandhi?
- 3. Life is a ———
- 4. What is the main theme of the story "Crime and Punishment"?
- 5. Name the book which is about recipes as mentioned by Atwood?
- 6. What is the duty of each community in the view point of Sarojini Naidu?
- 7. Define Simple Present Tense.

- 8. Fill in the blanks with correct adjectives :
 - (a) Elephant is the —— animal.
 - (b) She is a ——— lady.
- 9. Define definite article.
- 10. Fill in the blanks using correct modals :
 - (a) _____ I go?
 - (b) He ——— follow the rules.

Part B

 $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) Write a short note on quality education leads to attain excellence.

Or

- (b) Why does Indira Gandhi insist that youth are the backbone of India?
- 12. (a) Why was Balfour organized when he had to make a speech?

Or

- (b) Describe the relationship between the student and the teacher.
- 13. (a) Why did Atwood prefer animal stories?

 \mathbf{Or}

- (b) What does Sarojini Naidu say about the vision of patriotism?
- 14. (a) Explain the uses of simple past and past continuous Tense with examples.

Or

(b) What is Noun? What are the types of Nouns? Explain.

 $\mathbf{2}$
- 15. (a) Identify the pattern of the following sentences :
 - (i) I was working in my father's company.
 - (ii) Quality education is a must one.
 - (iii) He bought many books about the country.
 - (iv) The men have worked for five hours.
 - (v) I will meet you there in a moment.

Or

- (b) Fill in the blanks with the correct article :
 - (i) I saw tiger.
 - (ii) This is purse she presented me.
 - (iii) The function was quite ——— success.
 - (iv) ——— family sits for lunch.
 - (v) This car runs at sixty kilometers hour.
 - **Part C** $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) What are Livingstone's views on education?

Or

- (b) Write an essay on "On the Power of Youth".
- 17. (a) What are Gardiner's views on desirability or otherwise of forming habits?

Or

(b) What is the moral of the story "Crime and punishment? Elucidate.

3

- 18. (a) Fill in the blanks with correct adverbs from the box: (usually, never, once, always, often, mostly, very, sometimes, occasionally, rarely)
 - (i) I —— go to bed at 10 O' clock.
 - (ii) I have —— been to the USA.
 - (iii) I have been to Australia Just ——
 - (iv) I ——— take a bath before I go to bed.
 - (v) My grand-parents live in Kerala. I visit them
 - (vi) My friends are non-smokers.
 - (vii) I was impressed with her.
 - (viii) I ——— go for a walk in the park.
 - (ix) I watch English films —
 - (x) They go out.

Or

- (b) Fill in the blanks with appropriate prepositions :
 - (i) The old man sat ——— the chair.
 - (ii) He jumped ——— the wall.
 - (iii) He has been singing here 8 O' clock.
 - (iv) He earned more —— his sister.
 - (v) He ran ——— the room.
 - (vi) He is walking ——— the road.
 - (vii) The pries knelt the altar as the bride stood by him.
 - (viii) ——— sweets the corporation building there is a hotel.
 - (ix) He spoke ——— the independence of India.
 - (x) The wholesaler gives commission 25%.

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B.Sc. DEGREE EXAMINATION, NOVEMBER 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 scanf() and gets() functions?
- 2. Write statements to swap the values of two variables.
- 3. Write the differences between while and do...while statements in C.
- 4. Write code segment to print odd numbers from 1 to 10 using for loop.
- 5. Distinguish between call by value call by reference.
- 6. Write a program to convert the characters in a string to uppercase.
- 7. What is a Pointer? Write an example pointer declarion.
- 8. Write a structure definition for student data.
- 9. What is meant by random access file?
- 10. What are pre-processor directives?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) What are variables? List the rules for naming a variable.

Or

- (b) Explain the precedence of arithmetic operators.
- 12. (a) Explain the following with an example.
 - (i) switch
 - (ii) break
 - (iii) continue.

Or

- (b) Write a C program that reads a character and displays only the vowels using switch case structure.
- 13. (a) What is recursion? Write a 'C' program to compute factorial of given number using recursion.

Or

- (b) How strings are stored in array? Explain with an example.
- 14. (a) Define and explain the term Union in comparison with structure.

Or

(b) Explain briefly about passing of pointers to the functions.

 $\mathbf{2}$

15. (a) Write short notes on:

- (i) malloc()
- (ii) calloc
- (iii) realloc()

Or

(b) Discuss on file inclusion.

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

Answer **all** questions.

16. (a) Discuss about various data types in 'C'.

Or

- (b) Explain about various decision making statements in 'C'.
- 17. (a) Define the term array and its types. Write a program using multidimensional array.

Or

- (b) What are functions? Explain the format, definitiona and use of functions with an example program.
- 18. (a) Write function to add two matrices using pointers and return the resultant matrix to the calling function.

Or

(b) Explain various operations on files in 'C' with examples.

3

B.Sc. DEGREE EXAMINATION, NOVEMBER 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. With out solving the equation $5x^2 3x + 10 = 0$. Find the sum and product of the roots.
- 2. Define descartes rule of signs.

3. The matrix A is $\begin{bmatrix} -1 & 0 & 0 \\ 2 & -3 & 0 \\ 1 & 4 & 2 \end{bmatrix}$. Find the eigen values of A^2 .

- 4. Define Non singular matrix.
- 5. Define Convexity.
- 6. Define definite integral.

- 7. When a function f(x, y) is said to be minimum?
- 8. Define partial derivatives of f(x, y).

9. Solve: $\frac{d^2x}{dt^2} + 6\frac{dx}{dt} + 9x = 0$.

10. Define method of separation variable.

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

Answer all questions.

11. (a) Form an equation whose roots are 2 and $\frac{-1}{2}$.

Or

- (b) Show that $f(x) = \frac{1}{2}x \sqrt{x}$ satisfies the hypothesis of Rolle's theorem on [0, 4], and find all values of *C* in (0, 4) that satisfy the conclusion of the theorem.
- 12. (a) Prove that every square matrix and its transpose have the same eigen values.

Or

(b) Find the rank of the matrix A by using the row

echelon form $A = \begin{bmatrix} 1 & 2 & 3 \\ 2 & 1 & 4 \\ 3 & 0 & 5 \end{bmatrix}$.

 $\mathbf{2}$

13. (a) If $u = x \log xy$ where $x^3 + y^3 + 3xy = 1$ find $\frac{du}{dx}$.

Or

(b) Discuss the maximum and minimum of $x^2 + y^2 + 6x + 12$.

14. (a) Evaluate
$$\int \frac{1}{\sqrt[3]{1-5t}} dt$$

Or

- (b) Find the half range sine series for f(x) = x in (0, 1).
- 15. (a) Solve : $(D^2 5D + 6) y = e^{4x}x$.
 - Or
 - (b) Solve: $(D^2 3D + 2)y = \cos 3x$.

Answer **all** questions.

16. (a) Verify Rolle's theorem for the function

$$f(x) = \log \frac{x^2 + ab}{x(a+b)}, x \in [a, b], 0 \notin [a, b]$$

Or

(b) Increase by 7 the roots of the equation

$$3x^4 + 7x^3 - 15x^2 + x - 2 = 0$$

3

17. (a) Find the eigen values and eigen vector of the matrix

$$A = \begin{bmatrix} 0 & 1 & 1 \\ 1 & 0 & 1 \\ 1 & 1 & 0 \end{bmatrix}$$

Or

(b) Verify the Cayley-Hamilton theorem for the matrix
$$A = \begin{bmatrix} 7 & 2 & -2 \\ -6 & -1 & 2 \\ 6 & 2 & -1 \end{bmatrix}$$
and hence find A^{-1} .

18. (a) Evaluate
$$\int \frac{6x+5}{\sqrt{6+x-2x^2}} dx$$
.

$$\mathbf{Or}$$

(b) Solve the equation $(x^2 + 1)\frac{dy}{dx} + 4xy = \frac{1}{x^2 + 1}$ by using the method of variation of parameters.

4

Sub. Code
91421/22

U.G. DEGREE EXAMINATION, NOVEMBER 2022.

Second Year - Second Semester

Part II – English

PROSE, EXTENSIVE READING AND COMMUNICATION SKILLS

(Common for all UG Degree Courses)

(2016 onwards to 2018 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. What is Forster's attitude towards Mr. Rumble?
- 2. How long did it take to make orthosis 300 gm callipers?
- 3. When did Indians first have the vision of freedom?
- 4. How did Gandhi become enshrined?
- 5. How was Lynd converted to nationalism?
- 6. What is discipline of reality?
- 7. What is the function of an adverb?
- 8. Give two example of pronouns.
- 9. Give two examples of demonstrative pronouns
- 10. What are three types of conjunctions?

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

Answer **all** questions.

11. (a) Write brief note on Dr. Kalam's third vision.

Or

- (b) What are the two ways in which science benefits man?
- 12. (a) How does Nehru close his speech?

Or

- (b) What is discipline of reality? How does a child learn realities?
- 13. (a) Comment on the theme of After Twenty Years.

 \mathbf{Or}

- (b) Write the note on the character sketch of the astrologer.
- 14. (a) Fill in the blanks by adding adverbial clauses.
 - (i) You will win his favour _____.
 - (ii) _____ he is strong.
 - (iii) This is good _____.
 - (iv) _____ we must try.
 - (v) We eat _____.

Or

(b) Define types of pronouns with examples.

2

- 15. (a) Change into Direct speech:
 - (i) Shivani asked me how I could lift it.
 - (ii) Leela ordered her servant not to clean it.
 - (iii) He said that Kevin should come.
 - (iv) She said that rain had fallen last night.
 - (v) He asked me where I lived.

Or

(b) Write a short note on three types of comparisons.

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

Answer all questions.

16. (a) Write an essay on the conflict between the state and the artist.

 \mathbf{Or}

- (b) Write about Dr. Kalam's contribution to Indian education.
- 17. (a) Sum up Plato's contradictory views on the artist's role in society.

Or

- (b) How does Nehru react to Gandhi's death? How does he finally reconcile himself to it?
- 18. (a) Explain Pronoun and its kinds with example.

Or

(b) Write short notes on adverbial clauses and its types with examples.

3

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) $P(|x-5| \le 15)$

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B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Third Semester

Computer Science

DIGITAL COMPUTER FUNDAMENTALS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. Define the term 'digital'.
- 2. Write the expansion of the terms: ASCII and EBCDIC.
- 3. State the associative property of Boolean Algebra.
- 4. Simplify A(A+B).
- 5. Define the term combinational logic.
- 6. What is meant by priority encoder?
- 7. Draw the logic circuit of Half adder.
- 8. Define the term full adder.
- 9. Why complement number representation is used?
- 10. What are the 2 IEEE standards for floating point numbers?

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

Answer **all** questions.

11. (a) Convert the decimal 65 to BCD, Excess-3 and Gray code.

 \mathbf{Or}

- (b) With example, explain addition and subtraction in binary number system.
- 12. (a) State and explain DeMorgan's theorem with examples.

Or

- (b) Express the Boolean function F = A + B'C in sum of minterms form.
- 13. (a) Write short notes on Gated flip flops.

Or

- (b) Draw and explain BCD counter.
- 14. (a) Write short notes on full subtractor.

Or

- (b) Give a brief account on binary parallel adder.
- 15. (a) Elaborate on datatypes.

 \mathbf{Or}

(b) Briefly explain about error detection codes.

 $\mathbf{2}$

Answer **all** questions.

16.	(a)	Convert the following:	
-----	-----	------------------------	--

- (i) 11011110_2 to decimal (2)
- (ii) 0.51310 to octal (4)
- (iii) 0.6875_{10} to binary (4)

Or

- (b) Explain about Numeric and character codes.
- 17. (a) Simplify the following Boolean functions using K'Map method:

 $F(w, x, y, z) = \sum (1, 3, 4, 6, 9, 11, 12, 14).$

Or

- (b) What is flip flop? With diagram, explain the mechanism of Master Slave flip flop.
- 18. (a) Explain about the construction of ALU.

Or

(b) Explain floating point representation with examples.

3

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B.Sc. DEGREE EXAMINATION, NOVEMBER 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 features of Java that support OOP.
- 2. Write down the structure of a Java program.
- 3. Differentiate between JDK and JVM.
- 4. How a switch statement differs from if statement?
- 5. Define the term Class.
- 6. Write the steps involved in creating an array.
- 7. Write any two benefits of packages.
- 8. What is synchronization? When do we use it?
- 9. How applet differs from stand-alone application?
- 10. List out the commonly used drawing methods in the graphics class.

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

Answer **all** questions.

11. (a) What are the major differences between Java and C++?

Or

- (b) How Java is connected with Internet and WWW? Discuss.
- 12. (a) Write a Java program to reverse a given integer number.

Or

- (b) Write a Java program using if statement to compute electricity bill amount to be paid by a consumer.
- 13. (a) Discuss in detail about nesting of functions with sample program.

Or

- (b) Difference between abstract and final classes.
- 14. (a) Explain the steps involved in extending the thread class.

Or

- (b) What are the types of errors? Explain.
- 15. (a) Write a Java program to design a smiley.

Or

(b) How to draw bar charts in graphics programming? Explain.

 $\mathbf{2}$

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

Answer **all** questions.

16. (a) Explain type casting categories with an example program.

Or

- (b) Write in detail about decision making statements.
- 17. (a) Explain overloading and overriding methods with an example program.

 \mathbf{Or}

- (b) Explain different thread methods with an example.
- 18. (a) Write a Java program to design a banner using graphics.

Or

(b) Explain about Applet programming.

3

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Third Semester

Computer Science

DATA STRUCTURES AND ALGORITHMS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

 $(10 \times 2 = 20)$

Part A

- 1. Define the term data structure.
- 2. What is the difference between predecessor and successor?
- 3. Convert the following infix expression to post fix notation ((a + 2)*(b + 4)) 1.
- 4. List few applications of queue.
- 5. Define binary search tree.
- 6. Draw the binary tree for preorder traversal of the nodes PFBHGSRYTWZ.
- 7. Write down the worst case complexity of Quick and Merge sort.
- 8. State the applications of linear and binary search techniques.

- 9. What is time complexity?
- 10. List out the notations that are used to express time complexity of algorithm.

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Explain briefly about linear data structure.

Or

- (b) Write short notes on merging lists.
- 12. (a) Write down routines for inserting and deleting elements from a circular queue implemented using array.

Or

- (b) Discuss the applications of linked list.
- 13. (a) Explain how to find shortest path using Dijkstra's algorithm. Illustrate with an example.

Or

(b) Create a binary tree using inorder and postorder traversalInorder: D B H E A I F J C G

postorder: D H E B I J F G C A

14. (a) Write short notes on linear search with suitable example.

Or

(b) Sort the given integers and show the intermediate results using Bubble sort

35, 12, 14,9, 15, 45, 32, 95, 40, 5

 $\mathbf{2}$

15. (a) Write short notes on Little oh notation.

 \mathbf{Or}

(b) Distinguish between best, worst and average case complexities of an algorithm.

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

Answer **all** questions.

16. (a) How to search and retrieve an element in a list? Explain in detail.

Or

- (b) Explain the following operations on a doubly linked list:
 - (i) Insert an element
 - (ii) Delete an element
- 17. (a) Explain with an algorithm and diagrammatic illustrations various operations that can be performed on a Stack.

Or

- (b) Explain the various representation of binary tree with suitable example.
- 18. (a) Explain in detail about Divide and conquer algorithm. Illustrate with an example.

Or

(b) Explain in detail about Big oh and Omega notations.

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B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Third Semester

Computer Science

APPLIED PHYSICS - I

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

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

- 1. Mention the type of capacitors.
- 2. What is electrostatics?
- 3. What is magnetic potential?
- 4. Define permeability.
- 5. State the Ohm's law.
- 6. Mention the units of voltage and resistance.
- 7. Write a note on induced emf.
- 8. Mention about the eddy current.
- 9. Define impedance.
- 10. What is mean by Q factor?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Describe clearly the electrostatic potential.

Or

- (b) Discuss the difference between series and parallel capacitors.
- 12. (a) What is magnetization? Explain the intensity of magnetization.

Or

- (b) What is magnetic shell? Explain its potential at any point.
- 13. (a) Explain the working of carey Foster's bridge with neat diagram.

Or

- (b) Write a note on Ballistic galvanometer.
- 14. (a) Discuss the relation between induced emf and mutual inductance.

Or

- (b) Describe the transformer theory.
- 15. (a) Explain the A/C circuits with double components.

Or

2

(b) Write a note on selectivity and sharpness of resonance.

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

Answer **all** questions.

16. (a) State and prove Gauss theorem and explain its application.

Or

- (b) Explain the properties of dia, para and ferro magnetic materials.
- 17. (a) Explain in detail the Fleming's left hand rule and Fleming's right hand rule.

Or

- (b) What is potentiometer? Explain the measurement of current and resistance.
- 18. (a) Explain the Anderson's method coefficient of mutual induction.

Or

- (b) Write a note on.
 - (i) Power in A/C circuit
 - (ii) Power factor derivation.

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?

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

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.

 $\mathbf{2}$

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

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, NOVEMBER 2022

Fifth Semester

Computer Science

WEB TECHNOLOGY

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

 $(10 \times 2 = 20)$

Part A

- 1. What is HTML?
- 2. What is the use of line breaking? Which tag is used for line braking?
- 3. Write a javascript to add two input numbers.
- 4. What is the use apply () method?
- 5. What is the difference between selection and repetition structure?
- 6. Write the syntax for javascript function.
- 7. Which is defined as javascript identifier?
- 8. Write the use of to String() method.
- 9. List any four VB script functions.
- 10. What are the major properties of an input box?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Make a detailed note on HTML table tag.

Or

- (b) Explain the HTML Frame concept.
- 12. (a) Make detailed notes on javascript memory management.

Or

- (b) Explain with an example: passing arrays to function.
- 13. (a) Discuss about the selection structures in javascript.

 \mathbf{Or}

- (b) Explain the javascript logical operators.
- 14. (a) Discuss in detail : javascript recursion.

Or

- (b) Explain with an example program: Boolean object.
- 15. (a) Make detailed notes on operator precedence chart in VB script.

Or

(b) Explain: Code flow control in VB script.

Part C

 $(3 \times 10 = 30)$

Answer any three questions.

16. (a) Make a detailed note on nested and ordered list.

Or

(b) Explain : decision making concept in javascript.

 $\mathbf{2}$

17. (a) Explain with an example: functions in javascript.

Or

- (b) Discuss in detail: (i) Math object (ii) String object.
- 18. (a) Explain the VB script operators.

Or

(b) Write the VB script code to perform the validation on employee personal data input form.

3

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fifth Semester

Computer Science

OPERATING SYSTEMS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

 $(10 \times 2 = 20)$

Part A

- 1. What are the objectives of operating system?
- 2. What are the five major activities of an operating system with regard to memory management?
- 3. Where is PCB used in operating system?
- 4. What are the three types of scheduling in operating system?
- 5. What is the difference between parallel processing and concurrent processing?
- 6. What is input management in operating system?
- 7. What is the function of file management in operating system?
- 8. What is file compression?

- 9. Is Unix an operating system?
- 10. Write a note on memory management in Linux.

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

Answer **all** questions.

11. (a) What is fixed partitioning in operating system? Discuss about its advantages and disadvantages.

 \mathbf{Or}

- (b) How memory allocation is done in paging? Explain with a neat structure.
- 12. (a) What are the three levels of process scheduling? Discuss with a neat structure.

Or

- (b) What are the four conditions of deadlock? Explain.
- 13. (a) Write a brief note on Asymmetric multiprocessing with neat structure.

Or

- (b) What are the three types of storage device media? Explain.
- 14. (a) How does file manager interact with device manager? Elaborate.

Or

(b) What is data compression? Discuss about its types.

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15. (a) What is meant by design goal? Bring out the design goals of Linux operating system.

Or

(b) Discuss briefly about device management in Unix.

Part C

 $(3 \times 10 = 30)$

Answer all questions.

16. (a) Elaborate in detail about dynamic partitioning with a neat structure.

Or

- (b) Explain in detail about Segmented paging with a neat structure.
- 17. (a) Discuss in detail the following :
 - (i) Priority scheduling
 - (ii) Round Robin scheduling.

Or

- (b) What is multiprocessing in operating system? Explain in detail about its types with a neat structure.
- 18. (a) What is concurrent programming? Describe in detail about its issues, advantages and drawbacks.

Or

(b) Elaborate on detail file access methods in operating system with a neat structure.

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