Sub. Code

11**F** 

#### 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.	Туре	Type de communication?		
9.	Ecri	ez en Français.		
	(a)	100		
	(b)	200		
10.	Ecri	ez en anglais :		
	(a)	Quarante		
	(b)	Cinquante		
		<b>Part B</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		
		2 <b>C-5668</b>		

		(i)	Lepére		
		(ii)	le Frére		
		(iii)	la mére		
		(iv)	l'homme		
		(v)	l'oiseau		
14.	Ren	iplir le	es banques a	vec 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.	List	er les	signes en fra	ançais :	
	(a)	(i)	. →		
		(ii)	$\rightarrow$		
		(iii)	; →		
		(iv)	: →		
		(v)	? →		
				Ou	
					C 7000
				3	C-5668

Traduire les articles définis en anglais :

(b)

(b) (i) (ii) (iii) (iv)  $() \rightarrow$ (v) Part C  $(3 \times 10 = 30)$ Answer all questions. D'ecrivez l'autre fête que vous savez. (a)

16.

Ou

- (b) D'ecrivez votre journée
- 17. Formater une lettre de congé (a)

Ou

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

Ou

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

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

**खंड - क**(10 × 2 = 20)

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।

लिंग किसे कहते हैं? उनके कितने प्रकार हैं? 9. वचन कैसे कहते हैं? उनके कितने प्रकार है? 10. खंड - ख  $(5 \times 5 = 25)$ सभी प्रश्नों के उत्तर दीजिए। उत्तर संक्षेप में हो। लाल बिहारी का संक्षिप्त परिचय दीजिए। 11. (या) 'प्रायश्चित्त' कहानी की शीर्षक की सार्थकता पर विचार कीजिए। (b) 'उसने कहा था' इस कहानी में कौन किससे क्या कहा था? (a) 12. (या) पाँच मिनट की मुलाकात में गोपाल ने बाबूजी से क्या कहा? (b) तोताराम के साथ निर्मला की शादी किस हालत में हुई? 13. (a) (या) जियाराम ने आत्महत्या क्यों की? (b) सियाराम किसके साथ भाग गया और क्यों? (a) 14. (या) कल्याणी और उदयभानुलाल के बीच में झगडा क्यों हुआ? (b) 'कारक' किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए। (a) 15. (या) संज्ञा किसे कहते हैं? उनके भेदों को उदाहरण सहित समझाइए। (b) C-5669 2

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 चिरत्र बिगाड़ना नहीं चाहते, उनको चाहिए कि वे खुद भी अच्छा आचरण करें। शिक्षा का असली उद्देश्य चिरत्र का निर्माण ही है।

(या)

(b) कृष्णा का चरित्र-चित्रण कीजिए।

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11T

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

#### First Year / First Semester

#### Part - I

தமிழ்ச்செம்மொழியும் தமிழாகளின் பன்முகத்திறனும்

#### (Common for all U.G. Degree Courses)

(2016 to 2018 onwards)

Duration: 3 Hours Maximum: 75 Marks

ப**குதி அ** (10 × 2 = 20)

அனைத்து வினாக்களுக்கும் விடையளிக்கவும்.

- 1. ஓட்டுநிலை மொழி என்றால் என்ன?
- 2. தமிழின் செம்மொழித் தகுதிகளைச் சான்றுகளுடன் எடுத்துக் காட்டி விளக்கியவர் யார்?
- 3. செம்மொழி தகுதிபெற்றக் காப்பியங்கள் கூறுக.
- 4. தழை ஆடை என்பதென்ன?
- 5. 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.

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.
- 13. (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.

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

#### (அல்லது)

(ஆ) பண்டைத் தமிழ் மக்கள் போற்றிய விருந்தோம்பலை விரித்துரைக்க.

#### பகுதி இ $(3 \times 10 = 30)$

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

#### (அல்லது)

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

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# 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 question	s.
1.	What is vocational education?	
2.	What it is it that Indira Gandhi doe	es not demand?
3.	What did Stevenson ride on?	
4.	What was the boy's reaction to the	punishment?
5.	What was remarkable about Ern-Wild Animals I have Known?	est Thompson Seton's
6.	What are the tree visions that Saro	jini Naidu talks of?
7.	He my uncle yesterda verb)	y. (Use correct form of
8.	Define Noun.	
9.	Seenu is a boy poor far preposition)	amily. (use appropriate
10.	auxiliaries) you like to have tea	or coffee? (Use correct

Part B	(	(5)	×	5	=	25	5)
rart <b>b</b>		$^{\rm c}$	X	О	_	4	40

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.

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(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.	
	$\operatorname{Or}$	
(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.	
	<b>Part C</b> $(3 \times 10 = 30)$	
	Answer all questions.	
(a)	What, according to Livingstone, are the essentials of education?	
	$\operatorname{Or}$	
(b)	Write an essay on personality of Indira Gandhi as revealed in her speeches.	
(a)	What are Gardiner's views on the desirability or otherwise of forming habits?	
	$\operatorname{Or}$	
(b)	Write an essay in 500 words about the relationship between the rich student and the poor teacher.	

15.

16.

17.

	$\operatorname{Or}$
(b)	Fill in the blanks with correct preposition.
	Nehru was called to say a few words
	the occasion the
	assassination Gandhi an
	utter sense shame, Nehru expressed
	his regret the failure out country
	give protection the life
	this great man, as well as that
	many an innocent man, woman and
	child.

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

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

#### Second Year — Second Semester

#### Part 1 — FRENCH

# (Common for all UG Degree courses)

		(2016 to 2018 onwar	rds)
Dura	ation	: 3 Hours	Maximum : 75 Marks
		Part A	$(10 \times 2 = 20)$
		Answer all question	ıs.
1.	Que	e savez-vous du français ?	
2.	Tro	uvez les réponses :	
	(a)	Comment tu t'appelles ? ——	
	(b)	Comment allez-vous?	
3.	Dite	es les nombres :	
	(a)	les filles dans la classe : ——	
	(b)	les garçons dans la classe : —	
4.	C'es	et quoi les accents?	
5.	Que	els sont les trois types d'accents	?
6.	C'es	et quoi les articles ?	
7.	Тур	es d'articles ?	

8.	Types de pronoms.					
9.	La r	La monnaie de la France est :				
10.	Le drapeau français est :					
			Part B	$(5 \times 5 = 25)$		
			Answer all questions.			
11.	Don	nez le	es 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:			
			2	C-5672		

12.	Ecri	vez le	s 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.	Ecri	vez le	s nombres en lettres :
	(a)	(i)	39 -
		(ii)	46 -
		(iii)	41 -
		(iv)	64 -
		(v)	25 -
			Ou
			3 <b>C-5672</b>

14.	Ecriv	vez 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)	Décr	ivez votre mère en 5-6 lignes.	
			Ou	
	(b)	Décr	ivez votre famille.	
			4 C- <b>5672</b>	

(b)

(i)

(ii)

62 -

70 -

37 -

(iii) 53 -

(iv) 48 -

(v)

## Answer all questions.

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

Ou

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

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C-5672

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.

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?
- 6. राष्ट्रिपिता 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।

11. (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 स्त्रियों को वही अधिकार है जो पुरुषों को, यह मेरे स्वप्नों का भारत है।

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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)

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

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# 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.

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.

 $(10 \times 2 = 20)$ 

- 1. மெய்யெழுத்துக்களின் வகைகளைக் கூறுக.
- 2. உடம்படுமெய் என்றால் என்ன?
- 3. மு.மேத்தா எதன்மூலம் எதையும் அடைந்துவிட முடியும் என்கிறார்?
- 4. 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?

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.
- 13. (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.

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# **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.
- 18. (அ) "மனிதநேயம் போற்றுவோம்" என்னும் தலைப்பில் கவிதை இயற்றுக.

#### (அல்லது)

(ஆ) சுற்றுச்சூழலைப் பேணுதல் என்னும் கருவை மையமிட்டு சிறுகதை படைத்திடுக.

Sub. Code 91421/22

#### 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

 $\mathbf{Part A} \qquad (10 \times 2 = 20)$ 

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?

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?	
		$\operatorname{Or}$	
	(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?	
		$\operatorname{Or}$	
	(b)	What is Lynd's conversion to socialism and nationalism?	
13.	(a)	How does the true friendship reflect in <i>After Twenty Years</i> ?	
		$\operatorname{Or}$	
	(b)	How did the conjuror take his revenge on the Quick Man?	
14.	(a)	How did the father test the skills of his sons?	
		$\operatorname{Or}$	
	(b)	How do Phrase help in making of Simple sentence?	
		2 <b>C-5674</b>	

What did the stranger want to know?

8.

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?

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.

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#### 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 girl. (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?  $(5 \times 5 = 25)$ Part B 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.

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

Or

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.

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14.	(a)	Distinguish between primary and secondary stress with examples.
		$\mathbf{Or}$
	(b)	Use appropriate intonation symbols for the given expressions.
		(i) Where do you live?
		(ii) Thanks, my friend,
		(iii) Aro vou honny?

- (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.

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

Answer all questions.

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.
  - Kodai is my favourite tourist location. (v)
  - (vi) My mother is a doctor.
  - (vii) This chair costs Rs. 500.

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- (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.

Sub. Code

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# 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?

Or

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

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

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(b) What are the uses of visual aids?

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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.

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.

# **B.Sc. DEGREE EXAMINATION, APRIL 2022**

# **Second Semester**

#### **Aeronautical Science**

# **MATHEMATICS – II**

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

1. Evaluate 
$$\int_{0}^{3} \int_{0}^{1} (x^2 + 3y^2) dy dx$$
.

2. Evaluate 
$$\int_{0}^{\pi/4} \int_{0}^{1} r dr d\theta$$
.

- 3. Find the unit normal to the surface  $x^3 xyz + z^3 = 1$  at the point (1, 1, 1).
- 4. Define irrotational vector.
- 5. What do you mean by conformal mapping?
- 6. Define critical point of a transformation.
- 7. Prove that  $L\{e^{-at}\}=\frac{1}{s+a}$ .

- 8. Define Laplace transform.
- 9. Define Standard deviation.
- 10. Define median and mode.

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

Answer all questions.

11. (a) Evaluate  $\int_{0}^{\log 2} \int_{0}^{x} \int_{0}^{x+y} e^{x+y+z} dx dy dz$ .

Or

- (b) Change the order of integration in  $\int_{0}^{a} \int_{y}^{a} \frac{x}{x^2 + y^2} dx dy$ .
- 12. (a) If  $\overline{a}$  is a constant vector and  $\overline{r}$  is the position vector of the point (x,y,z) with respect to the origin, prove that (i) grad  $(\overline{a} \cdot \overline{r}) = \overline{a}$  (ii)  $div(\overline{a} \times \overline{r}) = 0$  and (iii)  $curl(\overline{a} \times \overline{r}) = 2\overline{a}$ .

Or

- (b) Show that  $\iint_S (z\overline{i} + x\overline{j} + 3y^2z\overline{k}) \cdot \hat{n} \, ds = 90$  where s is the surface of the cylinder  $x^2 + y^2 = 16$  included in the first octant between z = 0 and z = 5.
- 13. (a) Prove that  $z^3$  is analytic and find its derivative.

Or

(b) Find the analytic function w = u + iv using milne-Thomson rule.

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14. (a) Find the Laplace transforms of the function  $\sin \sqrt{t}$ .

Or

- (b) Find the inverse Laplace transforms of the function  $L^{-1} \left\{ \frac{14s+10}{49s^2+28s+13} \right\}.$
- 15. (a) Calculate the rank correlation coefficient for the following data:

x: 10 12 18 18 15 40

y: 12 18 25 25 50 25

Or

(b) Compute the mean and standard deviation for the following data:

5, 8, 7, 11, 9, 10, 8, 2, 4, 6

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

Answer all questions.

16. (a) Change the order of integration in  $\int_{0}^{1} \int_{y}^{2-y} xy \, dx \, dy$  and then evaluate it.

Or

(b) Verify Gauss divergence theorem for  $\bar{f}=(2x-z)\,\bar{i}+x^2y\,\bar{j}-xz^2\bar{k}$  over the cube bounded by x=0, y=0, z=0, x=1, y=1 and z=1.

3

17. (a) Find the image of the circle |z|=2 under the transformation

- (i) w = z + 3 + 2i
- (ii) w = 3z
- (iii)  $w = \sqrt{2} e^{i\pi/4}$ .

Or

(b) Find the bilinear transformation that maps the points 1+i, -i, 2-i of the z-plane into the points 0, 1, i of the w-plane.

18. (a) State and prove convolution theorem.

Or

(b) The marks secured by recruits in the selection test (X) and in the proficiency test (Y) are given below:

 $X: 10 \ 15 \ 12 \ 17 \ 13 \ 16 \ 24 \ 14 \ 22$ 

Y: 30 42 45 46 33 34 40 35 39

Calculate the rank correlation coefficient.

# **B.Sc. DEGREE EXAMINATION, APRIL 2022**

#### **Second Semester**

## **Aeronautical Science**

# ENGINEERING MECHANICS AND STRENGTH OF MATERIALS

## (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

# $\mathbf{Part A} \qquad (10 \times 2 = 20)$

Answer all questions.

- 1. State the principle of transmissibility of forces.
- 2. State the necessary and sufficient conditions for equilibrium of a particle in two dimensions.
- 3. State Varignon 's theorem of moment.
- 4. Define a force-couple system.
- 5. Define centroid and centre of gravity.
- 6. What is polar moment of inertia?
- 7. Write the work-energy equation of particles.
- 8. State impulse-momentum principle.
- 9. Define stiffness.
- 10. What is meant propped cantilever beam?

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

Answer all questions.

11. (a) Explain about principle of virtual work.

Or

(b) Write a short note on Parallelogram law of forces.

12. (a) Explain about D'Alembert's Principle and momentum impulse.

Or

- (b) Write a short note on SHM of Vibrations.
- 13. (a) Explain about types of bearings and its uses.

Or

- (b) Write short notes on Euler column theory.
- 14. (a) Explain about the method of section of solving a truss.

Or

- (b) Explain perfect frame and imperfect frames with help of neat sketch.
- 15. (a) Draw Stress Strain curve and explain salient points.

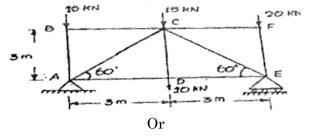
Or

(b) Derive Rankine's formula for columns.

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

Answer all questions.

16. (a) A truss is show in fig, Find the forces in all the members of the truss and indicate whether they are in tension (or) Compression

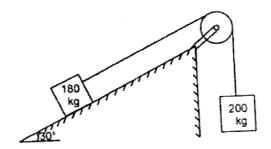


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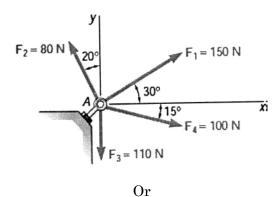
- (b) Forces 32KN, 24KN, 24KN and 120KN are concurrent at origin (0,0,0) and are respectively directed through the points whose coordinates are, A (2,1,6), B (4,-2, 5), C (-3,-2, 1) and D (5, 1,-2). Determine the resultant of the system.
- 17. (a) A ladder 5 m long rests on a horizontal ground and leans against a smooth vertical wall at an angle 70° with the horizontal. The weight of the ladder is 900 N and acts at the middle. The ladder is at the point of sliding, when a man is weighing 750 N stands on a rung 1.5 m from the bottom of the ladder. Calculate the coefficient of friction between the ladder and the floor.

Or

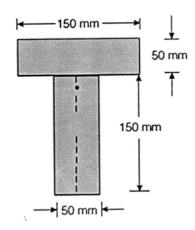
(b) A block and pulley system is shown in fig below. The coefficient of kinetic friction between the block and the plane is 0.25. The pulley is frictionless. Find the acceleration of the blocks and the tension in the string when the system is just released. Also find the time required for 200kg block to come down by 2m.



18. (a) Four forces act on bolt A as shown. Determine the resultant of the forces on the bolt.



(b) Find the area moment of inertia of the T section, shown in Fig.



# **B.Sc. DEGREE EXAMINATION, APRIL 2022**

## Third Semester

#### **Aeronautical Science**

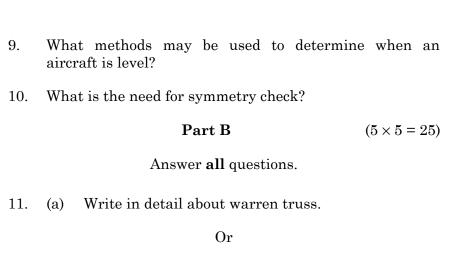
## AIRCRAFT CONSTRUCTION

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What are the basic aircraft structures?
- 2. What is the principal load carrying structure of an airplane?
- 3. Write the primary control surfaces and their respective axis of control.
- 4. What is the purpose of wing flaps?
- 5. Define shock chord.
- 6. What is the purpose of the metering pin in an oloe shock strut?
- 7. What is the necessary equipment for weighing the aircraft?
- 8. Define centre of gravity.



(b) Write all the major zones three-digit numbers and corresponding area.

12. (a) Differentiate b/w power assisted controls and fly by wire.

Or

- (b) How the pitch control is achieved?
- 13. (a) Discuss about Retractable gear.

Or

- (b) Write in detail about landing gear position indicator system.
- 14. (a) Write things needs to done to prepare the aircraft for weighing.

Or

(b) Write about the calculation for empty weight of  ${\rm C.\ G.}$ 

		check.
		$\operatorname{Or}$
	(b)	Write down the rigging procedure of the flight control system.
		<b>Part C</b> $(3 \times 10 = 30)$
Answer all questions.		
16.	(a)	Write in detail about the construction and internal parts of the wing.
		$\operatorname{Or}$
	(b)	Write in detail about the fly by wire system.
17.	(a)	(i) What is the purpose of the follow up differential mechanism in a nose wheel steering system? (2)
		(ii) Explain about power boost brake system. (8)
		$\operatorname{Or}$
	(b)	Describe briefly about the procedure of levelling the aircraft.
18.	(a)	Draw the schematic diagram for following
		(i) Operation of rudder (5)
		(ii) Operation of aileron. (5)
		$\operatorname{Or}$
	(b)	Write a note on hulls and float with suitable diagram.
		3 <b>C-5685</b>

Discus about incident and dihedral angle alignment

15.

# **B.Sc. DEGREE EXAMINATION, APRIL 2022**

## Fourth Semester

#### **Aeronautical Sciences**

## AIRCRAFT SYSTEMS

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What you mean by heat exchanger?
- 2. Classify at least truce engine control system?
- 3. List the advantages of pneumatic systems.
- 4. What is a brake system and its necessity?
- 5. What is vapour lock and list down its causes?
- 6. Differentiate between electric trim and manual trim?
- 7. What is the function of cabin air pressure safety valve?
- 8. Name any four modern control systems?
- 9. What are the advantages of hydraulic system over conventional system?
- 10. What is thermal relief value?

Part B

 $(5 \times 5 = 25)$ 

## Answer all questions.

11. (a) What do you mean by active control technology? Give at least three examples?

Or

- (b) Explain the power actuated systems with examples.
- 12. (a) Write detail about the push pull rod system?

Or

- (b) Explain the conventional flight control system with simple sketch.
- 13. (a) Explain the Modern control systems.

Or

- (b) Explain sequence value, Deposer value, relacter value, shut off value Cress feed value?
- 14. (a) Explain the Basic hydraulic system with power driven pump with a neat sketch.

Or

- (b) Explain with neat sketcher the air cycle cooling system and vapor-cycle cooling system of an A/C.
- 15. (a) What are cooling pales? Explain.

Or

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(b) Explain the properties and characterises of aviation fuels.

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

# Answer all questions.

16. (a) Explain the working of different fire detection and smoke detection techniques used in A/C with neat sketches.

Or

- (b) Explain icing do-icing and anti-icing? Discuss pneumatic dc-icing system.
- 17. (a) What are the components of the pneumatic system? Explain with neat sketches a typical pneumatic power system used in aircraft power plants.

Or

- (b) With neat sketches discuss in detail about the lubricating system of a typical piston engine.
- 18. (a) What is the need of cabin air pressurisation? Explain a typical air pressurisation system with pressurisation controller.

Or

(b) Explain with a sketch the mechanical flight control system used in early airplanes.

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#### B.Sc. DEGREE EXAMINATION, APRIL 2022.

#### Fourth Semester

#### **Aeronautical Science**

#### AIRCRAFT INSTRUMENTS

# (2016 Onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. In what way do magnetic fields generated by electrical equipment and steel parts in the airplane affect a magnetic compass?
- 2. What are the three sources of power used to drive a gyroscopic turn indicator?
- 3. What does a yellow arc on an instrument dial indicate?
- 4. What flight instruments are usually connected to a pitot-static system?
- 5. What type of indicating system is used to measure the turbine-engine exhaust gas temperature?
- 6. What are the different types of aircraft pressure gauge?
- 7. What are the two most common applications of thermocouples?
- 8. What equipment performs the calculation of calibrated airspeed for modern aircraft with digital instruments?
- 9. What are the navigation instruments?
- 10. What is called swinging a magnetic compass?

Part B

 $(5 \times 5 = 25)$ 

Answer all questions.

11. (a) Explain International standard Atmosphere.

Or

- (b) Explain about Instrument display and its type
- 12. (a) Sketch Pitot static tube and explain its working principle.

Or

- (b) What indication errors may be found in altimeters? Explain.
- 13. (a) Explain the working principle of Directional Gyroscopes.

Or

- (b) Explain the principle of gyroscope.
- 14. (a) Explain the operation of Bourdon tube.

Or

- (b) Explain the operation of capacitance type fuel indicating system.
- 15. (a) Write a short note on DR and RR compass.

Or

(b) How to calibrate DR compass?

Part C

 $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Draw and describe the operation of VSI when aircraft changes from level to a climb.

Or

(b) Explain about CHT and EGT gauges.

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- 17. (a) Explain the working principle of CRT used in civil and military aircrafts.
  - (b) Explain in detail Airspeed Indicators.
- 18. (a) Explain Bernoulli's Principle, how it can be applied in the working of flight instruments?

Or

- (b) Write a short note on
  - (i) Total Pressure
  - (ii) Stagnation Pressure
  - (iii) Static Pressure
  - (iv) Dynamic Pressure.

# **B.Sc. DEGREE EXAMINATION, APRIL 2022**

## Fourth Semester

#### **Aeronautical Science**

# AIRCRAFT MATERIALS, HARDWARE AND NDT

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. State any four Non-ferrous metals.
- 2. What are advantages of Titanium?
- 3. State the reason for hardening the material.
- 4. Mention few steps to avoid corrosion.
- 5. Mention the application of wood fabric in aircraft.
- 6. State the advantages of plastics.
- 7. Mention the use of resin and fibres in composites.
- 8. What is honeycomb construction?
- 9. What is impact strength?
- 10. What are the advantages of NDT methods.

Part B

 $(5 \times 5 = 25)$ 

## Answer all questions.

11. (a) What are the properties of Magnesium and Nickel alloys?

Or

- (b) Different ferrous and Non-ferrous materials.
- 12. (a) Explain heat treatment methods for ferrous and Non-ferrous materials.

Or

- (b) Explain the types of corrosion and treatments to avoid it.
- 13. (a) Explain types of components used in aircraft constructions.

Or

- (b) Explain the use of wood and fabric in aircraft construction.
- 14. (a) Differentiate thermoset and thermo plastics.

Or

- (b) Explain the sandwich construction and state its advantages and disadvantages.
- 15. (a) Explain Brinell and Rockwell hardness test.

Or

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(b) Explain Dye penetrant technique.

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

## Answer all questions.

16. (a) Explain the advantages and disadvantages of titanium and mention few applications.

Or

- (b) Explain Electroplating technique.
- 17. (a) Classify and explain the types of plastics.

Or

- (b) Explain continuous filament winding technique for composite structure.
- 18. (a) Explain Ultrasonic and Radiography techniques used in NDT.

Or

(b) Explain the need for finding the fatigue strength and methods used for measuring the fatigue strength.

# **B.Sc. DEGREE EXAMINATION, APRIL 2022**

## Sixth Semester

#### **Aeronautical Science**

# AIRCRAFT MAINTENANCE, GROUND HANDLING AND SUPPORT EQUIPMENTS

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. Write short note on 100 Hrs. inspection
- 2. Define operational life of components.
- 3. What is the purpose of the bleeding of the brakes?
- 4. What are important things to be checked after heavy landing?
- 5. What determines the number of rows in a rivet pattern?
- 6. What is the formulae for calculating the Number of rivets required on each side of the break?
- 7. What are three things needed to start the fire?
- 8. What is the purpose of aircraft tie down?
- 9. How many men involved in a refuelling of large aircraft?
- 10. Enumerate the functions of the hydraulic power unit.

Part B

 $(5 \times 5 = 25)$ 

## Answer all questions.

11. (a) Write in detail about the pre flight inspection to be done on aircraft.

Or

- (b) Write a short note on progressive inspection.
- 12. (a) Write down the procedures on Lending gear retraction test.

Or

- (b) Write about the Severe Turbulence Inspection.
- 13. (a) What are the fundamental rules must be observed if the original strength of the structure is to be maintained?

Or

- (b) Explain about the Slip roll former.
- 14. (a) Discuss the procedure for the pressure fuelling process.

Or

- (b) Discuss about the precautions to be taken against wind storm damage.
- 15. (a) Write short notes on electrical power unit.

Or

(b) Discuss about the tow bars used in towing process.

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

## Answer all questions.

16. (a) Describe in detail about the annual inspection and 100 Hrs. inspection.

Or

- (b) Discuss in brief about the alignment of main gear wheels.
- 17. (a) How to determine the rivet diameter needed for the repair work?

Or

- (b) Explain the jacking operation procedure and precautions to be followed.
- 18. (a) Explain about air start unit and hydraulic unit.

Or

(b) Write briefly about jacks used in levelling of the aircraft.

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# **B.Sc. DEGREE EXAMINATION, APRIL 2022**

## Sixth Semester

#### **Aeronautical Science**

## AERO ENGINE MAINTENANCE

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is the function of turbo charger?
- 2. Define Swept volume.
- 3. What is propeller blade balancing?
- 4. Differentiate fixed pitch and variable pitch propeller
- 5. What is the advantage of shrouded blades?
- 6. What is difference between stator and rotor?
- 7. What is meant by Blade damage?
- 8. What is overlimit inspection?
- 9. Distinguish between turbo prop and turbo shaft engine.
- 10. What is Engine trimming?

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

## Answer all questions.

11. (a) Explain magnetic particle inspection with neat sketch.

Or

- (b) Write a short note on dye penetrant inspection.
- 12. (a) Explain the inspection of propeller blade.

Or

- (b) Write short notes on propeller blade damage and oil leak.
- 13. (a) Explain safety precautions to be followed during starting of engine.

Or

- (b) Briefly describe about the deceleration check.
- 14. (a) Explain the Foreign object damage.

Or

- (b) Explain about inspection of ignition system.
- 15. (a) Write note on various engine parameters indicators.

Or

(b) Explain the preparation of engine run up.

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

# Answer all questions.

16. (a) Explain any two methods of Non destructive inspection.

Or

- (b) Explain classification of gas turbine engine. Explain the working of turbojet engine.
- 17. (a) Explain static and dynamic balancing of propeller.

Or

- (b) Explain various types of propeller used in aircraft. Also explain the inspection of wooden propeller.
- 18. (a) Describe the engine shut down procedure and post sopping procedure.

Or

- (b) Write short notes on
  - (i) Online maintenance
  - (ii) Special inspection procedure

# **B.Sc. DEGREE EXAMINATION, APRIL 2022.**

## Sixth Semester

#### **Aeronautical Science**

# AIRCRAFT COMMUNICATION AND NAVIGATION SYSTEM

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What is wavelength?
- 2. Mention some types of antennas?
- 3. What frequency range is utilized for VHF communication system?
- 4. What is the function of Selcal decorder?
- 5. What is the possible range of a VLF navigation station?
- 6. What are the components of ADF?
- 7. What is the purpose of ground proximity warning system?
- 8. What is the function of ATC transponder?
- 9. Define RADAR?
- 10. What is meant by radome?

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

Answer all questions.

11. (a) Explain about the microphone and its types?

Or

- (b) Explain with the block diagram of radio transmitter?
- 12. (a) Briefly explain the audio control system?

Or

- (b) Write the theory of operation of HF communication system?
- 13. (a) Describe a radio magnetic indicator?

Or

- (b) Explain the principle of Doppler navigation system?
- 14. (a) Describe the cockpit voice recorder?

Or

- (b) Explain about the operation of TCAS?
- 15. (a) Describe the flat plate antenna system?

Or

(b) Explain about Doppler radar?

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

Answer all questions.

16. (a) Explain the working operation of VOR with neat sketch?

Or

(b) Describe the radar safety?

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17. (a) Explain the testing and service for an ELT?

Or

- (b) Explain the working operation of DME?
- 18. (a) Describe the clear function of the weather mapping system display with example?

Or

(b) Explain the working operation of ILS?

# **B.Sc. DEGREE EXAMINATION, APRIL 2022.**

## Sixth Semester

## **Aeronautical Science**

# AIRPORT AND AIR TRAFFIC SERVICES

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What are the functions of Airport?
- 2. What are the classifications of Air traffic Service?
- 3. What are the duties of Alerting Service?
- 4. Define Holding Apron.
- 5. What are the sources of Airport Revenue?
- 6. Define PAPI.
- 7. What are the types of radar?
- 8. How to design wind sock?
- 9. Define DME.
- 10. What is meant by controlled Airspace?

# Answer all questions.

11. (a) Explain about Chicago Convention and functions of ICAO.

Or

- (b) Explain about different areas of Aerodrome.
- 12. (a) Explain about Apron.

Or

- (b) Write a short note on Airport Congestions and Delay.
- 13. (a) Explain Taxiway Lighting System.

Or

- (b) Briefly describe about the function of Ground Support Equipment.
- 14. (a) Explain the various lighting system help for landing.

Or

- (b) Explain about the goods prohibited for carriage by Air.
- 15. (a) Explain the classification of ATS airspaces.

Or

(b) Describe flight information service and advisory service.

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Part C

 $(3 \times 10 = 30)$ 

# Answer **all** questions.

- 16. (a) Write a note on the following
  - (i) Objectives of ATS
  - (ii) Parts of ATS service
  - (iii) Scope and provision of ATS

Or

- (b) Explain
  - (i) VFR operations.
  - (ii) IFR operations
- 17. (a) Explain about flight plan and its content.

Or

- (b) Discuss the salient factors namely Instrument runway, physical characteristics, width of runways and minimum distance between the parallel runway.
- 18. (a) Explain the markings in runway, give schematic diagram of airport.

Or

- (b) Discuss the following
  - (i) Identification beacons
  - (ii) Emergency and other service
  - (iii) Explain the various lighting system help for landing.

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# **B.Sc. DEGREE EXAMINATION, APRIL 2022.**

## Sixth Semester

## **Aeronautical Science**

## TRAVEL AND TOUR MANAGEMENT

# (2016 onwards)

Duration: 3 Hours Maximum: 75 Marks

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

- 1. What are the differences between Inbound and Outbound Tour Operators?
- 2. What are the uses of Travel trade?
- 3. Define Ancillary service.
- 4. What is the need of Visa process?
- 5. Explain Special Interest Tours (SITs)
- 6. Explain Gravel formalities.
- 7. What are the roles of travel agency?
- 8. Mention few source of income for Travel agency.
- 9. Explain the term IATO.
- 10. Explain the term IAPA.

Part B

 $(5 \times 5 = 25)$ 

# Answer all questions.

11. (a) Explain about uses of Principal Service Providers.

Or

- (b) Explain about American express company and its growth.
- 12. (a) Explain the sales distribution system.

Or

- (b) Explain the role of Travel sector and its importance for improving travel business.
- 13. (a) Explain the types of Tour packages.

Or

- (b) Explain the Do's and Dont's in Itinerary preparation.
- 14. (a) Explain about diversification business in travel agencies.

Or

- (b) Explain about the forex.
- 15. (a) Explain the PATA and its role.

Or

2

(b) What are the trends in tourism?

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

## Answer all questions.

16. (a) Explain the evolution of travel and tour over the years.

Or

- (b) Explain the various formalities involved in travel.
- 17. (a) Discuss the following (i) Tour formulation and Designing process (ii) Component of Tour packages

Or

- (b) Explain details about Resources and steps for itinerary planning.
- 18. (a) Explain the steps involved in setting up a full scale fledged travel agency.

Or

- (b) Explain the roles and Responsibilities of
  - (i) IHRA
  - (ii) ICCA

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?

Part B

 $(5 \times 5 = 25)$ 

## 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.

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.

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.

)

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

## 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.

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