

(2021 Batch onwards)

G 101 OE1.3

Reg. No:

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)
Mangaluru

B.A. Semester III – Degree Examination
November -2024

HISTORY (OPEN ELECTIVE)

FREEDOM MOVEMENT IN KARNATAKA (1800 to 1947)

Time: 2½ Hours

Max. Marks: 60

Note : Answer all questions to the point without exceeding the maximum limit of pages.

ಎಲ್ಲಾ ಪ್ರಶ್ನೆಗಳಿಗೆ ಪುಟದ ಮಿತಿಯನ್ನು ಮೀರದಂತೆ ಸಮರ್ಪಕವಾಗಿ ಉತ್ತರಿಸಿ.

SECTION - A

I Answer any TWO of the following in 3 pages each. (15×2=30)

ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಎರಡು ಪ್ರಶ್ನೆಗಳಿಗೆ ಮೂರು ಪುಟದಷ್ಟು ಉತ್ತರಿಸಿ.

1. Compare and contrast the Kittur Uprising with other anti-colonial movements in Karnataka in terms of its causes, strategies, and outcomes.

ಕರ್ನಾಟಕದಲ್ಲಿನ ವಸಾಹತುಶಾಹಿ-ವಿರೋಧಿ ಚಳುವಳಿಗಳನ್ನು ಕಿತ್ತೂರು ದಂಗೆಯನ್ನು ಉಲ್ಲೇಖಿಸಿ ಅದರ ಕಾರಣಗಳು, ತಂತ್ರಗಳು ಮತ್ತು ಪರಿಣಾಮಗಳ ವಿಷಯದಲ್ಲಿ ವಿವರಿಸಿ

2. Describe the political climate in India during the time of the Belgaum Congress Session of 1924.

1924ರ ಬೆಳಗಾವಿ ಕಾಂಗ್ರೆಸ್ ಅಧಿವೇಶನದ ಸಮಯದಲ್ಲಿ ಭಾರತದ ರಾಜಕೀಯ ವಾತಾವರಣವನ್ನು ವಿವರಿಸಿ.

3. Can you describe the major factors responsible for the rise of nationalism in Karnataka?

ST ALOYSIUS COLLEGE LIBRARY

MANGALURU - 575 003

ಕರ್ನಾಟಕದಲ್ಲಿ ರಾಷ್ಟ್ರೀಯತೆಯ ಉದಯಕ್ಕೆ ಕಾರಣವಾದ ಪ್ರಮುಖ ಅಂಶಗಳನ್ನು ನೀವು ವಿವರಿಸಬಹುದೇ?

Section - B

II Answer any THREE of the following in a page each. (3×5=15)

ಕೆಳಗಿನ ಯಾವುದಾದರೂ 3 ಪ್ರಶ್ನೆಗಳಿಗೆ ಒಂದು ಪುಟದಷ್ಟು ಉತ್ತರಿಸಿ.

1. Describe the major events and phases of the Nagar Revolt from its beginning to its conclusion.

ನಗರ ದಂಗೆಯ ಆರಂಭದಿಂದ ಮುಕ್ತಾಯದವರೆಗಿನ ಪ್ರಮುಖ ಘಟನೆಗಳು ಮತ್ತು ಹಂತಗಳನ್ನು ವಿವರಿಸಿ.

2. How did the Khadi Movement in Karnataka contribute to the promotion of indigenous industries?

ಕರ್ನಾಟಕದಲ್ಲಿ ಖಾದಿ ಆಂದೋಲನವು ಸ್ಥಳೀಯ ಕೈಗಾರಿಕೆಗಳ ಉತ್ತೇಜನಕ್ಕೆ ಹೇಗೆ ಕೊಡುಗೆ ನೀಡಿತು?

3. How did the Mysore Congress engage with the princely state's monarchy and administration in its efforts to promote political reform and the rights of the people?

ರಾಜಕೀಯ ಸುಧಾರಣೆ ಮತ್ತು ಜನರ ಹಕ್ಕುಗಳನ್ನು ಉತ್ತೇಜಿಸುವ ಪ್ರಯತ್ನಗಳಲ್ಲಿ ಮೈಸೂರು ಕಾಂಗ್ರೆಸ್ ರಾಜಪ್ರಭುತ್ವದ ರಾಜಪ್ರಭುತ್ವ ಮತ್ತು ಆಡಳಿತದೊಂದಿಗೆ ಹೇಗೆ ತೊಡಗಿಸಿಕೊಂಡಿತು?

4. Explain the circumstances and consequences of Sangolli Rayanna's capture and subsequent execution. How did this event impact the ongoing resistance in the region?

ಸಂಗೊಳ್ಳಿ ರಾಯಣ್ಣನ ಸೆರೆಹಿಡಿಯುವಿಕೆ ಮತ್ತು ನಂತರದ ಮರಣದಂಡನೆಯ ಸಂದರ್ಭಗಳು ಮತ್ತು ಪರಿಣಾಮಗಳನ್ನು ವಿವರಿಸಿ. ಈ ಘಟನೆಯು ಪ್ರದೇಶದಲ್ಲಿ ನಡೆಯುತ್ತಿರುವ ಪ್ರತಿರೋಧದ ಮೇಲೆ ಹೇಗೆ ಪರಿಣಾಮ ಬೀರಿತು?

Contd...2

5. What role did the British colonial authorities play in responding to the Kodagu Revolt, and how did their actions impact the progression of the uprising?

ಕೊಡಗು ದಂಗೆಗೆ ಪ್ರತಿಕ್ರಿಯಿಸುವಲ್ಲಿ ಬ್ರಿಟಿಷ್ ವಸಾಹತುಶಾಹಿ ಅಧಿಕಾರಿಗಳು ಯಾವ ಪಾತ್ರವನ್ನು ವಹಿಸಿದರು ಮತ್ತು ಅವರ ಕ್ರಮಗಳು ದಂಗೆಯ ಪ್ರಗತಿಯ ಮೇಲೆ ಹೇಗೆ ಪ್ರಭಾವ ಬೀರಿತು?

Section-C

III Answer the following in 3-5 sentences each.

(5×3=15)

ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ 3-5 ವಾಕ್ಯಗಳಲ್ಲಿ ಉತ್ತರಿಸಿ.

1. Who inspired the freedom movement in Karnataka?

ಕರ್ನಾಟಕದಲ್ಲಿ ಸ್ವಾತಂತ್ರ್ಯ ಚಳವಳಿಗೆ ಪ್ರೇರಣೆ ನೀಡಿದವರು ಯಾರು?

2. Name one prominent female freedom fighter from Karnataka and describe her contribution to the independence movement.

ಕರ್ನಾಟಕದ ಒಬ್ಬ ಪ್ರಮುಖ ಮಹಿಳಾ ಸ್ವಾತಂತ್ರ್ಯ ಹೋರಾಟಗಾರರನ್ನು ಹೆಸರಿಸಿ ಮತ್ತು ಸ್ವಾತಂತ್ರ್ಯ ಚಳವಳಿಗೆ ಅವರ ಕೊಡುಗೆಯನ್ನು ವಿವರಿಸಿ.

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

3. Who were the leaders of Palace Satyagraha?

ಅರಮನೆ ಸತ್ಯಾಗ್ರಹದ ನಾಯಕರು ಯಾರು?

4. What were the main reasons for the emergence of the Non-Cooperation Movement in Karnataka, and how did it align with the larger national objectives of the Indian freedom struggle?

ಕರ್ನಾಟಕದಲ್ಲಿ ಅಸಹಕಾರ ಚಳವಳಿಯ ಹೊರಹೊಮ್ಮುವಿಕೆಗೆ ಮುಖ್ಯ ಕಾರಣಗಳು ಯಾವುವು ಮತ್ತು ಅದು ಭಾರತೀಯ ಸ್ವಾತಂತ್ರ್ಯ ಹೋರಾಟದ ದೊಡ್ಡ ರಾಷ್ಟ್ರೀಯ ಉದ್ದೇಶಗಳೊಂದಿಗೆ ಹೇಗೆ ಹೊಂದಿಕೊಂಡಿತು?

5. Who revolted against the British in Surpura? When? What were its results?

ಸುರಪುರದಲ್ಲಿ ಬ್ರಿಟಿಷರ ವಿರುದ್ಧ ಬಂಡಾಯವೆದ್ದವರು ಯಾರು? ಯಾವಾಗ? ಅದರ ಫಲಿತಾಂಶಗಳೇನು?

(2021 Batch Onwards)

G 102 OE2.3

Reg. No. :

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)
Mangaluru

B.A. - SEMESTER III – Degree Examination
November - 2024

ECONOMICS – OPEN ELECTIVE
MONEY AND PUBLIC FINANCE

Time: 2½ Hours.

Max. Marks: 60

SECTION - A

I. Answer any FIVE of the following:

(5×2=10)

ಈ ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದಾದರೂ ಐದು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿರಿ.

1. What do you mean by public debt redemption?

ಸಾರ್ವಜನಿಕ ಸಾಲ ವಿಮೋಚನೆಯ ಅರ್ಥವೇನು?

2. List out any two effects of public expenditure.

ಸಾರ್ವಜನಿಕ ವೆಚ್ಚದ ಯಾವುದೇ ಎರಡು ಪರಿಣಾಮಗಳನ್ನು ಪಟ್ಟಿ ಮಾಡಿ.

3. Give the meaning of Tax to GDP ratio.

ತರಿಗೆ ಮತ್ತು ಜಿಡಿಪಿ ಅನುಪಾತದ ಅರ್ಥವನ್ನು ನೀಡಿ.

4. List out any two types of market failure.

ಯಾವುದೇ ಎರಡು ರೀತಿಯ ಮಾರುಕಟ್ಟೆ ವೈಫಲ್ಯವನ್ನು ಪಟ್ಟಿ ಮಾಡಿ.

5. Define Money.

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

ಹಣವನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.

6. What is mixed economy?

ಮಿಶ್ರ ಆರ್ಥಿಕತೆ ಎಂದರೇನು?

7. What is market imperfections?

ಮಾರುಕಟ್ಟೆ ಅವುರ್ಣತೆ ಎಂದರೇನು?

8. Give the meaning of GST.

ಜಿಎಸ್‌ಟಿಯ ಅರ್ಥವನ್ನು ತಿಳಿಸಿ.

SECTION - B

II. Answer any SIX of the following:

(6×5=30)

ಈ ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದಾದರೂ ಆರು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿರಿ:

9. Explain the scope of public finance.

ಸಾರ್ವಜನಿಕ ಹಣ ವ್ಯವಸ್ಥೆಯ ವ್ಯಾಪ್ತಿಯನ್ನು ವಿವರಿಸಿ.

10. Briefly explain objectives of fiscal policy.

ಹಣಕಾಸಿನ ನೀತಿಯ ಉದ್ದೇಶಗಳನ್ನು ಸಂಕ್ಷಿಪ್ತವಾಗಿ ವಿವರಿಸಿ.

Contd...2

11. Distinguish between impact and incidence of tax.

ತೆರಿಗೆಯ ಪರಿಣಾಮ ಮತ್ತು ಘಟನೆಗಳ ನಡುವೆ ವ್ಯತ್ಯಾಸವನ್ನು ಗುರುತಿಸಿ.

12. What are the sources of public revenue? Explain.

ಸಾರ್ವಜನಿಕ ಆದಾಯದ ಮೂಲಗಳು ಯಾವುವು? ವಿವರಿಸಿ.

13. Write a note on public debt.

ಸಾರ್ವಜನಿಕ ಸಾಲದ ಬಗ್ಗೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

14. Write a note on market failure.

ಮಾರುಕಟ್ಟೆ ವ್ಯಫಲ್ಯದ ಬಗ್ಗೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

15. Explain the objectives of public expenditure.

ಸಾರ್ವಜನಿಕ ವೆಚ್ಚದ ಉದ್ದೇಶಗಳನ್ನು ವಿವರಿಸಿ.

16. Write a note on money.

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

ಹಣದ ಬಗ್ಗೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

17. Briefly explain classification of money.

ಹಣದ ವರ್ಗೀಕರಣವನ್ನು ಸಂಕ್ಷಿಪ್ತವಾಗಿ ವಿವರಿಸಿ.

SECTION - C

III. Answer any TWO of the following:

(2×10=20)

ಈ ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದಾದರೂ ಎರಡು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿ:

18. Explain the cannons of taxation.

ತೆರಿಗೆಯ ಛಿರಂಗಿಗಳನ್ನು ವಿವರಿಸಿ.

19. What is direct tax? Explain the advantages of direct tax.

ನೇರ ತೆರಿಗೆ ಎಂದರೇನು? ನೇರ ತೆರಿಗೆಯ ಅನುಕೂಲಗಳನ್ನು ವಿವರಿಸಿ.

20. Explain the classification of public expenditure.

ಸಾರ್ವಜನಿಕ ವೆಚ್ಚಗಳ ವರ್ಗೀಕರಣವನ್ನು ವಿವರಿಸಿ.

21. What is public finance? Explain the features of public finance.

ಸಾರ್ವಜನಿಕ ಹಣಕಾಸು ಎಂದರೇನು? ಸಾರ್ವಜನಿಕ ಹಣಕಾಸಿನ ವೈಶಿಷ್ಟ್ಯಗಳನ್ನು ವಿವರಿಸಿ.

6. Ahmedabad Mill Strike claiming plague bonus took place in
 a) 1918 b) 1919
 c) 1915 d) 1917

ಷ್ವೇಗ್ ಬೋನಸ್ ಎಂದು ಅಹಮದಾಬಾದ್ ಮಿಲ್ ಮುಷ್ಕರ ನಡೆಯಿತು?

- ಅ) 1918 ಆ) 1919
 ಇ) 1915 ಈ) 1917

7. The direct action campaign of tax resistance against the British in 1930 is known as.

- a) Champaran b) Civil disobedience
 c) Dandi March d) Non-cooperation

1930 ರಲ್ಲಿ ಬ್ರಿಟಿಷರ ವಿರುದ್ಧ ತೆರಿಗೆ ಪ್ರತಿರೋಧದ ನೇರ ಕ್ರಿಯೆಯ ಅಭಿಯಾನವನ್ನು.....ಎಂದು ಕರೆಯಲಾಗುತ್ತದೆ.

- ಅ) ಚಂಪಾರಣ್ ಆ) ನಾಗರಿಕ ಅಸಹಕಾರ
 ಇ) ದಂಡಿ ಮಾರ್ಚ್ ಈ) ಅಸಹಕಾರ

8. The statement "India does not need imported drugs from the West when she has an inexhaustible stock of a variety of drugs grown in the villages themselves. But more than drugs they have to teach the people the right mode of living" is written in

- a) Harijan b) Walden
 c) Anna Karenina d) War and peace

ST ALOYSIUS COLLEGE LIBRARY
 MANGALURU - 575 003

"ಭಾರತವು ಹಳ್ಳಿಗಳಲ್ಲಿಯೇ ಬೆಳೆದ ವಿವಿಧ ಔಷಧಿಗಳ ಅಕ್ಕಯ ಸಂಗ್ರಹವನ್ನು ಹೊಂದಿರುವಾಗ ಪಾಶ್ಚಿಮಾತ್ಯ ದೇಶಗಳಿಂದ ಆಮದು ಮಾಡಿಕೊಳ್ಳುವ ಔಷಧಿಗಳ ಅಗತ್ಯವಿಲ್ಲ. ಆದರೆ ಔಷಧಿಗಳಿಗಿಂತ ಹೆಚ್ಚಾಗಿ ಅವರು ಜನರಿಗೆ ಸರಿಯಾದ ಜೀವನ ವಿಧಾನವನ್ನು ಕಲಿಸಬೇಕು" ಈ ಹೇಳಿಕೆಯುನಲ್ಲಿ ಬರೆಯಲಾಗಿದೆ.

- ಅ) ಹರಿಜನ್ ಆ) ವಾಲ್ಡೆನ್
 ಇ) ಅನ್ನಾ ಕರೆನಿನಾ ಈ) ಯುದ್ಧ ಮತ್ತು ಶಾಂತಿ

9. The director of Film "Gandhi (1982)

- a) Ben Kingsley b) Richard Attenborough
 c) John Briley d) Ravi Shankar

"ಗಾಂಧಿ (1982) ಚಿತ್ರದ ನಿರ್ದೇಶಕ

- ಅ) ಬೆನ್ ಕಿಂಗ್ಸ್ಲಿ ಆ) ರಿಚರ್ಡ್ ಅಟೆನ್‌ಬರೋ
 ಇ) ಜಾನ್ ಬ್ರೈಲಿ ಈ) ರವಿ ಶಂಕರ್

10. The state represents violence in a concentrated and organized form. The individual has a soul but the state is a

- a) Soul-less machine b) Sinful soul
 c) Mindful soul d) None of the above

ರಾಜ್ಯವು ಹಿಂಸಾಚಾರವನ್ನು ಕೇಂದ್ರೀಕೃತ ಮತ್ತು ಸಂಘಟಿತ ರೂಪದಲ್ಲಿ ಪ್ರತಿನಿಧಿಸುತ್ತದೆ. ವ್ಯಕ್ತಿಗೆ ಆತ್ಮವಿದೆ ಆದರೆ ರಾಜ್ಯವು

- ಅ) ಆತ್ಮರಹಿತ ಆ) ಪಾಪಿ ಆತ್ಮ
 ಇ) ತುಂಬಿದ ಮನಸ್ಸು ಈ) ಮೇಲಿನ ಯಾವುದೂ ಅಲ್ಲ

SECTION - B

Answer any **TWO** Questions. Answer the following in not more than 500 words. (2x10=20)

ಯಾವುದೇ ಎರಡು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿ. ಕೆಳಗಿನವುಗಳಿಗೆ 500 ಪದಗಳಿಗಿಂತ ಹೆಚ್ಚಿಲ್ಲದಂತೆ ಉತ್ತರಿಸಿ.

11. Explain Gandhi's views on Health and Naturopathy.

ಆರೋಗ್ಯ ಮತ್ತು ವೈಯಕ್ತಿಕ ಚಿಕಿತ್ಸೆಯಲ್ಲಿ ಗಾಂಧಿಯವರ ಅಭಿಪ್ರಾಯಗಳನ್ನು ವಿವರಿಸಿರಿ.

12. What are the views of Gandhi on sustainability?

ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿಯ ಬಗ್ಗೆ ಗಾಂಧಿಯವರ ಅಭಿಪ್ರಾಯಗಳನ್ನು ವಿವರಿಸಿ ಬರೆಯಿರಿ.

13. Explain the influences of Thoreau, Ruskin and Tolstoy on Gandhi?

ಥೋರೋ, ರಸ್ಕಿನ್ ಮತ್ತು ಟಾಲ್‌ಸ್ಟಾಯ್ ಗಾಂಧಿಯವರ ಮೇಲೆ ಬೀರಿದ ಪ್ರಭಾವಗಳನ್ನು ವಿವರಿಸಿರಿ.

SECTION - C

Answer any **TWO** of the following questions in not more than 800 words. (2x15=30)

ಯಾವುದೇ ಎರಡು ಪ್ರಶ್ನೆಗಳಿಗೆ 800 ಪದಗಳಿಗಿಂತ ಹೆಚ್ಚಿಲ್ಲದಂತೆ ಉತ್ತರಿಸಿ.

14. Examine Gandhiji's views on politics and religion.

ಗಾಂಧೀಜಿಯವರ ರಾಜಕೀಯ ಮತ್ತು ಧರ್ಮದ ಬಗೆಗಿರುವ ವಿಚಾರಗಳನ್ನು ವಿವರಿಸಿರಿ.

15. Critically evaluate Gandhi's contributions as a political and spiritual leader.

ರಾಜಕೀಯ ಮತ್ತು ಆಧ್ಯಾತ್ಮಿಕ ನಾಯಕರಾಗಿ ಗಾಂಧಿಯವರ ಕೊಡುಗೆಗಳನ್ನು ವಿಮರ್ಶಾತ್ಮಕವಾಗಿ

ಮೌಲ್ಯಮಾಪನ ಮಾಡಿ.

ST ALOYSIUS COLLEGE LIBRARY

MANGALURU - 575 003

16. Examine Gandhiji's political journey from South Africa to Freedom Struggle in India.

ದಕ್ಷಿಣ ಆಫ್ರಿಕಾದಿಂದ ಭಾರತದಲ್ಲಿ ಸ್ವಾತಂತ್ರ್ಯ ಹೋರಾಟದವರೆಗೆ ಗಾಂಧೀಜಿಯವರ ರಾಜಕೀಯ ಪ್ರಯಾಣವನ್ನು ವಿವರಿಸಿರಿ.

(2021 batch onwards)

G 104 OE1.3

Reg. No:

--	--	--	--	--	--	--	--	--	--

**St Aloysius College (Autonomous)
Mangaluru**

**B.A. Semester III – Degree Examination
November - 2024**

**SOCIOLOGY (OPEN ELECTIVE)
SOCIOLOGY OF TOURISM MANAGEMENT**

Time: 2½ Hours

Max. Marks: 60

PART - A

I. Answer any FIVE Questions in 2-3 sentences each. (5x2=10)

ಈ ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಐದು ಪ್ರಶ್ನೆಗಳಿಗೆ ತಲಾ 2-3 ವಾಕ್ಯಗಳಲ್ಲಿ ಉತ್ತರಿಸಿರಿ.

1. Who is a tourist?
ಪ್ರವಾಸಿ ಯಾರು?
2. Mention the primary factors that influence a tourist's decision-making process.
ಪ್ರವಾಸಿಗರ ನಿರ್ಧಾರ-ಮಾಡುವ ಪ್ರಕ್ರಿಯೆಯ ಮೇಲೆ ಪ್ರಭಾವ ಬೀರುವ ಪ್ರಾಥಮಿಕ ಅಂಶಗಳನ್ನು ಉಲ್ಲೇಖಿಸಿರಿ.
3. What are different roles of a tourist?
ಪ್ರವಾಸಿಗರ ವಿಭಿನ್ನ ಪಾತ್ರಗಳು ಯಾವುವು?
4. Distinguish between leisure and recreation.
ವಿರಾಮ ಮತ್ತು ಮನರಂಜನೆಯ ನಡುವೆ ವ್ಯತ್ಯಾಸವನ್ನು ಗುರುತಿಸಿರಿ.
5. What is meant by sustainable eco-tourism?
ಸುಸ್ಥಿರ ಪರಿಸರ ಪ್ರವಾಸೋದ್ಯಮದ ಅರ್ಥವೇನು?
6. Name the common indicators used to assess the sustainability of tourism.
ಪ್ರವಾಸೋದ್ಯಮದ ಸುಸ್ಥಿರತೆಯನ್ನು ನಿರ್ಣಯಿಸಲು ಬಳಸುವ ಸಾಮಾನ್ಯ ಸೂಚಕಗಳನ್ನು ಹೆಸರಿಸಿರಿ.
7. What is the concept of market-level demand in tourism?
ಪ್ರವಾಸೋದ್ಯಮದಲ್ಲಿ ಮಾರುಕಟ್ಟೆ ಮಟ್ಟದ ಬೇಡಿಕೆಯ ಪರಿಕಲ್ಪನೆ ಏನು?
8. What is e-tourism?
ಇ-ಟೂರಿಸಂ ಎಂದರೇನು?

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

PART - B

Answer any SIX of the following. (6x5=30)

ಈ ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಆರು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿರಿ.

9. Describe the key concepts and terms associated with the sociology of tourism.
ಪ್ರವಾಸೋದ್ಯಮದ ಸಮಾಜಶಾಸ್ತ್ರಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಪ್ರಮುಖ ಪರಿಕಲ್ಪನೆಗಳು ಮತ್ತು ನಿಯಮಗಳನ್ನು ವಿವರಿಸಿರಿ.
10. Describe the key aspects of sports tourism.
ಕ್ರೀಡಾ ಪ್ರವಾಸೋದ್ಯಮದ ಪ್ರಮುಖ ಅಂಶಗಳನ್ನು ವಿವರಿಸಿರಿ.
11. What are the challenges of motivation?
ಪ್ರೇರಣೆಯ ಸವಾಲುಗಳೇನು?
12. What are the primary motivations that drive tourists to visit specific destinations?
ನಿರ್ದಿಷ್ಟ ಸ್ಥಳಗಳಿಗೆ ಭೇಟಿ ನೀಡಲು ಪ್ರವಾಸಿಗರನ್ನು ಪ್ರೇರೇಪಿಸುವ ಪ್ರಾಥಮಿಕ ಪ್ರೇರಣೆಗಳು ಯಾವುವು?

Contd...2

G 104 OE1.3

13. What does "Place" represent in the 4 Ps of tourism marketing, and how does it affect consumer choices?

ಪ್ರವಾಸೋದ್ಯಮ ಮಾರ್ಕೆಟಿಂಗ್‌ನ 4 Ps ನಲ್ಲಿ "ಪ್ಲೇಸ್" ಏನನ್ನು ಪ್ರತಿನಿಧಿಸುತ್ತದೆ ಮತ್ತು ಇದು ಗ್ರಾಹಕರ ಆಯ್ಕೆಗಳ ಮೇಲೆ ಹೇಗೆ ಪರಿಣಾಮ ಬೀರುತ್ತದೆ?

14. Explain accommodation in tourism system.

ಪ್ರವಾಸೋದ್ಯಮ ವ್ಯವಸ್ಥೆಯಲ್ಲಿ ವಸತಿಗಳನ್ನು ವಿವರಿಸಿರಿ.

15. How does eco-tourism contribute to environmental conservation?

ಪರಿಸರ-ಪ್ರವಾಸೋದ್ಯಮವು ಪರಿಸರ ಸಂರಕ್ಷಣೆಗೆ ಹೇಗೆ ಕೊಡುಗೆ ನೀಡುತ್ತದೆ?

16. Explain the importance of tourism marketing.

ಪ್ರವಾಸೋದ್ಯಮ ಮಾರುಕಟ್ಟೆಯ ಮಹತ್ವವನ್ನು ವಿವರಿಸಿರಿ.

17. Write a note on e-tourism.

ST ALOYSIUS COLLEGE LIBRARY

MANGALURU - 575 003

ಇ-ಟೂರಿಸಂ ಕುರಿತು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

PART - C

Answer any TWO of the following.

(2x10=20)

ಈ ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಎರಡು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿರಿ.

18. Examine the advantages and disadvantages of educational tourism.

ಶೈಕ್ಷಣಿಕ ಪ್ರವಾಸೋದ್ಯಮದ ಅನುಕೂಲಗಳು ಮತ್ತು ಅನಾನುಕೂಲಗಳನ್ನು ತಿಳಿಸಿರಿ.

19. Analyze the factors that influence the success of community-based tourism programmes.

ಸಮುದಾಯ ಆಧಾರಿತ ಪ್ರವಾಸೋದ್ಯಮ ಕಾರ್ಯಕ್ರಮಗಳ ಯಶಸ್ಸಿನ ಮೇಲೆ ಪ್ರಭಾವ ಬೀರುವ ಅಂಶಗಳನ್ನು ವಿಶ್ಲೇಷಿಸಿರಿ.

20. Evaluate the challenges faced by intermediaries.

ಮಧ್ಯವರ್ತಿಗಳು ಎದುರಿಸುತ್ತಿರುವ ಸವಾಲುಗಳನ್ನು ಮೌಲ್ಯಮಾಪನ ಮಾಡಿರಿ.

21. How do factors like location, pricing, and quality influence the choice of accommodation for different types of travellers?

ಸ್ಥಳ, ಬೆಲೆ ಮತ್ತು ಗುಣಮಟ್ಟದಂತಹ ಅಂಶಗಳು ವಿವಿಧ ರೀತಿಯ ಪ್ರಯಾಣಿಕರಿಗೆ ವಸತಿ ಆಯ್ಕೆಯ ಮೇಲೆ ಹೇಗೆ ಪ್ರಭಾವ ಬೀರುತ್ತವೆ?

(2021 batch onwards)

G 105 OE1.3

Reg. No:

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous), Mangaluru

B.A. Semester III – Degree Examination

November -2024

Journalism-Open Elective

FEATURE WRITING AND FREELANCING

Time: 2 ½ Hours

Max. Marks: 60

I Answer any FIVE of the following

(5X10=50)

ಕೆಳಕಂಡ ಯಾವುದಾದರೂ ಐದು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿ.

1. Sketch the ethical considerations involved in investigative feature writing
ತನಿಖಾ ಲೇಖನ ಬರವಣಿಗೆಯಲ್ಲಿ ಒಳಗೊಂಡಿರುವ ನೈತಿಕ ಪರಿಗಣನೆಗಳನ್ನು ವಿವರಿಸಿ.
2. Explain why news articles prioritize timeliness and recent developments
ಸುದ್ದಿ ಲೇಖನಗಳು ಸಮಯೋಚಿತತೆ ಮತ್ತು ಇತ್ತೀಚಿನ ಬೆಳವಣಿಗೆಗಳಿಗೆ ಏಕೆ ಆದ್ಯತೆ ನೀಡುತ್ತವೆ ಎಂಬುದನ್ನು ವಿವರಿಸಿ
3. Sketch out characteristics between personality profile and business profile
ವ್ಯಕ್ತಿ ಪ್ರೊಫೈಲ್ ಮತ್ತು ವ್ಯವಹಾರ ಪ್ರೊಫೈಲ್ ನಡುವಿನ ಗುಣಲಕ್ಷಣಗಳನ್ನು ಚಿತ್ರಿಸಿ.
4. Comment on usage of descriptive language and imagery in art and performance reviews
ಕಲೆ ಮತ್ತು ಪ್ರದರ್ಶನ ವಿಮರ್ಶೆಗಳಲ್ಲಿ ವಿವರಣಾತ್ಮಕ ಭಾಷೆ ಮತ್ತು ಚಿತ್ರಣದ ಬಳಕೆಯ ಬಗ್ಗೆ ಪ್ರತಿಕ್ರಿಯಿಸಿ
5. How does the use of voice, tone, and style differ between written blogs, video vlogs, and audio podcasts?
ಬ್ಲಾಗ್‌ಗಳು, ವೀಡಿಯೋ ವ್ಲಾಗ್‌ಗಳು ಮತ್ತು ಆಡಿಯೋ ಪೋಡ್‌ಕಾಸ್ಟ್ ನಡುವೆ ಧ್ವನಿ, ಟೋನ್ ಮತ್ತು ಶೈಲಿಯ ಬಳಕೆ ಹೇಗೆ ಭಿನ್ನವಾಗಿದೆ?
ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003
6. Define freelancing and its historical origin
ಹವ್ಯಾಸಿ ಪತ್ರಿಕೋದ್ಯಮ ಮತ್ತು ಅದರ ಐತಿಹಾಸಿಕ ಮೂಲವನ್ನು ತಿಳಿಸಿ.
7. What are the effectiveness of different social media platforms for specific types of content, such as visual vs. written content.
ವಿಭಿನ್ನ ಸಾಮಾಜಿಕ ಮಾಧ್ಯಮ ವೇದಿಕೆಗಳು ದೃಶ್ಯ ಮತ್ತು ಬರವಣಿಗೆ ವಿಷಯಗಳಂತಹ ವಿಶೇಷ ವಿಷಯಗಳಿಗಾಗಿ ಎಷ್ಟು ಪರಿಣಾಮಕಾರಿ ಎಂದು ವಿವರಿಸಿ.

II Write short notes

(4X 2½=10)

ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

1. Caption writing
ಶೀರ್ಷಿಕೆ ಬರವಣಿಗೆ
2. Interview
ಸಂದರ್ಶನ
3. Gig Work
ಗಿಗ್ ವರ್ಕ್
4. Youtuber as a career option
ವೃತ್ತಿಜೀವನದ ಆಯ್ಕೆಯಾಗಿ ಯೂಟ್ಯೂಬರ್

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous) Mangaluru

B.A. Semester III – Degree Examination

November - 2024

ಕನ್ನಡ ಐಚ್ಛಿಕ – III (ಪದವಿ ಮುಕ್ತ ಆಯ್ಕೆ ಕನ್ನಡ ಪತ್ರಿಕೆ)

ಸಾಹಿತ್ಯ ಮತ್ತು ಜನಪದ: ಸೃಜನಶೀಲ ಅನುಸಂಧಾನ

Time: 2½ hrs.

Max Marks: 60

- I. ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಮೂರನ್ನು ಪ್ರಬಂಧ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ (7x3=21)
1. ಕ್ರಿಯಾವಿಧಿಗಳ ಮೂಲ ನಮಗೆ ಎಲ್ಲಿ ಕಾಣಿಸಿಗುತ್ತದೆ? ನಮ್ಮ ಸುತ್ತಮುತ್ತಲಿನ ಕ್ರಿಯಾವಿಧಿಗಳನ್ನು ವಿವರಿಸಿರಿ
What is the base of rituals? Explain some ritual practices from our surrounding
 2. ಭಾರತದ ವಿವಿಧ ಬುಡಕಟ್ಟುಗಳ ವಿಶೇಷತೆ ಏನು?
What is the specialty about the different tribes of India?
 3. ಜನಪದ ಕಲೆಗಳು ಹಾಗೂ ಆಧುನಿಕ ಕಲೆಗಳಲ್ಲಿ ಇರುವ ವ್ಯತ್ಯಾಸಗಳೇನು? ವಿವರಿಸಿರಿ
What is the difference between folk arts and modern arts? Explain
 4. ಜನಪದ ಕಥೆಗಳು ಕೊಡುವ ವಿಶೇಷ ರಂಜನೆ ಏನು? ವಿವರಿಸಿರಿ
What is the special entertainment that folk tales provide? Explain
 5. ಜಾನಪದದ ಲಕ್ಷಣಗಳನ್ನು ಹೆಸರಿಸುತ್ತಾ, ಜಾನಪದದ ವ್ಯಾಖ್ಯಾನವನ್ನು ನೀಡಿ
Define Folklore. Name the characteristics of Folklore.
 6. ಜನಪದ ಕಾವ್ಯಗಳು ಎಂದರೇನು? ವಿವರಣೆ ನೀಡಿ
What are Folk poems? Explain
- II. ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಮೂರನ್ನು ಸಂಕ್ಷಿಪ್ತ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ (3x3=09)
7. 'ದೇವರ ಹೆಣ' ಕಥೆಯಲ್ಲಿ ಕಾಣಿಸಿರುವ ಜನಪದ ಆಚರಣೆಗಳು ಏನು?
What are the folk rituals seen in the story Devara Hena?
 8. ಜನಪದ ಸಾಹಿತ್ಯವು ಅತ್ಯಂತ ವೈವಿಧ್ಯಮಯವಾಗಿದೆ. ಹೇಗೆ? ವಿವರಿಸಿರಿ
Folk literature is very diverse. How? Explain
 9. ದೇವರ ಹೆಣ ಕಥೆಯ ಮುಖೇನ ಲೇಖಕರು ಏನು ಹೇಳಲು ಹೊರಟಿದ್ದಾರೆ?
What are the ideas, the author is trying to say through the story 'Devara Hena'?
 10. ಪಾದ್ಧಾನಗಳು ಎಂದರೇನು? ಅವುಗಳಲ್ಲಿನ ವಿಶೇಷತೆಗಳೇನು?
What are Paddanas? What are the characteristics of them?
 11. ಸಿದ್ಧಿ ಸಮುದಾಯ ಶತಮಾನಗಳಲ್ಲಿ ನಡೆದು ಬಂದ ಹಾದಿಯನ್ನು ವಿವರಿಸಿರಿ
Describe the course of the Siddi community over the centuries
 12. ಆರಾಧನೆ ಮತ್ತು ರಂಗಭೂಮಿ ಕ್ರಿಯಾವಿಧಿಗಳಲ್ಲಿ ಹೇಗೆ ಬೆರೆತಿದೆ? ವಿವರಿಸಿರಿ
How are worship and theater intermingled in the Rituals? explain

Contd....2

III. ಈ ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಒಂದು ಪ್ರಶ್ನೆಗೆ ಉತ್ತರಿಸಿರಿ (4x1=04)

13. ಒಬ್ಬ ಜನಪದ ಕಲಾವಿದೆಯ ಕಾಲ್ಪನಿಕ ಸಂದರ್ಶನ ಮಾಡಿ

Do a fictional interview with a folk artist

14. ನಿಮ್ಮ ಸುತ್ತಮುತ್ತ ಇರುವ ಯಾವುದಾದರೂ ಬುಡಕಟ್ಟು ಸಮುದಾಯದ ಕುರಿತು ಬರೆಯಿರಿ

Write a note on any one tribal community.

IV. ಕೆಳಗಿನ ಯಾವುದಾದರೂ ಎರಡು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸಿರಿ (2x2=04)

15. ಯಕ್ಷಗಾನದ ಕುರಿತು ಬರೆಯಿರಿ

Write a note on Yakshagaana

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

16. ಕುಡುಬಿ ಜನಾಂಗದ ನೃತ್ಯ ಪ್ರಕಾರವನ್ನು ತಿಳಿಸಿ

Explain the dance forms of Kudubi Community

17. ಭೂತಾರಾಧನೆಯಲ್ಲಿ ಕಂಡುಬರುವ ಮಾತುಗಾರಿಕೆ ಹಾಗೂ ಹಾಡುಗಾರಿಕೆ ಕುರಿತು ಬರೆಯಿರಿ

Write about the speech and singing found in Bhootaradhana

18. ಸಿನೆಮಾ ಗೀತೆಗಳಿಗೂ ಜನಪದ ಗೀತೆಗಳಿಗೂ ಇರುವ ವ್ಯತ್ಯಾಸವೇನು?

What is the difference between film songs and folk songs?

V. ಅ) ಕೆಳಗಿನ ಎರಡರ ಕುರಿತು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ (3x2=06)

19. ಗಾದೆಗಳು Folk Puzzles

20. ಗುರಿಕಾರ Gurikara

21. ಕೊರಗರ ಡೋಲು Dhol of Koraga Community

22. ದೇವರ ಹೆಣ Devara Hena

ಆ) ಕೆಳಗಿನ ಎರಡರ ಕುರಿತು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ (3x2=06)

23. ಕ್ಯಾಥೊಲಿಕ್ ಸಮುದಾಯದ ಮದುವೆ ಹಾಡುಗಳು

Wedding songs of Carholic Community

24. ಕೋಲಾಟ Kolaata

25. ಜೋಗುಳ ಹಾಡುಗಳು Lullaby

26. ಹಿಂದೂ ಸಿದ್ಧಿ Hindu Siddi

- VI. ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಒಂದೊಂದು ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿ (1x10=10)
27. ಯಕ್ಷಗಾನದಲ್ಲಿ ಕಂಡುಬರುವ ಎರಡು ತಿಟ್ಟುಗಳನ್ನು ಹೆಸರಿಸಿ
Name the two types of Yakshagana.
28. ಸಿದ್ಧಿ ಸಮುದಾಯದ ಕುಣಿತ ಯಾವುದು?
What is the name of the dance form of Siddhi community?
29. ಕುಡುಬಿಯವರು ಯಾವ ಭಾಷೆಯನ್ನು ಮಾತಾಡುತ್ತಾರೆ?
Which language does Kudubi community speak?
30. ಹೆಚ್ಚಾಗಿ ಯಕ್ಷಗಾನ ಪ್ರಸಂಗಗಳು ಯಾವುದರ ಮೇಲೆ ಆಧಾರಿತವಾಗಿರುತ್ತವೆ?
Yakshagana performance is often based on what?
31. ಶೈವ ಸಂಪ್ರದಾಯದ ಧಾರ್ಮಿಕ ವೀರ ನೃತ್ಯದ ಹೆಸರೇನು?
What is the religious dance form of Shaiva known as?
32. ಮಾಪಿಳ್ಳೆ ಪಾಟ್ತ್ ಎಂದರೇನು?
What is the meaning of Mapille Paatte?
33. ಜನಪದ ವಿಶ್ವವಿದ್ಯಾಲಯ ಮೊದಲ ಕುಲಪತಿ ಯಾರು ಆಗಿದ್ದರು?
Who is the first chancellor of Folk University? ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003
34. ಕೇರಳದಲ್ಲಿ ಕಾಣಿಸಿಗುವ ಭೂತಾರಾಧನೆಯನ್ನು ಏನೆಂದು ಕರೆಯುತ್ತಾರೆ?
What is the name of the ritual which is similar to Bhootaradhe and which can be seen in Kerala called?
35. ವೇಷಗಳನ್ನು ಕಾಣುವ ಕರಾವಳಿಯ ಹಬ್ಬ ಯಾವುದು? ಉತ್ತರ ಆರಿಸಿ: (ನವರಾತ್ರಿ, ಅಮಾವಸ್ಯೆ, ಯುಗಾದಿ)
What is a costumed coastal festival? Select Answer: (Navratri, Amavasye, Ugadi)
36. ಭೂತಾರಾಧನೆಯಲ್ಲಿ ನರ್ತನ ಕಲಾವಿದನ ಬೆನ್ನಿನ ಹಿಂದೆ ಕಟ್ಟುವ ಅರ್ಧ ಚಂದ್ರಾಕಾರದ ರಚನೆಯನ್ನು ಏನೆನ್ನುತ್ತಾರೆ?
In Bhutharahane what is the half-moon shaped structure tied behind the Flok Ritual Artist's back called?

(2021 batch onwards)

G 108 OE1.3

Reg. No.:

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)
Mangaluru
BA Semester III – Degree Examination
November - 2024

English Major (Open Elective)

Phonetics of English Language

Time: 2½ hrs.

Max Marks: 60

I. Answer any FOUR of the following in about 150 to 200 words. (4x5=20)

1. What are monophthongs? Give one example each.
2. What are active and passive articulators? Distinguish between the two.
3. Explain the articulatory system of the organs of speech.
4. List the consonant sounds of English with an example each.
5. Write short notes on the places of articulation.
6. Write short notes on the respiratory system of the organs of speech.

II. Answer any TEN of the following in about 1-2 sentences each. (10X2=20)

1. Define organs of speech.
2. Name the classification of speech sounds.
3. Expand IPA.
4. What are allophones?
5. What is phonetics?
6. Identify the number of syllables in: (a) animation (b) practical
7. Name the bilabials.
8. In the upper part of the trachea is a structure called _____.
9. When the vocal cords are held loosely together the air from the lungs can escape freely without setting the vocal cords into vibration. **True/False.**
10. Name the categories of consonant sounds.
11. Name the affricates.
12. What is rhythm?

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

Contd...2

III. Transcribe the following from IPA to Normal orthography. 10X1=10

1. /laɪftə/
2. /məʃiːn/
3. /nɒlɪdʒ/
4. /ənaʊnsmənt/
5. /ədmit/
6. /miːtɪŋ/
7. /məməʀændəm/
8. /kənʌvɜːʃn/
9. /pɑːtɪkl/
10. /prɪzəɪd/

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

IV Transcribe the following from Normal orthography to IPA 10X1=10

1. anxious
2. barber
3. cuisine
4. Drama
5. engineer
6. necessary
7. Police
8. onion
9. photograph
10. Judge

St Aloysius College (Autonomous) Mangaluru
B.A. Semester III – Degree Examination
November - 2024
Communicative English (Open Elective)
DEVELOPING PROFESSIONAL COMPETENCY

Time : 2 ½ Hours

Max. Marks : 60

UNIT - I

I.A. Answer any TWO of the following questions in about 150 words. (5x2=10)

1. How to write an effective essay? Explain some major types of essays
2. How to write a story? Mention five key points that become part of a story.
3. Write a note on a Human Interest story. Examine Language as a major feature in a human-interest story.

B. Write a 'Narrative Essay' in about 350 words on the topic (1x10=10)

The best gift you have ever received

C. Complete the following story from the storyline provided. (1x5=5)

Every cloud has a silver lining.

UNIT - II

II.A. Answer any TWO of the following questions in about 150 words. (2x5=10)

1. How does self-confidence play a major role in self-introduction? Explain in detail.
2. What are the tips to be followed in resume writing? Mention some important parts of a Resume.
3. What are feature stories? Explain various types of them.

B. Write a resume with a cover letter in response to the following job opening (1x10=10)

Institution: Tech Innovators Inc., Qualification: Master's Degree in Computer Science,
Experience: 4+ years in Software Development.

ST ALOYSIUS COLLEGE LIBRARY

MANGALURU - 575 003

C. Self-Introduction (1x5=5)

You are the president of the student council. Deliver a self-introduction speech on the occasion of the Investiture Ceremony.

UNIT - III

III. Answer any TWO of the following questions in about 150 words: (2x5=10)

1. How to plan an effective Presentation? Does the audience play a major part in a presentation?
2. Write a note on the use of Visual Aids in the process of 'Planning the Presentation.'
3. Write a note on Language as a part of Effective Communication. Specify any two reasons for failure in effective communication.

(2023 batch only)

G 330 DC5.3

Reg. No.

--	--	--	--	--	--	--	--

**St Aloysius College (Autonomous)
Mangaluru**

**B.Com. (Apprenticeship/Internship Embedded) Semester III – Degree Examination
November - 2024**

Basics of Financial Management

Time: 2½ hrs.

Max Marks: 60

Note: Present value table will be provided.

SECTION A

Answer any **FIVE** of the following:

(5x2=10)

1. Why do we need financial planning?
2. Write the meaning of financial planning.
3. Explain the reasons for 'time preference of money'.
4. Calculate the future value of ₹20,000 invested now for a period of 6 years at a time preference rate of 8% per annum.
5. What are the different kinds of capital budgeting decisions?
6. State any four features of Net Present Value.
7. Determine the present value of an annuity of ₹25,000 receivable for 5 years at an effective rate of interest of 10% p.a.

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

SECTION B

Answer any **FOUR** of the following:

(4x5=20)

8. What are the principles that determine a sound financial plan?
9. Mr Jitender deposits ₹5,000 at the beginning of 1st year, ₹10,000 at the beginning of 2nd year, ₹15,000 at the beginning of 3rd year, ₹20,000 at the beginning of 4th year and ₹25,000 at the beginning of 5th year. The deposits earn an interest at 9% per annum. Determine how much money he will have at the end of 5 years?
10. Write a note on the importance of financial planning.
11. Compute the future value at the end of 8 years of the following series of payment at 15% rate of interest.
At the end of 1st year ₹ 1,000; At the end of 2nd year ₹ 2,000; At the end of 3rd year ₹ 3,000; At the end of 4th year ₹ 4,000; At the end of 5th year ₹ 5,000; At the end of 6th year ₹ 6,000; At the end of 7th year ₹ 7,000 and at the end of 8th year ₹ 8,000
12. What factors impact investment decisions? Explain.
13. A bank provides a 12% interest rate. Determine the effective interest rate if the compounding is done a) Weekly b) Quarterly c) Semi-annually d) Monthly

Contd....2

SECTION -C

Answer any TWO of the following:

(2x15=30)

14. Explain the scope financial management in modern business organizations.
15. (a) What are the features of capital budgeting? Explain. (09)
- (b) Mr. Mahindra invests ₹25,000 on March 1, 2023, at an interest rate of 10%. How long will it take for his investment to double? Solve this problem using (a) the Rule of 72 and (b) the Rule of 69. (06)
16. A firm whose cost of capital is 10% is considering two projects A & B, the details of which are:

	PROJECT 'A'	PROJECT 'B'
Investment:	2,00,000	2,00,000
Cash inflow:		
1	40,000	90,000
2	60,000	80,000
3	80,000	60,000
4	1,00,000	20,000
5	1,20,000	16,000

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

Compute the Net Present Value (NPV) and Profitability Index (PI) at 10% and Internal Rate of Return (IRR) for the two projects separately, Project A by 20% and 25% and Project B by 10% and 15%.

(2022 Batch Onwards)

G 340 OE1.3

Reg. No. :

--	--	--	--	--	--	--	--

**St Aloysius College (Autonomous)
Mangaluru**

Semester III – Degree Examination

November - 2024

B.Com. (Accounting and Tax) - OPEN ELECTIVE

CORPORATE LAW

Time: 2½ Hours

Max Marks: 60

SECTION – A

Answer any **FIVE** of the following.

(5x2=10)

1. Kamyra Ltd. is incorporated on 3rd January 2021. As per the Companies Act, 2013, what will be the financial year for the company?
2. Members are severally liable in certain cases. Explain.
3. Explain the options available for an application for an extension of reservation of name.
4. What are the provisions relating to information memorandum as contained in the Companies Act, 2013?
5. Briefly discuss the different kinds of share capital.
6. What are the conditions in regard to the Experts' statement?
7. State whether the following are True or False and give reasons
 - a. A public company can issue either redeemable or irredeemable preference shares.
 - b. New shares cannot be issued to outsiders without prior offer to the existing shareholders.

ST ALOYSIUS COLLEGE LIBRARY

MANGALURU - 575 003

SECTION - B

Answer any **FOUR** of the following.

(4x5=20)

8. Explain the Exceptions to Doctrine of Indoor Management.
9. a) Who can form one person company?
b) Discuss when nominee becomes member.
10. What is a shelf- prospectus? State the important provisions relating to the issuance of shelf- prospectus under the provisions of Companies Act, 2013
11. Discuss the provisions relating to the resolution for the private placement offers.
12. Can a company issue shares at a discount?
13. Explain:
 - a) Deemed Prospectus
 - b) Shelf Prospectus
 - c) Red Herring Prospectus
 - d) Abridged Prospectus

Contd...2

SECTION - C**Answer any TWO of the following.****(2x15=30)**

14. Gully Gilli Danda Club was formed as a Limited Liability Company under section 8 of the Companies Act, 2013 with the object of promoting Gilli Danda by arranging introductory courses at the district level and friendly matches. The club has been earning a surplus. Of late, the affairs of the company are conducted fraudulently, and dividends was paid to its members. Mr. A, a member decided to make a complaint with Regulatory Authority to curb the fraudulent activities by canceling the license given to the company.
- (i) Is there any provision under the Companies Act, 2013 to revoke the license? If so, state the provisions.
- (ii) Whether the company may be wound up?
- (iii) Whether the Gully Gilli Danda Club can be merged with Stick Private Limited, a company engaged in the business of networking?
15. With respect to a Section 8 Company; explain:
- (i) Who can issue and get the license under Section 8(1)?
- (ii) Revocation of license.
16. Explain the steps for incorporation of company.

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

(2021 Batch onwards)

G 401 OE1.3

Reg. No. :

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)

Mangaluru

B.B.A. Semester III – Degree Examination

November - 2024

B.B.A. – OPEN ELECTIVE

MONEY AND PUBLIC FINANCE

Time: 2½Hours

Max Marks: 60

PART – A

Answer any FIVE of the following.

(5x2=10)

1. What is paper money?
2. What is public expenditure?
3. What is MSS?
4. What is public finance?
5. What is surplus budget?
6. Mention any four canons of public expenditure?
7. Mention four types of GST.
8. What is external debt?

**ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003**

PART - B

Answer any FOUR of the following.

(4x5=20)

9. Write a note on high powered money.
10. Critically explain the cash transaction version of the quantity theory of money.
11. Briefly explain the three motives for holding money by J.M.Keynes.
12. Briefly explain the merits of direct tax.
13. What is fiscal policy? What are the objectives of fiscal policy.
14. Briefly explain the five methods of public debt redemption.

PART – C

Answer any TWO of the following.

(2x15=30)

15. Explain the various classification of money.
16. Explain the various sources of public revenue.
17. Explain the various canons of public expenditure in India.
18. Critically explain the principles of maximum social advantage theory.

(2021 Batch Onwards)

G 501 OE1.3

Reg. No. :

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester III – Degree Examination

November - 2024

PHYSICS (OPEN ELECTIVE)

FUNDAMENTALS OF OPTICS AND ELECTRICITY

Time: 2½ hrs.

Max Marks: 60

SECTION – A

Answer any **FOUR** of the following.

(4x2=8)

1. a) What is dispersion, and how does it occur when white light passes through a prism?
- b) What is the primary advantage of a refractor telescope over a reflector telescope?
- c) Differentiate between a prime lens and a zoom lens.
- d) Explain how the refractive indices of these two components are critical for efficient light transmission in optical fibers.
- e) What are electric charges? Mention the types.
- f) Explain the basic working principle of an electric water heater.

SECTION – B

Answer any **ONE FULL QUESTION** from each unit.

(4x10=40)

UNIT-I

- 2.a) What is Snell's law? Explain how it is used to determine refractive index of a medium. (6)
- b) Discuss how concave and convex mirrors can be used in various optical devices and applications, providing examples for each. (4)
- 3.a) Compare the laws of reflection and refraction (6)
- b) What are concave mirrors? Where are they used? (4)

UNIT-II

- 4.a) Elaborate on the concept of magnification in simple microscope. (6)
- b) What is the working principle behind a simple microscope, and how does it differ from a compound microscope? (4)
- 5.a) Explain the variances in design and operation between simple and compound microscopes. (6)
- b) What is the significance of the Hubble Space Telescope in astronomy, and how does it overcome the limitations of ground-based telescopes? (4)

UNIT-III

- 6.a) Describe how optical fibers are used in endoscopy, medical imaging, and laser surgery. (6)

Contd...2

- b) Explain the sign convention of lens. (4)
- 7.a) What is attenuation? Explain intrinsic and extrinsic attenuation. (6)
- b) Describe the concept of total internal reflection in optical fibers and its importance. (4)

UNIT-IV

- 8.a) What is the difference between an miniature circuit breaker (MCB) and a fuse in an electrical circuit, and how do they protect against overloads? (6)
- b) Explain how reducing power consumption can contribute to sustainability and lower utility bills for households. (4)
- 9.a) Discuss the working principle of incandescent bulbs, including the components involved and the process of light production (6)
- b) Discuss how DC differs from AC (alternating current) in terms of the direction and constancy of current flow. (4)

SECTION -C

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

Answer any **THREE** from the following.

(3x4=12)

10. A light ray travels from a medium with refractive index $n_1=2.06$ another medium with refractive index $n_2=2.3$. If the angle of incidence 60° , calculate the angle of refraction in the second medium.
11. A converging lens of refractive index 1.5 is kept in a liquid medium having same refractive index. What would be the focal length of the lens in this medium?
12. A circuit has a 12 V voltage source connected to a resistor with an unknown resistance. If the current passing through the resistor is 1.5 A, calculate the resistance R of the resistor.
13. A resistor has a resistance of 50Ω and a current of 2A passing through it. Calculate the voltage drop V across the resistor.

(2021 Batch onwards)

G 502 OE1.3

Reg. No.:

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)
Mangaluru

B.Sc. Semester III – Degree Examination
November - 2024

CHEMISTRY - OPEN ELECTIVE

STRUCTURE, BONDING AND CONCEPTS IN ORGANIC CHEMISTRY

Time: 2½ hrs.

Max Marks: 60

- Instructions: 1. Write the question number and subdivision clearly.
2. Write equations and diagrams wherever necessary.
3. Answer Part – A in first two pages of the answer book.

PART - A

Answer any **EIGHT** of the following.

(1×8=8)

1. a) State Heisenberg's uncertainty principle.
- b) Specify the electronic transition involved in Balmer series.
- c) Give reason: During the detection of nitrogen by Lassaigne's test if sulphur is present blood red colour is obtained.
- d) What is the electron configuration of sodium (atomic number 11) in its ground state?
- e) Give an example for homoaromatic compound.
- f) Define carbocation.
- g) Define electromeric effect.
- h) Give an example of non-benzenoid compound.
- i) Give an example of a reaction that involves homolytic cleavage.

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

PART - B

Answer any **EIGHT** of the following.

(3×8=24)

- 2.(i) How does the azimuthal quantum number (l) relate to orbital shapes?
- (ii) What is the charge of a proton, and how does it compare to the charge of an electron?
- (iii) Explain the calculation involved in the estimation of halogens in an organic compound by Carius method.
- (iv) Explain basicity and nucleophilicity.
- (v) What is nucleophile, and why are carbanion considered nucleophilic? Give an example for secondary and tertiary carbanion.
- (vi) Explain the principle involved in Kjeldals method for the determination of nitrogen in organic compounds.
- (vii) Among formic acid and acetic acid which is more acidic and why?
- (viii) Explain the concept of pi electron delocalization in aromatic compounds.
- (ix) Differentiate between chlorobenzene and benzaldehyde using resonance effect.

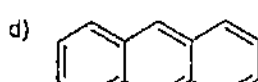
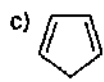
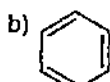
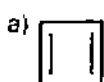
Contd...2

PART - C

Answer any **SEVEN** of the following.

(4×7= 28)

3. Explain the Aufbau principle. Give its limitations.
4. Derive the expression for de Broglie equation.
5. Based on hyper conjugation effect explain stability of secondary carbocations over primary carbocation.
6. Distinguish between sp^2 and sp hybridisation.
7. Explain mesomeric effect.
8. Predict aromatic/antiaromatic character of the following



9. Explain an example of a molecule where the inductive effect is used to explain the polarity of its bonds.
10. Explain how the inductive effect and steric hindrance effect the basicity of aliphatic amino acids.

St Aloysius College (Autonomous) Mangaluru
B.Sc SEMESTER III - DEGREE EXAMINATION
NOVEMBER - 2024

Mathematics (Open Elective)
Ordinary Differential Equations

Time : 2 ½ Hours

Max. Marks : 60

PART - AAnswer any **NINE** of the following .

(9×2=18)

1. Check whether the given differential equation $(y + 2xy^3)dx + (1 + 3x^2y^2 + x)dy = 0$ is exact.
2. Define a differential equation. Give an example.
3. Verify whether the given differential equation $(x^2 + 2y^2)dx - xydy = 0$ is homogenous.
4. Find the order and degree of $\frac{dy}{dx} + 2x\left(\frac{d^2y}{dx^2}\right)^2 = 0$.
5. Find the integrating factor of the linear differential equation $\frac{dy}{dx} + y = \sin x$.
6. Find the integrating factor of $ydx - xdy = 0$.
7. Rewrite the differential equation $(x^5 - 4y)dx - 2xdy = 0$ as a linear differential equation and hence find $P(x)$ and $Q(x)$.
8. Give an example for Bernoulli equation. Write the formula for substitution z .
9. Find the particular integral of $(D^2 + 4)y = 3\sin 2x$.
10. Find the complementary solution of $(D^2 - 4)y = \cos 2x$.
11. Solve: $(D^2 + 2D - 3)y = 0$.
12. Transform a given differential equation $x^2 \frac{d^2y}{dx^2} - 3x \frac{dy}{dx} + 4y = x^2$ into the differential equation of constant coefficients by making a substitution of $x = e^z$.

PART - B
UNIT - IST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003Answer any **TWO** of the following .

(2x7=14)

1. Solve: $(x^2 + y^2)dx - xydy = 0$.
2. Solve: $\frac{dy}{dx} = e^{2x-y} + x^2 \cdot e^{-y}$.
3. Solve: $(2x + y \cos xy)dx + (x \cos xy)dy = 0$.

UNIT - IIAnswer any **TWO** of the following .

(2x7=14)

1. Solve: $(x^2 + y^2 + 1)dx + x(x - 2y)dy = 0$.
2. Solve: $2(y - 4x^2)dx + xdy = 0$.
3. Solve: $y' = y - xy^3e^{-2x}$.

UNIT - IIIAnswer any **TWO** of the following .

(2x7=14)

1. Solve: $(D^3 + 2D + 1)y = 2x + x^2$.
2. Solve: $(D^2 - 4D + 3)y = e^x \cos 2x$.
3. Solve: $(3D^2 - 10D + 8)y = e^{12x} - 3e^{2x}$.

(2021 Batch onwards)

G 504 OE1.3

Reg. No.

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester III – Degree Examination

November - 2024

ELECTRONICS (OPEN ELECTIVE)

PRINCIPLES OF ELECTRONIC COMMUNICATION SYSTEMS

Time: 2 ½ hrs

Max Marks: 60

PART - A

Answer any **FIVE** of the following.

(5x2=10)

- 1.a) Define Frequency Modulation.
- b) Explain Ground wave propagation.
- c) Mention various layers of ionosphere and their height from the ground.
- d) What is the need for satellite in radio Communication? Explain.
- e) Mention the uplink and downlink frequency range used in GSM900 mobile communication.
- f) Mention different types of optic fibers.

PART - B

Answer any **FOUR** of the following.

(4x5=20)

2. Draw the block diagram of AM transmitter and explain the functions of various blocks.
3. A modulating signal of amplitude 5V amplitude modulates a carrier signal of 10V. Calculate the total power transmitted if the antenna resistance is 10 Ω.
4. Explain space wave propagation.
5. With necessary diagram explain "Frequency reuse" in mobile communication.
6. Mention any four different combinations of materials used in the construction of core and cladding of glass Optical fibres.
7. Draw the block diagram of a satellite transponder and explain the functions of various stages.

PART - C

ST ALOYSIUS COLLEGE LIBRARY

MANGALURU - 575 003

Answer any **THREE** of the following.

(3x10=30)

- 8.a) Discuss the need for modulation.
- b) An FM wave is represented by the voltage equation $V_{FM} = 12\sin[6 \times 10^8 t + 5\sin 6280 t]$. Calculate (i) the carrier frequency. (ii) Modulating frequency (iii) Modulation index (iv) Frequency deviation.
9. a) What is meant by station keeping with respect to satellite communication? Explain.
- b) With necessary ray diagram, explain the mechanism by which radio waves are reflected from ionosphere.
- 10.a) With necessary diagrams, explain i) cell splitting ii) Call Handoff in GSM
- b) With block diagram explain optic fiber communication link.
- 11.a) Find the Numerical aperture and Acceptance angle of an optic fibre which is immersed in a liquid of refractive index 1.35. Given Refractive index of core is 1.55 and that of cladding is 1.45.
- b) Discuss the frequency spectrum of AM wave.

(2021 Batch Onwards)

G 505 OE1.3

Reg. No.:

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester III – Degree Examination

November - 2024

COMPUTER SCIENCE (OPEN ELECTIVE)

INTERNET OF THINGS(IoT)

Time: 2½Hours.

Max Marks: 60

PART – A

1. Answer any **SIX** of the following.

(6x2=12)

- What function does an actuator serve in an IoT system?
- What impact do you think the IoT have on the transport sector?
- Define robotics with example.
- What is edge computing?
- Define M2M communication.
- List any two wireless communication technologies frequently employed in IoT devices.
- How do smart home devices contribute to energy efficiency?
- What is PaaS, SaaS?

PART – B

Answer any **ONE FULL** question from each unit.

(4x12=48)

UNIT – I

- Explain characteristics of IoT. (6)
 - Explain components of IoT. (6)
- How does the Internet of Things (IoT) affect our everyday lives? (6)
 - Explain architecture of IoT. (6)

UNIT – II

- How does ubiquitous computing work? (6)
 - Write a note on RFID tags. (6)
- What are the key components of an M2M communication system? (6)
 - Explain the types of P2P networks (6)

UNIT – III

- What measures can be taken to secure IoT devices (6)
 - Explain IoT Eco system. (6)
- Explain SMAC with an example. (6)
 - What is an IoT platforms? Explain types in detail. (6)

UNIT – IV

- Explain IoT in retail. (6)
 - Provide a brief explanation of IoT applications in any four different fields. (6)
- Write a note on IoT in Logistics. (6)
 - How do IoT-enabled devices enhance security, energy efficiency, and convenience in smart homes? (6)

(2021 batch onwards)

G 507 OE1.3

Reg. No.

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)
Mangaluru

B.Sc. Semester III – Degree Examination
November - 2024

BOTANY – OPEN ELECTIVE
MEDICINAL AND AROMATIC PLANTS

Time: 2½ hrs.

Max Marks: 60

Note: i) Answer all the sections.

ii) Draw diagrams wherever necessary.

SECTION –A

I. Answer any FIVE of the following. (5x2=10)

1. Mention any two uses of plant belonging to family Apocynaceae.
2. What is tridosha?
3. What is Community Biodiversity Register?
4. What is IPR?
5. Give any four therapeutic uses of *Trichopus zeylanicus*.
6. What is medicoethnobotany?
7. Why do plants contain aromatic compounds?
8. Mention any two essential oil compounds.

SECTION –B

II. Answer any SIX of the following. (6x5=30)

1. Give the qualitative tests for alkaloids and steroids.
2. Give an account on significance of medicinal plants.
3. Mention the family name and any two therapeutic uses of
(i) *Holigarna ferruginea* (ii) *Cassia auriculata*
4. Explain Indian snake root as modern medicine.
5. What is Biopiracy? Explain its categories.
6. Write a brief account on the medicinal plant *Catharanthus roseus*.
7. Explain clove and nutmeg as aromatic spices.
8. Describe the applications of neem.

STALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

SECTION –C

III. Answer any TWO of the following. (2x10=20)

1. Explain the uses of the following in cosmetic and perfume industry
a) *Vanilla planifolia* b) *Eucalyptus globulus*
2. Give an account on the objectives and functions of Karnataka State Medicinal Plant Board.
3. Give a detailed account of ethnobotanical sources of India.
4. Explain the role of Chanca pedra and Ashwagandha as modern medicine.

(2021 Batch onwards)

G 508 OE 1.3

Reg. No.:

--	--	--	--	--	--	--

St Aloysius College (Autonomous), Mangaluru

B.Sc. Semester III – Degree Examination

November -2024

ZOOLOGY (OPEN ELECTIVE)

Endocrinology

Time: 2½ Hours.

Max Marks: 60

- Note:**
1. Answer any **ten** questions from Part-A, any **four** questions from Part-B and any **two** questions from part-C.
 2. Draw diagrams wherever necessary.

PART – A

I. Answer any TEN of the following.

(10X2=20)

- a) What are Neurosecretions? Give an example
- b) How does the transport of endocrine and exocrine hormones occur?
- c) What role did the study of thyroid function play in the history of endocrinology and who were some of the key researchers in this area?
- d) Name the ovarian hormones.
- e) Give any two functions of vasopressin.
- f) List the symptoms of Gulls disease.
- g) Explain the regulation of PTH hormone.
- h) Define Hypophyseal portal system.
- i) Give the functions of epinephrine and norepinephrine.
- j) Define Antagonistic effect. Give an example.
- k) What is GPCR? Explain its significance.
- l) What are Nuclear receptors with example?

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

PART – B

II. Answer any FOUR of the following.

(4X5=20)

- a) Explain the role of Calcium in hormone action.
- b) Evaluate the roles of hormone response elements (HREs) in gene regulation by nuclear receptors.
- c) List the functions of insulin and Glucagon?
- d) Describe the mechanism of Thyroxine hormone production.
- e) Write note on Cretinism and Exophthalmic goiter.
- f) With relevant examples explain the major classes of hormones.

PART – C

III. Answer any TWO of the following.

(2X10=20)

- a) Write a note on functions of hypothalamus.
- b) Compare and contrast the modes of action of steroid hormones and peptide hormones.
- c) Give a detailed note on structure, hormones and functions of pineal gland.
- d) What are the anterior pituitary hormones? Explain their functions.

G 510 OE1.3

(2021 Batch onwards)

Reg. No. :

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester III – Degree Examination

November - 2024

BIOCHEMISTRY - OPEN ELECTIVE

BIOCHEMICAL TECHNIQUES

Time: 2½ Hours

Max. Marks: 60

Note: i) Answer all the questions

ii) Draw diagrams wherever necessary

PART – A

1. Answer any TEN of the following.

(10×2=20)

- What is Stationary Phase and Mobile phase in Chromatography?
- What is the principle behind Gel filtration Chromatography?
- Define R_f Value.
- Name the stationary phase used in paper and column chromatography.
- Differentiate adsorption and partition chromatography.
- What is the importance of SDS in electrophoresis.
- Mention the various buffers used in electrophoresis.
- Enlist the supporting medium used in zone electrophoresis.
- Mention the applications of paper electrophoresis.
- Differentiate between spectrophotometer & colorimeter
- List out the major applications of X-ray diffraction.
- Define fluorescence.

PART – B

Answer any EIGHT of the following.

(8×5=40)

- Write a note on circular paper chromatography.
- Explain the working, principle and applications of Ion exchange Chromatography.
- Outline the principle & operation of HPLC.
- Describe the principle and application of SDS-PAGE
- Write short note on 2D-Electrophoresis.
- Explain Gas chromatography.
- Outline the instrumentation and operation of Mass spectroscopy.
- Write a note on NMR Spectroscopy.
- Elaborate on principle and applications of IR Spectra.
- Describe the instrumentation and principle of spectrophotometer.

ST ALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

(2021 -2023 Batch)

G 601 OE1.3

Reg. No.:

--	--	--	--	--	--	--	--

St Aloysius College (Autonomous)

Mangaluru

B.C.A. Semester III – Degree Examination

November - 2024

(OPEN ELECTIVE)

COMPUTER ORIENTED NUMERICAL ANALYSIS

Time: 2 ½ Hours.

Max Marks: 60

PART – A

1. Answer any **SIX** of the following. (6x2=12)
- Define singular matrix and give example.
 - Find the inverse of the matrix $X = \begin{bmatrix} 1 & 3 \\ 2 & 4 \end{bmatrix}$
 - Find p , if $x_0 = 0.75825$, $x = 0.759$ and $h = 0.00005$.
 - Define Euclidian norm. Give Example.
 - If $f(0) = 3$, $f(1) = 5$ and $f(3) = 21$, then the unique polynomial of degree 2 or less using Newton's Divided Difference will be _____.
 - Write the Divided difference of $[x_0, x_1, x_2]$.
 - Write the Simpson's $\frac{1}{3}$ formula and write its error expression.
 - If $f(0) = 1$ and $f(1) = 2.72$, then find the approximate value of $\int_0^1 f dx$ using Trapezoidal rule.

PART – B

Answer any **ONE FULL** question from each unit. (4x12=48)

UNIT – I

2. a) Define matrix norms of $A = \begin{bmatrix} 5 & -4 & 2 \\ -1 & 2 & 3 \\ -2 & 1 & 0 \end{bmatrix}$ (6)

- b) Solve using Cramer's method.

$$x + y - z = 9$$

$$y + 3z = 3$$

$$-x + 2z = 2$$

STALOYSIUS COLLEGE LIBRARY
MANGALURU - 575 003

(6)

3. a) Using Gauss-Jordan method solve

$$x_1 + x_2 + x_3 = 6$$

$$3x_1 + 3x_2 + 4x_3 = 20$$

$$2x_1 + x_2 + 3x_3 = 13$$

(6)

- b) Solve the equations for unknowns using Matrix-Inversion method.

$$x - y + 2z = 3$$

$$x + 2y + 3z = 5$$

$$3x - 4y - 5z = -13$$

(6)

UNIT – II

4. a) Find the value of x for which $\sinh(x) = 5$ from the following table.

x	2.2	2.4	2.6	2.8	3.0
sinh(x)	4.457	5.406	6.685	8.198	10.018

(6)

- b) Solve for $\tan 28^\circ$ using Newton's backward Interpolation formula.

x (in degree)	10	15	20	25	30
tan x	0.1003	0.1511	0.2027	0.2553	0.3093

(6)

5. a) Find the **polynomial function** using Lagrange's method and find $f(2.6)$ using the data given in the table.

x	0	1	3
y	1	3	55

(6)

- b) Solve the following linear equations using Jacobi's method with initial approximation 0 for 4 decimal spaces.

$$10x_1 + x_2 + x_3 = 24$$

STALOYSIUS COLLEGE LIBRARY

MANGALURU - 575 003

$$-x_1 + 20x_2 + x_3 = 21$$

$$x_1 - 2x_2 + 100x_3 = 300$$

(6)

UNIT - III

6. a) Derive the Numerical Differentiation formula using Newton's Forward Difference equation and obtain the second order derivative $\frac{d^2y}{dx^2}$

(6)

- b) By means of Divided Difference formula, find the values of $f(8)$ from the following table.

x	4	5	7	10	11	13
f(x)	48	100	294	900	1210	2028

(6)

7. a) Derive the divided difference Newton's Generalised Interpolation formula.

(6)

- b) Using the following table, find first, the **polynomial equation** and then find $f(4.5)$ using Newton's Divided Difference method.

x	-1	0	3	6	7
f(x)	3	-6	39	822	1611

(6)

UNIT - IV

8. a) Evaluate $\int_0^3 \frac{1}{1+x^2} dx$ using Simpson's $\frac{1}{3}$ rule for $h = 0.5$.

(6)

- b) Using the general formula for Numerical Integration, derive the Trapezoidal Rule formula. Evaluate $\int_0^1 \frac{1}{1+x^2} dx$ by dividing the interval 0 to 1 into 4 sub-intervals.

(6)

9. a) Derive the General Formula for Numerical Integration.

(6)

- b) Evaluate $\int_0^2 \frac{1}{1+x^2} dx$ by using Simpson's $\frac{3}{8}$ Rule and hence solve for $h=0.25$.

(6)
