St Aloysius College (Autonomous)
Mangaluru
B.A./B.Com./B.B.A./B.Sc./B.C.A. Semester III - Degree Examination

February 2021
ENGLISH

Time: 3 Hours   Max. Marks: 100

UNIT - I (PROSE)

I. A. Answer the following in a word/phrase/sentence each.   (5x1=5)

1. Mention one of Bruce Lee's professions.
2. The Tawaifs are also known as _____.
3. The article 'The Diaspora Men' was published in _____.
4. In what does Indian society embedded, according to the lesson, 'Prospects of Democracy?'
5. Name any one force that according to Narayana Murthy, reshapes our world?

B. Answer any FIVE of the following in about 150 words each.

(5x5=25)

1. How does the author Pramod Kumar compare slave labour and indentured labour?
2. Write a short note on the interesting circumstances of the birth of Bruce Lee in America.
3. How did the colonial mores change the life of the tawaifs in 1920s? Explain.
4. Explain Dr Ambedkar's idea of society.
5. How according to Mr. Murthy, has Information Technology helped in designing customer-friendly goods?
6. Explain how Bollywood reduced the life of tawaifs into stereotypes of immoral women?
7. Examine Ambedkar's ambiguous position on Education's ability to end class system.

UNIT - II (POETRY)

II. A. Answer the following in a word/phrase/sentence each.   (5x1=5)

1. 'That my days have been a dream'. What incident transpired in the poet's life, that makes the poet question that his days have been nothing but a dream?
2. What does the poet Raymond Garfield urge the slave?
3. What is the mask a symbol of in the poem, 'We Wear the Mask?'
4. How is love presented in the poem, 'The Unquiet Grave?'
5. "Each of the house is a village". What is the figure of speech used in these lines?

B. Answer any FOUR of the following in about 120 words each.

(4x5=20)

1. How do you think urbanization and globalization have affected rural life? Explain with reference to the poem, 'For the Dispossessed.'

2. Explain the symbols of the 'surf-tormented shore', and 'the grains of golden sand' with reference to the poem, 'A Dream Within A Dream.'

3. Comment on the conversation between the spirit of the lover and the young man in the poem, The Unquiet Grave.'

4. The poem, 'We Wear the Mask', has an appeal to the Lord to save or heal the 'tortured souls.' Explain the agony of the speaker?

5. Write the relation drawn by the poet between existence, sacrifice and death with reference to the life of the slave in the poem," Time to Die."

6. Comment on the idea of death being a stepping stone for the slave's "children's children" to cross upon, according to the poem, "Time to Die."

UNIT - III (SHORT – STORY)

III. Answer any THREE of the following in about 150 words each:

(3x5=15)

1. Comment on the king's semi-barbaric form of justice in the story, "The Lady or the Tiger?'

2. What role did the public play as spectators in the theatre of justice?

3. What change did the fifteen years of confinement bring to the life and thoughts of the old banker? Explain in the context of the short story, "The Bet."

4. How did the renunciation note of the prisoner affect the banker?

5. Write a short note on the discussion between the banker and his friends that leads to the bet.

UNIT – IV (Grammar and Writing Skills)

IV. A.   Read the following passage carefully and write a precis of the same.

(1x5=5)

Teaching is the noblest of professions. A teacher has a sacred duty to perform. It is he on whom rests the responsibility of moulding the character of young children. Apart from developing their intellect, he can inculcate in them qualities of good citizenship, remaining neat and clean, talking decently and sitting properly. These virtues are not easy to be imbibed. Only he who himself leads a life of simplicity, purity and rigid discipline can successfully cultivate these habits in his pupils. Besides a teacher always remains young. He may grow old in age, but not in spirit. Perpetual contact with budding youths keeps him happy and cheerful. There are moments when domestic worries weigh heavily on his mind, but the delightful company of innocent children makes him overcome his transient moods of despair.

B. Choose appropriate words from the given list and fill in the blanks.

(5x1=5)

It was _____ coincidence that we were both on the same train that day. My friend Mr. Hemanth comes from a _____ community of weavers in southern Maharashtra. He is _____ interested in folk culture. Folk culture refers to elements of everyday life in traditional, localized people that are immediately recognizable as belonging to that culture. The conveyance of a sense of place is important in folk culture; even when these elements appear in other regions or cultures, they still retain the identity of their founding culture. Our discussion soon turned to the topic of _____ corruption that was destroying our economy and the _____ decline of morality in public life.

(sure, steady, sheer, close-knit, very, overt, chance, rampant, prominent, worthy)

C. Choose appropriate phrasal verbs from the given list and fill in the blanks.

(5x1=5)

1. See if you can rework your schedule and _____ practical ways to reduce the number of hours you're on call.
2. If they don't pay, they could be _____ of the house.
3. Can you _____ for me on the conference call? I have to leave early today for a doctor's appointment.
4. Please _____, so that the people at the back of the room can hear you.
5. The air craft is due to _____ at mid night.
   (turn out, help out, fill in, speak up, come up with, take off, speak out, come out)

D. Fill in the blanks with appropriate tense forms of verbs given.

(5x1=5)

One quality that _____ (help) students succeed in their studies is self-discipline. It _____ (be) particularly important in college. I _____ (learn) a great deal about self-discipline by observing my friend Emma. I have noted that Emma plans her time every night before she _____ (go) to bed. By having a time table and sticking to it, she _____ (be) always able to accomplish a lot more than I can.

E. Read the following context carefully and write a report in about 200 words.

(1x5=5)

The HR manager, Mr Neeraj Gupta of Arcelor Steel Pvt Ltd with its corporate office in Delhi has requested you to make a study of irregular attendance of contract wage workers of the company. Most of the workers are migrants from states like Bihar, Orissa and Jharkhand. The company claims that the wages paid to the workers are quite competitive compared to other companies in the same sector.

F. Read the following context carefully and write minutes of the meeting in about 200 words.

(1x5=5)

The office bearers of District cooperative bank consisting of the Chairman and four directors have a meeting to discuss the poor performance of the bank due to lockdown and other measures introduced by the government. The meeting lasts for one and a half hours with many suggestions made for improving the banks performance.

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St Aloysius College (Autonomous)
Mangaluru
B.A/B.Com/BBA/B.Sc./BCA. - Semester III –Degree Examination
January -2021

HINDI

Time: 3 hrs.   Max Marks: 100

I अ) किसी <u>एक</u> प्रश्न का उत्तर लिखिए :   (1X6=06)

  १. आलेखन संबंधी सामान्य अनुदेशों को लिखिए ।

  २. एक अच्छे आलेखन के गुण कौन कौन से हैं ? उन्हें विस्तार से लिखिए ।

  आ) किन्हीं <u>दो</u> प्रश्नों के उत्तर लिखिए :   (2X7=14)

  १. महिला महाविद्यालय में रिक्त कन्नड सहायक प्राध्यापक पद के लिए प्राचार्य के नाम एक आवेदन पत्र लिखिए ।

  २. तारानाथ फूटवैर, शास्त्री नगर कोल्लापुर से जो माल आपने मँगाया है, वह आदेश के अनुसार नहीं है । उन्हें क्षति पूर्ति की प्रार्थना करते हुए एक शिकायती पत्र लिखिए ।

  ३. सूरज इलेक्ट्रिकल्स की तरफ से अपने ग्राहकों को अपनी कंपनी की नई शाखा स्थापित करने की सूचना देते हुए एक परिपत्र लिखिए ।

II अ) निम्न लिखित अवतरण को पढकर दिये गये प्रश्नों के उत्तर लिखिए :   (5X2=10)

  पारंपरिक भारतीय मूल्यों का अवलोकन वैयक्तिक एवं परिसीमित भौगोलिक क्षेत्र में बसे लोगों अथवा समूहों को जो समान नेतृत्व प्रणाली का लाभ उठाते हैं, हम राज्य कहते हैं । विभिन्न ऐतिहासिक उद्रम स्थलों के सामाजिक समूह, जो एक दूसरे से भौगोलिक, आर्थिक एवं राजनीतिक भाव से जुडे हुए हैं, परंतु सामाजिक रूप से, विचारात्मक अथवा भाषात्मक आधार पर आत्मीकृत नहीं हैं फिर भी वे शांतिपूर्वक अथवा अत्यंत शांतिपूर्वक सहअस्तित्व की भावना से रहते हैं जो भारत राज्य की मुख्य विशिष्टता है । आधुनिक भारतीय विधि कुछ ऐसे नियमों को निर्धारित करेगी जिनका संबंध मुख्यतया पारिवारिक व्यवस्था से है जैसे कि लँगोट किस प्रकार पहनी जाती है अथवा पगड़ी किस तरह बाँधी जाती है । क्योंकि इस आधार पर एक क्षेत्रीय समूह के सदस्य के रूप में वादियों की पहचान की जा सके एवं उन्हें अपनी पारंपरिक विधि को अपनाने का अवसर प्रास हो सके । हालांकि उनके पूर्वजों ने वह क्षेत्र तीन-चार शताब्दियों पूर्व ही छोड दिया था । उपरोक्त प्रयुक्त शब्द राज्य से हमें भ्रमित नहीं होना चाहिए । व्यक्ति और राज्य के बीच संघर्ष हो, ऐसा कुछ नहीं था । यह स्थिति कम से कम विदेशी राज्य की स्थापना से पूर्व न थी । जिस प्रकार राज्य की प्रभुसत्ता की अवधारणा या चर्च-राज्य द्वि-भाजन भी नहीं था ।

  १. राज्य किसे कहते हैं ?

  २. भारत राज्य की मुख्य विशिष्टता कौनसी है ?

  ३. आधुनिक भारतीय विधि कौनसे नियमों को निर्धारित करती है ?

  ४. उपरोक्त प्रयुक्त शब्द राज्य से हमें क्या नहीं होना चाहिए ?

  ५. 'अवधारणा' शब्द का अर्थ लिखिए ?

  आ) निम्नलिखित शब्दों का हिंदी में अनुवाद कीजिए :   (5X1=05)

        १. Absence   २. Director

        ३. Gazette   ४. Honorarium

        ५. Notification

  इ) निम्नलिखित अवतरण का पल्लवन कीजिए :   (1X5=05)

  'क्रोध एक तरह का रोग होता है, जिसे क्षणिक पागलपन भी कह सकते हैं ।' – महात्मा गाँधी ।

III अ) एक वाक्य में उत्तर लिखिए :   (8X1=08)

१.   जान से प्यारे एकांकी किस विधा कि एकांकी है ?

२.   मृतक को ज़िन्दा करने का फ़ार्मुला किसने ढूंढा था ?

३.   किससे बड़ा महबूब नहीं है ?

४.   चाय पार्टी में कौन मौजूद नहीं थे ?

५.   शीतल सहाय कौन-कौन से नाटक मंडली में थे ?

६.   विनाश और प्रदर्शन का कारण क्या है ?

७.   भीड़ पर गोली किसने चलाई थी ?

८.   जन राज में कौन सेवक होते हैं ?

आ) किसी एक पात्र का परिचय दीजिए :   (1X6=06)

     १) मोहन गुसा   २) कम्मो का पति

इ) किसी एक का संदर्भ सहित व्याख्या कीजिए :   (1X6=06)

१.   "अरे साहब, ये क्या नहीं हैं ! ये प्रसिद्ध रेडियो आर्टिस्ट, मंच के कुशल अभिनेता हैं ।
     इन्होंने 'शहज़ादा सलीम' में दरोगा जेल का पार्ट किया था । इधर ये नाटक लेखन की
     ओर.... "

२.   "शासन की जड़ें हिलती या ना हिलती दादा जी पर आप की जड़ें जरूर हिल जाती,
     आपका व्यापार ठप हो जाता । आपका नुकसान हो जाता ।"

ई) किसी एक प्रश्न का उत्तर लिखिए :   (1X10=10)

१.   'जान से प्यारे' एकांकी में मृत परिवारों की मानसिकता का चित्रण दीजिए ।।

२.   'सीमा रेखा' एकांकी का सारांश अपने शब्दों में लिखिए ।

IV अ) एक वाक्य में उत्तर लिखिए :   (8X1=08)

१.   जमूरा ने कबूतर के चोंच में क्या देखा ?

२.   जमूरा मंत्री को कहाँ से पकड़ कर लाता है ?

३.   जमुना जी के बड़े बेटे का नाम क्या था ?

४.   श्याम दुकान से क्या लाना भूल गया ?

५.   सरोजिनी कौन थी ?

६.   अंबिका के पत्नी का नाम क्या था ?

७.   कुंती ने अपने पुत्र को कैसे पहचाना ?

८.   कर्ण की स्वामी-भक्ति किसके प्रति थी ?

आ) किसी एक पात्र का परिचय लिखिए :   (1X6=06)

     १) श्याम   २) दीनानाथ

इ) किसी एक का संदर्भ सहित व्याख्या कीजिए :   (1X6=06)

१.   "मैंने तेरी हकीकत सभी लोगों को बयान कर दी है । मैं किसी हालत में लौट नहीं सकता
     । मैं अब यहीं रहूँगा ।"

२.   "मैंने सुना है कि सूर्योदय के बाद जो भी ब्राह्मण तुमसे दान में जो भी माँगेगा, तुम उसे दे दोगे ।"

ई) किसी एक प्रश्न का उत्तर लिखिए :   (1X10=10)

१.   'अंडे के छिलके' पठित एकांकी का सार लिख कर उसकी विशेषताओं पर प्रकाश डालिए ।

२.   'आखेट' एकांकी के आधार पर कर्ण का चरित्र चित्रण कीजिए ।

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ಸಂತ ಅಲೋಶಿಯಸ್ ಕಾಲೇಜು (ಸ್ವಾಯತ್ತ)

ಮಂಗಳೂರು

ಬಿ.ಎಸ್ಸಿ /ಬಿ.ಸಿ.ಎ – ಮೂರನೆಯ ಚತುರ್ಮಾಸ ಅಂತಿಮ ಪರೀಕ್ಷೆ

February 2021

ಕನ್ನಡ ಭಾಷಾ ಪತ್ರಿಕೆ – 3

ಗರಿಷ್ಠ ಅಂಕಗಳು: 100

ಸಮಯ: 3.00 ಫಂಟೆ

I ಕಾವ್ಯ ಭಾಗ (10×2=20)

ಅ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಎರಡನ್ನು ಪ್ರಬಂಧ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ

1. 'ಮಸಿ ದಿಟಕ್ಕೆ ನಿಲ್ಲುದೇ'ಕಾವ್ಯ ಭಾಗದ ಶಿವ–ಪಾರ್ವತಿಯರ ಮುಖಾಮುಖಿಯ ಸ್ವಾರಸ್ಯ ಹೇಗೆ ಮೂಡಿ ಬಂದಿದೆ? ವಿವರಿಸಿ

2. 'ಮಾದ್ರಿಯ ಚಿತೆ' ಕವನದಲ್ಲಿ ಮಾದ್ರಿಯ ಮನದಾಳದ ನೋವು ಹೇಗೆ ಅಭಿವ್ಯಕ್ತಗೊಂಡಿದೆ? ವಿವರಿಸಿ

3. ಗೊಬ್ಬರ ಕವನದಲ್ಲಿ ಅನಾವರಣಗೊಂಡ ಸಾಂಸ್ಕೃತಿಕ – ಸಾಮಾಜಿಕ ಪ್ರಜ್ಞೆಯನ್ನು ವಿವರಿಸಿ.

ಆ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಒಂದನ್ನು ಟಿಪ್ಪಣೆ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ (3×1=3)

1. ಬಿ.ಟಿ. ಲಲಿತಾನಾಯಕ್

2. ಚೆನ್ನಮಲ್ಲಿಕಾರ್ಜುನ

ಇ) ಕೆಳಗಿನ ಪದ್ಯಗಳಲ್ಲಿ ಒಂದರ ಭಾವಾನುವಾದ ಸಂದರ್ಭ – ಸ್ವಾರಸ್ಯಗಳನ್ನು ವಿಶ್ಲೇಷಿಸಿ (6×1=6)

1. ಎಲ್ಲಿ ಕಾಂಬುದಿನಿತು ನಲ್ಮೆ?

   ಎಲ್ಲಿಯೆದೆಯ ಕೂರ್ಮೆ ಬಲ್ಮೆ?

   ಮಾದ್ರಿ ಮಡಿದಳೇನು? ಅವಳ ಹಿಡಿದ ಮೃತ್ಯು ಮಡಿದುದು

   ಮಡಿಯಲಾರದವಳ ಮೂರ್ತಿ !

   ಮಾಸಲಾರದವಳ ಕೀರ್ತಿ !

   ಜವನ ಕೈಯ ಸೊಡರ ಬೆಳಗಲವಳ ಚಿತೆಯ ಕೆಂಡವು

2. ಜನಕನಂದನೆಯಂತೆ ಸೀತೆಯೆಂಬವಳಂತೆ

   ಫನ ಸೊನಗಿನವಳತಿ ರಾಘವನ ಕಾಂತೆ ॥

   ತರಲು ಪೋಪೆನು ನಾನು ತಂದರಾಕೆಯ ನೀನು

   ಎರಕವಾಗಿರುವ ಬಗೆ ಪೇಳಬೇಕೆನಗೆ॥

ಈ) ಕೆಳಗಿನ ಸಾಲುಗಳಲ್ಲಿ ಎರಡರ ಸಂದರ್ಭ – ಸೂಚಿಸಿ ಸ್ವಾರಸ್ಯವನ್ನು ಬರೆಯಿರಿ (3×2=6)

1. ಬಾಯಲಿದ್ದ ಮಾತು ಬಾಯಲಿದ್ದಂಗೆ

2. ಕಣ್ಣೀರ ಹನಿಯೊಳೆ ನಲ್ಮೆಯನು ತುಂಬಿಹರು.

3. ಇನ್ನೇಸು ದಿನ ತಾನೆ ಹಚ್ಚಿಕೊಳ್ಳುವಿರದನು

ಉ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ವಸ್ತುನಿಷ್ಠ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ (1×5=5)

1. 'ಉಂಗುರ ಸಂಧಿ' ಕೃತಿಯ ಕರ್ತೃ ಯಾರು?

2. 'ವಿಶ್ವಮಾನವ' ಸಂದೇಶ ನೀಡಿರುವ ಕವಿ ಯಾರು?

3. ರಗಳೆಯ ಕವಿ ಎಂದು ಯಾರನ್ನು ಕರೆಯುತ್ತಾರೆ?

4. ಕನ್ನಡ ಮತ್ತು ಸಂಸ್ಕೃತಿ ಇಲಾಖೆಯ ಸಚಿವೆಯಾಗಿ ಕಾರ್ಯ ನಿರ್ವಹಿಸಿದ ಕವಯತ್ರಿ ಯಾರು?

5. ಅಕ್ಕಮಹಾದೇವಿಯ ಲೌಕಿಕ ಗಂಡನ ಹೆಸರೇನು?

II ಗದ್ಯ ಪ್ರಬಂಧಗಳು

ಅ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಎರಡನ್ನು ಪ್ರಬಂಧ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ   (10×2=20)

1. ಕಪ್ಪೆ ಶಾರದೆಯ ಮೇಳ ಪ್ರಬಂಧದ ಆಶಯವನ್ನು ವಿವರಿಸಿ.

2. ಪ್ರಸ್ತುತ ಸನ್ನಿವೇಶದಲ್ಲಿ ವೈಚಾರಿಕತೆಯ ಮಹತ್ವವೇನು? ವಿವರಿಸಿ.

3. 'ಅಜ್ಜಯ್ಯನ ಅಭ್ಯಂಜನ' ಪ್ರಬಂಧದ ಸ್ವಾರಸ್ಯವನ್ನು ವಿವರಿಸಿ.

ಆ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಒಂದನ್ನು ಟಿಪ್ಪಣಿ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ   (6×1=6)

1. ಮೋಂತುವಿನ ವ್ಯಕ್ತಿತ್ವವನ್ನು ಪರಿಚಯಿಸಿ

2. ಪ್ರತಿಭೆಯ ಪರಂಪರಾಗತ ಮಾನದಂಡವನ್ನು ದೇವನೂರು ಮಹಾದೇವ ಅವರು ಹೇಗೆ ಒಡೆಯುತ್ತಾರೆ?

ಇ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ವಸ್ತುನಿಷ್ಠ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ   (1×4=4)

1. 'ಗಾಂಧಿ ಬಂದ' ಕೃತಿಯನ್ನು ರಚಿಸಿದವರು ಯಾರು?

2. ಕನ್ನಡದ ಪ್ರಥಮ ಮೃಗಯಾ ಸಾಹಿತಿ ಯಾರು?

3. ತಮ್ಮೆಲ್ಲಾ ಆಸ್ತಿಯನ್ನು ನ್ಯಾಷನಲ್ ಎಜುಕೇಶನ್ ಸೊಸೈಟಿಗೆ ದಾನ ನೀಡಿದ ಲೇಖಕ ಯಾರು?

4. ಕನ್ನಡಕ್ಕೆ ಮೊದಲ ಜ್ಞಾನಪೀಠ ಪ್ರಶಸ್ತಿ ತಂದು ಕೊಟ್ಟವರು ಯಾರು?

III ಕಾದಂಬರಿ

ಅ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಒಂದನ್ನು ಪ್ರಬಂಧ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ   (10×1=10)

1. 'ಬೆಟ್ಟ ಸಾಲು ಮಳೆ' ಕಾದಂಬರಿಯಲ್ಲಿ ಗ್ರಾಮೀಣ ಬದುಕು ಹೇಗೆ ಅನಾವರಣ ಗೊಂಡಿದೆ? ವಿವರಿಸಿ.

2. ಪಟ್ಟ ಲಕ್ಷ್ಮಿ ಮತ್ತು ಕರಿತಿಮ್ಮಶೆಟ್ಟಿಯರ ಪ್ರೇಮ ಸಂಬಂಧ ಮೂಡಿ ಬಂದ ಪರಿಯನ್ನು ವಿವರಿಸಿ.

ಆ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಎರಡನ್ನು ಟಿಪ್ಪಣಿ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ   (3×2=6)

1. ಹೊನ್ನ ಕೋಳಿ ಮಾರುವ ಸನ್ನಿವೇಶವನ್ನು ವಿವರಿಸಿರಿ.

2. ಈರಣ ಮತ್ತು ಪಟ್ಟ ಲಕ್ಷ್ಮಿ ಮದುವೆ ಪ್ರಸ್ತಾಪ ಮುರಿದು ಬೀಳುವ ಬಗೆ ಹೇಗೆ?

3. ಸಾವುಕಾರ ಮತ್ತು ತಿಮ್ಮಕ್ಕನ ನಡುವಿನ ಮಾತುಕತೆಯನ್ನು ವಿವರಿಸಿ.

ಇ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ವಸ್ತು ನಿಷ್ಠ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ   (1×4=4)

1. 'ಕಾಡುಗೊಲ್ಲರ ಹಟ್ಟಿಯ ಅಧ್ಯಯನ' ಎಂಬ ವಿಷಯದಲ್ಲಿ ಪಿಎಚ್ಡಿ ಪಡೆದವರು ಯಾರು?

2. ಈರಣ್ಣನ ಹೆಂಡತಿಯ ಹೆಸರೇನು?

3. ಹೊನ್ನನ ತಾಯಿಯ ಹೆಸರೇನು?

4. ತಿಮ್ಮ ಶೆಟ್ಟಿಯ ಪ್ರೇಯಸಿಯ ಹೆಸರೇನು?

IV ಕ್ರಿಯಾತ್ಮಕ ಕನ್ನಡ

ಅ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಒಂದನ್ನು ಪ್ರಬಂಧ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ   (7×1=7)

1. ಪತ್ರಿಕೋದ್ಯಮ ಹಾಗೂ ಅದರ ವಿವಿಧ ಪ್ರಕಾರಗಳ ಕುರಿತು ವಿವರಿಸಿ.

2. ಅಂಕಣ ಬರಹ ಎಂದರೇನು? ಅದನ್ನು ಬರೆಯುವ ಬಗೆ ಹೇಗೆ ? ವಿವರಿಸಿ.

ಆ) ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ವಸ್ತುನಿಷ್ಠ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ   (1×3=3)

1. ಯಾವುದು ಪ್ರಜಾಪ್ರಭುತ್ವದಲ್ಲಿ 'ಕಾವಲುನಾಯಿ'ಯಂತೆ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತದೆ?

2. ಆರು ತಿಂಗಳಿಗೊಮ್ಮೆ ಪ್ರಕಟಗೊಳ್ಳುವ ಪತ್ರಿಕೆಯನ್ನು ಏನೆಂದು ಕರೆಯುತ್ತಾರೆ?

3. ಹಾ. ಮಾ ನಾಯಕರ ಅಂಕಣ ಬರಹದ ಹೆಸರೇನು?

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St. Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III – Degree Examination
February - 2021
SANSKRIT

Time: 3 Hours   **Max. Marks: 100**

1   *श्लोकत्रयं कर्णाटकभाषया आङ्ग्लभाषया वा अनुवादं कृत्वा विवृणुत ।*   3 X 8 = 24

1.1   यस्त्रिशृङ्गो मम त्वासीन्मनोज्ञो वंशपर्वतः ।
      स मध्यशृङ्गभङ्गेन मनस्तपति मे भृशम् ॥

1.2   जानामि सर्वत्र सदा च नाम द्विजोत्तमाः पूज्यतमाः पृथिव्याम् ।
      अकार्यमेतच्च मयाद्य कार्यं मातुर्नियोगाद् अपनीय शङ्काम् ॥

1.3   त्रातोऽयं शङ्खचूडः पतगपतिमुखात् वैनतेयो विनीतः
      तेन प्रागभक्षिता ये विषधरपतयो जीवितास्तेऽपि सर्वे ।
      मत् प्राणाप्त्या विमुक्ता न गुरुभिरसवः चक्रवर्तित्वमाप्तम्
      साक्षात् त्वं देवि दृष्ट प्रियमपरमतः किं पुनः प्रार्थ्यते यत् ॥

1.4   युद्धप्रियाश्च शरणागतवत्सलाश्च दीनेषु पक्षपतिताः कृतसाहसाश्च ।
      एवंविधप्रतिभयाकृतिकुचेष्टितानां दण्डं यथार्थमिह धारयितुं समर्थः ॥

1.5   भ्रान्तैः सुतैः परिवृतः तरुणैः सदारैः वृद्धो द्विजो निशिचरानुचरः स एषः ।
      व्याघ्रानुसारचकितो वृषभः सधेनुः सन्त्रस्तवत्सक इवाकुलतामुपैति ॥

2   *द्वयोः संस्कृतभाषया टिप्पणीं लिखत ।*   2 X 6 = 12

2.1   पाण्डवाः ।
2.2   श्रीहर्षदेवः ।
2.3   जीमूतकेतुः ।

3   *द्वयोः कर्णाटकभाषया आङ्ग्लभाषया वा टिप्पणीं लिखत ।*   2 X 6 = 12

3.1   भासमहाकवेः विषये प्रबन्धं लिखत ।
3.2   नागानुकम्पा रूपकस्य कथा सारं लिखत ।
3.3   घटोत्कचस्य पात्रचित्रणम् ।

4   *पञ्चानां सन्दर्भसहितविवरणं कर्णाटकभाषया आङ्ग्लभाषया वा लिखत ।*   5 X 4 = 20

4.1   बलाबलं परिज्ञाय पुत्रमेकं विसर्जय ।
4.2   मर्षयतु भवान् मर्षयतु । अयं मे प्रकृतिदोषः ।
4.3   विचित्राणिहि दैवविलसितानि ।
4.4   पुत्रापेक्षीणि खलु पितृहृदयानि ।
4.5   भोः सुयोधन, वर्धते ते शत्रुपक्षः ।
4.6   राक्षसाग्नौ सुतापेक्षी होष्यामि विधि संस्कृतम् ।
4.7   नायं नागः, परित्यज एनम्, माम् भक्षय ।

5   द्वयोः कर्णाटकभाषया आङ्लभाषया वा प्रबन्धात्मकमुत्तरं लिखत ।   2 X 10 = 20

5.1   भासमहाकवेः विषये प्रबन्धं लिखत ।

5.2   जीमूतवाहनस्य स्वभावगुणान् यथा पात्रं निरूपयत ।

5.3   संस्कृतनाटकानाम् उगम – विकास विचारे प्रबन्धं लिखत ।

5.4   नागानुकम्पा–रूपकभागं सविमर्शं निरूपयत ।

6   अलङ्कारमेकं सलक्षणं सोदाहरणं संस्कृतेन विवृणुत ।   1 X 6 = 6

6.1   उपमा ।

6.2   श्लेषः ।

6.3   रूपकः ।

7   एकं छन्दः सलक्षणं सोदाहरणं विवृणुत ।   1 X 6 = 6

7.1   अनुष्टुप् ।

7.2   इन्द्रवज्रा ।

7.3   वसन्ततिलका ।

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G 139.3   Reg. No: |__|__|__|__|__|

St Aloysius College (Autonomous)
Mangaluru
B.A./B.Sc./B.Com. Semester III – Degree Examination
January - ೨೦೨೧

KONKANI

Time: 3 Hours   Max. Marks: 100

UNIT I

1. ಸವಾಲಾಂಕ್ ದೊನಾಂಚ್ಚೊ ಸಂದರ್ಭ್ ಆನಿ ಗದ್ಯಾನುವಾದ್ ದೀವ್ನ್ ಸ್ವಾರಸ್ಯ್ ಬರಯಾ

                                                    (5x2=10)

ಅ) ರಂಗ್ ಮ್ಹಜೊ ಅಸಲೊ

    ಜಾಕಾ ಜಾಯ್ ತಸಲೊ

    ಜಾಂತುಂತ್ ಹಾಂವ್ ಭರ್ನಾಲೊಂ

    ತಾಚೊಚ್ ರಂಗ್ ಮ್ಹಜೊ ಜಾಲೊ!

ಆ) ಜೆದ್ವಾಂ ಸಂಧ್ಯಾ ಮಾರುತ್ ಹಳೂ ವಳ್ಳೊ

    ಕೊನ್ಯಾಕ್ ಸುಕೊ ಚಿವೊ ಧಲ್ಲೊ

    ಥಂಯ್ ಕಾವ್ಯ ಜೋಶ್ ಮಾತ್ಯೆಕ್ ಭುಲ್ಲೊ

    ಹಾಂ! ಹಾಂಗಾ ಪುರ್ಲಾ ಕವಿಕ್!

ಇ) ಮಾಂ ಬಾಪಾಂನಿ ಸಾಂಗೊನ್ ದಿಲ್ಲೆ

    ಶೆಗುಣ್ ಸೊಭಿತ್ ಸಬಾರ್

    ಸದಾಂ ಆಮಿ ಆಮ್ಚೆ ಕರುನ್

    ಚಿಂತ್ಯಾಂ ಚಿಂತ್ಯಾಂ ಉಬಾರ್

    ಭೊಂವ್ತಿಂ ಪೊಂಪುನ್ ಪ್ರೀತಿ ಮಾಯ್ಪಾಸ್

    ಧೈರಾನ್ ಚಲ್ಯಾಂ ಮುಕಾರ್

    ಚಲ್ಯಾಂ ಫುಡೆಂ ಶೆಕಿಂ ಮೆಳ್ಚ್ಯಾಕ್

    ಸಾಸಣ್ ಫರಿಂ ಸರ್ಗಾಕ್

2. ಸವಾಲಾಂಕ್ ಜಾಪಿ ಬರಯಾ:   (2x5=10)

ಅ) ಕವಿಕ್ ಖಿಂಯ್ ಪುರ್ಲಾ ಮ್ಹಣ್. ಕವಿ ಚಾ.ಫ್ರಾ. ಸಾಂಗ್ತಾ?

ಆ) ಗಿಚ್ಚುಂವ್ಕ್ ಸುರು ಕೆಲ್ಲೊ ರಿಚ್ಚಿ ಕವಿ ಜಾಲ್ಲೊ ಪ್ರಸಂಗ್ ಕಳಯಾ.

3. ಖಿಂಚಾಯ್ ಏಕಾ ಕವಿಚಿ ಪರಿಚಯ್ ದಿಯಾ:   (1x5=5)

ಅ) ಚಾ.ಫ್ರಾ. ದೆಕೊಸ್ತಾ

ಆ) ಒಲಿವಿನೊ ಗೊಮಿಸ್

4. ಖಂಚಾಯ್ ಎಕಾ ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ:

ಅ) ಪಾವ್ಸಾಚೊ ರಂಗ್ ಕಸಲೊ?

ಅ) ಕಷ್ಟಾಂಚೊ ಫಳ್ ಕಿತೆಂ ಜಾವ್ನಾಸಾ?

UNIT II

1. ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ   (6x1=6)

ಅ) ಹಿಪ್ಪಿ ಚಲಿಯೆಚೆಂ ನಾಂವ್ ಕಿತೆಂ?

ಅ) ಅಮಾಸ್ ಕೊಣ್?

ಇ) ಕೋಣ್ ಪಾಟಿಂ ಘರಾ ವೆತಾ?

ಈ) ಬಾಬುಲೊ ಆಖ್ರೇಕ್ ಖಂಯ್ ವೆತಾ?

ಉ) ಕುರಿಯಯ್ಯಾ ಕೋಣ್?

ಊ) ಹಿಪ್ಪಿಚಲಿ ಖಂಯ್ಸರ್ ವಸ್ತಿ ಕರ್ತಾ?

2. ಖಂಚಾಯ್ ದೋನ್ ವಾಕ್ಯಾಚೆಂ ಸಂದರ್ಭ್ ಕಳವ್ನ್, ಸ್ವಾರಸ್ಯ್ ಕಳಯಾ: (5x2=10)

ಅ) "ಮನ್ಯಾಂ ಕಡೆನ್ ದೇವ್ ಉಲಯ್ಯಾರೇ ಮ್ಹಜ್ಯಾ ರಾಯಾ".

ಅ) "ಮಾಮ ಪಳೆ . . . . ತುಜ್ಯಾ ನಾರ್ಲಾಂಚ್ಯಾ ಮಾಡಾಕ್ ಕೊಣೆಂಗೀ ರಂಗ್ ಪುಸ್ಲಾ".

ಇ) "ಚಿಯರ್ಸ್ ಟು ಸಿಂಡ್ರೆಲಾ ಆಂಡ್ ಹರ್ ಬೇಬಿ ಇನ್ದ ಊಂಬ್".

3. ಸವಾಲಾಕ್ ಜಾಪ್ ಬರಯಾ:   (5x2=10)

ಅ) "ಪಾಟಿಂ ಘರಾ" ಕಾಣಿಯೆಂತ್ ಬಾಬಚೆ ವ್ಯಕ್ತಿತ್ವ್ ಅನಾವರಣ್ ಕರ್.

ಅ) ಅವಯ್ಚ್ಯಾ ಅಕಾಲಿಕ್ ಮರ್ಣಾ ನಂತರ್ ಬಾಬುಲ್ಯಾಚಿ ಸ್ಥಿತಿ ವಿವರ್ಸಿಯಾ.

4. ಖಂಚಾಯ್ ಎಕಾಚೆಂ ಪಾತ್ರ್ ಚಿತ್ರಣ್ ಕರಾ:   (1x4=4)

ಅ) ಪಾಟಿಂ ಘರಾ ಕಾಣಿಯೆಚೊ ಚಾಲಕ್

ಅ) ಸಿಂಡ್ರೆಲಾ

UNIT III

1. ಖಂಚಾಯ್ ದೋನ್ ವಾಕ್ಯಾಚೆಂ ಸಂದರ್ಭ್ ಕಳವ್ನ್, ಸ್ವಾರಸ್ಯ್ ಕಳಯಾ: (5x2=10)

ಅ) 'ಟಿ.ವಿ. ಆಸ್ಲ್ಯಾ ಘರಾ ವೇಳ್ ಆಸಾನಾ'.

ಅ) "ತುಮಿಂ ಶಹರಾಂತ್ ನ್ಹಯ್ ಲುಸಿಫೆರಾಚಾ ಘರಾಂತ್ ಆಸಾತ್".

ಇ) "ಬರಿ ಖಬಾರ್ ಸಾಂಗೊಂಕ್ ಆಯಿಲ್ಲೊ".

2. ಎಕಾ ವಾಕ್ಯಾನ್ ಜಾಪ್ ಬರಯಾ:   (1x5=5)

ಅ) ದೊನ್ಪಾರಾಚೊ ಸಯ್ಫೊ ಕೋಣ್?

ಅ) ಆಧುನಿಕ್ ಸ್ತ್ರೀ ಕೋಣ್?

ಇ) ಸ್ಟೆಲ್ಲಾಚೊ ಬೆಕಾರಿ ಭಾವ್ ಕೋಣ್?

ಈ) ನೊಬ್ಬಿಚೊ ಖಂಚೊ ಸೈರೊ ದೊನ್ವರಾಂ ಆಯಿಲ್ಲೊ?

ಉ) ಲ್ಯಾನ್ಸಿ ಪಿಂಟೊ ನಾಯಕಚೊ ಖಂಚೊಯ್ ಏಕ್ ನಾಟಕ್ ಉಲ್ಲೇಖ್ ಕರಾ.

3. ಖಂಚಾಯ್ ಎಕಾ ಸವಾಲಾಕ್ ಜಾಪ್ ಬರಯಾ: (10x1=10)

ಅ) ದೊನ್ವರಾಚ್ಯಾ ಸಯ್ರ್ಯಾಕ್ ಧಾಂವ್ಡಾಂವ್ಕ್ ಕೆಲ್ಲೆಂ ಸಾಧನ್ ವಿವರ್ಸಿ.

ಅ) ಬಪ್ಪುಕ್ ನೊಬ್ಬಿಚ್ಯಾ ಕುಟ್ಮಾಚ್ಯಾನಿಂ ದಿಲ್ಲೊ ಸ್ವಾಗತ್ ಆನಿ ಹಾಚೊ ಪರಿಣಾಮ್ ಕಿತೆಂ?

UNIT IV

1. ಎಕಾ ವಾಕ್ಯಾನ್ ಜಾಪ್ ಬರಯಾ: (1x5=5)

ಅ) ಪರಿಪತ್ರ್ ಮ್ಹಳ್ಯಾರ್ ಕಿತೆಂ?

ಅ) ಜಾಹೀರಾತ್ ಮ್ಹಳ್ಯಾರ್ ಕಿತೆಂ?

ಇ) ಪತ್ರಾಚೆ ಮುಖ್ಯ ಲಕ್ಷಣ್ ಕಿತೆಂ?

ಈ) ಖಂಚಾಯ್ ಎಕಾ ಖಾಸ್ಗಿ ಪತ್ರಚೊ ಉಲ್ಲೇಖ್ ಕರಾ.

ಉ) ವಿಚಾರಣ್ ಪತ್ರ್ ಮ್ಹಳ್ಯಾರ್ ಕಿತೆಂ?

2. ಖಂಚಾಯ್ ತೀನ್ ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ: (5x3=15)

ಅ) "ಸಾಂ ಲುವಿಸ್ ಕೊಲೆಜಿಂತ್ ಕೊಂಕ್ಣಿ ಉಪನ್ಯಾಸಕಚಿ ಗರ್ಜ್" ಮ್ಹಳ್ಯಾ ಮ್ಹಾತಾಳ್ಯಾಖಾಲ್ ಜಾಹೀರಾತ್ ತಯಾರ್ ಕರಾ.

ಅ) "ಆಂಜೆಲ್" ಕಾದಂಬರಿಚ್ಯೊ ಪ್ರತಿಯೊ ಜಾಯ್ ಮ್ಹಣ್ ಕೊಂಕ್ಣಿ ಸಂಸ್ಥ್ಯಾಚ್ಯಾ ನಿರ್ದೇಶಕಾಕ್ ಪತ್ರ್ ಬರಯಾ.

ಇ) ಕೊಂಕ್ಣಿ ಸಂಘಚ್ಯಾ ಉಗ್ತಾವಣಾಚಿ ವರ್ದಿ ಖಂಚ್ಯಾಯ್ ಎಕಾ ಪತ್ರಾಕ್ ದಾಡ್ನ್ ದಿಯಾ.

ಈ) ಸೂಕ್ತ್ ಕಾರಣ್ ದಿವ್ನ್ ದೋನ್ ದಿಸಾಂಚಿ ರಜಾ ವಿಚಾರ್ನ್ ತುಮ್ಚ್ಯಾ ಸಂಸ್ಥ್ಯಾಚ್ಯಾ ಪ್ರಾಂಶುಪಾಲಾಕ್ ಪತ್ರ್ ಬರಯಾ.

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UNIT – I (Prose)

I A. Answer any ONE of the following in about 100-150 words: (1x5=5)

1. Who was J H Wright? How is he associated with Vivekananda?

2. How was Vivekananda different from others in his address? What was the reaction to his speech?

3. 'Indians are not a nation; they are only an amorphous mass of people' Explain.

B. Answer any TWO of the following in about 200-250 words (2x10=20)
each:

1. What aspects of Vivekananda's character are revealed in his journey to the West?

2. From the various personal experiences of Dorothy L Sayers, write down the various ways by which both fact and opinion can be distorted.

3. According to Dorothy L Sayers, what is 'The Freedom of the Press'?

4. What is the impression Tagore has on freedom after he visits the West? Explain.

UNIT – II (Poetry)

II A. Answer any FOUR of the following in about 100-150 words each:
(4x5=20)

1. According to the poet when should we keep calm?

2. What is the poet's message in the poem IF? Do you agree with it?'

3. According to the speaker, who is likely to count success as sweetest? Do you think the poet is accurate in describing the feelings of people who fail?

4. How would you define success in your own words?

5. According to Rydyard Kipling, how should a person develop humility in life?

UNIT – III (Novel)

III A. Answer the following in a sentence or two each: (5x1=5)

1. Who is given in charge of the Muslim properties?
2. Who was Meet Singh?
3. Why does the village decide to stand by their Muslim neighbors?
4. Who was Lala Ram Lal? How did he die?
5. Who was Hukum Chand?

B. Answer any TWO of the following in about 300 words each: (5x2=10)

1. Why do some of the villagers agree to attack the train in the novel 'Tarin to Pakistan'?

2. Describe the town of Mano Majra at the beginning of the book.

3. Describe Meet Singh's appearance.

4. Explain Iqbal's belief on the population of India, and on the money spent on agriculture and industry.

C. Answer any <u>ONE</u> of the following in about 200-250 words each:

(1x10=)

1. The people of Mano Majra are indifferent to violence and indifferent to the sufferings of other people. Explain with reference to the novel 'Train to Pakistan'.
2. What is the implication of focusing on a predominantly Sikh village, rather than a Muslim or Hindu one? Also, how might the novel be different if it was a story about a "Train to India"?
3. How does Kushwant Singh depict religious conflicts between Hindus, Sikhs and Muslims in the novel ' Train to Pakistan' ?

UNIT – IV
(Grammar and Writing Skills)

IV A. Write a dialogue between two friends discussing their career in <u>TEN</u> turns each:

(1x10=10)

B. Read the following passage and answer the questions given below

(5x1=5)

Mount Vesuvius, a volcano located between the ancient Italian cities of Pompeii and Herculaneum, has received much attention because of its frequent and destructive eruptions. The most famous of these eruptions occurred in A.D. 79.

The volcano had been inactive for centuries. There was little warning of the coming eruption, although one account unearthed by archaeologists says that a hard rain and a strong wind had disturbed the celestial calm during the preceding night. Early the next morning, the volcano poured a huge river of molten rock down upon Herculaneum, completely burying the city and filling the harbor with coagulated lava.

Meanwhile, on the other side of the mountain, cinders, stone and ash rained down on Pompeii. Sparks from the burning ash ignited the combustible rooftops quickly. Large portions of the city were destroyed in the conflagration. Fire, however, was not the only cause of destruction. Poisonous sulfuric gases saturated the air. These heavy gases were not buoyant in the atmosphere and therefore sank toward the earth and suffocated people.

Over the years, excavations of Pompeii and Herculaneum have revealed a great deal about the behavior of the volcano. By analyzing data, much as a zoologist dissects an animal specimen, scientists have concluded that the eruption changed large portions of the area's geography. For instance, it turned the Sarno River from its course and raised the level of the beach along the Bay of Naples. Meteorologists studying these events have also concluded that Vesuvius caused a huge tidal wave that affected the world's climate.

In addition to making these investigations, archaeologists have been able to study the skeletons of victims by using distilled water to wash away the volcanic ash. By strengthening the brittle bones with acrylic paint, scientists have been able to examine the skeletons and draw conclusions about the diet and habits of the residents. Finally, the excavations at both Pompeii and Herculaneum have yielded many examples of classical art, such as jewelry made of bronze, which is an alloy of copper and tin. The eruption of Mount Vesuvius and its tragic consequences have provided everyone with a wealth of data about the effects that volcanoes can have on the surrounding area. Today, volcanologists can locate and predict eruptions, saving lives and preventing the destruction of other cities and cultures.

a) Herculaneum and its harbor were buried under _____ lava.

    i) liquid   ii) solid   iii) flowing   iv)gas

b) The poisonous gases were not _____ in the air.

   i) able to float   ii) visible   iii) able to evaporate

   iv) invisible   v) able to condense

c) Scientists analyzed data about Vesuvius in the same way that a zoologist

   _____ a specimen.

   i) describes in detail   ii) studies by cutting apart

   iii) photographs   iv) chart

d) _____ have concluded that the volcanic eruption caused a tidal wave.

   i) Scientists who study oceans   ii)Scientists who study atmospheric conditions
   iii) Scientists who study ash   iv)Scientists who study animal behaviour

e) Scientists have used _____ water to wash away volcanic ash from the
   skeletons of victims.

   i) bottled   ii) volcanic   iii)purified

   iv) sea   v) fountain

C. Give ONE WORD SUBSTITUTION for the following choosing from the words given in bracket: (5x1=5)

(Extravagant, Simile, Antiquarian, Metaphor, Cram, Pram, Wreath, Crown)

a) A man who waste his money on luxury

b) A person interested in collecting, studying and selling of old things

c) A figure of speech by which a thing is spoken of as being that which it only resembles

d) A four-wheeled carriage for a baby, pushed by a person on foot

e) A decorative ring of flowers and leaves

D. Fill in the blanks with appropriate CLICHES given in the brackets :
   (5x1=5)

(jump through hoops, sets the bar high, butterflies in her stomach, gold standard, made my day)

a) She always has _____ before a test.

b) The fraternity had their pledges _____ in order to prove their loyalty

c) I hear that the new restaurant around the corner really _____ for exquisite seafood.

d) Personal handwritten thank- you's remain the _____ of courtesy in the age of cellphones, computers, and instant messages.

e) Getting an A on my test _____ .

E. In order to promote reading habits in the students, your college has organised a Library Week. You are Ranjan/Reena. You have to speak in the morning assembly and inform the students about the week-long programme. Write your speech in 150-200 words.
   You have noted the following points: (1x5=5)

    • days and dates
    • new arrivals displayed
    • exhibition of books by some publishers
    • famous authors, I poets to visit and interact with students
    • quizzes and competitions
    • more facilities in the library
    • new teenage magazines

St Aloysius College (Autonomous) Mangaluru

B.A./B.Sc. /B.Com./B.B.A/B.C.A. Semester III – Degree Examination

January –2021

FRENCH

Time: 3 hrs.   Max Marks: 100

I.   Répondez aux questions   1x10 =10

1. Comment s'appelle le premier film de science-fiction?
2. Quel pays est appelé comme le berceau du cinema?
3. Comment s'appellent les frères lumières?
4. Guernica est la peinture de qui?
5. Le prix national de France le Cesars est organisé en quel mois?
6. François Truffaut a reçu le César du meilleur réalisateur pour quel film?
7. Luc Besson est associé au quel mouvement cinématographique?
8. Qui est l'actrice principale du film Amélie?
9. Qui a écrit le roman 'The Hunchback of Notre Dame'?
10. Les Destinées est l'œuvre de qui?

II.   Répondez aux 4 questions en 5-6 lignes   4 x5= 20

1. Que savez vous de la création du trophée César.
2. Écrivez d'un realisateur français célèbre.
3. Rédigez des idees clés du movement Nouveau Réalisme
4. Résumez le film Jean de Florette
5. Écrivez d'un acteur ou actrice célèbre français(e)
6. Quelles sont les contributions des frères Lumieres au cinéma du monde?

III. Répondez aux 2 questions en 10 lignes   2x10=20

1. Que savez-vous de la Nouvelle Vague? Expliquez avec ses caracteristiques et des exemples.
2. Expliquez l'histoire du cinéma français.
3. Qu'est-ce que le mouvement du romantisme littéraire? expliquer avec les principaux auteurs et leurs œuvres.

IV.   Complétez aux temps convenables   1x5= 5

1. Si nous mangions moins nous ……………………….. (être) en forme.
2. (Avoir) …………. tu un stylo, s'il te plait?
3. Paul (pouvoir) ………………………………… mieux faire s'il voulait.
4. S'il pleuvait, nous …………….. (ne pas sortir).
5. Quand elle était jeune, elle ………..…… (avoir) les cheveux longs.

V.   Mettez le texte au passé compose   5

La directrice de l'école autorise l'organisation d'une kermesse de fin d'année. Elle demande des idées aux élèves. Charlie pense à une tombola tandis que d'autres proposent une course au sac. Les enfants demandent la date de la kermesse à leur maître. Ils rédigent ensuite une affiche pour les parents. Le jour venu, de nombreux stands sont installés et les jeux se déroulent à merveille ! Les enfants rentrent chez eux fiers et heureux !   *Kermesse: fair*

VI.   **Rapporter des Paroles**   1x5= 5

1.   Alain me demande : 'Veux-tu me prêter ton stylo ?'
     => Alain m'a demandé _____

2.   Elle leur precise: 'Je partirai par le train de 18 heures.'
     = >Elle leur precise qu'elle .... par le train de 18.

3.   Elle nous assure: 'Vous aurez moins de travail.'
     =>Elle nous assure que............ moins de travail.

4.   Vous annoncez: 'Ma fille va se marier en Angleterre'
     = >vous annoncez que votre fille............ en Angleterre.

5.   Nous leur confirmons: Lucie arrivera à 8 heures chez vous.'
     =>Nous leur confirmons que Lucie .... à 8 heures chez eux.

VII.   **Complétez en conjuguant au subjonctif**   1x5 =5

1.   Pourvu que nous n'*(arriver)* ------------ pas trop tard!

2.   Tu feras des exercices jusqu'à ce que tu *(comprendre)* --------------- ta leçon.

3.   J'ai acheté de la farine pour que vous *(pouvoir)* -------------- faire un gâteau.

4.   C'est dommage que ton fils ----------te voir cette année. (ne pas venir)

5.   Nous nous levons si tard le matin qu'il arrive que nous *(manquer)* --------- le petit-
     déjeuner.

VIII.   **DIALOGUE**

                                                                         10

Vous devez faire une activité originale (promenade à cheval, tour sur les montagnes etc).
Mais deux entre vous ne sont pas d'accord.

                                       Ou

Un(e) ami(e) est parti(e) seul(e) en vacances dans un pays étrangère. Elle devait rentrer il y
a trois jours. Vous n'arrivez pas à avoir de ses nouvelles.

IX.   **LETTRE**
      Décrivez une fête indienne ou une fête française
                                                                         10

X.   **COMPREHENSION**
                                                                         10

                                                       Delhi, le 12 avril 2020

Chère Pauline,

Comment ça va ? Je vais bien et mes études vont commencer bientôt. Dans cette lettre, je vais
te parler de l'enseignement indien.

L'enseignement en Inde est gratuit, public et obligatoire jusqu'à 14 ans. Il est divisé en trois
dégrés : primaire, secondaire et supérieur. Au primaire dégré, l'enfant peut commencer son
parcours scolaires dès l'âge de 2 ans jusqu'à 6 ans avec l'école maternelle, ensuite l'école pri-
maire de 6 ans jusqu'à 10 ans. À l'école secondaire, l'enfant entre en High School à l'âge de
11 à 15 ans, après avoir passé l'examen du certificat de l'école secondaire . L'enfant entre en
Higher Secondary School (1le et 12e classe) à l'âge de 15 à 17 ans. Enfin l'enseignement
supérieur, qui ouvre la porte du collège et de l'école professionnelle après
avoir passé l'examen de 'Higher Secondary'. Au collège, on a des choix entre les Arts et les
Sciences et à l'école professionnelle après un concours pour 4-5 ans.

Quand est-ce que tes études vont commencer ? Explique-moi, le système éducatif en France.
J'attends pour ta réponse.

Ali

Cher Ali,

Paris, le 19 mai 2020

Comment vas-tu ? Je vais bien ici et mes études ont déjà commencé. Dans cette lettre, je vais te décrire l'enseignement français.

L'enseignement en France est un peu différent de celui en Inde. Il est aussi gratuit, public et obligatoire jusqu'à 16 ans. L'enseignement français est divisé en trois dégrés : primaire, secondaire et supérieur. Au primaire dégré, l'enfant peut commencer son parcours scolaires dès l'âge de 2 ans jusqu'à 6 ans avec l'école maternelle. Ensuite, l'école primaire de 6 ans jusqu'à 11 ans. À l'enseignement secondaire, l'enfant entre au collège de 11 à 15 ans et puis au lycée à l'âge de 15 à 18 ans après avoir obtenu le diplôme de Brevet en lequel l'enfant a le choix entre le lycée général ou le lycée professionnel. À la fin, l'enseignement supérieur après avoir passé le Baccalauréat qui ouvre la porte de l'Université. Après le Bac, on peut choisir la formation professionnelle, les études de technologie, les lettres, les sciences humains etc.

Donne mes salutations à tes parents !

Amitiée,

Pauline

Répondez aux questions.

1. À quel âge l'enfant commence son parcours scolaire en Inde ?
2. Jusqu'à quel âge l'enseignement en France et en Inde est obligatoire ?
3. L'enseignement français est divisé en combien de niveaux ?
4. Qu'est-ce que c'est 'Higher Secondary' en Inde et 'le Bac' en France ?

   Dites vrai ou faux.

5. Le système scolaire de France et celui de l'Inde sont pareilles.
6. On ne peut pas entrer à l'université française sans avoir passé le Bac.
7. En Inde pour entrer au collège, on a besoin du certificat de l'école secondaire.
8. Ali et Pauline sont les camarades.

   Trouvez dans le texte.

9. La forme nominale du verbe 'enseigner'
10. La forme verbale du nom 'la fin'

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St Aloysius College (Autonomous)
Mangaluru
B.A./B.Sc./B.Com./B.B.A./B.C.A. Semester III – Degree Examination
January 2021
MALAYALAM

Time: 3 Hours

Max. Marks: 100

I. മൂന്നെണ്ണം വ്യാഖ്യാനിക്കുക   **(3x5 =15)**

1. "ആരു നീയനുജത്തി? നിർന്നിമേഷമായെന്തെൻ
   തേരുപോകവേ നേരെനോക്കി നിൽക്കുന്നു ദൂരെ?

2. നിഴൽ പോൽ മറഞ്ഞു നീ,യെന്നുള്ളിലൂറിക്കൂടി
   അഴലോ നിശ്ശൂന്നതാബോധമോ നിർവേദമോ

3. ഭാഗ്യ, മപ്പണിപറ്റീ,യുണങ്ങീ, വ്രണ,മഞ്ചു
   നാൾക്കകം മുന്നേപ്പോൾ നീ കുസൃതിക്കൂടായ് മാറി.

4. ഗാനം പോൾ ഗുണകാവ്യം പോൽ, മമ
   മാനസമോർത്തു, സഖീ നിന്നെ..

II. മൂന്നന്നണ്ണത്തിനു കുറിപ്പു തയ്യാറാക്കുക   **(3x5=15)**

5. ഫിൻലൻഡിൻെറ ഗ്രാമീണഭംഗി എസ്.കെ വർണ്ണിക്കുന്നതെങ്ങിനെ?

6. ഫിൻലൻഡിൻെറ പഴയ ചരിത്രം വിവരിക്കുക

7. പുതിയ രൂപത്തിലും ഭാവത്തിലും ഹെൽസിങ്കി നഗരം രൂപംകൊണ്ടതെങ്ങിനെ?

8. ഗാഹ്ത്തിയെക്കുറിച്ച് വിവരിക്കുക

III. ഒരെണ്ണത്തിന് രണ്ടു പുറത്തിൽ കവിയാതെ ഉത്തരമെഴുതുക   **1x10=10)**

9. അപകടത്തിൽ പെട്ട പിടിയാനയെ വനപാലകൻ രക്ഷപ്പെടുത്തിയതെങ്ങിനെ?

10. സൂര്യനോട് സൂര്യകാന്തിപ്പൂവ് പറയുവാനാഗ്രഹിച്ചതെന്തൊക്കെ?

IV. ഒരെണ്ണത്തിന് രണ്ടുപുറത്തിൽ കുറയാതെ ഉത്തരമെഴുതുക   **(1x10=10)**

11. ഫിൻലൻഡിൻെറ മതത്തെക്കുറിച്ച് എസ്.കെ നൽകുന്ന വിവരണമെന്ത്?

12. ഹെൽസിങ്കിയിൽ തനിക്കുണ്ടായ അനുഭവങ്ങളെ എസ്.കെ വർണ്ണിക്കുന്നതെങ്ങിനെ?

V. ഒരെണ്ണത്തിന് മൂന്നുപുറത്തിൽ കുറയാതെ ഉത്തരമെഴുതുക   **(1x15=15)**

13. ദേവാലയത്തിൻെറ പശ്ചാത്തലത്തിൽ കവി മനസിനിയെ
    അവതരിപ്പിച്ചിരിക്കുന്നതെങ്ങിനെ?

14. സൂര്യനും സൂര്യകാന്തിപ്പൂവും തമ്മിലുള്ള ആത്മബന്ധം കവിതയിൽ കവി
    അവതരിപ്പിച്ചിരിക്കുന്നതെങ്ങിനെ ?

VI. ഒരെണ്ണത്തിന് മൂന്നുപുറത്തിൽ കുറയാതെ ഉത്തരമെഴുതുക   **(1x15=15)**

15. ഫിൻലൻഡിൻെറ മുഖ്യ സമ്പത്ത് വനങ്ങളാണെന്ന് പറയുന്നതെന്തുകൊണ്ട്?

16. ഫിൻലൻഡിലെ രാജ്യരക്ഷാസേനയെക്കുറിച്ച് വിവരിക്കുക

VII. ഒരെണ്ണത്തിന് മൂന്നുപുറത്തിൽ കുറയാതെ ഉത്തരമെഴുതുക   **(1x15=15)**

17. ഉത്തരം കിട്ടാത്ത ഒരു പ്രഹേളികയാണ് മനുഷ്യമനസ്സ്–വാനപ്രസ്ഥത്തിലെ
    മാസ്റ്റർ ,വിനോദിനി ഇവരുടെ മാനസികാവസ്ഥയെ വിലയിരുത്തിക്കൊണ്ട് സമർഥിക്കുക

18. വാനപ്രസ്ഥം –ഒരാസ്വാദനം തയ്യാറാക്കുക

VIII. ഒരെണ്ണത്തിൻെറ ആശയം വിശദമാക്കുക   **(1x5=5)**

19. വിത്തുഗുണം പത്തുഗുണം

20. ഒരുവേള പഴക്കമേറിയാ–
    ലിരുളും മെല്ലെ വെളിച്ചമായ് വരും

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(2019 Batch onwards)

Reg. No.

St Aloysius College (Autonomous)
Mangaluru

B.A./B.Sc./B.C.A. – Semester III -Degree Examination

February 2021

FOUNDATION COURSE IN GENDER EQUITY AND VALUE EDUCATION

Time: 2Hrs.   Max Marks: 50

I.   **Answer any <u>FIVE</u> of the following questions in just one sentence each**   (5×1=5)

1. Gender Stereotypes

   ಲಿಂಗ ಪಡಿಯಚ್ಚು

2. Expand PNDT.

   ಪಿ.ಎನ್.ಡಿ.ಟಿ. ವಿಸ್ತರಿಸಿ.

3. Give the etymology of the term 'Patriarchy'

   ಪ್ಯಾಟ್ರಿಯಾರ್ಕಿ ಎಂಬ ಪದದ ಶಬ್ದಾರ್ಥವನ್ನು ನೀಡಿ.

4. What is female infanticide?

   ಹೆಣ್ಣು ಶಿಶು ಹತ್ಯೆ ಎಂದರೇನು?

5. What is abduction?

   ಅಪಹರಣವೆಂದರೇನು?

6. Name two patrons of female education in India.

   ಭಾರತದಲ್ಲಿ ಮಹಿಳೆಯರ ಶಿಕ್ಷಣದ ಇಬ್ಬರು ಪೋಷಕರನ್ನು ಹೆಸರಿಸಿ.

7. Mention the forms of domestic violence.

   ಗೃಹ ಹಿಂಸೆಯ ವಿಧಗಳನ್ನು ತಿಳಿಸಿರಿ.

II.   **Answer any <u>FIVE</u> of the following questions in about two sentences each**   (5×2=10)

8. What is malnutrition?

   ಅಪೌಷ್ಟಿಕತೆ ಎಂದರೇನು?

9. Mention any two factors affecting maternal mortality.

   ಮಾತೃ ಮರಣಕ್ಕೆ ಪೂರಕವಾದ ಎರಡು ಅಂಶಗಳನ್ನು ಸೂಚಿಸಿರಿ.

10. What is globalization?

    ಜಾಗತೀಕರಣ ಎಂದರೇನು?

11. Difference between Sex and Gender.

    ಜೈವಿಕ ಲಿಂಗ ಮತ್ತು ಸಾಮಾಜಿಕ ಲಿಂಗದ ನಡುವಿನ ವ್ಯತ್ಯಾಸ.

12. Mention the offences relating to marriage.

    ವಿವಾಹ ಸಂಬಂಧದ ಅಪರಾಧಗಳು

13. What is dowry death?

    ವರದಕ್ಷಿಣೆ ನಿಧನ ಎಂದರೇನು?

14. Mention any two objectives of National Commission for Women.

ರಾಷ್ಟ್ರೀಯ ಮಹಿಳಾ ಆಯೋಗದ ಎರಡು ಉದ್ದೇಶಗಳನ್ನು ಸೂಚಿಸಿರಿ.

III. **Answer any <u>TWO</u> of the following questions in 20 lines each**

(2x10=20)

15. Briefly explain Alma Ata Declaration

ಆಲ್ಮ ಆಟಾ ಪ್ರಕಟಣೆಯನ್ನು ಸಂಕ್ಷಿಪ್ತವಾಗಿ ವಿವರಿಸಿ.

16. Explain the initiatives taken by the government to protect women against violence.

ಮಹಿಳೆಯನ್ನು ಹಿಂಸೆಯಿಂದ ರಕ್ಷಿಸಲು ಸರ್ಕಾರ ತೆಗೆದುಕೊಂಡ ಉಪಕ್ರಮಗಳನ್ನು ವಿವರಿಸಿ.

17. Write a note on proponents of women's education.

ಮಹಿಳಾ ಶಿಕ್ಷಣದ ಪ್ರತಿಪಾದಕರ ಕುರಿತು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

18. Explain the discrimination against girl child in India.

ಭಾರತದಲ್ಲಿ ಹೆಣ್ಣು ಮಕ್ಕಳ ವಿರುದ್ಧ ಪಕ್ಷಪಾತವನ್ನು ವಿವರಿಸಿ.

PART – B
VALUE EDUCATION

I. **Answer any <u>ONE</u> of the following in not less than a page.**   (1x5=5)

ಕೆಳಗಿನ ಯಾವುದಾದರೂ <u>ಒಂದು</u> ಪ್ರಶ್ನೆಗೆ ಒಂದು ಪುಟಗಳಿಗೆ ಮೀರದಂತೆ ಉತ್ತರಿಸಿರಿ.

19. Write a note on preparation for marriage.

ವಿವಾಹದ ತಯಾರಿಯ ಬಗ್ಗೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

20. What are the characteristics of a functional Family? Discuss.

ಕ್ರಿಯಾತ್ಮಕ ಕುಟುಂಬದ ಲಕ್ಷಣಗಳೇನು? ಚರ್ಚಿಸಿ ಬರೆಯಿರಿ.

II. **Answer any <u>ONE</u> of the following in not less than two**   (1x10=10)

pages.

ಕೆಳಗಿನ ಯಾವುದಾದರೂ <u>ಒಂದು</u> ಪ್ರಶ್ನೆಯನ್ನು ಎರಡು ಪುಟಕ್ಕೆ ಮೀರದಂತೆ ಬರೆಯಿರಿ.

21. Examine the values, which will help in building a healthy family.

ಆರೋಗ್ಯಕರ ಕುಟುಂಬವನ್ನು ನಿರ್ಮಿಸಲು ಅಗತ್ಯವಾಗಿರುವ ಮೌಲ್ಯಗಳನ್ನು ಪರಿಶೀಲಿಸಿ ಬರೆಯಿರಿ.

22. Explain the Temporary Methods of family planning.

ತಾತ್ಕಾಲಿಕ ಕುಟುಂಬ ಯೋಜನೆಯ ವಿಧಾನಗಳನ್ನು ವಿವರಿಸಿ.

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G 501.3   Reg. No: ☐☐☐☐☐☐

St Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III – Degree Examination
January - 2021
PHYSICS
Acoustics, Optics and Networks

Time: 3 Hours

Max. Marks: 100

SECTION – A

Answer any TEN of the following.   (10x2=20)

1. a) What is meant by damping?

   b) What is a progressive wave?

   c) Define intensity of a wave. Give the expression for it.

   d) How does the velocity of sound vary with pressure and density in a gas?

   e) Draw a labeled diagram showing how coherent beams are produced using Fresnel's biprism.

   f) What happens to the fringes in an interference pattern, when monochromatic light is replaced by white light?

   g) What is a half period zone?

   h) What is double refraction?

   i) What are constant voltage source and current source?

   j) State and explain voltage division law.

   k) Define the terms, node and loop.

   l) State Norton's theorem.

SECTION – B

Answer any TWO full questions from each unit.

UNIT - I

2. a) Give the theory of forced vibrations and obtain the condition for resonance.   (6)

   b) Derive an expression for simple harmonic oscillation.   (4)

3. a) Set up the equation for a progressive wave and hence obtain the differential equation of wave motion.   (6)

   b) Assuming Newton's formula for velocity of sound in air, obtain Newton - Laplace formula.   (4)

4. a) Derive an expression for the velocity of longitudinal waves in a fluid. (6)

   b) State and explain the laws of transverse vibrations in a string. (4)

UNIT - II

5. a) Derive an expression for the fringe width in the case of interference at an air wedge.   (6)

   b) Explain why a thin film appears coloured when viewed in reflected light. (4)

6. a) Explain Fraunhofer diffraction at a single slit and obtain the expression **(6)**
   for the fringe width.
   b) Compare Zone plate and convex lens. **(4)**

7. a) Explain Fresnel's theory of optical rotation. **(6)**
   b) Compare positive and negative crystals. Give an example for each. **(4)**

Unit -III

8. a) With an example, explain the analysis of an electrical network using **(6)**
   mesh equations.
   b) What are passive and active circuit elements? Give examples. **(4)**

9. a) With an example, state and explain Thevenin theorem. **(6)**
   b) State and explain Kirchhoff's laws. **(4)**

10. a) State maximum power transfer theorem and prove it in case of a dc **(6)**
    network.
    b) Explain delta to star conversion with suitable equations. **(4)**

SECTION – C

Answer any FOUR of the following   **(4x5=20)**

11. A stretched wire emits a note of fundamental frequency 35Hz. When the tension is increased by 0.5 kg wt; the frequency of fundamental note rises to 40Hz. Find the initial tension and also the length of the wire. Linear density of the wire is 1.33×10^{-3} kgm^{-1}.

12. Calculate the percentage change in the velocity of sound through air due to change in temperature from 20° C to 30°C.

13. A parallel beam of light with wavelength 589 nm is incident on a thin glass plate such that the angle of refraction into the plate is 60°. Calculate the smallest thickness of the plate which will make it appear dark by reflection. Refractive index of glass is 1.5.

14. Assuming that visible spectrum lies between 430nm and 680nm, Calculate the number of lines per mm on a grating that will spread the first order spectrum through an angle of 20° for normal incidence.

15. Plane polarized light is incident normally on a quartz plate cut with faces parallel to its optic axis. Find the thickness of the quartz plate which introduces a phase difference of 45° between ordinary and extra-ordinary rays. Wave length of light is 583nm. $\mu_0=1.6584$, $\mu_e=1.4864$

16. Using Thevenin theorem, find the power dissipated in the resistor R in the circuit shown below.

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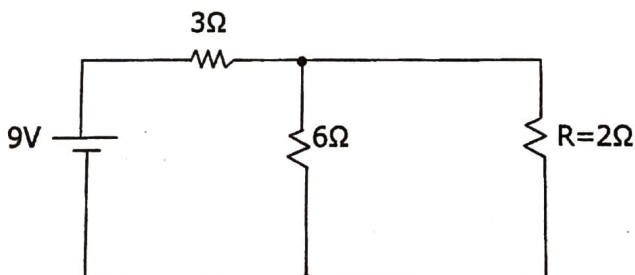
G 502.3   Reg. No.

St Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III – Degree Examination
January/February 2021
CHEMISTRY

Time: 3 hrs.   Max Marks: 100

PART – A

1. **Answer any <u>TEN</u> of the following questions in 1 to 3 sentences**
   (2x10=20)

   a) Define rate of a reaction. Write any one factor affecting the rate of a reaction.

   b) Give Clausius-Clapeyron equation and explain the terms.

   c) State group displacement law.

   d) d-block elements show variable oxidation states. Give reason.

   e) What are Lanthanides? Write their general electronic configuration.

   f) Cerium and Terbium show +4 oxidation states. Give reason.

   g) Pick out the aromatic species in the following.
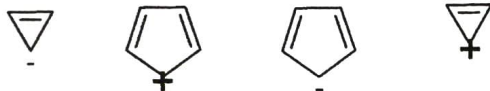
   h) Write the equation for the chlorination reaction of benzene?

   i) Give the equation for the nitration of naphthalene.

   j) Name any two fuels used in flame photometry.

   k) Give any two applications of plasma emission spectroscopy.

   l) How is DTG different from TGA?

PART – B

2. **Answer any <u>TEN</u> of the following questions in 2 to 5 sentences**
   (3x10=30)

   i) Give any 3 differences between molecularity and order of the reaction.

   ii) How is order of the reaction determined by Ostwald's isolation method?

   iii) Derive the relationship between K_p and K_c.

   iv) Calculate the magnetic moment using spin only formula of Fe^{3+} and Co^{2+}.

   v) Explain the metallic character of d-block elements.

   vi) Compare the complexation tendencies of lanthanides and actinides.

   vii) Explain Hoffmann rearrangement with mechanism.

   viii) What happens when naphthalene is heated with conc. H_2SO_4? Write the chemical equation.

   ix) Explain the effect of ortho-para directing group on aromatic electrophilic substitution, with an example.

   x) Draw the schematic diagram of instrumentation of Plasma emission spectroscopy.

   xi) Discuss any 3 applications of Atomic Absorption Spectroscopy.

   xii) What is the principle of Thermogravimetric analysis?

PART – C

Answer any <u>TEN</u> of the following questions.

(5x10=50)

3. What is second order reaction? Derive an expression for rate constant of second order reaction when concentration of the reactants are equal.

4. Explain the thermodynamic derivation of law of mass action.

5. Define decay constant? Derive an integrated expression for decay constant.

6. Compare 4d and 5d series of elements with their 3d analogues.

7. Explain the ion exchange method of separation of lanthanides.

8. Describe the separation of Np, Pu and Am from Uranium.

9. Give the mechanism of intra and intermolecular Fries rearrangement.

10. Explain Friedel Crafts alkylation of Benzene. Give its mechanism.

11. Explain the preparation of naphthalene by Haworth synthesis.

12. Describe the construction and working of a laminar flow burner.

13. Explain the instrumentation of Atomic Absorption Spectroscopy.

14. Explain the principle of Differential Thermal Analysis.

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St Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III – Degree Examination
February - 2021

MATHEMATICS
Number Theory, Group Theory and Multivariate calculus

Time: 3 Hours

Max. Marks: 100

Note: Answer all parts

PART – A

Answer any TEN of the following.

$(10×2½=25)$

1. Find the remainder obtained when 2^{20} is divided by 41.

2. If $ca \equiv cb \pmod{n}$ and $d = gcd(c,n)$ then prove that $a \equiv b \left(mod\ \dfrac{n}{d} \right)$.

3. Solve the linear congruence $5x \equiv 2 \pmod{26}$.

4. Prove that identity element in a group is unique.

5. If G is a group such that $a^2 = e, \forall a \in G$ then show that G is abelian.

6. Prove that every group of prime order is cyclic.

7. Determine the domain of the function $f(x,y) = \dfrac{\sqrt{25 - x^2 - y^2}}{x}$.

8. Find the slope of the tangent line to the curve of intersection of the surface $z = \dfrac{\sqrt{24 - x^2 - 2y^2}}{2}$ with the plane $y = 2$ at $\left(2,\ 2,\ \sqrt{3}\right)$.

9. Let $u = x^2 + 2xy + y^2$, $x = t\cos t,\ y = t\sin t$, find $\dfrac{du}{dt}$.

10. If $f(x,y) = \dfrac{1}{16}x^2 + \dfrac{1}{9}y^2$ find the gradient of f at the point $(4, 3)$.

11. Find the critical point of $f(x,y) = 6x - 4y - x^2 - 2y^2$.

12. If $f(x,y) = x^2 - 4y$ then find $\nabla f(-2, 2)$.

13. Evaluate $\displaystyle\int_1^4 \int_{y^2}^{y} \sqrt{\dfrac{y}{x}}\ dx\,dy$.

14. Find the volume of the solid bounded by the surface $f(x,y) = 4 - \dfrac{1}{9}x^2 - \dfrac{1}{16}y^2$, the planes $x = 3$ and $y = 2$ and the three coordinate planes.

15. Find by double integration the area of the region in the xy plane bounded by the curves $y = x^3$ and $y = x^2$.

PART – B

UNIT – I

Answer any THREE questions.   (3×5=15)

1. Let $N = a_m 10^m + a_{m-1} 10^{m-1} + ... + a_0$ be the decimal expansion of the positive integer $N, 0 \le a_k < 10$ and let $S = a_0 + a_1 + ... + a_m$. Then prove that $9 | N$ if and only if $9 | S$. Also without performing division determine whether the integer 1571724 is divisible by 11.

2. Let $n_1, n_2, ..., n_r$ be positive integers such that $gcd(n_i, n_j) = 1$ for $i \ne j$. Then prove tha the system of linear congruences

$$x \equiv a_1 \ (mod \ n_1)$$
$$x \equiv a_2 \ (mod \ n_2)$$
.
.
.
$$x \equiv a_r \ (mod \ n_r)$$

has a simultaneous solution which is unique modulo the integer $n_1, n_2, ..., n_r$.

3. Solve the congruence $x \equiv 1 \ (mod \ 3), x \equiv 2 \ (mod \ 5), x \equiv 3 \ (mod \ 7)$.

4. State and prove Fermats little theorem.

5. If p is a prime then prove that $(p-1)! \equiv -1 (mod \ p)$.

UNIT – II

Answer any THREE questions.

(3×5=15)

1. Let H be a finite subset of a group G such that $ab \in H$ whenever $a \in H$ and $b \in H$ then prove that H is a subgroup of G.

2. Let H and K be a finite subgroups G such that HK is also a subgroup of G. Then prove that $O(HK) = \dfrac{O(H) . O(K)}{O(H \cap K)}$.

3. Prove that an infinite cyclic group has exactly two generators.

4. Let G be a group and $a \in G$. Then prove that the set $H = \left\{ a^n \mid n \in \mathbb{Z} \right\}$ is a subgroup of G and it is the smallest subgroup of G containing a.

5. Let G be a finite group and H a subgroup of G. Then prove that order of H divides the order of G.

UNIT – III

Answer any THREE questions

(3×5=15)

1. Using $\epsilon - \partial$ definition prove that $\lim\limits_{(x,y) \to (1,2)} (3x^2 + y) = 5$.

2. Given $f(x, y) = \begin{cases} \dfrac{xy(x^2 - y^2)}{x^2 + y^2}, & if \ (x, y) \ne (0, 0) \\ 0, & if \ (x, y) = (0, 0) \end{cases}$

Show that $f_1(0, y) = -y$ for every y.

3. Given $f(x, y)= \begin{cases} \dfrac{xy}{x^2+y^2}, & if \ (x, y)\neq(0, 0) \\ 0 & , if \ (x, y)=(0, 0) \end{cases}$

Prove that $D_1 f(0,0)$ and $D_2 f(0,0)$ exist but that f is not differentiable at $(0,0)$.

4. If $u=xy+xz+yz, \ x=r, \ y=r\cos t$ and $z=r\sin t$ then find $\dfrac{\partial u}{\partial t}$ using chain rule.

5. Show that $u(x,y)=\tan^{-1} \dfrac{2xy}{x^2-y^2}$ satisfies $\dfrac{\partial^2 u}{\partial x^2}+\dfrac{\partial^2 u}{\partial y^2}=0$.

UNIT - IV

Answer any THREE questions   (3×5=15)

1. Given $f(x,y)=2x^2-y^2+3x-y$, find the maximum value of $D_U f$ at the point where $x=1$ and $y=-2$.

2. Find the equations of the tangent plane and equations of the normal line to the surface $x^2+y^2+z^2=17$ at the point $(2, -2, 3)$.

3. Find symmetric equations of the tangent line to the curve of intersection of the surfaces $3x^2+2y^2+z^2=49$ and $x^2+y^2-2z^2=10$ at the point $(3, -3, 2)$.

4. If $f(x, y)=x^3+y^2-6x^2+y-1$, determine the relative extrema of f if there are any.

5. Find the point $P(x,y,z)$ closet to the origin on the plane $2x+y-z-5=0$.

UNIT - V

Answer any THREE questions   (3×5=15)

1. Find an approximate value of the double integral $\iint\limits_R (2x^2-3y)dA$ where R is the rectangular region having vertices $(-1, 1)$ and $(2, 3)$,Take a partition of R formed by the lines $x=0, \ x=1$ and $y=2$ and take (ξ_i, γ_i) at the centre of the ith region.

2. Find the volume of the solid in the first octant bounded by two cylinders $x^2+y^2=4$ and $x^2+z^2=4$.

3. Find the area of the region inside the cardiod $r=2(1+\sin\theta)$ using double integral.

4. Find the area of the paraboloid $z=x^2+y^2$ below the plane $z=4$.

5. Evaluate te iterated integral $\int\limits_0^1 \int\limits_0^x \int\limits_0^{x+y} (x+y+z)dzdydx$.

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G 504.3   Reg. No.

St Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III – Degree Examination

February 2021
ELECTRONICS

Linear Integrated Circuits and Applications, Sequential Logic Circuits and Logic Families

Note: This question paper has THREE sections. Section A, Section B and Section C. Answer all sections.

Time: 3 hrs.   Max Marks: 100

SECTION – A

1. Choose the correct answer from the choices given at the end of   (12x1=12) each question and write the correct answer.

i) In ECL famil name , ECL stands for _____
   - (a) Emitter Collector Logic
   - (b) Emitter Coupled Logic
   - (c) Enhancement Coupled Logic
   - (d) Emitter Capacitor Logic

ii) The feedback factor of a voltage follower using op-amp is _____
   - i) 0
   - ii) 0.5
   - iii) 0.75
   - iv) 1

iii) The feedback factor of a Wien bridge oscillator is _____
   - a) 3
   - b) 29
   - c) 1/3
   - d) 1/29

iv) The integrator gives _____ wave output for a square wave input.
   - a) Square
   - b) Triangular
   - c) Ramp
   - d) Step

v) The maximum number of states possible in a counter constructed using 5 flip-flops is__
   - (a) 31
   - (b) 32
   - (c) 5
   - (d) 33

vi) The maximum rate of change output voltage per time for unity gain of an op-amp is called_____.
   - a) Bias current
   - b) Slew rate
   - c) CMRR
   - d) PSRR

vii) Butterworth filter has _____stop band and _____pass band
   - a) flat, ripple
   - b) ripple, flat
   - c) ripple, ripple
   - d) flat, flat

viii) A differential amplifier using transistors uses _____coupling scheme
   - a) R-C
   - b) Direct
   - c) Transformer
   - d) Inductive

ix) The input resistance of a voltage series feedback amplifier using op-amp _____ with feedback.
   - a) is equal to the input resistance of the op-amp
   - b) increases
   - c) does not change
   - d) decreases

x) For an oscillator, the loop gain $A\beta$ must be _____to produce sustained oscillations.
   - a) Equal to zero
   - b) less than one
   - c) one
   - d) greater than one

xi) The output voltage of an op-amp inverting amplifier with open loop gain 10^5 is _____ when connected to an input signal source of amplitude 1V is (Given Vcc=±15V).
   - (a) 10^5V
   - (b) 15V
   - (c) -15V
   - d) -1 V

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xii) The offset null network in IC 741 is connected between __ and ___ pins.
a) 5,8   b) 1,8   c) 1,5   d) 4,7

(10x1=10)

2. **Answer any __TEN__ questions.**

i) Mention any two characteristics of comparator.

ii) What is the limitation of a basic op-amp differentiator?

iii) What is meant by epitaxial layer?

iv) Draw the circuit symbol of an OP-AMP.

v) What is meant by a zero-crossing detector?

vi) Give the expression for frequency of oscillations of a phase shift oscillator using op-amp.

vii) Define PSRR of an op-amp.

viii) What is meant by a micro operation?

ix) Mention any one advantage of TTL IC.

x) Mention any one advantage of active filter over passive filter.

xi) Draw the circuit diagram of a two bit ripple counter using T flip-flops.

xii) Define modulus of a counter.

3. **Answer any __TEN__ questions.**   (10x2=20)

i) Design an Op-amp substractor to get output voltage of $V_0=(V_a-V_b)$ where V_a and V_b are the input voltages.

ii) Why are the asynchronous counters called ripple counters? Explain.

iii) Differentiate between monolithic and hybrid IC's.

iv) What is the function of MBR register?

v) Calculate the output voltage of voltage series feedback amplifier using op-amp having $R_F = 25k\Omega$, $R_1 = 5k\Omega$ and $V_i = 0.25V$. Assume $V_{cc}= \pm 12V$.

vi) Give the expression for frequency of oscillations of a Wien bridge oscillator.

vii) An operational amplifier has a differential gain of 100 and common mode gain of 0.01. Calculate CMRR and express it in decibels.

viii) Draw the circuit of a two-sided voltage limiter.

ix) Compare DTL and CMOS logic families.

x) Mention any four characteristics of an ideal op-amp.

xi) Draw the internal structure of IC 555.

xii) Draw the circuit diagram of an inverter using op-amp.

SECTION – B

4. **Answer any <u>SEVEN</u> questions.** (7x4=28)

i) Explain any four characteristics of logic families.

ii) With circuit diagram derive the expression for the gain of a first order Butterworth low pass filter.

iii) In non inverting amplifier using op-amp R_1= 1kΩ and R_F=10kΩ. Calculate A_{CL}, R_{if} and R_{of}. Given :A= 200000, Ri=2MΩ, Ro=75Ω, supply voltage is ±15V .

iv) Draw the circuit diagram of a dual input balanced output difference amplifier using BJTs and explain its working.

v) With necessary circuit diagram obtain the expression for the input resistance of a voltage series feedback amplifier using op-amp.

vi) Explain Serial in – Serial out shift Register using D flip-flops.

vii) With circuit diagram explain the working of Hartley oscillator using Op-amp. Write the expression for its frequency of oscillations.

viii) Draw the circuit of an instrumentation amplifier using Op-amp. write the expression for its output voltage.

ix) Write a note on shift micro operation.

x) Design a summing amplifier using Op-amp in inverting configuration, to realize the output voltage $v_o=3v_1+5v_2-9v_3$ where v_1, v_2 and v_3 are the input voltages.

SECTION – C

Answer any <u>THREE</u> full questions. (10x3=30)

5. a) With circuit diagram and input output waveforms explain the working of inverting Schmitt trigger using Op-amp. Write the expression for UTP and LTP. (6)

   b) With a circuit diagram explain the working of a Hartley oscillator (4)

6. a) Draw the circuit diagram of an integrator using op-amp and obtain the expression for its output voltage (6)

   b) Draw the circuit diagram of a two input summing amplifier using op-amp in non inverting configuration and obtain the expression for its output voltage. (4)

7. a) Draw the circuit of voltage shunt feedback amplifier using an op- amp and obtain the expression for its closed loop gain. (6)

   b) Design a difference amplifier using op-amp to get a differential gain of 10. Calculate its output voltage for V_{in1}=20mV and Vin2=80mV. Assume V_{cc} =± 12V (4)

8. a) Design a 3-bit synchronous counter using JK flip-flop. (6)

   b) A Wien bridge oscillator makes use of lead –lag network with R=10kΩ and C= 0.033μF. Calculate its frequency of oscillations. (4)

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PART –A

1. **Answer any <u>TEN</u> of the following.**   (10X2=20)

a) How is Java byte code different from machine code?

b) Write the Java statement for the following expression

$$T=\sqrt{\frac{2M1M2}{M1+M2}}$$

c) What are the special operators in java?

d) Write the purpose of super keyword.

e) List the conditions to be followed while using subclass constructor.

f) Which inheritance is not supported by java? Why?

g) List the difference between arrays and vectors.

h) Explain the following mathematical functions used in Java

   i)   round(x)   ii) ceil(x)

i) What is synchronization?

j) What is the role of Java Swing?

k) List any four Java System Packages

l) Differentiate between local applet and remote applet.

PART –B

Answer any <u>ONE</u> <u>FULL</u> question from each unit.   (4x20=80)

UNIT - I

2. a) Explain the various types of if statement with syntax and example.   **8**

   b) List and explain primitive data types available in java.   **6**

   c) What is the use of labelled continue statement. Explain with syntax and   **6**
   example.

3. a) Explain the while and do ... while statement with syntax and example.   **8**

   b) Explain the features of java   **6**

   c) List and explain the logical operators in java.   **6**

UNIT – II

4. a) How a constructor can be used to initialize the object of a Class.   **5**

   Explain.

   b) How multiple inheritance in Java is achieved?   **5**

   c) What is a abstract class? What are its features? Give an example.   **5**

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    d) What is the purpose of final variables and methods? Explain with an example.   **5**

5. a) What are objects? How to create an object of a class?   **5**
    b) What do you mean by method overloading? Explain.   **5**
    c) Explain single inheritance with a program example.   **5**
    d) What is the need of using static members? How do you access them? Give example.   **5**

UNIT – III

6. a) How do you declare and initialize a two dimensional array? Give an example.   **5**
    b) How strings differ from String Buffer classes. Explain the following methods with example   **10**

        i)   replace()
        ii)   substring()
        iii)   indexOf()
        iv)   setCharAt()

    c) Explain how an interface can be used by a class with an example.   **5**

7. a) How to create a package in Java. Explain with an example.   **8**
    b) What are the similarities and differences between interface and class?   **6**
    c) Explain any four vector methods.   **6**

UNIT – IV

8. a) Explain applet life cycle with a neat diagram.   **8**
    b) What is an exception? How do we handle them in java?   **6**
    c) Briefly explain the components and containers of Java swings.   **6**

9. a) Explain life cycle of a thread with a neat diagram.   **8**
    b) Write a java program to read the array elements and handle the related exceptions.   **6**
    c) Explain <APPLET> tag with suitable example.   **6**

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G 506.3

Reg. No.:

St Aloysius College (Autonomous)
Mangaluru
B.Sc. - Semester III
February 2021
STATISTICS
Statistical Inference - I

Max Marks: 100

Time: 3 Hours.

Note: Answer all parts

PART – A

I. Answer any TWELVE of the following: (2x12=24)

1. If $X \sim \chi^2(n)$, then what is the p.d.f. of X?

2. Suppose $t \sim t_{(2)}$. What are its mean and variance?

3. State the relation between Normal, Chi square and F distribution.

4. If $F \sim F(m,n)$ then what is the p.d.f of $1/F$?

5. Obtain the probability density function of first order statistic $X_{(1)}$.

6. State Markov's Inequality.

7. Explain convergence in probability.

8. State the importance of Central Limit Theorem.

9. Find the m.l.e of θ in $U(0, \theta)$.

10. What are the necessary and sufficient condition for consistency of an estimator?

11. Distinguish between unbiased and asymptotically unbiased estimators.

12. State any two properties of moment estimators.

13. State Fisher Neyman Factorization Theorem for sufficiency.

14. What is meant by central confidence interval?

15. What is $100(1 - \alpha)\%$ Confidence Interval for the mean in case of dependent samples?

PART – B

II. Answer any SIX of the following. (6x6=36)

16. Find median of χ^2 variate with 'n' d.f..

17. Show that limiting distribution of student's t variate is Normal.

18. Find mean and variance of t distribution with n d.f.

19. State and prove Central Limit Theorem.

20. If $X_1, X_2,...,X_n$ is a random sample from $U(-\theta, \theta)$ distribution. Show that $X_{(n)}$ is biased for θ. Find a function of $X_{(n)}$ which is unbiased for θ.

21. If $X_1, X_2,...,X_n$ are the random sample from $N(\theta, \sigma^2)$. Show that sample mean and sample variance are jointly sufficient for θ and σ^2.

22. If $X_1, X_2,..., X_n$ is a random sample from $B(n, \theta)$. Obtain the moment estimators of the parameters.

23. If $X_1, X_2,..., X_n$ is a random sample from Beta distribution of first kind with parameters μ and 1. Find the m.l.e of $\left(\dfrac{\mu}{\mu+1}\right)$

24. Derive $100(1-\alpha)\%$ confidence interval for the difference in proportions of two independent populations based on two samples of large sizes.

PART – C

III. Answer any <u>FOUR</u> of the following.   **(10x4=40)**

25. a) State and prove reciprocal property of F distribution.   **(5)**

    b) If F is a F variate with (n_1, n_2) d.f provided n_2 is large then prove that n_1F follows Chi square distribution with n_1 degrees of freedom.   **(5)**

26. Derive the p.d.f of Chi Square variate with n degrees of freedom.

27. a) State and prove Chebysheve's inequality.   **(5)**

    b) While sampling from a Cauchy distribution with parameters with p.d.f $f(x) = \dfrac{1}{\pi} \dfrac{1}{(1+(x-\mu)^2)}$; $-\infty < x < \infty$ show that sample mean is not a consistent estimator of the population mean but sample median is consistent for population me.   **(5)**

28. a) For a random sampling from Exponential distribution with parameter θ obtain m.l.e of the parameter θ.   **(4)**

    b) Estimate α and β for the following distribution by the method of moments

    $$f(x, \alpha, \beta) = \dfrac{\beta^\alpha}{\Gamma\alpha} e^{-\beta x} x^{\alpha-1}; \quad 0 \le x \le \infty$$ **(6)**

29. If $X_1, X_2,..., X_n$ is a random sample from $U(0, \theta)$. Let $T_1 = \dfrac{n+1}{n-1} X_{(n)}$ and $T_2 = -(\dfrac{n+1}{n-1}) X_{(1)}$. Show that relative efficiency of T_1 with respect to T_2 is unity.

30. Derive $100(1-\alpha)\%$ central confidence interval for the difference in means of two independent normal population with common unknown variance.

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G 507.3   Reg. No.: ☐☐☐☐☐☐

St Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III– Degree Examination
January -2021
BOTANY
BIODIVERSITY III, MORPHOLOGY & EMBRYOLOGY OF ANGIOSPERMS

Time: 3 Hours.   **Max Marks: 100**

Note: i) Answer all the sections.
ii) Draw diagrams wherever necessary.

SECTION –A
(10X2=20)

I Answer any TEN of the following.

1) Write any two features of Rhynia which link the ancestor.
2) What is Apospory? Give an example.
3) Explain Resurrection? Where it is found?
4) What is Circinate vernation? Where it is found?
5) What is Spur shoot? Where it is found?
6) What is Cupule? Where it is found?
7) Write the differences between Dicot and Monocot plant.
8) Mention the types of Cymose inflorescence.
9) Write the differences between Legume and Lomentum.
10) Write any two contrivances for Cross pollination.
11) What is Double fertilization?
12) What are Epicotyl and Hypocotyl?

SECTION – B
(6x5=30)

II Answer any SIX of the following.

1) Describe the morphology of sporophyte in *Psilotum.*
2) Explain the HLS of *Marselia* Sporocarp.
3) Discus the Anomalous growth in *Gnetum* stem.
4) Explain the Morphology of Male and Female cone in *Cycas.*
5) Write a note on Taproot modifications with suitable examples.
6) Explain the types of Aestivation.
7) Describe the Lever Mechanism in Salvia.
8) Explain Helobial endosperm.

SECTION – C
III Answer any FIVE of the following.   (5x10=50)

1) Describe the morphology of *Selaginella sporophyte.* Add a note on anatomy of Rhizophore.
2) Explain the Morphology of Sporophyte and Gametophyte in *Pteris.*
3) Explain the anatomy of *Pinus* needle with a neat labelled diagram.
4) Write a note on
   a) T S of Coralloid root of Cycas   b) Ovule V S of Gnetum.
5) Explain the types of subaerial and aerial stem modifications.
6) Explain the following.
   a) Types of Fixation of Anther b) Types of Placentation.
7) Describe the structure of Angiospermic ovule. Write a note on types of ovules.
8) Draw a neat labelled sketch of mature anther T S. Explain its parts.
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G 508.3   Reg. No.: ☐☐☐☐☐☐

St Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III – Degree Examination
February 2021
ZOOLOGY
COMPARATIVE ANATOMY AND ANIMAL PHYSIOLOGY

Time: 3 Hours.   Max Marks: 100

Note: i) Answer any TEN questions from PART A and ONE FULL question from each unit of PART B.
      ii) Draw diagrams wherever necessary.

PART –A

I   Answer any **TEN** of the following.   (10X2=20)

a) Define bilateral symmetry. Give an example.

b) What is meso-nephric kidney? Give two examples.

c) Name the heart chambers of amphibians and mammals.

d) Write a note on obesity?

e) Define homeostasis. Give examples.

f) What is respiratory quotient?

g) Write a note on blood pressure.

h) What is uricotelism? Give two examples for uricotelism animals.

i) Explain rigor morits.

j) What is pancreas gland? What is its function?

k) Write a note on statocyst.

l) What are neurons? Mention the types.

PART – B

Select ONE full question from each unit.

Unit I

II a) Give a comparable account on different vertebrate brains that you have studied. Write its evolutionary significance.   (10)

b) How anatomically and functionally metanephric kidney different from others.   (5)

c) Explain the different types of body plans in animals with suitable examples.   (5)

OR

III a) Give comparative account on different type of heart and aortic arches in vertebrate groups.   (10)

b) Explain briefly the structure of a pronephric kidney.   (5)

c) Write the differences between radial symmetry and biradial symmetry.   (5)

Unit II

IV a) Explain the process of mechanical digestion and chemical digestion. How does absorption of carbohydrates take place?   (10)

b) Explain lipid digestion in man.   (5)

c) Write a note on blood glucose homeostasis.   (5)

OR

V a) Write a note on respiratory disorders.   **(10)**

   b) What is homeostasis? Explain the factors to maintain homeostasis.   **(5)**

   c) Write a note on respiratory pigments.   **(5)**

Unit III

VI a) Explain about the types of heart in animals.   **(10)**

   b) Write a note on renal failure.   **(5)**

   c) Write a note on neuro-muscular junction.   **(5)**

OR

VII a) Write a note on circulatory disorders.   **(10)**

   b) What is ammonotelism and ureotelism? Give two examples for each.   **(5)**

   c) Describe the ultra structure of striated muscles.   **(5)**

Unit IV

VIII a) With a near labeled diagram, explain the structure of myelinated multipolar neuron.   **(10)**

   b) Write a note on chemoreceptors.   **(5)**

   c) What is adrenal gland? Explain.   **(5)**

OR

IX a) Explain the types of synapses and synaptic transmission.   **(10)**

   b) Write a note on human eye.   **(5)**

   c) Describe about hypo and hypersecretion of hormones.   **(5)**

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G 509.3   Reg. No.: [ ][ ][ ][ ][ ][ ]

St Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III – Degree Examination
February 2021
MICROBIOLOGY
MICROBIAL PHYSIOLOGY AND METABOLISM

Time: 3 Hours.   Max Marks: 100

Instructions: Answer PART A AND B AND C

Draw Diagrams wherever necessary.

PART – A

1. **Define/Answer any <u>TEN</u> of the following:**   (2x10=20)
   a) Nitrogenase
   b) Eutrophication
   c) Antenna pigments
   d) Coenzymes
   e) Oxidoreductases
   f) ATPase
   g) Protein kinase
   h) Lipid Catabolism
   i) Cyanobacteria
   j) Anoxygenic photosynthesis
   k) Leghaemoglobin
   l) Active site of an Enzyme

PART – B

Answer 'a' or 'b' and 'c' is compulsory from each unit.   (15x4=60)

UNIT -I

2. a) Describe the role of ATP in metabolism   (9)

   OR

   b) Describe the mechanism of Enzyme reaction

   c) Write a note on feedback inhibition.   (6)

UNIT –II

3. a) Describe the glycolytic pathway.   (9)

   OR

   b) Describe the types of lactic acid fermentation.

   c) Write a note on molecular basis of signal transduction in bacteria .   (6)

UNIT –III

4. a) Describe the formation and development of biofilms.   (9)

   OR

   b) Describe cyclic and noncyclic photophosphorylation.

   c) Write a note on the photosynthetic pigments in bacteria.   (6)

UNIT –IV

5. a) Explain the sulphur cycle and write about its significance   (9)

   OR

   b) Describe the process of Nitrogen fixation by Rhizobium.

   c) Write a note on Global warming.   (6)

PART – C

Answer any <u>FOUR</u> of the following.   (5x4=20)

6. a) Carbon cycle.
   b) Propionic acid fermentation.
   c) Oxidative phosphorylation.
   d) Energy coupling reactions.
   e) Standard free energy.
   f) Oxidation of ammonium and nitrites.

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St Aloysius College (Autonomous)
Mangaluru
B. Sc. Semester III - Degree Examination
February 2021
BIOCHEMISTRY
ENZYMOLOGY

Time: 3 Hours

Max. Marks: 100

PART – A

1. Answer any **TEN** of the following. (10×2=20)

a) Define holoenzyme and apoenzyme

b) What are active sites in enzymes? Give one example

c) What is specific activity? Give one example

d) What are multienzyme complex? Give example

e) What are reversible inhibitors? Give one example

f) What is L-B plot? Give one application

g) What are allosteric enzymes? Give examples

h) What is turn over number?

i) Give examples for hydrolases and Lyases

j) What is Enzyme-substrate complex? Who proposed this theory?

k) What are substrate-specific enzymes? Give example

l) Give two examples for digestive enzymes

PART – B

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

2. Explain Mechaelis-Menton equation and add note on significance of Km & Vmax

3. Explain Lock and key model and Koshland's induced fit theories

4. Explain the role of metal ion as cofactor in enzyme catalysis

5. Describe irreversible inhibitors with suitable examples

6. Explain sigmoidal kinetics of allosteric enzymes

7. Write a note on physiological significance of Chymotrypsin

8. What are Isoenzyme? Explain the importance with examples

9. Explain applications of enzymes in medicine.

PART – C

Answer any **FIVE** of the following: (5x10=50)

10. Explain about competitive inhibition and its application

11. Give an account on different methods of enzyme immobilization

12. Give an account on application of enzymes in food and dairy industry

13. Explain in detail about purification and characterization of enzymes

14. Explain the nomenclature and classification of enzymes based on IUB with examples

15. Give an account on effect of factors on enzyme catalysis with appropriate examples

16. Describe the role of enzyme regulation in biological system with examples

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(2019 Batch Onwards)

Reg. No. :

St Aloysius College (Autonomous)
Mangaluru
B.Sc. Semester III - Degree Examination
February 2021
BIOTECHNOLOGY
MICROBIOLOGY AND IMMUNOLOGY

Time: 3 Hours   Max. Marks: 100

Note: i) Answer all the questions
    ii) Draw diagrams wherever necessary

PART – A

1. Answer any **TEN** of the following.   (10×2=20)

a) Give any two scopes of microbiology
b) What are bacteriophages? Give any one example
c) Differentiate between pure and mixed culture
d) What is inflammation? Mention the cardinal signs of inflammation.
e) Define epitopes
f) What are tumor antigens?
g) Differentiate between Antigenicity and Immunogenicity
h) Describe the biological functions of interferons
i) Give any two stains used in negative staining techniques
j) Differentiate between moist and dry heat sterilization
k) Give any two symptoms of Grave's disease
l) What are bactericidal and bacteriostatic agents?

PART – B

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

2. Explain characteristics of archaebacteria with an example
3. Describe the structure of antibody with neat labelled diagram
4. Write a note on any two chemical methods of sterilization
5. Write the contributions of Antony Van Leeuwenhoek
6. Note on cancer immunotherapy
7. Write a short note on bacterial endospore with neat labelled diagram
8. Comment on phagocytosis
9. Explain structure of HIV

PART – C

Answer any **FIVE** of the following: (5x10=50)

10. Give an detailed account on Golden era of Microbiology

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St Aloysius College (Autonomous) Mangaluru
B.A./B.Sc. Semester III – Degree Examination
February 2021
COMPUTER ANIMATION
Multimedia Techniques

Time: 3 hrs.   Max Marks: 100

SECTION - A

Answer any TEN of the following: (2×10=20)

1.
a) Describe adjustment layers.
b) What is the use of RAM Preview?
c) Name four types of lights in After Effects.
d) What are offline files?
e) How to use speed and durations in editing?
f) Which software can be used to convert video to another file format?
g) What is a composition?
h) What are Jump cuts?
i) Define foley.
j) Name any 2 color correction tools in Premiere.
k) What is a bin in Premiere?
l) List out the uses of safe text area.

SECTION – B

Answer any FOUR of the following: (5×4=20)

2. Explain the difference between editing and visual effects.
3. Write a note on High-definition videos.
4. Describe the importance of video editing.
5. Explain color key and ultra key.
6. How to remix audio and video? Explain the steps.

SECTION – C

Answer any TWO of the following: (10×2=20)

7. Define Editing. Explain the importance and advantages of it.
8. Write the steps to make a debate programme for televisions.
9. Explain the video editing terminology.

SECTION – D

Answer any TWO of the following: (20×2=40)

10. Make a list of popular video editor applications and explain.
11. Explain about the film editing and the Digital Intermediate process.
12. What are the techniques to improve After Effects performance? Explain.

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St Aloysius College (Autonomous)
Mangaluru
B.Sc. - SEMESTER III – Degree Examination
February 2021
ECONOMICS
MONETARY ECONOMICS

Time: 3 hrs.

Max Marks: 100

PART - A

Answer any FOUR of the following questions in about 10 sentences each.   (4×5=20)

1. Briefly explain the different methods of note issue.

2. Write a note on value of money.

3. Write a note on inflationary gap.

4. Write a note on E-banking.

5. What are the constituents of Financial System?

6. Explain the objectives of World Bank.

PART – B

Answer any FOUR of the following questions in about 20 sentences each.   (4×10=40)

7. Explain the components of money supply.

8. Explain the Cash Transaction Approach of Quantity Theory of money.

9. Define inflation. What are the causes of inflation?

10. Explain the Modern Banking instruments of a Commercial Bank.

11. What are the Objectives and Functions of SEBI?

12. Explain the structure and functions of international capital market.

PART – C

Answer any TWO of the following questions in about 50 to 60 sentences each.   (2×20=40)

13. Define Money. Explain the Functions of money.

14. What are index numbers? Explain the steps involved in the construction of index numbers.

15. Define Central Bank. Explain the Functions of the Central Bank.

16. What are the objectives and functions of IMF?

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