

(2021 Batch Onwards)

G 501 DC1.1

Reg. No. :

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc. Semester I – Degree Examination**

**December - 2022**

**PHYSICS**

**MECHANICS AND PROPERTIES OF MATTER**

Time: 2½ hrs.

Max Marks: 60

**SECTION – A**

**Answer any FOUR of the following.**

**(4x2=8)**

1. a) What is a physical quantity? Mention any two physical quantities.
- b) State the law of conservation of energy.
- c) State the postulates of special theory of relativity.
- d) State Hooke's law and explain what is meant by elastic limit.
- e) Define forces of cohesion and adhesion.
- f) Explain what is meant by terminal velocity.

**SECTION – B**

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

**(4x10=40)**

**UNIT-I**

- 2.a) State the law of conservation of linear momentum and derive an expression for the final velocity of a rocket. **(6)**
- b) State Newton's Law of Universal Gravitation. Give the expression for the gravitational force between two masses and define gravitational constant. **(4)**
- 3.a) Derive an expression for centripetal acceleration for a particle in uniform circular motion. **(6)**
- b) State the three Kepler's Laws of planetary motion. **(4)**

**UNIT-II**

- 4.a) Derive an expression for the moment of inertia of a rectangular lamina about an axis passing through its centre and i) Perpendicular to its plane ii) Parallel to its length. **(6)**
- b) State and prove the parallel axis theorem. **(4)**
- 5.a) Write Lorentz Transformation equations and show that a moving clock goes slow. **(6)**
- b) Obtain the relativistic relation between total energy and linear momentum of a body. **(4)**

**UNIT-III**

- 6.a) What is a cantilever? Obtain an expression for the depression produced at the free end of a loaded cantilever. **(6)**

Contd...2

- b) Define elastic potential energy and derive an expression for the elastic potential energy in the case of stretching of a wire. (4)
- 7.a) What is a torsion pendulum? Obtain an expression for its period of oscillation. (6)
- b) What is torsion? Obtain the relation between the angles of twist and angle of shear. (4)

**UNIT-IV**

- 8.a) Explain with theory the drop weight method of determining surface tension of a liquid. (6)
- b) Give the applications of surface tension. (4)
- 9.a) Derive Stoke's formula for terminal velocity and hence explain how the co-efficient of viscosity of a liquid can be determined using it. (6)
- b) What is velocity gradient? Distinguish between laminar flow and turbulent flow. (4)

**SECTION -C**

**Answer any THREE from the following.**

**(3x4=12)**

10. The length of a spaceship is 1 Km. What will be its length as measured from Earth when it is moving with a velocity of  $0.8c$  where  $c$  is equal to  $3 \times 10^8$  m/s.
11. A vertical spring is stretched by 3 cm when a load of 3 Kg is attached to it. What will be the period of oscillation of the spring when a load of 2.5 Kg is attached to it.  $g=9.8$  m/s<sup>2</sup>
12. A mass of 10 Kg is suspended from a metal wire of length 1m and 0.5 mm in diameter. Calculate the Young's modulus of the material of the wire, if its length increases by 4 mm.
13. Calculate the work expended in spraying a drop of water 1 mm diameter into a million droplets of same size, the surface tension of water is  $0.072$  Nm<sup>-1</sup>.

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**St Aloysius College (Autonomous)**  
**Mangaluru**  
**B.Sc. Semester I – Degree Examination**  
**December - 2022**  
**CHEMISTRY**

Time: 2½ hrs.

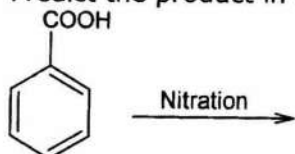
Max Marks: 60

- 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 all the following questions in 1 to 3 sentences. (1×8=8)

1. a) Explain spot test with an example.
- b) Define retention factor.
- c) Explain the titration curve for a precipitation titration.
- d) Define mole fraction.
- e) Formic acid is stronger than acetic acid. Give reason.
- f) Define heterolytic fission reaction. Give an example.
- g) Predict the product in the following reaction.



- h) Give any two factors affecting the rate of  $S_N^1$  reaction.

**PART - B**

Answer any EIGHT of the following in 3 to 5 sentences. (3×8=24)

2. (i) Based on sample size, explain classification of qualitative analysis.
- (ii) What is the principle of column chromatography?
- (iii) A solution is  $10^{-3}M$  in  $Cr_2O_7^{2-}$  and  $10^{-2}M$  in  $Cr^{3+}$ . If the pH is 2, what is the potential of the half reaction at 298 K?  
 $Cr_2O_7^{2-} + 14H^+ + 6e^- \longrightarrow 2Cr^{3+} + 7H_2O$   $E^0_{Cr_2O_7^{2-}, Cr^{3+}} = 1.33V$
- (iv) Explain the role of metal ion indicators in complexometric titrations.
- (v) Mention the conditions for Volhard's method of argentometric titrations.
- (vi) Give the criteria for aromaticity.
- (vii) Explain the concept of singlet and triplet carbene.
- (viii) Explain Hofmann elimination reaction with an example.
- (ix) Explain the mechanism of  $S_N^2$  reaction.
- (x) Give the classification of dienes with an example each.

**PART - C**

Answer any SEVEN of the following questions.

3. Explain the principle and types of paper chromatography.

(4×7=28)

Contd...2

4. Explain the titration curve for strong acid vs weak base.
5. The two sets of results obtained by a standard method and new method are given below.

Standard method (mg/L)	30	27	20	35	24	31	34
New method(mg/L)	26	22	20	25	24	28	32

Determine whether the precision of the new method differs significantly from that of standard method. Given critical value= 2.13

6. Explain the application of EDTA in the determination of hardness of water.
7. Define molarity. Calculate the mass of  $\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$  crystals (MW=244.3 g/mol) required to prepare 2.0 L of 0.108M  $\text{BaCl}_2$  solution.
8. Explain the mechanism of  $\text{E}_2$  reaction.
9. What is mesomeric effect? Explain +M effect with an example.
10. How do you convert benzene to nitrobenzene? Give the mechanism.
11. Explain benzyne mechanism.

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**St Aloysius College (Autonomous)  
Mangaluru**

**B.Sc. Semester I – Degree Examination  
December - 2022**

**MATHEMATICS**

**Number Theory –I, Algebra-I, Calculus-I**

Time:  $2\frac{1}{2}$  hrs.

Max Marks: 60

**PART-A**

Answer any **SIX** of the following:

(6x2=12)

1. Find the remainder upon dividing  $1! + 2! + 3! + \dots + 100!$  by 12.
2. Find whether the Diophantine equation  $6x + 51y = 22$  is solvable or not.
3. Show that matrix  $A = \begin{bmatrix} \cos \alpha & \sin \alpha \\ -\sin \alpha & \cos \alpha \end{bmatrix}$  is an orthogonal matrix.
4. If matrix  $A$  is skew symmetric then prove that  $A^2$  is symmetric.
5. Calculate  $\frac{ds}{d\theta}$  for the curve  $r = \log_e \sin 3\theta$ .
6. Find the radius of curvature at any point for  $s = c \tan \psi$ .
7. Verify Rolle's Theorem for the function  $f(x) = e^x[\sin x - \cos x]$ ,  
 $x \in \left[\frac{\pi}{4}, \frac{5\pi}{4}\right]$ .
8. Determine  $\lim_{x \rightarrow \frac{\pi}{2}} \frac{\tan x}{\tan 3x}$ .

**PART- B**

**UNIT- I**

Answer any **TWO** of the following:

(2x6 =12)

1. For positive integers  $a, b$  prove that  $gcd(a, b). lcm(a, b) = ab$ .
2. A customer bought a dozen pieces of fruits - apples and oranges for 1.32 dollars. If an apple costs 3 cents more than an orange and more apples than oranges were purchased, how many pieces of each kind were bought?
3. Solve the simultaneous congruences:  
 $x \equiv 2 \pmod{3}$   
 $x \equiv 3 \pmod{5}$   
 $x \equiv 2 \pmod{7}$ .

Contd....2

**UNIT- II****Answer any TWO of the following:****(2x6=12)**

1. Find the solution or solutions, if it exists, for the following system of equations using elementary row operations.

$$2x_1 + 3x_2 - 4x_3 = 2$$

$$x_1 - 3x_2 + x_3 = 1$$

$$3x_1 - 5x_2 - 4x_3 = 2.$$

2. Find the inverse of the matrix  $A$  by using characteristic equation, where

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

3. Show that the following system of equations is inconsistent.

$$x_1 - 2x_2 + x_3 - x_4 = -1$$

$$3x_1 - 2x_2 + 3x_3 = -4$$

$$5x_1 - 4x_2 + x_4 = -3.$$

**UNIT- III****Answer any TWO of the following:****(2x6=12)**

1. If  $r = a(1 + \cos \theta)$  find the polar subtangent, polar sub normal and the length of the polar tangent when  $\theta = \tan^{-1}\left(\frac{3}{4}\right)$ .
2. Find  $\frac{ds}{dx}$  for the curve  $3ay^2 = x(x - a)^2$ .
3. Trace the curve  $r = 1 - \sin \theta$ .

**UNIT- IV****Answer any TWO of the following:****(2x6=12)**

1. State and prove Cauchy's Mean Value Theorem.
2. Show that

$$\sin x = x - \frac{x^3}{3!} + \frac{x^5}{5!} + \dots + (-1)^{n-1} \frac{x^{2n-1}}{(2n-1)!} + (-1)^n \frac{x^{2n}}{(2n)!} \sin \theta x.$$

3. Determine (a)  $\lim_{x \rightarrow 1} \frac{1 + \log x - x}{1 - 2x + x^2}$

(b)  $\lim_{x \rightarrow 0} (\cos x)^{\cot x}$ .

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**St Aloysius College (Autonomous)  
Mangaluru**

**B.Sc. Semester I – Degree Examination  
December -2022**

**ELECTRONICS**

**FUNDAMENTALS OF ANALOG AND DIGITAL ELECTRONICS**

Time: 2 ½ hrs.

Max Marks: 60

Note: This question paper has TWO sections- SECTION A AND SECTION B. Answer both the sections.

**SECTION – A**

**1. Choose the correct answer from the choices given at the end of each question and write the correct answer. (6x1=6)**

- (i) For a transistor  $\beta=100$ , then  $\alpha=$ -----  
a) 1.01      b) 0.99      c) 100      d) 0.01
- (ii) An FET is -----  
a) voltage-controlled device    b) current-controlled device  
c) power controlled device    d) Frequency controlled device
- (iii) Two's complement of (101010) is -----  
a) 101011    b) 010101    c) 010110    d) 001000
- (iv) The internal resistance of an ideal voltage source is \_\_\_\_\_  
a) zero                      b) infinity                      c) very low                      d) very high
- (v) The colour code of 4.7 k $\Omega$  + 5% resistor is \_\_\_\_\_  
a) yellow – Violet -Red - Gold                      b) yellow – Violet -Red - Silver  
c) yellow – Violet -Orange - Gold                      d) Orange -Blue -Red – Gold
- (vi) An LR circuit uses L=1H and R=1000 $\Omega$ . The time constant of the circuit is -----  
a)1000S                      b) 1mS                      c) 2mS                      d) 500

**2. Answer any SIX questions: (6x1=6)**

- (i) Define cut-in voltage of a diode.
- (ii) Write the truth table of NAND gate.
- (iii) Realize AND gate using only NAND gates.
- (iv) Write the current equation of transistor.
- (v) Write the circuit symbol of N-channel FET.
- (vi) Define a node in a network.
- (vii) What is the value of a capacitor coded 103?
- (viii) Write the expression for the impedance of an RL circuit

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3. Answer any **SIX** questions.

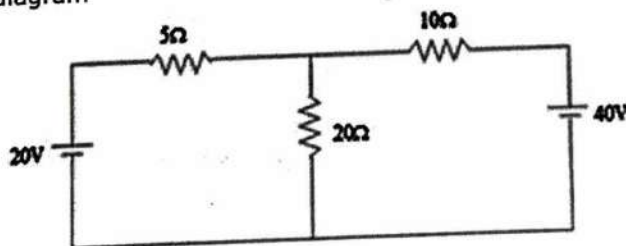
- (i) State Duality theorem in Boolean algebra. Give one example.
- (ii) State Current divider rule.
- (iii) Draw the labeled diagram of characteristics of a Zener diode.
- (iv) Define time constant of a RC circuit while discharging. Write the equation for the time constant.
- (v) Perform  $(11001)_2 + (1011)_2$
- (vi) Define the term ripple factor w.r.to rectifier. Give the value of ripple factor at the output of a full wave rectifier.
- (vii) Explain Avalanche break down in diodes.
- viii) Define h- parameter, " $h_{12}$ "

SECTION - B

4. Answer any **FOUR** questions.

(4x4=16)

- (i) With example explain the subtraction of a smaller number from a larger number using 1's complement method.
- (ii) With a circuit diagram explain the action of a bridge rectifier
- (iii) With necessary diagrams explain transistor action
- (iv) An uncharged capacitor and a resistor are connected in series. The emf of the battery is  $V = 12\text{ V}$ ,  $C = 8\ \mu\text{F}$ ,  $R = 500\ \text{k}\Omega$   
After the switch is closed, find
  - (a) The time constant of the RC circuit.
  - (b) The maximum charge on the capacitor.
  - (c) The charge on the capacitor 6 s after the switch is closed.
- (v) With an example explain the procedure to obtain standard SOP of any Boolean function.
- (vi) Using Kirchoff's laws, calculate the current through  $20\Omega$  resistor in the following diagram



5. Answer any **Four** questions:

(5x4=20)

- i) Simplify the Boolean function  $Y = \sum m(0,4,5,6,7,11,12,15) + \sum \phi(1,2,10)$  using K-Map.
- ii) State the laws of Boolean algebra
- iii) With necessary diagrams explain the action of a transistor as a switch
- iv) Define  $\alpha_{dc}$  and  $\beta_{dc}$ . Obtain the relationship between  $\alpha_{dc}$  and  $\beta_{dc}$
- v) State and prove maximum power transfer theorem.
- vi) With a circuit, derive the expression for the instantaneous current in a series LCR circuit connected to an AC source.

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc. Semester I – Degree Examination**

**December - 2022**

**COMPUTER SCIENCE**

**COMPUTER FUNDAMENTALS AND PROGRAMMING IN C**

**Time: 2½Hours.**

**Max Marks: 60**

**PART –A**

1. **Answer any SIX of the following.** (6x2=12)
- a) What is an operating system? Give two examples.
  - b) What are comments? How to write comments in C?
  - c) List any two rules to be followed for naming a variable.
  - d) Differentiate constants and variables.
  - e) What is entry controlled loop? Give example.
  - f) Write the purpose of goto statement in C.
  - g) Write any two advantages of using user-defined functions.
  - h) Write the advantages of using pointers.

**PART –B**

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

**UNIT - I**

- 2. a) Explain the components of computer system with neat diagram. (6)
- b) Explain the different phases of program development cycle. (6)
- 3. a) Explain any five applications of computer (5)
- b) Give the characteristics of third generation computers. (4)
- c) Write any three features of C program. (3)

**UNIT – II**

- 4. a) Explain the primary data types available in C. (5)
- b) What is type conversion? Explain its types. (4)
- c) Explain ternary operator with its syntax and example. (3)
- 5. a) List and explain arithmetic and relational operators in C with example. (6)
- b) Explain the formatted input and output functions with example. (6)

**UNIT – III**

- 6. a) Explain any two forms of if statement with syntax and example. (5)
- b) Explain for loop with syntax and example. (4)
- c) Explain break statement with example. (3)
- 7. a) List and explain any four character handling function with syntax and examples. (5)
- b) Explain the methods of declaring and initializing one dimensional array. (4)
- c) What is a string? How do you declare a string variable? (3)

**Contd...2**

**UNIT - IV**

- 8. a) With syntax and example explain how structure variables and members are declared and defined in C. (6)
- b) Explain any two categories of user-defined functions with example. (6)
  
- 9. a) What is user-defined function? How do you create, define and call a function in a program? Explain with example. (5)
- b) What is a pointer? How do you create and initialize pointer variables? (4)
- c) Write the difference between structure and union. (3)

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc. - Semester I**

**December - 2022**

**STATISTICS**

**DESCRIPTIVE STATISTICS**

Time: 2 1/2 Hours.

Max Marks: 60

Note: Answer all parts

**PART - A**

**I. Answer any FIVE of the following: (2x5=10)**

1. Define qualitative data with an example.
2. Find the arithmetic mean of  $a, a+d, \dots, a+2nd$ .
3. Define Gini's coefficient.
4. If  $r$  is the correlation coefficient between  $X$  and  $Y$  what is the correlation coefficient between  $X$  and  $-Y$ .
5. Show that Karl Pearson's coefficient of correlation is independent of origin and scale.
6. Write a short note on Yules measure.
7. Write a note on dispersion matrix.

**PART - B**

**II. Answer any FIVE of the following. (10x5=50)**

8. a) Explain stem and leaf with an example.  
b) State and prove the properties of arithmetic mean.
9. a) State properties of S.D. Also show that mean deviation from mean is not less than S.D.  
b) Derive the expression for  $r^{\text{th}}$  order central moments in terms of raw moments.
10. a) State and prove any two properties of regression coefficients.  
b) Derive the three criteria of independence of attributes.
11. a) Find the AM GM and HM of the series  $a, ar, ar^2, \dots, ar^{n-1}$  also show that  $G^2=AH$ .  
b) Derive the formula for Spearman's Rank Correlation coefficient.
12. a) Explain the concept of curve fitting. Derive the normal equations for fitting an equation of the form  $y = a + bx + cx^2$ .  
b) Explain the construction of box plot. How do you interpret it?
13. a) Derive the construction of histogram and how mode can be located?  
b) Define the following with an example each.  
i) Nominal Scale ii) interval scale iii) Ratio Scale iv) ordinal Scale
14. Derive the regression equation of  $X_1$  on  $X_2$  and  $X_3$ .

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc. Semester I– Degree Examination**

**December - 2022**

**BOTANY**

**MICROBIAL DIVERSITY AND TECHNOLOGY**

**Time: 2½ Hours.**

**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) What is isogamy and oogamy?
- 2) Mention one disease each caused by prions and viroids.
- 3) On what principal does the phase contrast and dark field microscope work?
- 4) Define synthetic culture medium and give any two examples.
- 5) List the characteristic feature of axenic culture.
- 6) What is the difference between tyndalization and pasteurization? In which field they are applied?
- 7) List any one contribution each of Joseph Lister and Paul Ehrlich to microbiology.
- 8) What is apothecium?

**SECTION – B**

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

**(6x5=30)**

- 1) Write a note on (i) root knot disease of brinjal (ii) blast disease of rice
- 2) Describe the works of Dmitri Iwanowski and Leeuwenhoek.
- 3) Write a note on routine culture media.
- 4) Write a note on the ultrastructure of bacterial cell with a neat diagram.
- 5) Describe the morphology of *Penicillium* asexual stage with a neat labelled diagram.
- 6) Describe the structure of SARS-Cov-2 with a labelled diagram
- 7) Briefly explain about the different sterilization methods you have studied.
- 8) Describe the Five kingdom classification system.

**SECTION – C**

**III Answer any TWO of the following.**

**(2x10=20)**

- 1) Explain the different modes of multiplication in T<sub>2</sub> phage.
- 2) Explain the teleutosorus and uredosorus stage in *Puccinia*.
- 3) Write a general note on different types of microbiological stains.
- 4) Describe the nutritional types in microbes.

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**St Aloysius College (Autonomous)**

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**B.Sc. Semester I – Degree Examination**

**December - 2022**

**ZOOLOGY-I**

**CYTOLOGY, GENETICS AND INFECTIOUS DISEASES**

**Time: 2½ Hours**

**Max. Marks: 60**

**Note: 1. Answer all questions.**

**2. Draw diagrams wherever necessary.**

**PART - A**

**I. Answer any TEN of the following.**

**(2X10=20)**

1. Define endocytosis. Give an example.
2. What are intermediate filaments? Mention one function.
3. Differentiate monocistronic mRNA from polycistronic mRNA.
4. Define cell junctions. Mention any two types.
5. What is apoptosis?
6. With reference to Mendelism, state the law of dominance.
7. Define multiple alleles. Give an example.
8. What is genetic maternal effect? Give an example.
9. List any four types of structural chromosomal aberrations.
10. What are allosomes and autosomes?
11. Name the disease caused by *Trypanosoma* and *Giardia*.

**PART - B**

**II. Answer any FOUR questions.**

**(5X4=20)**

1. Explain transport with reference to endomembrane system.
2. Describe the chemical structure of DNA.
3. Write an explanatory note on cell adhesion molecules.
4. Differentiate penetrance from expressivity with example.
5. What is sex influenced genes? Explain with suitable examples.
6. What is pedigree analysis? Explain.

**PART - C**

**III. Answer any TWO questions.**

**(10X2=20)**

1. Explain oxidative phosphorylation and electron transport system.
2. With an aid of neat labelled diagram, explain the process of mitosis.
3. Explain the sex determination and mechanism in *Drosophila melanogaster*.
4. Describe the life cycle and pathogenicity of *Wuchereria*.

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**St Aloysius College (Autonomous)**  
**Mangaluru**  
**B.Sc. Semester I – Degree Examination**  
**December - 2022**  
**MICROBIOLOGY**  
**GENERAL MICROBIOLOGY**

Time: 2½ Hours.

Max Marks: 60

Instructions: Answer PART A AND B AND C

Draw Diagrams wherever necessary.

**PART – A**

1. Define/Answer any TEN of the following:

(2x10=20)

- a) Condensor
- b) Sergei Winogradsky
- c) HEPA filter
- d) Doubling time
- e) Selective Media
- f) ATCC
- g) Chemotaxis
- h) Pili
- i) Dark field microscope
- j) Aldehyde
- k) Gelatin
- l) Mordant

**PART – B**

Answer 'a' or 'b' from each unit.

(5x4=20)

**UNIT -I**

2. a) Discuss the construction and working principle of Fluorescence microscope. (5)

**OR**

- b) Give a brief account on the contributions of Louis Pasteur.

**UNIT -II**

3. a) Write a note on various colony characteristics of microbes with suitable diagrams. (5)

**OR**

- b) Give an account on dry heat sterilization techniques.

**UNIT -III**

4. a) Write a short note on various stages of the growth curve of bacteria. (5)

**OR**

- b) What is a continuous culture? Discuss the methods to achieve continuous culture.

**UNIT -IV**

5. a) Explain the structure of bacterial flagella. Add a note on flagellar arrangements. (5)

**OR**

- b) Explain the process of endospore formation in bacteria.

**PART – C**

Answer any TWO of the following.

(10x2=20)

6. a) Explain in detail the construction, principle and working of SEM. Discuss its applications.
6. b) Discuss the different methods to measure bacterial growth.
6. c) What are anaerobes? Explain the methods to cultivate anaerobes.

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc. Semester I – Degree Examination**

**December - 2022**

**BIOCHEMISTRY**

**CHEMICAL FOUNDATIONS OF BIOCHEMISTRY-I**

**Time: 2½ Hours**

**Max. Marks: 60**

**Note: i) Answer all the questions**

**ii) Draw diagrams wherever necessary**

**PART – A**

1. **Answer any FIVE of the following.** (2×5=10)
- What are the differences between CGS and SI system?
  - Define Avogadro number.
  - What is Hund's rule?
  - Define Quantum numbers.
  - What is dipole-dipole interaction?
  - What are Zwitter ions?
  - What is redox potential?

**PART – B**

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

- Explain atomic weight, molecular weight and isotopes.
- Write about Pauli's exclusion principle.
- Explain the theories on Acids and Bases.
- Explain Henderson-Hasselbalch equation.
- What is electrode potential? How to measure it?
- State the different laws of Thermodynamics.

**PART - C**

**Answer any THREE of the following:** (10×3=30)

- Explain physical and chemical properties of water.
- Explain titration curve of amino acid with an example.
- Explain in detail Covalent bonds and Ionic bonds with suitable examples.
- Explain the shapes of orbitals and subshells.
- How hypo and hypertonic solutions effects on blood cells? Add a note on Donnan membrane equilibrium.

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G 511 DC1.1

Reg. No:

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**St Aloysius College (Autonomous)**  
**Mangaluru**  
**B.Sc. Semester I – Degree Examination**  
**December - 2022**  
**BIOTECHNOLOGY**  
**CELL BIOLOGY AND GENETICS**

Time: 2½ Hours

Max. Marks: 60

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

**PART - A**

1. Answer any **FIVE** of the following: (5×2=10)
- Give any two scopes of Biotechnology
  - Comment on Intermediate filaments
  - Differentiate between Centromere and Telomere
  - Define Karyotype
  - Mention any two features of Colour Blindness
  - Distinguish between test cross and back cross
  - Write the chromosomal configuration of Down's and Turner's Syndrome
  - Give two examples for physical Mutagens

**PART - B**

Answer any **SIX** of the following:

(6×5=30)

- Explain the ultrastructure of Prokaryotic cell
- Describe the structure and functions of Golgi Complex
- Classify chromosomes based on the position of centromere
- Describe the structure of Lampbrush chromosome
- State Mendel's second law and justify it with an example
- Explain the inheritance of flower colour in Sweet peas
- Give an account of causes and symptoms of Cri du Chat Syndrome
- Explain mutation in animals giving two examples

**PART - C**

Answer any **TWO** of the following:

(2×10=20)

- Explain the ultrastructure of Plasma Membrane
- Give an account on prophase I of meiosis
- Explain Epistasis with a suitable example
- With suitable example explain linkage in Drosophila

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(2021 Batch onwards)

G 110 DC1.1/G 512 DC1.1

Reg. No.

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**St Aloysius College (Autonomous)**  
**Mangaluru**

**B.A./B.Sc. Semester I – Degree Examination**  
**December - 2022**

**COMPUTER ANIMATION**  
**GRAPHIC DESIGN FOR ANIMATION**

Time: 2½ hrs.

Max Marks: 60

**PART - A**

Answer any **FIVE** of the following.

(5x2=10)

1. a) What is the use of object intersecting?
- b) How to create a new brush style in Photoshop?
- c) Expand PNG and JPEG.
- d) Name any four layer styles.
- e) What is the use of eyedropper tool?
- f) How to blur the image edges in Photoshop?

**PART - B**

Answer any **FOUR** of the following.

(4x5=20)

2. Explain few Layer styles of Photoshop.
3. Write a note on various Photoshop file formats
4. Write a note on graphic design.
5. Describe the steps to create eye blinking animation
6. Explain any ten Photoshop tools.

**PART - C**

Answer any **THREE** of the following:

(3x10=30)

7. Explain the elements of graphic design.
8. Write the steps to create dew drops.
9. What is the difference between vector and bitmap graphics? Explain.
10. Explain the features of Photoshop.

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(2021 batch onwards)

G 513 DC1.1

Reg. No. :

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc.- SEMESTER I- Degree Examination**

**December - 2022**

**ECONOMICS**

**MICRO ECONOMICS - I**

**Time: 2 ½ Hours.**

**Max. Marks: 60**

**SECTION - A**

**I. Answer any FIVE of the following:**

**(5×2=10)**

1. Define Economics.
2. What is production possibility curve?
3. Write any two determinants of demand.
4. What is income elasticity of demand?
5. What is indifference map?
6. What is Production function?
7. What is oligopoly?
8. Give the meaning of kinked demand curve.

**SECTION - B**

**II. Answer any SIX of the following:**

**(6×5=30)**

9. Explain briefly the scope of Economics.
10. Explain the degrees of Price elasticity.
11. What are the determinants of supply?
12. Write a note on law of Equi-marginal utility.
13. Explain the concept of consumer's equilibrium.
14. What are isoquants? State its properties.
15. Briefly explain the short run cost concepts.
16. Explain the relationship between AR and MR under perfect competition.
17. Explain the features of perfect competition.

**SECTION - C**

**III. Answer any TWO of the following:**

**(2×10=20)**

18. State and explain the law of demand. What are its exceptions?
19. Explain the properties of indifference curves.
20. Explain the law of variable proportions.
21. What is monopoly? How price and output is determined under monopoly?

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G 513 DC2.1

(2021 Batch Onwards)

Reg. No. :

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**St Aloysius College (Autonomous)**  
**Mangaluru**  
**B.Sc. – SEMESTER I – Degree Examination**  
**December - 2022**  
**ECONOMICS**  
**MATHEMATICS FOR ECONOMICS**

**Time: 2½ hrs.**

**Max Marks: 60**

**Note: Graph sheets and Log table will be provided.**

**PART - A**

**Answer any FIVE of the following.**

**(5×2=10)**

1. List out any two forms of functional notation.
2. Draw a supply curve for subsidised and free goods.
3. What is power function?
4. What do you mean by maxima?
5. What is Definite integration?
6. Find the area under the curve  $Y = 3x^2 + 2$  between  $x = 2$  &  $x = 4$ ?
7. Derive investment multiplier formula.
8. Suppose that the consumption function is given by  $C = 10 + 0.55Y$ , Investment function =  $70 + 0.2Y$  &  $G = 80$ . Determine the equilibrium values of national income (Y).

**PART - B**

**Answer any SIX of the following.**

**(6×5=30)**

9. Write a note on variables.
10. When the price of a certain commodity is found to be Rs 10, 70 units were demanded. When the price is Rs.20, 60 units were demanded. Find out the demand function and calculate the price elasticity of demand at this price.
11. Find the inverse of the matrix  
$$A = \begin{bmatrix} 3 & 1 \\ 2 & 4 \end{bmatrix}$$
12. Break even production of a firm is 5000 units. Its fixed cost is Rs 50,000, the variable cost per unit is Rs 25. Find out the price of the product and BEP?
13. Calculate the depreciated value of a vehicle worth Rs 12,00,000 after 3 years, if the annual rate of depreciation is 8%.
14. A company has the following Total Revenue function  
$$R = 36x - 2x^2$$
  - i. What equation represents the average revenue function?
  - ii. What equation represents the marginal revenue function ?
  - iii. At what level of output the revenue of the company is maximum?
15. The MC function is  $C^1 = 4 + 6x + 30x^2$ . Find the firms TC, AC function given the fixed cost at Rs 500. Calculate TC and AC when  $X = 20$ .

**Contd...2**

16. Find the Consumer Surplus for the demand function  $P = 85 - 4X - X^2$ . When demand  $X_0 = 5$ .
17. Suppose that the consumption function is given by  $C = 10 + 0.55Y$ , Investment function =  $70 + 0.2Y$  &  $G = 80$ .
- Complete the model.
  - Determine the equilibrium values of national income (Y) consumption expenditure (C), Investment expenditure (I) & Government expenditure (G)

**PART – C****Answer any TWO of the following.****(2×10=20)**

18. A company produces 2 products X and Y. The PPC is given by  $Y^2 + X + 4Y - 20 = 0$
- Find out the company maximum capacity for each of the 2 products.
  - What combination will be produced if  $X=6$  and  $Y= 6$ .
  - Represent the PPC graphically.
19. The demand and supply function of a certain commodity are  $s = -4 + 3P$  and  $D = 20 - 2P$ .
- Find out the equilibrium values of price and quantity.
  - What happens to equilibrium values when a subsidy of Rs.1 is given?
  - What is the loss of revenue to the government?
  - Determine how the subsidy is shared between the producer and consumer.
20. Pareto's Law of Income distribution for a particular group is given by
- $$N = \frac{216 \times 10^{10}}{X^{3/2}}$$
- How many people are millionaires?
  - How many people have income between Rs.3,600 and Rs 10,000?
  - What is the lowest income of the 80 people with highest incomes?
21. A perfectly competitive has a following cost function
- $$TC = 5 + 10q - 0.9q^2 + 0.04q^3$$
- and the prevailing price of the product in the market is Rs.4.
- Find profit maximising level of output?
  - What is the profit of the competitive firm?

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G 514 DC1.1

(2021 Batch onwards)

Reg. No. :

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc. Semester I – Degree Examination**

**December – 2022**

**FOOD SCIENCE**

**FUNDAMENTALS OF FOOD SCIENCE AND NUTRITION**

**Time: 2½ Hours**

**Max. Marks: 60**

**Note: i) Answer all the questions**

**ii) Draw diagrams wherever necessary**

**PART – A**

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

**(2×5=10)**

- What are Isomers?
- Explain about Food Pyramid.
- What are Phytochemicals?
- Give a note on Food Pigments.
- What are Vitamins?
- Write about Geriatric Nutrition.
- Define Prebiotics.

**PART – B**

Answer any **SIX** of the following.

**(5×6=30)**

- Write short notes on Nutritive value of meat.
- Explain in detail about Sports Nutrition.
- Write short notes on Millets with Example.
- Explain in detail about BMR with example
- Explain in detail about Functions of water in body.
- Write a short note on Dietary Fibers.
- Explain in detail about Rice with Classification.
- Write short notes on RDA with Example.

**PART – C**

Answer any **TWO** of the following:

**(10×2=20)**

- Explain in detail about the importance of cooking methods with example.
- Write a short note on Lipids with classification.
- Explain in detail about carbohydrates along with their classification.

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(2022 Batch onwards)

G 701 DC1.1

Reg. No.

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc.(Visual Communication) Semester I – Degree Examination**

**December - 2022**

**INTRODUCTION TO COMMUNICATION**

**Time: 2½ hrs.**

**Max Marks: 60**

**PART - A**

**Write short note in 2 to 3 sentences on any TEN of the following (10x2=20)**

1. George Gerbner
2. Decoding
3. Rhetoric Model of Communication
4. Group Communication
5. Context
6. Culture
7. Noise
8. Kinesics
9. Mass Communication
10. Social Media
11. Opinion Leaders
12. Hypodermic Needle Theory

**PART - B**

**Answer any FOUR of the following in 100 – 150 words each (4x5=20)**

13. Harold D. Lasswell's model of Communication.
14. Explain the Circular Model of Communication
15. Describe Interpersonal Communication
16. Elucidate the process of communication.
17. Explain the nature of group communication

**PART - C**

**Write a detailed note on any TWO of the following in 150 – 250 words each (2x10=20)**

18. Illustrate and explain Mathematical Model of Communication
19. Explain uses and gratifications theory
20. Explain the types of communication with examples

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G 701 DC3.1

(2022 Batch onwards)

Reg. No.

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**St Aloysius College (Autonomous)**  
**Mangaluru**

**B.Sc.(Visual Communication) Semester I – Degree Examination**  
**December - 2022**

**HISTORY OF VISUAL ARTS**

**Time: 2½ hrs.**

**Max Marks: 60**

**PART - A**

**Write short note in 2 to 3 sentences on any TEN of the following**

**(10x2=20)**

1. Define aesthetics.
2. What is Baroque Art?
3. Define 'growth'.
4. What are murals?
5. Describe 'calligraphy'.
6. What is 'symmetry'?
7. What is 'Futurism'?
8. Define 'Rasa'.
9. What is 'acropolis'?
10. Give examples of Vijayanagara architecture.
11. Give examples of neoclassical painting.
12. Who painted the 'Guernica'?

**PART - B**

**Answer any FOUR of the following in 100 – 150 words each**

**(4x5=20)**

13. Briefly explain the objectiveness and subjectivism of art.
14. Differentiate between 'shape' and 'form'.
15. Write a note on 'Mughal art'.
16. Write a note on Formalism with examples and explain.
17. Differentiate between 'fine art' and 'visual art'.

**PART - C**

**Write a detailed note on any TWO of the following in 150 – 250 words each**

**(2x10=20)**

18. Elucidate the characteristics of Gothic Architecture.
19. Explain the features of 'Impressionist Art' and 'Expressionism'.
20. Describe the important milestones on Indian art.

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(2022 Batch onwards)

G 701 DC2.1

Reg. No.

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.Sc.(Visual Communication) Semester I – Degree Examination**

**December - 2022**

**THEORIES OF VISUAL COMMUNICATION**

**Time: 2½ hrs.**

**Max Marks: 60**

**PART - A**

**Write short note in 2 to 3 sentences on any TEN of the following (10x2=20)**

1. "Pre Historic time" how it will help to communicate?
2. Give an introduction about Advertising?
3. Define Huxley's model.
4. What is Visual Communication?
5. "Sign"
6. Components of visual communication?
7. Visual Communication and Social Media
8. Colour theory
9. Semantics
10. Difference between volume and value?
11. Gestalt Theory and human study
12. Social Photography

**PART - B**

**Answer any FOUR of the following in 100 – 150 words each (4x5=20)**

13. Explain Rasa and Dhanvi Theory
14. Explain gestalt principal and theory with suitable examples
15. Explain the role of Photography in communication with example?
16. Explain visual rhetoric of the image
17. What is visual persuasion?

**PART – C**

**Write a detailed note on any TWO of the following in 150 – 250 words each (2x10=20)**

18. Explain each rasa with suitable examples
19. How ideology helps in new products in business?
20. Explain cognitive Dissonance theory with suitable examples.

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(2021 batch onwards)

G 537 LA2.1

Reg. No.

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ಸಂತ ಅಲೋಶಿಯಸ್ ಕಾಲೇಜು (ಸ್ವಾಯತ್ತ), ಮಂಗಳೂರು

ಬಿ.ಎಸ್ಸಿ - ಒಂದನೆಯ ಚತುರ್ಮಾಸ ಅಂತಿಮ ಪರೀಕ್ಷೆ

ಡಿಸೆಂಬರ್ - 2022

ಕನ್ನಡ ಭಾಷಾಪತ್ರಿಕೆ - 1

ಸಮಯ : 2½ ಘಂಟೆ

ಗರಿಷ್ಠ ಅಂಕ: 60

- I ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಮೂರನ್ನು ಪ್ರಬಂಧ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ 7 X 3= 21
1. ಗುಣಶೇಖರ ಮಣಿಮಂಜರಿಯನ್ನು ಮದುವೆಯಾದ ಬಗೆಯನ್ನು ವಿವರಿಸಿ
  2. ಭಕ್ತಿ ಮತ್ತು ಆಚರಣೆಗಳ ಬಗ್ಗೆ ವಚನಕಾರರ ಚಿಂತನೆಗಳನ್ನು ವಿವರಿಸಿ
  3. ಹಣದ ಮಹಿಮೆಯನ್ನು ಕುರುಡು ಕಾಂಚಾಣ ಕವನದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ವಿವರಿಸಿ
  4. ಮಿದುಳು ನಶಿಸುವ ಕಾಯಿಲೆಯ ಗುಣಲಕ್ಷಣಗಳನ್ನು ಡಾ. ಸಿ.ಆರ್. ಚಂದ್ರಶೇಖರವರು ಹೇಗೆ ವಿವರಿಸಿದ್ದಾರೆ?
  5. ಮೇರಿಕ್ಯೂರಿ ಅವರು ಆಸದೃಶ ಪ್ರತಿಭೆಯನ್ನು ಹೊಂದಿದ್ದರೆಂಬುದನ್ನು ಲೇಖನದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ವಿವರಿಸಿ
  6. ಕನ್ನಡದಲ್ಲಿ ಬಳಕೆಯಾಗುವ ಲೇಖನ ಚಿಹ್ನೆಗಳು ಯಾವುವು? ವಿವರಿಸಿ
- II ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಮೂರನ್ನು ಸಂಕ್ಷಿಪ್ತ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ 3X 3= 09
7. ತೆಂಕಣಗಾಳಿಯಾಟ ಉಂಟು ಮಾಡಿದ ಅನಾಹುತಗಳನ್ನು ಕವಿ ಪಂಜೆಯವರು ಹೇಗೆ ಚಿತ್ರಿಸಿದ್ದಾರೆ? ವಿವರಿಸಿ
  8. ತುಳುನಾಡಿನ ಸೊಬಗನ್ನು 'ಎಷ್ಟೊಂದು ಸುಂದರ' ಕವನದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ವಿವರಿಸಿ
  9. ಜೀವ ಜಗತ್ತಿನ ಸಾಮ್ರಾಜ್ಯವಾದ ಸಹಬಾಳ್ವೆಯ ಸಂಕೇತ ಎಂಬುದನ್ನು ನಿರೂಪಿಸಿ
  10. ಇ-ನಾಸಿಕ ಯಂತ್ರ ತಯಾರಿಯ ಹಿಂದೆ ಮೂಗಿನ ಪಾತ್ರವೇನು? ವಿವರಿಸಿ
  11. ಅಣೆಕಟ್ಟೆಯಲ್ಲಿ ಮರೆಯಾದ ಬದುಕಿನ ಘಟನೆಗಳನ್ನು 'ಕಾಲಿಟ್ಟಲ್ಲಿ ಕಾಲುದಾರಿ' ಲೇಖನದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ವಿವರಿಸಿ
  12. ಲೇಖನದಲ್ಲಿ ಬಳಕೆಯಾಗುವ ವಿರಾಮ ಚಿಹ್ನೆಗಳು ಯಾವುವು? ವಿವರಿಸಿ
- III ಒಂದು ಪದ್ಯಭಾಗದ ಸಂದರ್ಭ ಸೂಚಿಸಿ ಪದ್ಯದ ಮಹತ್ವವನ್ನು ವಿವೇಚಿಸಿ 4 X1= 04
13. ಕತ್ತೆಯನೇರಿ ಬಪ್ಪವರಲ್ಲಾ ನಿತ್ಯರಾಗಬಲ್ಲರೇ?  
ಉಪ್ಪು ಹುಳಿಯ ಮುಟ್ಟುವರಲ್ಲ ಕರ್ತನ ಕಾಣ ಬಲ್ಲರೇ?  
ಅಮುಗೇಶ್ವರನೆಂಬ ಲಿಂಗವನರಿದನೆಂಬವರು  
ಅರಿಯಲರಿಯರು ಆರಾರೂ
  14. ಬರುತಿದೆ ಇದೆ ಇದೆ ಇದೆ ಇದೆ ಬರುತಿದೆ  
ಸಡಿಲಿಸಿ ಮಡದಿಯರುಡಿಯನು ಮುಡಿಯನು  
ಬಡ ಮುದುಕರ ಕೊಡೆ ಗರಿ ಹರಿದಾಡಿಸಿ  
ಹುಡುಗರ ತಲೆತಲೆ ಟೊಪ್ಪಿಯ ಆಟವ  
ದಡಬಡನಾಡಿಸಿ, ಮನೆ ಮನೆ ತೋಟವ  
ಆಡಿಮೇಲಾಗಿಸಿ

Contd...2

- IV ಎರಡು ಪದ್ಯ ಸಾಲುಗಳ ಸಂದರ್ಭ ಸೂಚಿಸಿ ಸಾಲಿನ ಮಹತ್ವವನ್ನು ವಿವೇಚಿಸಿ 2X2= 04
15. ಘಟವೆಂಬ ಮಠದೊಳಗೆ ಮನವೆಂಬ ಮರ ಹುಟ್ಟಿತ್ತು
  16. ಚೆಲುವ ಬದುಕಿನ ತಂಪನರಸುತ ಮನಸು ಸಾಗಿಹುದು
  17. ಮಂಗಾಟ ನಡೆದಾಗ ಅಂಗಾತಬಿತ್ತೋ, ಹೆಗಲಲಿ ಎತ್ತೋ
  18. ಹುಡುಗರ ತಲೆ ತಲೆ ಟೊಪ್ಪಿಯ ಆಟವ ದಡಬಡನಾಡಿಸಿ
- V ಅ) ಕೆಳಗಿನ ಎರಡರ ಕುರಿತು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ 3X2= 06
19. ಪಂಜೆ ಮಂಗೇಶರಾಯರು
  20. ದ.ರಾ. ಬೇಂದ್ರೆ
  21. ಡಾ.ವಸಂತ ಕುಮಾರ ಪೆರ್ಲ
  22. ಅಂಬಿಗರ ಚೌಡಯ್ಯ
- ಆ) ಕೆಳಗಿನ ಎರಡರ ಕುರಿತು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ 3X2= 06
23. ಲಿವಿಂಗ್ ಸ್ಟೇಲ್ ವಿದ್ಯಾ
  24. ಪಿ.ಕೆ. ರಾಜಶೇಖರ
  25. ಉದ್ಧರಣ ಚಿಹ್ನೆ
  26. ಡಾ. ಸಿ.ಆರ್. ಚಂದ್ರಶೇಖರ್
- VI ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಒಂದೊಂದು ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿ 1X10= 10
27. ದ.ರಾ. ಬೇಂದ್ರೆಯವರ ಕಾವ್ಯನಾಮ ಯಾವುದು?
  28. ಮಿದುಳು ನಶಿಸುವ ಖಾಯಿಲೆಯ ವೈಜ್ಞಾನಿಕ ಹೆಸರೇನು?
  29. ಗುಣಶೇಖರ ಯಾವ ಪಟ್ಟಣದ ರಾಜ?
  30. 'ಎಷ್ಟೊಂದು ಸುಂದರ' ಕವನವನ್ನು ಯಾವ ಕೃತಿಯಿಂದ ಆಯ್ದುಕೊಳ್ಳಲಾಗಿದೆ?
  31. ಗುಣಶೇಖರನಿಗೆ ಒಗಟು ಬಿಡಿಸಲು ಸಹಾಯ ಮಾಡಿದವರು ಯಾರು?
  32. ಸಣ್ಣ ಕತೆಗಳ ಜನಕ ಎಂದು ಪ್ರಸಿದ್ಧರಾದ ಕವಿ ಯಾರು?
  33. 'ಕಾಲಿಟ್ಟಲ್ಲಿ ಕವಲುದಾರಿ' ಲೇಖನವನ್ನು ಬರೆದ ಕವಯಿತ್ರಿ ಯಾರು?
  34. ಲೇಖನದಲ್ಲಿ ಅಲ್ಪವಿರಾಮ ಚಿಹ್ನೆಯನ್ನು ಯಾವಾಗ ಬಳಸಲಾಗುತ್ತದೆ?
  35. ಸುಧೀಂದ್ರ ಹಾಲ್ಡೊಡ್ಡೇರಿ ಅವರ ವಿಜ್ಞಾನ ಅಂಕಣದ ಹೆಸರೇನು?
  36. ದ್ರಾವಿಡ ಭಾಷೆಗಳಲ್ಲೇ ತುಳು 'ಪ್ರೌಢಭಾಷೆ' ಎಂಬುದಾಗಿ ಹೇಳಿದ ಭಾಷಾ ವಿದ್ವಾಂಸ ಯಾರು?

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**St Aloysius College (Autonomous)**  
**Mangaluru**

**B.Sc. Semester I – Degree Examination**  
**December - 2022**

**SANSKRIT**

**Time: 2½ hrs.**

**Max Marks: 60**

- 1 श्लोकद्वयम् अनुवादं कृत्वा विवृणुत । 2 X 5 = 10
- 1.1 विपदि धैर्यम् अथाभ्युदये क्षमा सदसि वाक्पटुता युधि विक्रमः ।  
यशसि चाभिरुचिः व्यसनं श्रुतौ प्रकृतिसिद्धमिदं हि महात्मनाम् ॥
- 1.2 अनुद्वेगकरं वाक्यं सत्यं प्रियहितं च यत् ।  
स्वाध्यायाभ्यसनं चैव वाङ्मयं तप उच्यते ॥
- 1.3 व्याघ्रीव तिष्ठति जरा परितर्जयन्ती रोगाश्च शत्रव इव प्रहरन्ति देहम् ।  
आयुः परिस्रवति भिन्नघटादिवाम्भः लोकस्तथाप्यहितमाचरतीति चित्रम् ॥
- 1.4 सहधर्मिणीं वनान्तादशरथसूनोर्जहार दशवक्त्रः ।  
बन्धनमाप समुद्रो न दुर्जनस्यान्तिके निवसेत् ॥
- 2 चतुर्णां सन्दर्भसहितविवरणं लिखत । 3 X 4 = 12
- 2.1 विसृज्यतां धेनुरियं महर्षेः ।
- 2.2 एकः पापानि कुरुते फलं भुङ्क्ते महाजनः ।
- 2.3 दुःखं जहौ दुरन्तं प्रष्टव्याः सत्पथं वृद्धाः ।
- 2.4 किं किं न साधयति कल्पलतेव विद्या ।
- 2.5 दुष्टे दण्डः प्रयोक्तव्यः ।
- 3 त्रीन् प्रबन्धरूपेण उत्तरयत । 3 X 5 = 15
- 3.1 'सूक्तिमुक्तावलिः' पाठे प्रतिपादितानि जीवन मौल्यानि कानि ? विवृणुत ।
- 3.2 वाचां महत्त्वं विदुरनीतिः पाठे कथं वर्णितम् ?
- 3.3 कालिदासः विरहकातरस्य यक्षस्य भावान् कथं वर्णितवान् ?
- 3.4 दिलीप-सिंहयोः संवादमधिकृत्य लिखत ।
- 3.5 श्रद्धत्रयविभागयोगे उक्ताः तपः प्रभेदान् अधिकृत्य प्रबन्धं लिखत ।
- 4 द्वयोः टिप्पणीं लिखत । 2 X 4 = 08
- 4.1 मेघदूतम् ।
- 4.2 महाभारतम् ।
- 4.3 दिलीपसत्त्वपरीक्षणम् ।

**Contd...2**

5 एकं संस्कृतेन टिप्पणीं लिखत ।

1 X 5 = 05

5.1 सुभाषितानि ।

5.2 भर्तृहरिः ।

5.3 कालिदासः ।

6 रिक्तस्थानानि पूरयत ।

10 X 1 = 10

6.1 प्रकृतिसिद्धमिदं हि \_\_\_\_\_ । (महात्मनाम्, महान्, महत्वम्)

6.2 \_\_\_\_\_ गुणाः काञ्चनमाश्रयन्ति । (सर्वाः, सर्वः, सर्वे)

6.3 देशे काले च पात्रे च तद्धानं \_\_\_\_\_ स्मृतम् । (तामसम्, राजसम्, सात्त्विकम्)

6.4 वाङ्मयं \_\_\_\_\_ उच्यते । (तप, तपाः, तपौ)

6.5 आहारस्त्वपि \_\_\_\_\_ त्रिविधो भवति प्रियः । (एकस्य, बहवः, सर्वस्य)

6.6 यज्ञस्तपस्तथा दानं तेषां भेदमिमं \_\_\_\_\_ । (शृणुता, शृण्मः, शृणु)

6.7 जाड्यं \_\_\_\_\_ हरति । (धीः, धियः, धियो)

6.8 ब्राह्मणास्तेन वेदाश्च यज्ञाश्च विहिताः \_\_\_\_\_ । (पुरा, अधुना, सर्वदा)

6.9 उच्छिष्टमपि चामेध्यं \_\_\_\_\_ तामसप्रियम् । (भोजनम्, आसनम्, शयनम्)

6.10 साम्ना \_\_\_\_\_ वशे कुर्यात् । (मूर्खम्, ज्ञानिम्, बालान्)

6.11 काकोऽपि जीवति चिराय बलिं च \_\_\_\_\_ । (भुङ्क्ते, भुञ्जते, भुञ्जन्ते)

6.12 यशोधनो धेनुमूषेः \_\_\_\_\_ । (मुमोच, मुमुञ्च, मुञ्च)

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G 735 LA1.1

(2021 batch onwards)

Reg. No.

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.A./ B.Com./B.B.A./B.Sc./B.C.A. - Semester I - Degree Examination  
December - 2022**

**ENGLISH**

Time: 2½ hrs.

Max Marks: 60

**UNIT - I (PROSE)**

**I. A Answer the following in a word/phrase/sentence each:**

**(5x1=5)**

1. Tocqueville examines patriotism in all its forms particularly in the interrelationships between man, government and \_\_\_\_\_.
2. According to the lesson, 'The Power of Prayer', Adversity always presents opportunities for \_\_\_\_\_.
3. The eighteen 'flesh and blood machines' are replaced by machines of steel which spout out pins by the hundred million. What does the underlined phrase mean?
4. The essay, 'A Hanging' is set in \_\_\_\_\_.
5. In a period where patriotism is self-oriented and driven by personal advantage it is important to disintegrate the public and private interests. TRUE/FALSE.

**B. Answer any THREE of the following in about 180 words each:**

**(3x5=15)**

1. What does Tocqueville say about irrational patriotism under monarchy?
2. Describe the tiny temple town of Rameswaram as a vehicle of moral growth.
3. Elaborate on the significance of the prisoner avoiding a puddle and its impact on the readers.
4. Discuss how capitalism turns people into dangerous lunatics in the real world?

**UNIT - II (POETRY)**

**II. Answer any TWO of the following in about 180 words each:**

**(2x5= 10)**

1. Explain how cosmic pattern is connected to the pattern of human life in the poem, "Night and death."
2. How is the tiger portrayed as a mythical beast which is almost inexplicable in its beauty and glory?
3. How is death presented in the poem, "Do Not Go Gentle into That Good Night?"
4. Comment briefly on the treatment of time in the poem, "A Hot Noon in Malabar."

**UNIT - III (SHORT STORY)**

**III. Answer any TWO of the following in about 180 words each.**

**(2x5=10)**

1. How did the narrator of the story, 'Getting Married' solve the problem of buying the chest of drawers?
2. Do you think the narrator had a role in arranging all the things for their marriage in, 'Getting Married'?
3. Examine Pahom's state of mind as he moves from being a peasant to becoming a landowner.
4. Why does Pahom buy more and more land? What does this signify?

Contd...2

**UNIT – IV (GRAMMAR AND WRITING SKILLS)****IV A. Fill in the blanks with appropriate idioms and phrases given in brackets. (5x1=5)**

1. Apparently, he has stopped gossiping and promises to \_\_\_\_\_ this year.
2. I read the government's \_\_\_\_\_ on the great state of the health issues.
3. The government \_\_\_\_\_ the Olympics to save the city money.
4. We're hoping that we'll at least \_\_\_\_\_ and perhaps make a small profit.
5. Detectives will \_\_\_\_\_, in their efforts to find those responsible.

**[ leave no stone unturned, turn over a new leaf, bank on, highly coloured report, break even, bring home the bacon, at all costs]**

**B. Write a dialogue in about 150 words in five turns each. (1x5=5)**

Write a dialogue that takes place between you and your class guide seeking guidance as you are unable to attend yoga classes due to health issues.

**C. Develop a story based on the hints given below in about 150 words. (1x5=5)**

A farmer---- huge farm---- scarcity of water----- neighbour---- bought his well ---- cunning neighbour---- did not permit to draw water---- neighbour's argument-sold well not water----- emperor--- wisest courtier---- questioned the neighbor---- pay rent to farmer----- or empty water----- realized mistake---- farmer grateful to the emperor---- happily went home.

**D. Read the following passage and answer the questions that follow. (5x1=5)**

The majority of successful senior managers do not closely follow the classical rational model of first clarifying goals, assessing the problem, formulating options, estimating likelihoods of success, making a decision, and only then taking action to implement the decision. Rather, in their day-by-day tactical maneuvers, these senior executives rely on what is vaguely termed "intuition" to manage a network of interrelated problems that require them to deal with ambiguity, inconsistency, novelty, and surprise; and to integrate action into the process to thinking.

Generations of writers on management have recognized that some practicing managers rely heavily on intuition. In general, however, such writers display a poor grasp of what intuition is. Some see it as the opposite of rationality; others view it as an excuse for capriciousness. Isenberg's recent research on the cognitive processes of senior managers reveals that managers' intuition is neither of these. Rather, senior managers use intuition in at least five distinct ways. First, they intuitively sense when a problem exists. Second, managers rely on intuition to perform well-learned behavior patterns rapidly. This intuition is not arbitrary or irrational, but is based on years of painstaking practice and hands-on experience that build skills. A third function of intuition is to synthesize isolated bits of data and practice into an integrated picture, often in an "Aha!" experience. Fourth, some managers use intuition as a check on the results of more rational analysis. Most senior executives are familiar with the formal decision

Contd...2

analysis models and tools, and those who use such systematic methods for reaching decisions are occasionally leery of solutions suggested by these methods which run counter to their sense of the correct course of action. Finally, managers can use intuition to bypass in-depth analysis and move rapidly to engender a plausible solution. Used in this way, intuition is an almost instantaneous cognitive process in which a manager recognizes familiar patterns.

One of the implications of the intuitive style of executive management is that "thinking" is inseparable from acting. Since managers often "know" what is right before they can analyze and explain it, they frequently act first and explain later. Analysis is inextricably tied to action in thinking/acting cycles, in which managers develop thoughts about their companies and organizations not by analyzing a problematic situation and then acting, but by acting and analyzing in close concert. Given the great uncertainty of many of the management issues that they face, senior managers often instigate a course of action simply to learn more about an issue. They then use the results of the action to develop a more complete understanding of the issue. One implication of thinking/acting cycles is that action is often part of defining the problem, not just of implementing the solution.

**1. According to the passage, senior managers use intuition in all of the following ways EXCEPT to**

- (a) speed up of the creation of a solution to a problem.
- (b) bring together disparate facts
- (c) stipulate clear goals

**2. The passage suggests which of the following about the "writers on management"**

- (a) They have criticized managers for not following the classical rational model of decision analysis.
- (b) They have relied in drawing their conclusions on what managers say rather than on what managers do.
- (c) They have misunderstood how managers use intuition in making business decisions.

**3. According to the passage, the classical model of decision analysis includes all of the following EXCEPT**

- (a) creation of possible solutions to a problem
- (b) establishment of clear goals to be reached by the decision
- (c) action undertaken in order to discover more information about a problem

**4. The passage provides support for which of the following statements?**

- (a) Managers cannot justify their intuitive decisions.
- (b) Managers' intuition works contrary to their rational and analytical skills
- (c) Intuition enables managers to employ their practical experience more efficiently.

**5. Give a suitable title to the passage.**

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(2022 batch onwards)

G 736.LA 3.1

Reg. No.

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.A/B.Com/B.B.A/B.Sc./B.C.A Semester I - Degree Examination  
December - 2022**

**HINDI**

**Time: 2 ½ hrs.**

**Max Marks: 60**

**I किन्हीं दो प्रश्नों का उत्तर लिखिए :**

**(2x5=10)**

1. भाषा की परिभाषा लिखकर, उसके स्वरूप को समझाइए।
2. व्यंजन वर्ण किसे कहते हैं? उसके भेदों को समझाइए।
3. संधि किसे कहते हैं? उसके प्रमुख भेदों को उदाहरण के साथ समझाइए।
4. अर्थ के आधार पर शब्द के कितने भेद हैं? उदाहरण के साथ समझाइए।

**II. अ) निम्नलिखित शब्दों का तद्भव रूप लिखिए :**

**(5x1=05)**

1. अग्नि
2. ओष्ठ
3. अंधकार
4. उज्वल
5. तीक्ष्ण

**आ) निम्नलिखित शब्दों का शुद्ध रूप लिखिए :**

**(5x1=05)**

1. अनधिकार
2. मन्त्रीवर
3. स्मसान
4. अत्याधिक
5. हस्थक्षेप

**III. एक वाक्य में उत्तर लिखिए :**

**(10x1=10)**

1. बहुत दिनों के बाद बाजारों में क्या दिखाई दे रही थी?
2. सूर्य कैसे चल रहा था?
3. काकपुराण के विवेचन में अचानक क्या पडी?
4. 'गिल्लू' के रचनाकार कौन है?
5. गिलहरियों के जीवन की अवधि कितने वर्ष होती है?
6. 'पृथ्वीराज की आँखे' एकांकी के रचनाकार कौन है?
7. कालिन्दी के पति का नाम क्या है?
8. सबसे अच्छी ढोलक कौन बजाती थी?
9. परशुराम ने कर्ण से क्या कहा था?
10. कर्ण किसके कारण से अभागे बन गया था?

**IV. निम्नलिखित अवतरण का संदर्भ सहित व्याख्या कीजिए:**

**(2x5 = 10)**

1. "चुप कर, मेरा वीर। रोयेगा तो वह मुसलमान पकड कर ले जाएगा, मैं वारी जाऊँ, चुप कर।"

**अथवा**

"क्या हो जाएगा, कहाँ टिका लेगी इन्हें? शहर के लोग हैं, इनकी मेहमानदारी हमारे बस की नहीं।"

**Contd...2**



2. "तुम्हारी स्वामिभक्ति देखकर मुझे गर्व हो रहा है। तुम शूर हो, गुणी हो और दानी भी हो।"

अथवा

"सोच लो --- यह घर या वह घर। मेरे भाई का ब्याह है। इस मौके पर चली गई तो वापस घुसने नहीं दूँगा। पडी रहना सारी उमर बाप के द्वारे।"

V. किसी एक प्रश्न का उत्तर लिखिए :

(10x1=10)

1. पठित कहानी "मलबे का मालिक" के आधार पर आजादी के बाद उत्पन्न घटना क्रम पर प्रकाश डालिए।

अथवा

2. 'गिल्लू' कहानी का सारांश लिखकर, उद्देश्य स्पष्ट कीजिए।

VI. किसी एक प्रश्न का उत्तर लिखिए :

(10x1=10)

1. "आखेट" एकांकी का सारांश लिखते हुए एकांकी के संदेश को स्पष्ट कीजिए।

अथवा

2. "पृथ्वीराज की आँखे" एकांकी का सारांश लिखकर एकांकीकार के उद्देश्य सविस्तार लिखिए।

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G 739.LA 8.1

(2021 Batch onwards)

Reg. No:

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St Aloysius College (Autonomous)

Mangaluru

B.A. /B.Sc./B.Com/B.C.A/B.B.A Semester I - Degree Examination

December - 2022

KONKANI

Max. Marks: 60

Time: 2 ½ Hours

ಕವನಾಂ- ಯುನಿಟ್ 1

(5×1=5)

I ಖಂಚಾಯ್ ಎಕಾ ಕವನಾಚೊ ಸಾರಾಂಶ್ ಬರಯಾ :

೧. ಚಲ್ತೆಂ ಹಾವೆಂ ದಖ್ಲಾಂ  
ಆಂಗವ್ಣ್ ಕೆಲೆಲ್ಯಾಂನಿ  
ಕಾಂಯ್ ಏಕ್ ಶೆಂಭರ್ ಮಯ್ಲಾಂ  
ಮಾತ್ಯಾಕ್ ರೆವುನ್ ಪೊಟಿ  
ಖಾಂದಾರ್ ಲಾಂಬ್ನಿ ಜೋಳಿ  
ಓಂತ್ ಹಾಲೊವ್ನ್ ಮಾಗ್ಣಾಂನಿ
೨. ತಾಚ್ಯಾ ಮೊಗಾಚಿ ಭಾಸ್ ಚ್ ವೆಗ್ಳಿ  
ಮೊನೆಪಣಾಂತ್ ಪಾಂಗುರ್ಲೆಲಿ  
ಫೆಟ್ ಬಾವ್ಣಾಂ ಪಂದಾಕ್  
ಸಾ - ತಾಟ್ ಬಾಳಾಂಕ್ ರಾಕ್ಣಾಂ  
ಭಡ್ವಾಕ್ ಗಾಂವ್ ಭರ್ ಮಾನ್  
ಮೆಳ್ತಾಲೊ ಕುಟ್ಮಾಂತ್ ಸದಾಂ  
ಸನ್ಮಾನ್
೩. ಹೆರ್ ಎಕಾ ತಾರ್ವಾಟ್ಯಾ ಚ್ಯಾ ಮನಾಂತ್  
ಆಸ್ತಾ ಏಕ್ ದಯೊ ತಾಂಡುನ್ ಭಿತರ್ಲೊ  
ಆನಿ ಆಸ್ತಾ ಏಕ್ ಗಾಂವ್  
ಪಯ್ಸ್ ಪಲ್ಡಿ ಶೆಣಿಲ್ಲೊ

(1×5=5)

II. ಎಕಾ ವಾಕ್ಯಾನ್ ಜಾಪ್ ಬರಯಾ :

೧. ಕೊಣಾಕ್ ತಾಪ್ ಯೆಂವ್ಚೊ ನಾಕಾ ಮ್ಹಣ್ ಕವಿ ಮಾಗ್ತಾ?
೨. ನ್ಹಂಯ್ ಕಿತೆಂ ಆಶೆತಾ?
೩. ಚಾಮ್ಚ್ಯಾಚೊ ವಾಣೊ ಫೆವ್ನ್ ಕವಿ ಕೊಣಾಲಾಗಿಂ ವೆತಾ?
೪. ಮೆಲ್ವಿನ್ ರೊಡ್ಡಿಗಸಾಚೆಂ ಖಂಚೆಂಯ್ ಏಕ್ ಕವನ್ ಉಲ್ಲೆಖ್ ಕರಾ.
೫. ತಾರ್ವಾಟಿ ಕವನಾಚಿ ಲೇಖಕಿ ಕೋಣ್?

( 5×1=5)

III ಖಂಚಾಯ್ ಎಕಾ ಸವಾಲಾಕ್ ಜಾಪ್ ಬರಯಾ :

೧. ವೈರಸ್ ಕಶೆಂ ಸಂಸಾರಾಕ್ ಮಾರೆಕಾರ್ ಜಾಲೆಂ ಮ್ಹಣ್ ಕವಿ ಸಾಂಗ್ತಾ?
೨. "ಮ್ಹಜಿ ಸಪಣ್ ಪೋರಿ " ಕವನಾಚೊ ಸಾರಾಂಶ್ ಬರಯಾ .

ಗಡ್ಯ ಭಾಗ್ ಯುನಿಟ್ -೨

(1×5=5)

I ಎಕಾ ವಾಕ್ಯಾನ್ ಜಾಪ್ ಬರಯಾ :

೧. ಪಪ್ಪು ಖಂಯ್ಸರ್ ರಾವ್ತಾಲೊ?
೨. ತುಳಸ್ ಕಾಣ್ಯೆಚೊ ಬರಯ್ತಾರ್ ಕೋಣ್?
೩. ಆಲಿಸ್ ಬಾಯೆಚೊ ಪೊಸೊ ಪೂತ್ ಕೋಣ್?
೪. "ಲಿಪ್ ಸ್ಪಿಕ್ " ನಿಶಾನಿ ಕೋಣ್ ದಿತಾ?
೫. ಮಿಶೆಲ್ ಖಂಯ್ಸರ್ ಭೆಟಾ?

Contd...2

II. ಖಂಚಾಯ್ ಎಕಾ ಪಾತ್ರಾಚಿ ಪರಿಚಯ್ ದಿಯಾ: (5×1=5)

೧. ಜೊಸ್ಸಿ

೨. ಸೈಕಲ್

III ಖಂಚಾಯ್ ಎಕಾ ಸವಾಲಾಕ್ ಜಾಪ್ ಬರಯಾ: (5×1=5)

೧. ತುಳಸಿ ಕಾಣಿಯೆಂತ್ ಭುಕ್ ಥಾಂಭಂವ್ ಕೆಲ್ಲೆಂ ಪ್ರೇತನ್ ವಿವರ್ಸಿಯಾ.

೨. ಲೇಖಕಾಕ್ ಸೈಕಲಾರ್ ಜಾಲ್ಲೊ ಅನುಭವ್ ಕಳಯಾ.

ಯುನಿಟ್ - ೨ ನಾಟಕ್

I ಎಕಾ ವಾಕ್ಯಾನ್ ಜಾಪ್ ಬರಯಾ : (5×1=5)

೧. ಮಿರೊಣ್ ಕೋಣ್?

೨. ಫಾ. ಜೇಮ್ಸ್ ಥಂಯ್ ಕಿತೆಂ ಅನಾಹುತ್ ಘಡ್ತಾ?

೩. ಶಿಪಾಯ್ ಗಿರಿ ನಾಟಕಾಚೊ ಬರಯ್ತಾರ್ ಕೋಣ್?

೪. ಕೋಣ್ ವಿಧವ್ ಸ್ತ್ರೀ?

೫. ಗೊವ್ಪಿಕ್ ಮಂಡಳಿಚ್ಯಾ ಖಂಚಾಯ್ ಎಕಾ ಸಾಂದ್ರ್ಯಾಚೊ ಉಲ್ಲೇಖ್ ಕರಾ.

II ಖಂಚೆಯ್ ಏಕ್ ವಾಖ್ಯೆ ಕೊಣೆಂ ಕೊಣಾಕ್ ಖಂಚ್ಯಾ ಸಂದರ್ಭಾರ್ ಸಾಂಗ್ಲೆಂ ಕಳಯಾ. (5×1=5)

೧. " ಬಳ್ ಆಸ್ ಲ್ಹಾಂಚೆಂ ಬೊಳ್ಕೆಂ "

೨. " ತುಕಾ ಕೊಣೆ ಆಧಾರ್ ದೀಂವ್ಕ್ ಇನ್ಯಾರ್ ಕೆಲ್ಯಾರ್ ಯಿ, ಹಾಂವ್ ತುಕಾ ಮ್ಹಜೊ ಆಧಾರ್ ಇನ್ಯಾರ್ ಕರಿಚೊನಾ "

III ಖಂಚಾಯ್ ಎಕಾ ಸವಾಲಾಕ್ ಜಾಪ್ ಬರಯಾ: (5×1=5)

೧. ದೆನಿಸಾ ಥಂಯ್ ಘಡ್ ಲ್ಲೆಂ ಅನಾಹುತ್ ಬರಯಾ.

೨. ಫಾ ಜೇಮ್ಸ್ ಥಂಯ್ ಘಡ್ ಲ್ಲೆಂ ಅನಾಹುತ್ ವಿವರ್ಸಿಯಾ.

ಯುನಿಟ್ ೪ - ವ್ಯಾಕರಣ್

I ಎಕಾ ವಾಕ್ಯಾನ್ ಜಾಪ್ ಬರಯಾ : (5×1=5)

೧. ಸ್ವರ್ ಮ್ಹಳ್ಳಾರ್ ಕಿತೆಂ ?

೨. ಕೊಂಕ್ಣೆಚೆ ಲಿಂಗ್ ಖಂಚೆ?

೩. ನಾಮಪದಕ್ ಏಕ್ ಉದಾಹರಣ್ ದಿಯಾ.

೪. ವರ್ಣ್ ಮಾಲೆಂತ್ ಕಿತ್ಲಿಂ ವರ್ಣ್ ಆಸಾತ್?

೫. ಏಕ್ ವಚನ್ - ಬಹುವಚನಾಕ್ ಉದಾಹರಣ್ ದಿಯಾ.

II ಖಂಚಾಯ್ ದೋನ್ ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ: (5×2=10)

೧. ನಾಮಪದ್ ಆನಿ ತಾಚೆ ಪ್ರಕಾರ್ ಬರಯಾ.

೨. ಕೊಂಕ್ಣೆಚಿಂ ಲಿಂಗಾಂ ಚರ್ಚಾ ಕರಾ.

೩. ಕೊಂಕ್ಣೆಚಿ ವರ್ಣಮಾಲಾ ಬರವ್ನ್ ಚರ್ಚೆ ಕರಾ.

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(2021 batch onwards)

Reg. No.

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**St Aloysius College (Autonomous)**

**Mangaluru**

**B.A./B.Sc./B.Com./B.B.A./B.C.A. Semester I- Degree Examination**

**ADDITIONAL ENGLISH**

**CROSS CULTURAL TEXTS-I**

**December 2022**

**Time: 2½ hrs.**

**Max Marks: 60**

**UNIT - I (PROSE)**

- I. A. Answer any TWO of the following in about 100-150 words each: (2x5=10)**
1. Describe the social setting of the short-story 'A Waterfall of Horses'.
  2. What is the significance of the title 'The Adventure of the Speckled Band'?
  3. Shashi Tharoor describes India in a very pessimistic manner. Comment.
  4. Who is the Human Phonograph? What role do they play in the short story?

- B. Answer any ONE of the following in about 250-300 words: (1x10=10)**
1. "Violence of temper approaching mania has been hereditary in the men of the family, and in my stepfather's case it had, I believe, been intensified by his long residence in the tropics." Comment on the above with respect to the person who is referred to in 'The Adventure of the Speckled Band'.
  2. Discuss the major themes and concerns covered by Shashi Tharoor in the introduction to his book *India: From Midnight to the Millennium and Beyond* with respect to contemporary issues affecting Indian society.

**UNIT - II (NOVEL)**

- II. Answer any ONE of the following in about 250-300 words: (1x10=10)**
1. How does the geographical state in which *The Girl from Nongrim Hills* become a character in the novel?
  2. Critically analyze any two characters in the novel *The Girl from Nongrim Hills*.

**UNIT - III (POETRY)**

- III. A Annotate any TWO of the following in about 100-150 words each: (2x5=10)**
1. All along the watchtower  
Princes kept the view  
While all the women came and went  
Barefoot servants, too  
Well, uh, outside in the cold distance  
A wildcat did growl  
Two riders were approaching  
And the wind began to howl

**Contd...2**

2. if you have to sit for hours  
staring at your computer screen  
or hunched over your  
typewriter  
searching for words,  
don't do it.  
if you're doing it for money or  
fame,  
don't do it.  
if you're doing it because you want  
women in your bed,  
don't do it.  
if you have to sit there and  
rewrite it again and again,  
don't do it.
3. But Oh! 'tis coldly cruel to wound  
The bosom whose blood must gush unbound.  
No tear is so bright as the tear that flows  
For erring woman's unpitied woes;  
And blest be forever his honoured name  
Who shelters an orphan from sorrow and shame!

**B Answer any TWO of the following in about 100-150 words each: (2x5=10)**

1. How does 'The Orphan Girl' talk about war?
2. Critically analyze the mythical imagery used in 'Ms Millitancy'
3. What arguments does Charles Bukowski make about writing?
4. Write a short-note on Bob Dylan's influences and how they affect the composition of "All Along the Watchtower"

**UNIT – IV (Grammar and Writing Skills)**

**IV. A. Fill in the blanks with appropriate idioms from the options given below. (5x1=5)**

**at all costs , to turn a new leaf, make a beeline, donkey's years, pull up your socks, to bank on, break even, copycat, on the bench**

1. Sudhir tried his best to \_\_\_\_\_ but was unable to combat inflation and rising rent.
2. Stella and Mary \_\_\_\_\_ for the bookshop once the latest edition arrived.
3. It has been \_\_\_\_\_ since we saw a lunar eclipse.
4. I have been trying \_\_\_\_\_ and quit smoking.
5. They can \_\_\_\_\_ the senator's support to pass the legislation.

**B. Write a report for the following scenario in about 200 words. (1x5=5)**

1. The NSS unit of your college recently held a cleaning-drive at a popular local beach. You are Pramod/Krithika, a second-year journalism student who was sent to cover the event. Write a report of the event to be sent to a local news website.

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**St. Aloysius College (Autonomous)**  
**Mangaluru**

**B.A./B.Sc. /B.Com./B.B.A./B.C.A. - Semester I - Degree Examination**  
**December - 2022**

**FRENCH**

**Time: 2½ hrs.**

**Max Marks: 60**

**I. Répondez en utilisant le pronom EN ou Y.**

**(8x1=8)**

1. Sony boit du café?
2. Voulez-vous manger un chocolat?
3. Les employés sont dans le bureau?
4. Il pense à son travail?
5. Il a beaucoup de cousins.
6. Est-ce qu'elle vient d'Inde?
7. Il va en France?
8. Vous achetez deux livres pour Paul?

**II. Répondez en utilisant les Subjectifs.**

**(4x1=4)**

1. Il ne faut pas que vous (parler)..... pendant le cours.
2. Il est important qu'il (aller)..... à son rendez-vous.
3. Il faut qu'il (être) ..... à l'heure chez le médecin.
4. Je serai ravi qu'il (réussir) .....son concours

**III. Comparez**

**(4x1=4)**

1. Les chinois et les indiens fabriquent des portables. (=)
2. Le fauteuil et la chaise (+ lourd)
3. Ryan et son frère. (mangent du riz -)
4. Valérie et Denis chantent. (bien +)

**IV. Mettez les phrases au futur simple**

**(4x1=4)**

1. Le week-end prochain ils .....(*courir*) un marathon.
2. Bientôt, les hommes ..... (habiter) sur Mars.
3. En 2023, nous..... (avoir) deux jours par semaine
4. Dans deux jours Luke Skywalker et Han Solo..... (passer) par Terre.

**V. Répondez aux questions**

**(4x5=20)**

1. Expliquez l'enseignement en France.
2. Résumer l'article quelle école pour demain?
3. Expliquez le travail en France en dix points.
4. Expliquez le système politique en France

G 750 LA6.1

(1x5=5)

**VI. Dialoguez sur le sujet suivant:**

Votre ami va passer un examen ou un entrein pour trouver du travail. Il n'est pas sûr de lui. Vous le rassurez.

Ou

Vous êtes avec un(e) ami (e). Vous entrez dans un magasin pour acheter un vêtement (ou un sac, etc). La vendeuse vous accueil. Vous demandez conseil. Vous choisissez. Vous essayer le vêtement etc.

(5)

**VII. Ecrivez une lettre de demamnde d'emploi.**

(5x2=10)

**VIII. COMPREHENSION**

La guerre de Troie( Trojan War) est l'une des guerres les plus célèbres de l'histoire. Il est bien connu pour sa durée de 10 ans, pour l'héroïsme d'un certain nombre de personnages légendaires et pour le cheval de Troie. Ce qui n'est peut-être pas familier, cependant, c'est l'histoire du début de la guerre.

Selon le mythe grec, le conflit entre les Troyens et les Grecs a commencé au mariage de Pélée, roi de Thessalie, et de Thétis, une nymphe de la mer. Tous les dieux et déesses avaient été invités à la célébration du mariage à Troie, à l'exception d'Eris, déesse de la discorde. Elle avait été omise de la liste des invités parce que sa présence mettait toujours les mortels et les immortels en conflit.

Pour se venger de ceux qui l'avaient méprisée, Eris a décidé de provoquer une escarmouche. Au milieu de la salle de banquet, elle lança une pomme d'or marquée « pour la plus belle ». Toutes les déesses ont commencé à marchander pour savoir qui devrait le posséder. Les dieux et les déesses ont atteint une impasse lorsque le choix a été réduit à Héra, Athéna et Aphrodite. Quelqu'un était nécessaire pour régler la controverse en choisissant un gagnant. Le travail est finalement tombé à Paris, fils du roi Priam de Troie, qui était réputé être un bon juge de beauté. Paris n'avait pas la tâche facile. Chaque déesse, désireuse de gagner la pomme d'or, a essayé de le corrompre agressivement.

« Je vous accorderai de vastes royaumes à gouverner », a promis Héra. "Les vastes royaumes ne sont rien en comparaison de mon don", a contredit Athéna. « Choisissez-moi et je verrai que vous remportez la victoire et la gloire à la guerre. » Aphrodite a cependant surpassé ses adversaires. Elle remporte la pomme d'or en offrant à Paris Héléne, fille de Zeus et la plus belle mortelle du pays. Paris, soucieux de réclamer Héléne, partit pour Sparte en Grèce.

Si Paris apprit qu'Héléne était mariée, il accepta néanmoins l'hospitalité de son mari, le roi Ménélas de Sparte. Par conséquent, Ménélas a été indigné pour un certain nombre de raisons lorsque Paris est parti, ramenant Héléne et une grande partie de la richesse du roi à Troie. Ménélas a rassemblé ses forces loyales et a mis le cap sur Troie pour commencer la guerre pour récupérer Helen.

1. Selon la mythologie grecque, quand le conflit entre les Troyens et les Grecs a-t-il commencé ?
2. Quelle était la tâche assignée à Paris ?
3. Eris était connue pour \_\_\_\_\_ à la fois des mortels et des immortels.
  - a) complot contre
  - b) créer des conflits entre
  - c) se sentir hostile envers
  - d) ignorer
4. Chaque déesse a essayé \_\_\_\_\_ de soudoyer Paris.
  - a) audacieusement
  - b) effectivement
  - c) secrètement
  - d) Réponse non disponible
5. Quelle escarmouche Eris a-t-il provoqué pendant le mariage ?

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**St Aloysius College (Autonomous)  
Mangaluru**

**B.A./B.Sc./B.Com./B.B.A./B.C.A Semester I - Degree Examination**

**December - 2022**

**MALAYALAM**

**Max Marks:60**

**Time: 2½ hrs.**

- I. ഒന്നോ രണ്ടോ വാക്യത്തിൽ ഉത്തരമെഴുതുക (5x1=5)**
1. ചെറുശ്ശേരി കൃഷ്ണഗാഥ രചിച്ചത് ആരുടെ നിർദ്ദേശപ്രകാരമായിരുന്നു? ?
  2. സീത ഹനുമന്റെ കൈയിൽ കൊടുത്തുവിടുന്ന അടയാളമെന്ത്?
  3. നീ എന്ന സർവ്വ നാമത്തിന്റെ പ്രയോഗ ഭേദങ്ങൾ ഏതൊക്കെ?
  4. മൂക്കന്റെ ദിനചര്യ എപ്രകാരമായിരുന്നു?
  5. കേശവൻനായർക്ക് പശുവിനെ വിൽക്കേണ്ടി വന്നതെന്തുകൊണ്ട്?

- II. മൂന്നെണ്ണത്തിന് സന്ദർഭവും സാരസ്യവും വ്യക്തമാക്കുക (3x4=12)**
6. കിമിതിരഘുകുലവരചരിതം ക്രമേണ മേ കീർത്തിച്ചിതാകാശമാർഗ്ഗേ മനോഹരം..
  7. ഇന്നിനി നമ്മെ മറന്നുപോയെന്നാലും എന്നുടെ കണ്ണിനോ പുണ്യമുണ്ടാം എന്നുടെ പാർട്ടികൾ പലതാണ്.എല്ലാത്തിലും മൂക്കനെങ്ങിനെ ചേരും..
  9. ഞാൻ മുടിഞ്ഞൊട്ടെ എന്നാലും ചെയ്യരുതാത്തതു ചെയ്യുകില്ല..

- III. ഒരു പുറത്തിൽ കുറയാതെ രണ്ടെണ്ണത്തിന് ഉത്തരമെഴുതുക (2x8=16)**
10. കുശനിപ്പണിക്കാരൻ ലക്ഷപ്രഭുവായതെങ്ങിനെ ?
  11. മുതിർന്നവരെ നീ എന്നു വിളിക്കുന്നത് അവരെ വധിക്കുന്നതിന് തുല്യമാണെന്ന് കാണിക്കാൻ ലേഖകൻ ചൂണ്ടിക്കാണിക്കുന്ന ഉദാഹരണമെന്ത് ?
  12. കൃഷ്ണനെ കാണാൻപോകുന്ന കുചേലന്റെ ചിന്തകളെന്തെല്ലാമായിരുന്നു?

- IV. രണ്ടു പുറത്തിൽ കുറയാതെ രണ്ടെണ്ണത്തിന് ഉത്തരമെഴുതുക (2x10=20)**
13. ദൂതനെന്ന നിലയിൽ ഹനുമന്റെ വ്യക്തിത്വം നിരൂപണം ചെയ്യുക
  14. ഒരു സാധാരണ കൃഷിക്കാരന്റെ നിസ്സഹായത 'കൃഷിക്കാരൻ' എന്ന കഥയിൽ വിവരിക്കുന്നതെപ്രകാരമാണ് ?
  15. വിശ്വവിഖ്യാതമായ മൂക്ക് എന്ന കഥ നൽകുന്ന സന്ദേശമെന്ത് ?.

- V. നിർദ്ദേശമനുസരിച്ചെഴുതുക (7x1=7)**
16. പുജകബഹുവചനം എന്നാലെന്ത് ?
  17. തത്വം എന്നാലെന്ത്?
  18. പൂർണ്ണ ക്രിയക്കു രണ്ട് ഉദാഹരണമെഴുതുക
  19. തെറ്റു തിരുത്തുക  
അവതി, സായാനം,
  20. വാക്യത്തിൽ പ്രയോഗിക്കുക  
കടുംപിടുത്തം, കാലം കഴിക്കുക
  21. വാക്യത്തിലെ തെറ്റു തിരുത്തുക  
രാമു മീനെ പിടിക്കാൻ പോയി

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St Aloysius College (Autonomous)  
Mangaluru

B. A /B. Sc / B.C.A Semester I – Degree Examination  
December – 2022

ENVIRONMENTAL STUDIES AND VALUE EDUCATION

Time: 2 hrs.

Max Marks: 50

PART – A

ENVIRONMENTAL STUDIES

I. Answer any **TEN** of the following Questions: (2x10=20)

1. What is desertification?  
ಮರುಭೂಮೀಕರಣ ಎಂದರೇನು?
2. Write any two significances of The Wildlife Protection Act, 1972.  
ವನ್ಯಜೀವಿ ಸಂರಕ್ಷಣಾ ಕಾಯಿದೆ, 1972 ರ ಯಾವುದಾದರೂ ಎರಡು ಮಹತ್ವಗಳನ್ನು ಬರೆಯಿರಿ.
3. What is solid waste management?  
ಘನತ್ಯಾಜ್ಯ ನಿರ್ವಹಣೆ ಎಂದರೇನು?
4. What is ecological succession?  
ಪರಿಸರ ಅನುಕ್ರಮ ಎಂದರೇನು?
5. What is acid rain? Mention the names of the gases involved in acid rain formation.  
ಆಮ್ಲ ಮಳೆ ಎಂದರೇನು? ಆಮ್ಲ ಮಳೆ ರಚನೆಯಲ್ಲಿ ಒಳಗೊಂಡಿರುವ ಅನಿಲಗಳ ಹೆಸರನ್ನು ಉಲ್ಲೇಖಿಸಿ.
6. What are decomposers? Give an example.  
ವಿಘಟಕಗಳು ಯಾವುವು? ಒಂದು ಉದಾಹರಣೆ ಕೊಡಿ.
7. What is incineration?  
ದಹನ ಎಂದರೇನು?
8. What is biodiversity? Mention the types.  
ಜೀವವೈವಿಧ್ಯ ಎಂದರೇನು? ಅದರ ಪ್ರಕಾರಗಳನ್ನು ಉಲ್ಲೇಖಿಸಿ.
9. What are biodegradable wastes? Give an example.  
ಜೈವಿಕ ವಿಘಟನೀಯ ತ್ಯಾಜ್ಯಗಳು ಯಾವುವು? ಒಂದು ಉದಾಹರಣೆ ಕೊಡಿ.
10. Define Environmental ethics.  
ಪರಿಸರ ನೀತಿಶಾಸ್ತ್ರವನ್ನು ವ್ಯಾಖ್ಯಾನಿಸಿ.
11. What do you mean by forests?  
ಅರಣ್ಯ ಎಂದರೇನು?
12. What are sacred grooves?  
ಪವಿತ್ರ ಚಡಿಗಳು ಯಾವುವು?

Contd...2

**II. Answer any ONE of the following questions.****(1x5=5)**

13. Explain any two methods of water conservation.

ನೀರಿನ ಸಂರಕ್ಷಣೆಯ ಯಾವುದಾದರೂ ಎರಡು ವಿಧಾನಗಳನ್ನು ವಿವರಿಸಿ.

14. Write short notes on Biodiversity Hotspots with special reference to India.

ಭಾರತದ ವಿಶೇಷ ಉಲ್ಲೇಖದೊಂದಿಗೆ ಜೀವವೈವಿಧ್ಯ ಹಾಟ್‌ಸ್ಪಾಟ್‌ಗಳ ಕುರಿತು ಕಿರು ಟಿಪ್ಪಣಿಗಳನ್ನು ಬರೆಯಿರಿ.

**III. Answer any ONE of the following questions.****(10x1=10)**

15. Add a brief note on the environmental movements in India.

ಭಾರತದ ಪರಿಸರ ಚಳುವಳಿಗಳ ಕುರಿತು ಸಂಕ್ಷಿಪ್ತ ಟಿಪ್ಪಣಿಯನ್ನು ಸೇರಿಸಿ.

16. What is disaster management? What are the self-protection measures taken during flood?

ವಿಪತ್ತು ನಿರ್ವಹಣೆ ಎಂದರೇನು? ಪ್ರವಾಹದ ಸಂದರ್ಭದಲ್ಲಿ ಕೈಗೊಳ್ಳಬೇಕಾದ ಸ್ವಯಂ ರಕ್ಷಣಾ ಕ್ರಮಗಳೇನು?

**PART - B****VALUE EDUCATION****I. Answer any ONE of the following in not less than a page.****(5x1=5)**

17. Explain five elements of the Integral Pedagogical Paradigm (IPP).

ಸಮಗ್ರ ಶಿಕ್ಷಣಶಾಸ್ತ್ರ ಮಾದರಿಯ ಯಾವುದಾದರೂ ಐದು ಅಂಶಗಳನ್ನು ವಿವರಿಸಿ

18. Write down the need for the right self-esteem.

ಸರಿಯಾದ ಸ್ವಾಭಿಮಾನದ ಅವಶ್ಯಕತೆಯ ಬಗ್ಗೆ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.

**II. Answer any ONE of the following in not less than two pages.****(10x1=10)**

19. Explain the techniques to enhance critical thinking skills.

ವಿಮರ್ಶಾತ್ಮಕ ಚಿಂತನೆಯನ್ನು ಹೆಚ್ಚಿಸಲು ಅಗತ್ಯವಿರುವ ತಂತ್ರಾಂಶಗಳನ್ನು ವಿವರಿಸಿ.

20. Explain the support system available at the college to reach out to society.

ಸಮಾಜವನ್ನು ತಲುಪಲು ಲಾಭ್ಯವಿರುವ ಬೆಂಬಲ ವ್ಯವಸ್ಥೆಯ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ

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