St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester IV- Degree Examination July/August - 2022 PHYSICS

ELECTROMAGNETISM, ELECTRICITY II & ELECTRONICS I

Time: 3 hrs. Max Marks: 100

SECTION - A

- 1. Answer any <u>TEN</u> of the following. (10×2=20)
- a) Define Curl of a vector with an example.
- b) State Gauss theorem & express it in the vector form.
- c) Define Pointing vector. What is its significance?
- d) What are normal & anomalous dispersion?
- e) What is the average value of a sinusoidal A.C.? Write the expression for it.
- f) Define line voltage and phase voltage.
- g) Define RC Low Pass filter with circuit diagram.
- h) What is half wave rectification? Represent the typical input and output waveform.
- i) Give symbolic representation for an n-p-n and a p-n-p transistor.
- j) If the current gain β of a transistor is 99, what is the value of α ?
- k) Which is the most preferred configuration in transistor and Why?
- 1) Draw a representative diagram of E-MOSFET.

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Answer TWO full questions from each unit:

UNIT - I

- 2.a) Derive $\nabla \times B = \mu(\sigma E + \varepsilon \partial E / \partial t)$. with usual symbol. (6)
 - b) Define divergence of a vector; express it in the Cartesian form. What (4) is its significance?
- 3.a) Show that electromagnetic waves are transverse in nature. (6)
 - b) Show that $\nabla . E = -\partial B / \partial t$. (4)
- 4.a) Derive the wave equation for the field vectors E and B. Hence arrive (6) at the equation for the velocity of electromagnetic wave in a medium.
 - b) Derive equation of continuity. (4)

UNIT - II

- 5.a) Derive an expression for current in a series LCR circuit hence obtain the expression for resonance frequency.
 - b) Discus RC high Pass Filter and derive an expression for its cut off frequency.

Contd....2

6.a)	Explain with a circuit diagram, the working of a bridge rectifier and	(6)
	obtain expressions for ripple factor and efficiency.	
b)	Mention any four difference between series and parallel LCR circuit.	(4)
7.a)	Explain star connection in 3 Phase ac circuit. Obtain the relation	(6)
	between line voltage and phase voltage.	
b)	With a circuit explain the working of π filter.	(4)
	UNIT - III	
8.a)	Explain drain and transfer characteristics for J FET.	(6)
b)	Explain with diagram how voltage divider bias is achieved in a	(4)
	transistor.	
9.a)	For a transistor CE mode having fixed bias, explain the various steps	(6)
	of drawing DC load line on the output characteristics. What is its	
	importance?	
b)	Describe construction and working of FET.	(4)
10.a)	Explain input and output characteristics of transistor in CE mode.	(6)
b)	Compare the CB, CE and CC configurations of an amplifier. Give one	(4)
	application of each.	

SECTION - C

Answer any FOUR of the following:

 $(4 \times 5 = 20)$

- 11. If $\overrightarrow{F} = 2x^2 z\hat{\imath} + y^2 z\hat{\jmath} xy^3 zk$ calculate the div \overrightarrow{F} at (1, 2, -1).
- 12. A capacitor of $4\mu F$ and a resistor of 10Ω are connected to a 200V, 50Hz AC supply. Find the value of inductance to be connected in series to make the current in the circuit maximum. Find the value of this maximum current.
- 13. Design a RC Low Pass Filter and High Pass Filter for cut off frequency of 1KHz and 5KHz using capacitor of $0.1\mu F$ capacity.
- 14. A bridge rectifier has the transformer secondary voltage of 100Volts rms. It supplies power to a load of 500Ω . Calculate 1) DC output voltage 2) Percentage Efficiency.
- 15. A 3-Phase delta connection has phase voltage 250V. If it supplies power resistor of 1Mega ohm. Find the line voltage, phase current phase voltage and the power delivered to the load.
- 16. In a fixed biased CE amplifier, β =100, V_{BE} =0.7V, R_B =500K Ω , R_C =2.5K Ω , VCC=+20V. Draw DC load line and hence determine Q point.

G 502.4

Reg. No.:

St Aloysius College (Autonomous) Mangaluru

B.Sc.- Semester IV - Degree Examination July/August - 2022

CHEMISTRY - PAPER IV

Time: 3 hrs.

Max Marks: 100

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

PART - A

Answer any $\underline{\mathsf{TEN}}$ of the following in 1 to 3 sentences.

(2×10=20)

- a) Define the term enthalpy.
 - b) Calculate the maximum efficiency of an engine operating between 130°C and 30°C.
 - c) Write the equation for Gibbs free energy and Helmholtz free energy.
 - d) Give an example for coordinate isomerism in a coordination compound.
 - e) List two factors that affect the stability of complexes.
 - f) Write the structures of 'cis' and 'trans' diamminedibromoplatinum.
 - g) Give one example for a reaction using Rosenmund's catalyst.
 - h) Give one example for Oppenauer oxidation.

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Predict the product of the following reaction,

- j) State Grothus Draper law.
- k) What is Quantum efficiency?
- Define resonance fluorescence.

PART - B

Answer any $\underline{\mathsf{TEN}}$ of the following in 2 to 5 sentences.

(3×10=30)

- 2. (i) Derive the relationship between C_p and C_v .
 - (ii) Calculate the entropy change involved in the isothermal expansion of 5 moles of an ideal gas from a volume of 10 L to a volume of 100 L at 300K.
 - (iii) Derive Kirchoff's equation.
 - (iv) State any three the postulates of Valence Bond Theory.
 - (v) What is spectrochemical series?
 - (vi) Write a short note on crystal field stabilization energy.
 - (vii) Give an example for Wolf- Kishner reduction.
 - (viii) Give one example each for a reaction with Osmium tetroxide and lead tetra acetate as a oxidizing agent. Contd...2

(ix) Predict A and Q in the following reactions.

a)
$$R \longrightarrow C \longrightarrow C \longrightarrow R$$
 $R \longrightarrow CH \longrightarrow CH \longrightarrow R$
b) $H_3C \longrightarrow CH_2 \longrightarrow C \longrightarrow CH_3 \longrightarrow H_2O/H^+$ Q

- (x) What are Norrish type-I and type-II reactions?
- (xi) Give three applications of lasers.
- (xii) Explain chemiluminescence with an example.

Part - C

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

(5×10=50)

- 3. Derive an expression for the total work done using Carnot cycle.
- 4. Derive an expression for the entropy change in terms of T and V for an ideal gas.
- Derive an expression to show the variation of Gibbs free energy with temperature and pressure.
- 6. Explain hybridization, geometry and magnetic property of $[CoF_6]^{3-}$ using VBT.
- 7. Explain crystal field splitting in octahedral complexes.
- 8. Discuss Jahn-Teller effect.
- 9. Write the mechanism for the reduction of ketone with NaBH₄.
- 10. Write the mechanism for the reduction of alkene using Wilkinson's catalyst.
- Write three oxidation reactions of alcohols using (i) PCC (ii) Jones reagent
 (iii) Collins reagent
- 12. Discuss the photochemistry of photolysis of combination of H_2 and Br_2 .
- 13. Explain Jablonski diagram.
- 14. Explain photosensitization with 3 examples.

G 503.4

Reg. No:			

St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester IV - Degree Examination

July 2022

MATHEMATICS

FUNCTIONS OF A COMPLEX VARIABLES, NUMBER THEORY, GROUP THEORY AND REAL ANALYSIS Max. Marks: 100 Time: 3 Hours

Note: Answer all parts

PART - A

Answer any TEN of the following:

(10×2½=25)

- Find the domain of $f(z) = \frac{1}{1-|z|^2}$. 1.
- Verify the Laplace equation for the function $f(z) = e^{-y} \sin x$. 2.
- Show that f'(z) does not exist at any z for $f(z) = z \overline{z}$. 3.
- If p is a prime and k > 0 then prove that $\phi(p^k) = p^k p^{k-1}$. 4.
- Prove that the Fibonacci number u_{mn} is divisible by u_{m} . 5.
- Find the rational number represented by [4; 2, 1, 3, 6]. 6.
- Let G be the group of real numbers under addition and $\phi:G\to G$ be defined by 7. $\phi(x) = 13x$. Show that ϕ is a homomorphism and find its kernel.
- Compute $a^{-1}ba$ where $a = (1 \ 3 \ 5) \ (1 \ 2), b = (1 \ 5 \ 7 \ 9)$. ST ALOYSIUS COLLEGE LIBRARY 8.
- a) What is the order of the symmetric group S_n ? 9.
 - b) What is the number of even permutation of n elements?
- Determine if the sequence $\left\{\frac{3n-1}{4n+5}\right\}$ is increasing or decreasing. 10.
- If $\sum_{n=0}^{\infty} u_n$ is convergent, then prove that $\lim_{n\to\infty} u_n = 0$.
- If $\{s_n\}$ is the sequence of partial sums of the series then prove that for any $\varepsilon > 0$, there exists N > 0 such that $|S_R - S_T| < \varepsilon \quad \forall R > N \text{ and } T > N$.
- State root test. 13.
- Test the convergence of the series $\sum_{n=1}^{\infty} (-1)^n \frac{3}{n^2+1}$. 14.
- Prove that the series $\sum_{n=1}^{\infty} \frac{1}{\lceil \log(n+1) \rceil^n}$ is absolutely convergent.

Contd....2

PART - B

UNIT - I

 $(3 \times 5 = 15)$

Answer any THREE of the following:

- 1. Using $\epsilon \delta$ definition prove that $\lim_{z \to 1} \frac{iz}{2} = \frac{i}{2}$ in some open disk |z| < 1.
- 2. Let f(z)=u(x,y)+iv(x,y) and f'(z) exists at $z_0=x_0+iy_0$. Prove that the first order partial derivatives of u and v satisfy C-R equations.
- 3. Show that the function $u(x, y) = y^3 3x^2y$ harmonic. Find the harmonic conjugate of u and construct the corresponding analytic function.
- 4. Show that $f(z)=|z|^2$ is differentiable only at the origin.
- 5. If $f(z) = r^{-4} e^{-i 4\theta}$, find f'(z) using polar co-ordinates and also express f'(z) in z.

UNIT - II

Answer any THREE of the following.

 $(3 \times 5 = 15)$

- 1. Let n > 1 and g.c.d(a, n) = 1. If $a_1, a_2, ..., a_{\phi(n)}$ are the positive integers less than n and relatively prime to n, then prove that $aa_1, aa_2, ..., aa_{\phi(n)}$ are congruent modulo n to $a_1, a_2, ..., a_{\phi(n)}$ in some order.
- Prove that radius of the inscribed circle of a Pythagorean triangle is always an integer.
- 3. For the Fibonacci sequence $\{u_n\}$, prove that $g.c.d(u_m, u_n) = u_d$ where $d = \gcd(m, n)$.
- 4. If $2^k 1$ is a prime then prove that $n = 2^{k-1}(2^k 1)$ is a perfect number and also prove that every even perfect number is of this form.
- 5. If $C_k = \frac{p_k}{q_k}$ in the k^{th} convergent of the simple continued fraction $[a_0; a_1, ..., a_n]$ then prove that $p_k q_{k-1} q_k p_{k-1} = (-1)^{k-1}, 1 \le k \le n$.

UNIT - III

Answer any THREE of the following:

 $(3 \times 5 = 15)$

- 1. If ϕ is a homomorphism of a group G onto a group G' with kernel K, then prove that $\frac{G}{K} \cong G'$.
- 2. Prove that every permutation is a product of disjoint cycles.
- 3. Prove that S_n has a normal subgroup of index 2, the alternating group A_n consisting of all even permutations.
- 4. Prove that a subgroup N of a group G is normal G if and only if every left coset of G is a right coset of N in G.
- 5. Express (1 2 3)(4 6 7)(2 5 7 8)(3 9 5 1) as a product of disjoint cycles, find its order. State whether it is even or odd. What is its signature?

UNIT-IV

Answer any THREE of the following:

 $(3 \times 5 = 15)$

- 1. Using the definition of convergence prove that the sequence $\left\{\frac{n}{2n+1}\right\}$ converges to $\frac{1}{2}$.
- 2. Prove that a monotonically increasing sequence bounded above converges.
- State and prove integral test.
- 4. Prove that the series $\sum_{p=1}^{\infty} \frac{1}{n^p}$ converges if p > 1.
- 5. Test the convergence of the following:

i)
$$\sum_{n=1}^{\infty} \frac{n!}{(n+2)!}$$
 ii) $\sum_{n=1}^{\infty} \frac{\cos^2 n}{3^n}$.

ii)
$$\sum_{n=1}^{\infty} \frac{\cos^2 n}{3^n}$$

UNIT - V

Answer any TWO of the following:

 $(2 \times 7\% = 15)$

If $a_n > 0$, $a_{n+1} < a_n \ \forall n$ and if $\lim_{n \to \infty} a_n = 0$, then prove that the alternating series

$$\sum_{n=1}^{\infty} (-1)^{n+1} a_n \text{ converges.}$$

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- 2. If $\lim_{n\to\infty} \left| \frac{u_{n+1}}{u} \right| = L$ for an infinite series $\sum u_n$, $u_n \neq 0$ for all n, then prove that the series is absolutely convergent if L < 1, is divergent if L > 1 and the test fails when L=1.
- 3. Test the convergence of the following series:

i)
$$\sum_{n=1}^{\infty} (-1)^n \frac{3^n}{n^2}$$

$$ii) \sum_{n=2}^{\infty} (-1)^n \frac{1}{\log n}$$

i)
$$\sum_{n=1}^{\infty} (-1)^n \frac{3^n}{n^2}$$
 ii) $\sum_{n=2}^{\infty} (-1)^n \frac{1}{\log n}$ iii) $\sum_{n=1}^{\infty} (-1)^n \frac{n+2}{n(n+1)}$.

4. Determine if the following series are absolutely convergent, conditionally convergent or divergent.

i)
$$\sum_{n=1}^{\infty} (-1)^n \frac{3^{2n+1}}{n^{2n}}$$

ii)
$$\sum_{n=1}^{\infty} \frac{1-2\sin n}{n^3}$$

i)
$$\sum_{n=1}^{\infty} (-1)^n \frac{3^{2n+1}}{n^{2n}}$$
 ii) $\sum_{n=1}^{\infty} \frac{1-2\sin n}{n^3}$ iii) $\sum_{n=1}^{\infty} (-1)^{n+1} \frac{1}{(2n-1)!}$

Time: 3 hrs.

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Reg. No.		

Max Marks: 100

St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester IV – Degree Examination July/August – 2022

ELECTRONICS

Breakdown Devices, power amplifiers, Fundamentals of Electronic Communications and Digital Computers

Not	Note: This question paper has TWO sections- SECTION A AND SECTION B.							
	Answer both the sections. SECTION - A							
I.	Choose the correct answer from the choices given at the end of each question and write the correct answer. (12x1=12)							
i)	Voltage regulator IC 7912 gives a output of a) +12V b) -12V c) +2V d) -2V							
ii)	Maximum efficiency of a class –A inductive load power amplifier is							
iii)	a) 25% b) 50% c) 78.5% d) 100% A TRIAC haspn junctions a) 2 b) 4 c) 1 d) 3							
iv)	a) Emitter modulator b) Collector modulator c) Varactor diode modulator d) Balanced modulator							
	a) SSB-TC b) SSB-SC c) DSB-SC st ALOYSIUS COLLEGE LIBRARY MANGALURU- 575 003 d) DSB-TC							
	The highest modulating frequency used in AM system is 5 kHz. Then the bandwidth of the resulting AM signal is a)5kHz b) 10kHz c) 20kHz d) 40kHz							
	If the radiation resistance of a dipole antenna is 10Ω , a current 2A flowingthrough it, radiatespower. a) 40W b) 48W c)24W d)12W The electron density is maximum inlayer							
	a) F1 b) D c) C d) E The characteristic impedance of a transmission line at high frequency is							
	a) $\frac{L}{c}$ b) $\sqrt{\frac{L}{c}}$ c) $\sqrt{\frac{R}{c}}$ d) $\sqrt{\frac{c}{L}}$							
×)	The ability of a receiver to reproduce all the audio frequencies faithfully is called its a) Fidelity b) Sensitivity c) Selectivity d) reproducibility							
٧i١	is used as storage element in dynamic RAM cell.							
^1)	a) MOSFET b) inductor c) capacitor d) BJT Contd2							

G 504.4

xii) In amplitude modulation, when carrier is 100% modulated, the power carried by each sideband is______of the carrier power.

a. 16.7%

b. 33%

c. 25%

d. 50%

2. Answer any TEN questions.

(10x1=10)

- i) Mention any one application of a DİAC.
- ii) Define the term 'line regulation' w.r.t voltage regulators.
- iii) Mention one difference between a voltage amplifier and a power amplifier.
- iv) Draw the waveform of AM wave with a modulation index 0.8.
- v) Give the full form of SSBTC
- vi) Define modulation index of a AM wave
- vii) Define 'Critical frequency".
- viii) Define UPLINK FREQUENCY
 - ix) Define Frequency modulation.
 - x) Mention one advantage of flash memory
- xi) Expand the terms:- (a) EPROM, and (b) EEPROM
- xii) How many address lines are required address 1k Memory?

3. Answer any TEN questions

(10x2=20)

- i) Mention any two differences between a SCR and a TRIAC.
- ii) Mention the advantages of class B power amplifier over class A power amplifier.
- iii) What are the advantages of SSBSC?
- iv) Mention any two drawbacks of Ionospheric communication.
- v) Mention the limitations of Zener shunt regulator.
- vi) Explain why pre-emphasis is used in FM.
- vii) Draw the circuit diagram of a Diode detector.
- viii) What is meant by station keeping w.r.t satellites? Explain
- ix) Mention the expression for characteristics impedance of a (a)Coaxial(b) parallel transmission lines
- x) Explain any one characteristics of a memory.
- xi) With block diagram explain a digital computer.
- xii) Calculate the refractive index of an ionized layer of election density 3.65x10¹² electrons /m³ at a radio frequency of 1MHz

SECTION - B

4. Answer any SEVEN questions.

(7x4=28)

- i) Draw the block diagram of a satellite transponder and explain.
- ii) With necessary circuit diagram explain the read operation in a flash memory cell.
- iii) Define reflection coefficient and standing wave ratio. Obtain the relationship between them.
- iv) Explain the need for modulation.
- v) With circuit diagram explain the action of a shunt Zener diode regulator.

G 504.4 Page No.3

- vi) Briefly explain different modes of radio wave propagation.
- vii) Explain the input/store/output operation in a microcomputer.
- viii) With necessary diagram explain the half wave rectifier using SCR.
- ix) A carrier of power 500 watts is amplitude modulated to a depth 60%. Calculate (i) the power in each sideband (ii) the percentage of total power in each sideband (iii) the percentage power saved with SSBSC transmission.
- x) Write a note on audio power amplifier using IC.

SECTION - C

Answer any THREE full questions.

(10x3=30)

- **5.**a) Derive the expression for the electric intensity at a distance 'r' from the center of a dipole antenna.
 - b) Define Amplitude modulation. Obtain the expression for the amplitude modulated wave.

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 (6+4)
- **6.**a) With circuit diagram explain a balanced modulator and show that carrier is suppressed at the output of a balanced modulator.
 - b) Write a note on layers of ionosphere.

(6+4)

- 7.a) With necessary diagram explain how the read operation is performed in a 4x4 diode ROM.
 - b) Write a note IC voltage regulators .

(6+4)

- **8.**a) What is class –A amplifier? Show that maximum efficiency of class –A inductive load power amplifier is 50%.
 - b) With necessary circuit diagram explain the read operation in a DRAM cell.

(6+4)

(2019 Batch onwards)

G 505.4

Reg. No.:			

Contd...2

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Mangaluru

B.Sc. Semester IV - Degree Examination July/August - 2022 **COMPUTER SCIENCE**

RELATIONAL DATABASE MANAGEMENT SYSTEM USING MYSQL

Time: 3 Hours Max Marks: 100

PART -A

- 1. Answer any <u>TEN</u> of the following. (10x2=20)
- a) Define the terms: (i) database schema (ii) entity.
- b) Give the symbol and meaning of weak entity type.
- c) What is a super key?
- d) Why duplicates are not allowed in a relation?
- e) What is referential integrity constraints?
- f) Define Boyce Codd normal form.
- g) Write the purpose of commit and rollback commands.
- ST ALOYSIUS COLLEGE LIBRARY h) List any two wild characters used in pattern matching. MANGALURU- 575 003
- i) What is the purpose of cursor in stored procedure?
- j) Write a query display only first five records from a table.
- k) How do assign a value to a variable in MYSQL?
- I) Mention the types of parameters in MYSQL stored procedure with example.

PART -B

	Answer any ONE FULL question from each unit.	(4×20=80)
200	UNIT - I	
2. a)	Explain different types of database users.	(5)
b)	Explain the various types of attributes with examples.	(5)
c)	What is data independence? Explain its types.	(5)
d)	With a diagram explain the three schema architecture of database system.	(5)
3. a)	Write a note on database languages.	(E)
b)	Explain any four characteristics of database management system.	(5)
c)	Explain the cardinality ratio of relationship types.	(5)
d)		(5)
-,	What are the responsibilities of DBA?	(5)
	UNIT - II	
4. a)	Define 1NF and 2NF relations with example. How to convert 1NF to 2 relation?	NF (6)
b)	Explain the select and project operations of relational algebra with example.	
c)	Consider the relation R={A,B,C,D,E,F,G,H,I,J} and set of functional	(6)
	dependencies. $F = \{AB \rightarrow C, A \rightarrow DE, B \rightarrow F, F \rightarrow GH, D \rightarrow IJ\}$. What is the	
	key of R? Decompose the relation in the	G
	key of R? Decompose the relation into 2NF and then to 3NF.	(8)
5. a)	Explain various types of outer join operations.	(8)

G 505	.4 Pa	age No. 2
b)	Explain the terms domain constraint, relation schema and degree of a	
	relation.	(6)
c)	What do you mean by anomaly? Explain the different types of	
	anomalies.	(6)
	UNIT – III	
6. a)	Explain with example the use of GRANT command in MYSQL? Also	
	Explain the use of WITH GRANT OPTION clause.	(5)
b)	Explain the following with syntax and example:	
	(i) ALTER (ii) UPDATE	(5)
c)	Explain GROUP BY and ORDER BY clauses in MYSQL.	(5)
d)	Explain any five aggregate functions with examples.	(5)
7. a)	What is nested query? Explain with an example.	(5)
b)	Explain primary key and foreign key as a table level constraint.	(5)
	Explain different data types used in MYSQL.	(5)
d)	List and explain any five clauses used in SELECT statement in MYSQL.	(5)
9 ->	UNIT - IV	
	What are the features of using stored procedure.	(6)
	Explain with syntax and example, the usage of the following looping statements:	
	i. WHILE	
	ii. LEAVE	(6)
c) (**************************************	(0)
t	Consider the table student (sid,sname,score) write a stored procedure o perform the following task on student table by using multiple OUT	
	parameters.	
15.	 i) Count users who have scored less than 35 marks 	
	ii) Find Avg score of all	
	iii) Count user who has scored more than 60 marks	(8)
	and the first of the first	
9. a) Ex	plain the conditional control statements in MYSQL.	(6)
	ow do you create function and call function, explain with an example.	(6)
c) Co	onsider the table EMPLOYEE (Eno, Ename, Dept, Salary). Write a	(6)
cu	rsor program to increase the employee salary department wise.	
Ma	arketing :15%	
	oduction: 12%	
Acc	counts: 7%	
		(8)

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Reg. No.:	

St Aloysius College (Autonomous) Mangaluru

B.Sc. Semester IV – Degree Examination July/August - 2022

STATISTICS

Statistical Inference - II

Time: 3 Hours Max Marks: 100

Note: Answer all parts

PART - A

Answer any <u>TWELVE</u> of the following:

(2x12=24)

- What is Testing of hypothesis? Give one example.
- Distinguish between Type I and Type II errors in testing of hypothesis.
- 3. Define acceptance and critical regions?
- 4. Distinguish between one tailed and two tailed tests?
- State Neyman Pearsons fundamental lemma for the determination of Best Critical Region.
- 6. Give the test procedure for testing H_0 : $\mu = \mu_0$ against H_1 : $\mu \neq \mu_0$ based on random sample of small size n drawn from a Normal population with an unknown variance σ^2 .
- State the conditions required for the application of Chi square test.
- 8. Write the assumptions under which t-test can be applied.
- 9. Define Standard Error of a statistic. What is the Standard Error of $(\mu_1-\mu_2)$ for an unknown common variance σ^2 .
- 10. What do you mean by strength of SPRTP?

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- 11. State any two properties of LRTP.
- 12. When do we apply Non Parametric Tests?
- Explain Yates correction for continuity.
- 14. State any two applications of Chi square tests.
- 15. What is the large sample approximation of Sign test?

PART - B

II. Answer any SIX of the following.

(6x6=36)

- 16. Derive MP Test of size α for testing H_0 : $p = p_0$ against H_1 : $p = p_1$ ($p_1 > p_0$) where p is the parameter of a Bernoulli Distribution.
- Explain the test for correlation coefficient in a Bivariate Normal population with the test procedure for large samples.
- 18. Explain one sample Sign Test. When do we apply it?
- Explain a) Simple Hypothesis b) Composite Hypothesis c) unbiased test and consistent test in testing of hypothesis.

G 506.4 Page No.2

20. Derive SPRTP of strength (α,β) for testing Ho: $\theta=\theta_0$ against H₁: $\theta=\theta_1$ for an Exponential distribution with parameter θ .

- Derive an expression for testing an association of attributes in 2X2 contingency table.
- 22. Derive LRTP for testing H_0 : $\mu = \mu_0$ against H_1 : $\mu \neq \mu_0$, for a normal population with a known variance σ^2 .
- 23. Obtain a large sample test procedure for testing $H_0: P=P_0$ against $H_0: P\neq P_0$ Where P is the population Proportion.
- Stating the assumptions describing Chi Square Test of goodness of fit.
 Identify the degrees of freedom.

PART - C

III. Answer any <u>FOUR</u> of the following.

(10x4=40)

- 25. Derive LRTP for testing $H_0: \sigma_1 = \sigma_2$ against $H_1: \sigma_1 \neq \sigma_2$ of two Normal populations whose means are unknown.
- 26. Derive SPRTP to test $H_0: \mu = \mu_0$ against $H_1: \mu = \mu_1$ ($<\mu_0$) for a Normal Population with a known variance σ^2 and explain acceptance and rejection lines.
- Deduce the Brandt Snedekors test statistic for testing independence of attributes in 2Xk contingency table and state the test procedure.
- 28. a) State Nayman Peason Fundamental Lemma for the determination of BCR.

(3)

b) Obtain BCR of size and for testing H_0 : $\mu=\mu_0$ against H_1 : $\mu\neq\mu_1$ for a random sample of size n drawn from a Normal population with a known variance σ_2 .

(7)

- 29. Deduce the test statistic for Paired t- test. How do we apply it?
- Briefly explain two sample Median Test by deriving the distribution of the test statistic.

(2020 Batch Onwards)

G 507.4

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Reg. No.:		

St Aloysius College (Autonomous) Mangaluru

B.Sc. Semester IV- Degree Examination July/August - 2022 BOTANY

PLANT TAXONOMY, ETHNOBOTANY AND ECONOMIC BOTANY

Time: 3 Hours. Max Marks: 100

Note: i) Answer all the sections.

ii) Draw diagrams wherever necessary.

SECTION -A

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

(10X2=20)

- 1) Define chemotaxonomy.
- 2) Write two demerits of Engler and Prantl's system of classification.
- 3) What is binomial nomenclature? Write two principles of binomial nomenclature.
- Define lomentum, mentioning one example.
- 5) Name the type of fruit characteristic to Brassicaceae.
- 6) What is stylopodium? Name the family in which it is characteristically seen.
- 7) Distinguish between fan palm and feather palm.
- 8) What is resupination? Name the family in which this feature is characteristically seen.
- 9) Write the features of androecium in Solanaceae.
- 10) What is ethnobotany? Mention its importance.
- 11) Name the families to which Dendrobium and Anthurium belongs.
- 12) Write one use each of Anamitra cocculus and Piper longum.

SECTION - B

II Answer any <u>SIX</u> of the following.

(6x5=30)

- 1) Write a note on Artificial system of plant classification.
- 2) Write a note on the significance of Botanical gardens and Arboretum.
- 3) Explain the features of androecium and gynoecium in Asclepiadaceae.
- 4) List out any five differences between Malvaceae and Tiliaceae.
- 5) Write short notes on;

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- a) Cyathium
- b) Fruits in Moraceae
- 6) Enlist five diagnostic features of Zingiberaceae.
- 7) Write a note on narcotic plants
- 8) Explain how wine is prepared.

SECTION - C

III Answer any FIVE of the following.

(5x10=50)

- 1) Write explanatory note on herbarium techniques. Add a note on Regional Herbaria.
- Give an account of Bentham and Hooker's classification, mentioning its merits and demerits.

Page No.2 G 507.4

3) Describe the diagnostic features of Annonaceae, mentioning the botanical names of two examples.

- 4) Give the diagnostic features of Apocynaceae mentioning the botanical names of two examples.
- 5) Write short notes on the following:
 - a) Bulb
- b) Labellum
- c) Cauliflorous condition

- d) Drupe
- e) Glumes
- 6) Explain the diagnostic features of Musaceae. Write the botanical names of two economically important plants.
- 7) Give the botanical name, family, part used and uses of Ground nut and Castor. Add a note on extraction of coconut oil.
- 8) Write the botanical name, family, part used and economic importance of the following:
 - a) Clove
- b) Cocoa
- c) Turmeric

d) Cashew

e) Jute

G 508.4

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Reg. No.:	

St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester IV – Degree Examination
July/August - 2022
ZOOLOGY

CELL & MOLECULAR BIOLOGY AND GENETICS

Time: 3 Hours. Max Marks: 100

Note: i) Answer any <u>TEN</u> questions from PART A and <u>ONE FULL</u> 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 the terms active transport and passive transport.
- b) Write the significance of mitosis.
- c) What are oncogenes? Mention the types.
- d) What are Okazaki fragments?
- e) Define inversion and insertion mutation.
- f) Give any four reasons for using the garden pea plant as an experimental organism by Mendel.
- g) What are lethal genes? Give an example.
- h) What is a pleiotropism? Give an example.
- i) What is somatic cell hybridisation? Give an example.
- j) What are Gynandromorphs?
- k) What are sex influenced traits? Give one example.
- I) What is chorionic villus sampling?

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PART - B

Select ONE full question from each unit.

Unit I

- II. a) Give an account of Prophase I in animal cell with suitable illustrations. Add a note on significance of meiosis. (10)
 - b) Write the structure and function of Mitochondria and Ribosomes.
 - c) Enumerate the characteristics of cancer cells with illustrations. (5)

OR

- III. a) Define cancer. How do you distinguish benign tumours from malignant tumours? Explain the main types of cancer. (10)
 - b) Illustrate the mechanism of crossing over. (5)
 - c) Describe the chemical constitution of plasma membrane. (5)

(5)

Page No.2

Unit II

IV. a)	Describe Griffith's experiment to prove the DNA as the genetic							
	material.	(10)						
b)	Write a note on Split genes and Redundant DNA.							
c)	Explain Lac operon concept.	(5)						
	OR							
V. a)	What is mutation? Explain the different types of mutation.	(10)						
	Explain the fine structure of genes.	(5)						
	Enumerate the forms of DNA with their distinctive features.	(5)						
	Unit III							
VI. a)	What is Dominant epistasis? Explain the phenomenon with reference							
	to Plumage colour in Leghorn, Wyandotte fowls. Use Punnet checker							
	board with F₂ phenotypic ratio.	(10)						
b)	What is monohybrid cross? Explain with example.	(5)						
c)	Write explanatory note on Emphasial and a second							
	OR	(5)						
VII. a)	What are polygenes? Explain the phenomenon with reference to skin							
	colour in humans. Use Punnet checker board with F2 phenotypic (10							
	ratio.							
b)	Explain interaction of genes with reference to comb pattern in fowls.	(5)						
c)	Write short notes on Test cross and Back Cross.	127-12-20						
		(5)						
	Unit IV							
VIII. a)	What is linkage? Explain incomplete linkage in Drosophila.	(10)						
b)	Give an account of Genic Balance Theory of Sex Determination	20 C(1 5)						
c)	Explain Human genome project.	(5)						
	OR	(5)						
IX. a)	Give an account of inborn errors of metabolism.	(10)						
b)	What is sex linked inheritance? Explain the inheritance of	(10)						
	naemophilia in man.	/F \						
c)	What is a chromosome map? Describe with reference to three point test cross.	(5)						
	test cross.	(5)						

(2019 Batch Onwards)

G 509.4

Reg. No.:			

St Aloysius College (Autonomous) Mangaluru

B.Sc. Semester IV – Degree Examination

July/August - 2022

MICROBIOLOGY

Microbial Ecology and Environmental Microbiology

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) Radioisotopes
- b) DAPI
- c) Rhizosphere
- d) Phylloplane
- e) Sewage lagoon

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- f) Typhoid
- g) Rotorod
- h) Commensal flora
- i) Lentic habitat
- Completed test
- k) Imhoff Tank
- I) Haustoria

PART - B

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

UNIT -I

2. a) Describe the process of microbial succession.

(9)

OR

- b) Explain the structure of lentic habitat. Add a note on the factors affecting microbial flora.
- c) Write a note on Probiotics and its potential benefits.

(6)

UNIT -II

3. a) Discuss the distribution of Indoor and Outdoor air microflora.

(9)

OR

- b) Discuss the viral airborne diseases.
- c) Write briefly on Electrostatic precipitation.

(6)

UNIT-III

4. a) Enumerate the waterborne diseases. Give an account of amoebiasis (9) G 509.4 Page No.2

- b) Explain the small-scale sewage treatment.
- c) Write a note on Oxidation lagoons.

(6)

UNIT -IV

5. a) Define synergism. Give a note on any two types of positive (9) interaction.

OR

- b) Define Mycorrhizae. Explain the different types of mycorrhizal association.
- c) Write a note on Phyllosphere.

(6)

PART - C

Answer any FOUR of the following.

(5x4=20)

- 6. a) Activated sludge process.
 - b) Anderson's sampler.
 - c) Isotopic fractionation.
 - d) Winogradsky.
 - e) Freshwater environment.
 - f) Biological safety cabinets.

(2019 Batch onwards) G 510.4 Reg. No.

Reg. No.

St Aloysius College (Autonomous)

Mangaluru

B.Sc. Semester IV – Degree Examination

July/August - 名のみ) BIOCHEMISTRY METABOLISM

Time: 3 hrs.

Max Marks: 100

Instructions: 1. Write the number and subdivision clearly.

- 2. Write equation and diagrams whenever necessary
- 3. Answer Part -A in the two pages of the answer book.

PART - A

1. Answer any TEN of the following.

 $(10 \times 2 = 20)$

- a) Differentiate between glucogenic and ketogenic amino acids.
- b) Write the ultrastructure of a chloroplast.
- c) What are uncouplers? Give one example.
- d) Name any one radioisotope and its use in the study of metabolism.
- e) What is deamination? Give example.
- f) What is ketosis?
- ¹ g) What is decarboxylation reaction? Give example.
 - h) Write the structure of pyrimidine with example.
 - i) Name the components of photosystem I.
 - j) Mention the importance of the Cori cycle.
 - k) Mention the causes of gout.
 - I) What is the fate of glucose during anaerobic conditions?

PART - B

Answer any SIX of the following:

(6x5=30)

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- 2. Explain the role of inhibitors of ETC.
- 3. Outline the biosynthesis of cholesterol.
- 4. Write a note on cyclic photophosphorylation.
- 5. Write a note on transamination reaction.
- 6. Explain the steps involved in glycogenolysis.
- 7. Write a note on the salvage pathway of purines.
- 8. Briefly explain the Calvin cycle.

PART - C

Answer any FIVE of the following:

(5x10=50)

- 9. Explain TCA cycle.
- 10. Describe the Urea cycle. Mention its significance.
- 11. Explain the Pentose phosphate pathway and its physiological significance.
- 12. Explain the de novo synthesis of pyrimidines with a schematic flow chart.
- 13. Explain the components and working of the Electron transport chain.
- 14. Give an account of β -oxidation of even-numbered saturated fatty acids.

(2020 Batch Onwards)

G 511.4

Reg. No.:

St Aloysius College (Autonomous) Mangaluru

B.Sc. Semester IV- Degree Examination

July/August - 2022

BIOTECHNOLOGY

MOLECULAR BIOLOGY AND RECOMBINANT DNA TECHNOLOGY

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.

 $(10 \times 2 = 20)$

- a) What are transposons?
- b) Define cistron.
- c) Write any four differences between prokaryotic and eukaryotic DNA replication.
- d) Define gene and splicing.
- e) List the promoters in bacteria.
- f) What is poly-A tailing? Explain its significance.
- g) Write about the nomenclature of restriction enzymes
 - h) Write any two methods for DNA quantification.
 - i) What is a cosmid?
 - j) Differentiate between human, bovine and porcine insulin.
 - k) Give two examples for recombinant vaccines.
 - Explain the purpose of GATT.

PART - B

Answer any SIX of the following.

(6x5=30)

- 2. Explain Hershey and Chase experiment.
- 3. Explain the experimental evidence for the semiconservative methods of DNA replication. ST ALOYSIUS COLLEGE LIBRARY
- 4. Write a short note on Lac operon.

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- Explain bacterial conjugation.
- 6. Write about the steps involved in isolation of DNA from plants.
- 7. Write a short note on Agrobacterium mediated gene transfer.
- 8. Write about the steps involved in PCR.
- 9. Explain how Bt cotton is produced.

PART - C

Answer any FIVE of the following:

(5x10=50)

- 10. Explain in detail about the DNA repair mechanisms.
- 11. Explain the structure of eukaryotic gene.
- 12. Write a note on Holliday model.
- 13. Explain the mechanism of translation in eukaryotes.
- 14. Explain physical methods involved in gene transfer
- 15. Give a detailed account on plasmid vectors used in genetic engineering.
- 16. Write a note on construction of cDNA library and give four applications of it.
- 17. Explain the production of recombinant human growth hormone.

G110.4/G 512.4

(2019 Batch Onwards)

Reg. No.

St Aloysius College (Autonomous)

Mangaluru

B.A./B.Sc. Semester IV – Degree Examination

July/August - 2022 COMPUTER ANIMATION 3D MODELING

Time: 3 hrs.

Max Marks: 100

SECTION - A

Answer any <u>TEN</u> of the following:

 $(2 \times 10 = 20)$

- 1. a) How to create curved shape railings?
 - b) How to take duplicate copies in Maya?
 - c) How to give outline for spline objects?
 - d) What is the use of bend modifier?
 - e) Name the different types of stairs.
 - f) What is the use of spacing tool?
 - g) Write any 2 object types of Extended primitives
- : h) In 3D How to take duplicate copies in circle?
 - i) Name any 4 extended splines.
 - j) What is the use of mirror tool?
 - k) What is dolly & tilt view in Maya?
 - I) Name any 4 types of foliage

SECTION - B

Answer any FOUR of the following:

 $(5 \times 4 = 20)$

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- Write a note on polygon terminology.
- 3. Write down the steps to create 3D soap.
- 4. Write a note on Autodesk Maya.
- 5. Write a short note on Foliage
- 6. Explain symmetry modifier.

SECTION - C

Answer any TWO of the following:

 $(10 \times 2 = 20)$

- 7. Write a note on 3D doors, windows.
- 8. Explain briefly about nonlinear deformers of Maya.
- 9. Write a note on Editable spline.

SECTION - D

Answer any TWO of the following:

 $(20 \times 2 = 40)$

- 10. Write a note on 3D Modeling.
- 11. Explain briefly about 3D modifiers.
- 12. Name few compound objects & explain how it helps in 3D modeling.

G 513.4

Reg. No.:	

St Aloysius College (Autonomous) Mangaluru

B.Sc. - SEMESTER IV - Degree Examination July /August - 2022

ECONOMICS

INTERNATIONAL TRADE AND PUBLIC FINANCE

Time: 3 hrs.

Max Marks: 100

PART - A

Answer any <u>FOUR</u> of the following questions in about 10 sentences each.

 $(4 \times 5 = 20)$

- 1. Write a short note on the significance of international trade.
- 2. Distinguish between balance of trade and balance of payments.
- 3. What are the arguments against free trade policy?
- 4. Briefly explain the principle of maximum social advantage.
- 5. Write a note on taxable capacity.

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6. Write a note on deficit financing.

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PART - B

Answer any <u>FOUR</u> of the following questions in about 20 sentences each.

 $(4 \times 10 = 40)$

- 7. Explain the different forms of economic integration.
- 8. Explain the Factor Endowment theory of international trade.
- 9. Explain the various factors determining terms of trade.
- 10. Explain the causes of disequilibrium in balance of payments
- 11. Explain the canons of taxation.
- 12. What is fiscal policy? Explain its role in economic development.

PART - C

Answer any <u>TWO</u> of the following questions in about 50 to 60 $(2\times20=40)$ sentences each.

- 13. Describe the Comparative Cost advantage theory of international trade. What are its criticisms?
- 14. Explain the types and effects of tariff.
- 15. What is the organizational structure of WTO? Explain its functions.
- 16. Explain different types of public debt. What are the methods of debt redemption?

(2019 Batch Onwards)

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St Aloysius College (Autonomous) Mangaluru

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

July-August -2022 ENGLISH

Time: 3 hrs.

II.

Max Marks: 100

UNIT - I (PROSE)

- A. Answer the following in a word/phrase/sentence each. (5x1=5)
 - 1. Which was the award received by Arundhati Roy in the year 2004?
 - Expand NGO.
 - 3. In the essay, 'Dancing in the Rain', where are the children employed?
 - 4. In the words of Stephen Leacock, what are the rich perpetually suffer from?
 - 5. "All things are connected." In what context does the Chief say this?
 - B. Answer any FIVE of the following in about 150 words each.

(5x5=25)

- How does the author comment on the sense of ownership over nature or land displayed by the 'Great Chief'? Elaborate.
- 2. In what different ways are the children in modern days straitjacketed in the opinion of Azim Premji? Explain.
- 3. Why does the speaker comment that the idea of justice itself is under attack today? Explain with reference to Arundhati Roy's lecture?
- 4. What are the alarming shifts in the contemporary understandings of justice and human rights? Give specific examples from the lecture of Arundhati Roy.
- 5. What problems with wealth does Leacock talk about with Mr. Spugg?
- 6. How does Leacock describe his friend who had ten thousand dollars?
- 7. Why does the author repeatedly ascribe 'sacredness' or 'holiness' to nature and natural phenomena? Justify your answer in the light of "The Letter to Chief Seathl."

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UNIT - II (POETRY)

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

- According to the poem, 'The Second Coming' what has the world lost touch with?
- 2. How does the speaker refer to the crowd in the poem, "The Lynching"?
- One must learn to keep strict ______ over selfishness and spite.' Fill the blank with the correct word from the poem, 'Stay Calm.'
- 4. What could the Parson have done instead of preaching for forty years?
- 5. What saves the mosquito from being killed?

G 135.4/535.4/335.4/435.4/635.4

B. Answer any <u>FOUR</u> of the following in about 120 words each.

4x5=20)

- How does the poet bring out the dehumanization and objectification of the black bodies in 'The Lynching'? Give illustrations from the poem.
- How does W.B. Yeats highlight the idea of the impending 'anarchy' by making use of the metaphor of the 'falcon and the falconer'? Explain.
- When, in the poet's opinion, should one be sure that she has mastered the most vital thing in life? Explain in the light of the poem, 'Stay Calm'.
- 4. What is God's attitude towards humanity in the poem, 'Channel Firing'? What comments does the poet make on God's attitude towards humanity? Elaborate.
- 5. Discuss the special qualities and titles attributed to the mosquito in the poem, 'The Mosquito'.
- Comment on the influence of the 'allure of power and unethical living' in the contemporary society with reference to the poem, 'The Second Coming'.

UNIT - III (SHORT - STORY)

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

(3x5=15)

- Write a note on the character of King Yiji.
- 2. What are some the things that King Yiji good at? How did he manage to earn his daily living?
- 3. How does the peasant describe the appearance of the hermits that he came across in one of his previous journeys?
- 4. How do the helmsmen/captain assist the bishop to reach the curious island at last according to the short story, 'The Three Hermits'?
- Write a note on the various characters sailing in the vessel and the purpose of their journey with reference to the short story, 'The Three Hermits'.

UNIT - IV (Grammar and Writing Skills)

IV. A. Change the voice of the following sentences.

(6x1=6)

- 1. My friend has scored good marks in the internals.
- 2. Tom painted the entire house.
- 3. The wedding planner is showing all the reservations.
- 4. Suzan will bake two dozen cup cakes for the bake sale.
- 5. Everyone considers her to be the best student in the class
- 6. What did they decorate the street with?

B. Frame 'WH' questions to get the underlined words as answers.

1. The greatest difficulty was in identifying the plants.

(6x1=6)

2. Parallel lines never meet.

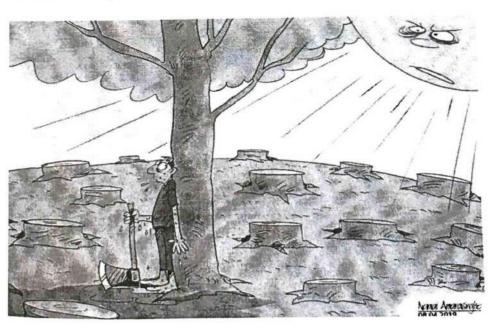
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- 3. Performing an act of kindness produces a positive attitude.
- 4. The driver refuses to wait as he is in a hurry to reach home.
- 5. Superstitions of various kinds are prevalent among the masses.
- 6. They sent a letter.
- C. Fill in the blanks with the correct form of the verb given in the brackets. (6x1=6)
- The candidate, along with her supporters, _____ the building. (leave, leaves)
- 2. Macaroni and cheese ______ a delicious meal. (is, are)
- 3. Just a card or a balloon _____ enough. (is, are)
- 4. Either the measurement or the calculation _____ created a problem. (has, have)
- 5. This equipment _____ unusual. (is, are)
- 6. The poet and dramatist _____ dead. (is, are)
- D. Convert the following sentences into indirect speech. (6x1=6)
- 1. He said to her, "Please wait."
- 2. He said to him, "Are you coming?"

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- 3. She said, "I have baked a cake."4. Roshni said, "I may meet her here."
- 5. Ramesh said, "I will finish my homework in two days."
- 6. "I'm sorry", said mark.
- E. Write an analysis of the following cartoon.

(6x1=6)



_G 136.4/	(2019 batch onwards) 336.4/436.4/536.4/636.4 Reg. No.:			
St Aloysius College (Autonomous)				
. /0	Mangaluru			
B.A/B.	Com./BBA/B.Sc./BCA - Semester IV - Degree E	examination		
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lime, 2 .		dax Marks. 100		
() 3 ()	एक वाक्य में उत्तर लिखिए : मसौदा के रचयिताओं का हिंदी के प्रति क्या अभिप्राय था ?	5 x 1 =05)		
2.	राजभाषा आयोग के गठन का आदेश कब हुआ ?			
	संविधान सभा के पहले अध्यक्ष कौन बने ?			
4.	स्वतंत्र देश को अपनी ही भाषा में राजकाज चलाना चाहिए यह किसका अभिम	नत था ?		
5.	नागरी लिपि में लिखी हिंदी को संघ की भाषा के रूप में कब स्वीकार किया ग	ाया ?		
3 1)	किसी एक प्रश्न का उत्तर लिखिए	(1x5=05)		
	राजभाषा आयोग पर प्रकाश डालिए ?			
2.	राष्ट्रपति का आदेश -3 दिसम्बर 1955 पर प्रकाश डालिए ?			
₹)	निम्नलिखित अवतरण का संक्षिप्त रूप लिखकर शीर्षक दीजिए :			
	राष्ट्रीय कार्यों में सुधार की आशा तभी की जा सकती है जब व्यक्तिगत ईम अपने जीवन में आत्मसात करते हैं यह वे बूंदे हैं जो वर्षा कराती है जब पर्याप्त बना लूँगा, तब अच्छा बन जाऊँगा ऐसा कहना या सोचना बेकार आदमी बेईमान है और अपने कार्यों का प्रयोग कर बेहतर बनता है ते पुनर्जीवित नहीं हो सकता है वह निरंतर गिरता जाएगा जिसे हम राष्ट्रीय व उसे प्रत्येक व्यक्ति की समग्रता ही निर्मित करती है कुछ एक लोगों के च	। मैं अपने लिए : है । यदि कोई ो राष्ट्रीय चरित्र वरित्र कहते हैं ।		
f)	ही राष्ट्र ऊँचा नहीं हो जाता। किसी एक विषय पर निबंध लिखिए: 1) भारत में पर्यटन व्यवसाय 2) मनोरंजन के आधुनिक साधन	1 x 6 = 06)		
	1) मारत म पयटन व्यवसाय 2) मनारजन के जायुनक सायन			
II) 3 f)	निम्निलिखित कहावतें एवं मुहावरों का अर्थ लिखिए : इतनी सी जान गज भर की जुबान	(5 x 1 =05)		
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		JKU- 373 003		
	उन्नीस बीस का अंतर होना			
3.	अपने पैरों पर खड़ा होना			
आ)	किसी एक प्रश्न का उत्तर लिखिए:	(1 x 5 = 05)		
100	आपके महाविद्यालय में मनाये गए वार्षिकोत्सव पर प्रतिवेदन लिखिए ?			
2.	प्रतिवेदन लेखन में किन बातों पर विशेष ध्यान देना चाहिए लिखिए ?			
₹)	A 1 7 - 2	(2 x 5 = 10)		
	किन्ही दो प्रश्नों का उत्तर लिखिए:	The state of the s		
	विशेष रिपोर्ट किसे कहते हैं ? उसके कितने प्रकार है विस्तार से लिखिए?	(
2.	इंटरनेट पत्रकरिता पर प्रकाश डालिए ?			
3.	संवाददाता के गुणों को लिखिए ?			
	account and Adams in Street, 200.	Contd2		

G 136.4/336.4/436.4/536.4/636.4 Page No. 2 III) अ) एक वाक्य में उत्तर लिखिए : $(8 \times 1 = 08)$ 1. महादेवी वर्मा ने कितने रूपए का बजट बनाया था ? 2. किसने मधुकरी मांगकर जीवन निर्वाह किया ? हमारे संस्कार किससे संपन्न होते हैं? 4. कौन बताते है कि पश्पिक्षयों में मन नहीं होता ? 5. 'लोहित्य' किसका संस्कृत रूप है ? 6. अज्ञेयजी ने किस की यात्रा कई बार की है ? 7. लेखक को कहाँ ठहराया गया ? स्वागत समिति के मंत्री किसको डांटने लगे ? किसी एक विषय पर टिप्पणी लिखिए: आ) $(1 \times 6 = 06)$ 1. ज्ञान के विकास में भाषा का योगदान 2. निरालाजी की मदद करने की प्रवृत्ति किसी एक का सन्दर्भ सहित व्याख्या कीजिए : $(1 \times 6 = 06)$ 1. "घृणा का भाव मनुष्य की असमर्थता का प्रमाण है | " 2. "अब मैं बचा हूँ | अगर रुका तो मैं ही चुरा लिया जाऊँगा | " र्ड किसी एक प्रश्न का उत्तर लिखिए: भाषा का महत्त्व साहित्यिक पाठ की विशेषताओं पर प्रकाश डालिए ? $(1 \times 10 = 10)$ 2. "ईमनदारों के सम्मेलन में" पाठ का सारांश लिखकर मुख्य अंशों को लिखिए ? IV) अ) एक वाक्य में उत्तर लिखिए : नेतृत्व की अभिलाषा के दोष क्या है ? $(1 \times 8 = 08)$ 2. हसन के कितने बच्चे हैं ? कौन यमुनोत्री की यात्रा पर जाने के लिए प्यासे थे ? 4. देश में कौनसे काम ठप पड़े हैं ? 5. किसे अपने पद प्रतिष्ठा का ख्याल रखना पड़ रहा था ? जमुनोत्री की यात्रा की तीर्थस्थान की ऊँचाई कितनी है ? 7. आत्मकथा अंश के लेखक कौन है ? बचपन का माहौल कैसा लगता है ? किसी एक विषय पर टिप्पणी लिखिए: आ) 1) हसन 2) यमुना का उद्गम स्थान $(1 \times 6 = 06)$ किसी एक का सन्दर्भ सहित व्याख्या कीजिए : "क्या आप स्वराज्य चाहते हैं ? तो लेक्चर देना सीखिए |" $(1 \times 6 = 06)$ 2. "इसके बाद हमारे बीच बहसें होने लगी, दो एक बार झड़पें भी हुई। एक दूसरे के नजदीक रहते हुए भी एक दूसरे से दूर होने लगे।"

 " नेता नहीं नागरिक चाहिए " विषय का सारांश अपने शब्दों में लिखिए ? $(1 \times 10 = 10)$

किसी एक प्रश्न का उत्तर लिखिए:

2. रज़िया के माध्यम से जाति संप्रदाय की दीवार भेद कर मानवीय संबंधों का चित्रण किस

(2020 batch onwards) ₆ 537.4/ G 637.4 Reg. No: ಸಂತ ಅಲೋಶಿಯಸ್ ಕಾಲೇಜು (ಸ್ವಾಯತ್ತ)

ಮಂಗಳೂರು

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

ಜುಲೈ -2022

ಕನ್ನಡ ಭಾಷಾ ಪತ್ರಿಕೆ – 4

ಸಮಯ: 3 ಗಂಟೆ

ಅಂಕಗಳು: 100

ಕಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಮೂರನ್ನು ಪ್ರಬಂಧ ರೂಪದಲ್ಲಿ ಉತ್ಪರಿಸಿ

(10x3=30)

1) ಅನಲಾನಿಲ ಸಂಯೋಗಂ ಪದ್ಯಭಾಗದಲ್ಲಿ ಕಂಡು ಬರುವ ಭೀಮ- ದ್ರೌಪದಿ ಸಂವಾದದ ಸೊಗಸನ್ನು ವಿವರಿಸಿರಿ

ಅಥವಾ

ಜ್ಞಾನಿಯ ಸ್ವರೂಪವನ್ನು ಕವಿ ಸರ್ವಜ್ಞನು ಹೇಗೆ ವಿವರಿಸುತ್ತಾನೆ?

2) ಶಾಂತಿ ಹಾಗೂ ನಿರೂಪಕನ ಸಂಬಂಧ 'ಆಹುತಿ' ಕಥೆಯಲ್ಲಿ ದುರಂತದ ಹಾದಿ ಹಿಡಿದ ಬಗೆ ಹೇಗೆ? ವಿವರಿಸಿರಿ

ಜೀವ ವೈವಿಧ್ಯವು ಎಷ್ಟು ಮುಖ್ಯವೋ ಭಾಷಾ ವೈವಿಧ್ಯವೂ ಅಷ್ಟೇ ಮುಖ್ಯ ಹೇಗೆ? ವಿವರಿಸಿರಿ 3) ಸೀತಾಸ್ವಯಂವರದ ಸಂದರ್ಭವನ್ನು ವಿವರಿಸಿ

ಅಥವಾ

ರಾವಣನ ಪಾತ್ರ ಚಿತ್ರಣ 'ಮದುವೆಯ ಹಂದರ' ಕಾವ್ಯದಲ್ಲಿ ಹೇಗೆ ನಿರೂಪಿತವಾಗಿದೆ? ವಿವರಿಸಿರಿ

II ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಲ್ಲಿ ಮೂರನ್ನು ಸಂಕ್ಷಿಪ್ತ ರೂಪದಲ್ಲಿ ಉತ್ತರಿಸಿ

(6x3=18)

4) ಕಂಪಣನ ವ್ಯಕ್ತಿತ್ವ "ಕಂಪಣ" ಕವನದಲ್ಲಿ ಹೇಗೆ ಮೂಡಿದೆ? ವಿವರಿಸಿರಿ

ಅಥವಾ

'ಕಳಕೊಂಡವರು' ಕವನದ ಆಶಯವೇನು?

5) ಆನಂದಿಬಾಯಿಯವರ ವೈದ್ಯಕೀಯ ಶಿಕ್ಷಣ ಕಲಿಕೆಯ ಕನಸು ನನಸಾದ ಬಗೆಯನ್ನು ವಿವರಿಸಿರಿ

ಅಥವಾ

ಸಸಕಿಯ ದುರಂತದ ಬದುಕನ್ನು ಪೇಪರ್ ಹಕ್ಕಿ ಪ್ರಬಂಧವು ಹೇಗೆ ನಿರೂಪಿಸಿದೆ?

6) ಸ್ವಯಂವರದ ಸಂದರ್ಭದಲ್ಲಿ ಅತಿಕಾಯ, ಇಂದ್ರಜಿತು ಹೇಗೆ ವರ್ತಿಸಿದರು? ವಿವರಿಸಿರಿ

ಅಥವಾ

ತುಳುನಾಡಿನ ಸಂಪ್ರದಾಯ, ಆಭರಣ ಇತ್ಯಾದಿಗಳು 'ಮದುವೆಯ ಹಂದರ' ಕಾವ್ಯ ಒಳಗೊಂಡ ಬಗೆಯನ್ನು ವಿವರಿಸಿರಿ

III ಒಂದು ಪದ್ಯ ಭಾಗದ ಸಂದರ್ಭ ಸೂಚಿಸಿ ಪದ್ಯದ ಮಹತ್ವನ್ನು ವಿವೇಚಿಸಿ

(6x1=6)

7) ನೀನಗ್ನಿಮತ್ರಿಯಯ್ ಪವ ಮಾನತನೂಭವನೆನಾನಣಂ ಕೂಡೆ ಸುಸಂ ಧಾನಮರಿನ್<u>ರ</u>ಪರೊಳೆಂತನ ಲಾನಿಲಸಂಯೋಗಮುರಿಪದಿರ್ಕುಮೆ ಪಗೆಯಂ

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8) ಮಾತಿನ ಬೊಮ್ಮವು ತೂತಾದ ಮಡಕೆಯು ಪಾತಕದ ಸರವೆ ಇವು ಮೂರು ಲೋಕದೊಳ ಗೇತಕೆ ಜಯಕೆ ಸರ್ವಜ್ಞ

IV ಎರಡು ಪದ್ಯ ಸಾಲುಗಳ ಸಂದರ್ಭ ಸೂಚಿಸಿ ಸಾಲಿನ ಮಹತ್ವನ್ನು ವಿವೇಚಿಸಿ

(5x2=10)

- 9) ತನ್ನ ನೋಡಲಿ ಎಂದು ಕನ್ನಡಿ ಕರೆವುದೇ
- 10) ದೀಪ ಹಚ್ಚದೆಯೇ ಬೆಳಗಿದ ನಂದಾದೀಪ ಒಲವು
- 11) ಕಳಕೊಂಡವರು ನಾವು ಶುದ್ದ ಭಾಷಿಗರನ್ನು
- 12) ಬಚ್ಚಿಟ್ಟಿರುವೆ ಗರಿಗೆದರಿದ ಆಸೆಗಳ ಎದೆಗೂಡಿನೊಳಗೆ

Contd...2

(6x2=12)

V 💩 ಕೆಳಗಿನ ಎರಡರ ಕುರಿತು ಚಿಪ್ಪಣಿ ಬರೆಯಿರಿ

- 13) ಕವಿರತ್ನ ರನ್ನ
- 14) ಜ್ಯೋತಿ ಗುರುಪ್ರಸಾದ್
- 15) ಸರ್ವಜ್ಞನ ತ್ರಿಪದಿ
- 16) ಪುಣ್ಯದ ಜೀವ ಕವನದಲ್ಲಿ ಹೆಣ್ಣಿನ ಕುರಿತಾದ ಗ್ರಹಿಕೆಗಳು ಆ) ಕೆಳಗಿನ ಎರಡರ ಕುರಿತು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ (6x2=12)
- 17) ಕೊಡಗಿನ ಗೌರಮ್ಮ
- 18) ಝೆನ್
- 19) ಓ.ಎಲ್ ನಾಗಭೂಷಣಸ್ವಾಮಿ
- 20) ಎಂ. ಜಯಕರಭಂಡಾರಿ
- VI ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಒಂದೊಂದು ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿ (1x12=12)
- 21) ಗದಾಯುದ್ಧ ಕೃತಿಗಿರುವ ಇನ್ನೊಂದು ಹೆಸರೇನು?
- 22) 'ಕಳಕೊಂಡವರು' ಕವನವನ್ನು ರಚಿಸಿದ ಕವಿ ಯಾರು?
- 23) "ಚುಕ್ಕಿ ಚೆಲ್ಲುವ ಬೆಳಕು" ಕವನಸಂಕಲನವನ್ನು ಬರೆದ ಕವಿಯ ಹೆಸರೇನು?
- 24) ಜ್ಯೋತಿ ಗುರುಪ್ರಸಾದ್ ಅವರ ಒಂದು ಕೃತಿಯನ್ನು ಹೆಸರಿಸಿ
- 25) ಹೀಬ್ರೂ ಆದಿ ಮನುಷ್ಯನ ಭಾಷೆ ಎಂದವರು ಯಾರು?
- 26) ಜಪಾನಿನ ಹಿರೋಶಿಮಾ ನಗರಕ್ಕೆ ಅಣುಬಾಂಬು ದಾಳಿಯಾದ ವರ್ಷ ಯಾವುದು?
- 27) ರೆಭನ್ ಬುದ್ಧಿಸಂ ಲೇಖನವನ್ನು ಬರೆದವರು ಯಾರು?
- 28) ಆನಂದಿಬಾಯಿಯವರ ತಂದೆಯ ಹೆಸರೇನು?
- 29) ಮಂದಾರ ರಾಮಾಯಣನ್ನು ರಚಿಸಿದ ಕವಿ ಯಾರು?
- 30) ಜನಕಮಹಾರಾಜನ ಸಾಕುಮಗಳ ಹೆಸರೇನು?
- 31) ರಾವಣನ ತಾಯಿ ಯಾರು?
- 32) ಲಕ್ಷ್ಮಣ ವರಿಸಿದ ಕನೈಯ ಹೆಸರೇನು?

(2016 Batch onwards)

-20 A	Reg. No.	
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St Aloysius College (Autonomous) Mangaluru

B.Sc. Semester IV – Degree Examination July - 2022 SANSKRIT

Time:	3 hrs.	Max Marks: 100
1	इलोकत्रयं कर्णाटकभाषया आङ्ग्लभाषया वा अनुवादं कृत्वा विवृणुत	/ (3X8=24)
1.1	वालाग्रशतभागस्य शतधा कल्पितस्य च ।	
	भागो जीवः सः विज्ञेयः स चानन्त्याय कल्पते ॥	
1.2	अपुष्पाः फलवन्तो ये ते वनस्पतयः स्मृताः ।	
	पुष्पिणः फलिनश्चैव वृक्षास्तूभयतः स्मृताः ॥	
1.3	वक्त्रेण उत्पलनालेन यथोर्ध्वं जलमाददेत् ।	
	तथा पवनसंयुक्तः पादैः पिबति पादपः ॥	
1.4	योगेन चित्तस्य पदेन वाचां मलं शरीरस्य च वैद्यकेन ।	
	योऽपाकरोत्तं प्रवरं मुनीनां पतञ्जलिं प्राञ्जलिरानतोऽस्मि ॥	
1.5	चतुरिधकं ञातमष्टगुणं द्वाष्टिस्तथा सहस्राणां ।	
	अयुतद्वयविष्कम्भस्य आसन्नो वृत्तपरिणाहः ॥	
3	द्वयोः संस्कृतभाषया टिप्पणीं लिखत ।	
3.1	सस्यविभागाः ।	(2X5=10)
3.2		
	आयुर्वेदः ।	
3.3	योगञ्चास्त्रम् ।	
4	द्वयोः टिप्पणीं कर्णाटकभाषया आङ्गलभाषया वा लिखत ।	(3)(0-16)
4.1	प्राचीनभारतीयवि.नानम् ।	(2X8=16)
4.2	'यागः चिनवनिविगेशः' विकास	
4.3	अणितनाचन ।	JS COLLEGE LIBRARY ALURU- 575 003
2		
2.1	पञ्चानां वाक्यविवरणं कर्णाटकभाषया आङ्गलभाषया वा लिखत । ^{गणितं तावत विकास}	(5X5=25)
2.2	"वर्गानस्य मलम् ।	
2.3	ज्ञानप्रसादेन एषः अवगन्तव्यः ।	
2.4	मित्रो दाधार पृथिवीमृतद्याम् ।	
2.5	भवन्य सर्वभूतेष मानतः अ जिलिकाः	
2.6	अर्थाव शब्दि: जौनम	
2.7	भारतदेशः आपञ्चसहस्रवर्षेश्यः जारिकाः	
4./	भारतदेशः आपञ्चसहस्रवर्षेभ्यः ज्ञानविज्ञानयोः क्षेत्रमस्ति । आयुर्वेदस्तावत् अथर्ववेदस्य उपवेदत्वेन परिगणितः ।	
	अथववदस्य उपवदत्वेन परिगणितः।	

; .t

G 538.4

6.4

6.5

अन्धगजन्यायः ।

अरण्यरोदनन्यायः ।

Page No.2 G 139.4 $(5 \times 2 = 10)$ 2) ಖಂಚಾಯ್ ದೋನ್ ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ: ಅ) ಕುಡ್ಮಿ ಕೋಣ್? ಶಾಂಚೆಂ ಖಂಚೆಂಯ್ ಏಕ್ ವಿಶಿಷ್ಟ್ ಆಚರಣ್ ಬರಯಾ. ಆ) 'ಮಾಂಡೊ ಆನಿ ದುಲ್ಬೊರ್ ಎಕಾ ನಾಣ್ಯಾಚಿಂ ದೋನ್ ಮುಖಾಂ' ವಿವರ್ಗ್ಸಿಯಾ. ಇ) ಖಂಚಿಯ್ ಎಕ್ ಜಾನಪದ್ ಕಾಣಿ ಬರಯಾ. $(5 \times 1 = 5)$ 3) ಖಂಚಾಯ್ <u>ಎಕಾ</u> ಸವಾಲಾಕ್ ಜಾಪ್ ಬರಯಾ: ಅ) ಖಂಚ್ಯೊಯ್ ಪಾಂಚ್ ಹುಮಿಣ್ಯೊ ಸೊಡಯಾ. ಆ) ಖಂಚ್ಯೊಯ್ ಪಾಂಚ್ ವೊವಿಯೊ ಬರಯಾ. $(4 \times 1 = 4)$ 4) ಖಂಚಾಯ್ <u>ಎಕಾ</u> ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ. ಅ) ವಿಲಿಯಂ ಮಾಡ್ತಾ ಆ) ಬಸ್ತಿ ವಾಮನ್ ಶೆಣೈ UNIT - III (1×5=5) 1) ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ. ಅ) 'ದಿಶಾ' ಕಾದಂಬರಿಚೊ ಲೇಖಕ್ ಕೋಣ್? ಆ) ಕೊಡಾಚಿ ದಿಶಾ ಚುಕ್ತಾ? ಇ) ಪ್ರಮೀಳಾಚ್ಯಾ ಬಾಪಾಯ್ಕ್ ಖಂಯ್ಚಿ ಪಿಡಾ ಆಸ್ಲ್ಡಿ? ಈ) ಕಾದಂಬರಿಂತ್ ಕೋಣ್ ಜೀವ್ಘಾತ್ ಕರ್ತಾ? ಉ) ನೀತ ಥಂಯ್ ಘಡ್ಲಿ ಚೂಕ್ ಕಿತೆಂ? $(5 \times 2 = 10)$ 2) ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ. ಅ) ಭಾವ್ - ಭಯ್ದಿಚೊ ಸಂಬಂಧ್ ಆ) ಪ್ರಮೋದಾನ್ ನೀತಕ್ ಕಿತ್ಯಾಕ್ ಘಾತ್ ಕೆಲೊ? $(10 \times 1 = 10)$ 3) ಖಂಚಾಯ್ <u>ಎಕಾ</u> ಸವಾಲಾಕ್ ಜಾಪ್ ಬರಯಾ. ಆ) 'ದಿಶಾ' ಕಾದಂಬರಿಚೊ ಅರ್ಥ್ ಆನಿ ಶೆವೊಟ್ ಬರಯಾ. ಆ) 'ದಿಶಾ' ಕಾದಂಬರಿಂತ್ ಕೊಣಾಚಿ 'ದಿಶಾ' ಚುಕ್ತಾ? ಹಾಕಾ ಕಾರಣ್ ಕಿತೆಂ? **UNIT-IV** $(1\times5=5)$ ಅ) ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ. ಅ) ಭಾಶಾಂತರ್ ಮ್ಹಳ್ಯಾರ್ ಕಿತೆಂ? ಆ) ಗಾದ್ ಮ್ಹಳ್ಯಾರ್ ಕಿತೆಂ? ಇ) ಭಾಶಾಂತರಾಂತ್ ಕಿಶ್ಲಿಂ ವಿಧಾನಾಂ ಆಸಾತ್? ಆನಿ ಖಂಯ್ಕಿಂ? ಈ) ' I will go to Bangalore tomorrow' ಹೆಂ ವಾಕ್ಕ್ ಅನುವಾದ್ ಕರಾ.

ಉ) 'ಕಡಲ ತೀರದಲ್ಲಿ ವಾಸಿಸುವ ಜನರು ಮಿನು ಹಿಡಿಯುವ ಕಾಯಕವನ್ನು ನಡೆಸುತ್ತಿದ್ದಾರೆ' ಹೆಂ ಭಾಶಾಂತರ್ ಕರಾ.

ಇ) 'ದೀಸ್ ವೆತಾ ವೆತಾನಾ ರಾಯಾಚೊ ಘೊಡೊ ಗಾಡಾಂವ್ ಜಾಲ್ಲೊ ಖಂಯ್' ಗಾದ್ ವಿಸ್ತರಣ್ ಕರಾ.

ಅ) ಕೊಂಕ್ಡಿ ವಿಭಾಗಾಚ್ಯಾ ರುಪ್ಯಾಳ್ಯಾ ವರ್ಗ್ಸಾಚ್ಯಾ ಸಮಾರೋಪಾಚಿ ವರ್ಧಿ ಬರಯಾ.

ಆ) 'ಸಮಾಜೆಚ್ಯಾ ಉದರ್ಗತೆ ಖಾತಿರ್ ಯುವಜಣಾಂಚೊ ಪಾತ್ರ್' ಲೇಖನ್ ಬರಯಾ.

2) ಸವಾಲಾಂಕ್ ಜಾಪ್ ಬರಯಾ.

(5×3=15

(2019 Batch onwards)

G 140.4

Reg. No.

St Aloysius College (Autonomous)

Mangaluru

B.A./B.Sc./B.Com./B.B.A./B.C.A Semester IV - Degree Examination July - 2022

ADDITIONAL ENGLISH

Time: 3 hrs.

Max Marks: 100

UNIT - I

(Short Story)

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

- 1. Americans adapt various ways to free themselves from British English. True/False.
- 2. What was Arun doing when the boy met him?
- 3. How did the three hermits offer prayer before they met the Bishop?
- 4. What was the name of Dattas shop?
- 5. Who is William Slim addressing his speech to?

B. Answer any TWO of the following in about 100-150 words each:

(2x5=10)

- 1. According to William Slim, what does it mean to be an officer?
- 2. How did the Americans simplify the usage of English?
- 3. Had Arun really forgiven Deepak? Support your answer with evidence from the story 'The Thief.'
- 4. Attempt a character sketch of the frame maker in 'The Golden Frame.'

C. Answer any ONE of the following in about 200-250 words :

(1x10=10)

- 1. What is the purpose of the customer visiting the photo frame shop? What are the qualities that the customer attributes to the person in the photograph in the story 'The Golden Frame.'?
- 2. Why does Arun not hand the thief to the police? Do you think most people would have done that? In what way is he different from others?
- 3. How does R K Narayan explain Toasted English?

UNIT II

$^{\mathrm{II}}$ A. Answer the following in a word/phrase or a sentence: (Play)

(5x1=5)

- 1. Who wrote Dance Like A Man?
- 2. What did Ratna promise C V Suri?
- 3. What was Vishwas fathers occupation?
- 4. What happen to the Mridangam performer?
- 5. Who is Chenni amma?

B. Answer any TWO of the following in about 100-150 words each:

- 1. Explain the theme of gender discrimination in the play 'Dance Like A Man.'
- 2. Bring out the difference between the two generations portrayed in the play.
- 3. Explain the role of women in the play.
- 4. Bring out the stereotypical attitude of the society brought out through Amritlal with examples from the play.

C. Answer any ONE of the following in about 200-250 words: (1x10=10)

- Bring out the elements of humor in the play 'Dance Like A Man.'
- 2. Explain the gender bias portrayed in the play.
- 3. Give an account of the circumstances that lead to the death of Shankar.

UNIT III

(Novel)

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

- 1. Who is Marie?
- 2. Who is Raymond?
- Why did the Arabs follow Meursault, Marie and Raymond? 3.
- Who was the owner of the beach house? 4.
- Raymond asked Meursault to write a letter to his brother. True/False 5.

B. Answer any ONE of the following in 100-150 words each: (1x5=5)

- 1. Briefly describe the relationship between Salamano and his dog?
- 2. Why was Meursaults' boss displeased with him?
- 3. Give details about Maries visit to Meursaults when he was in prison.

C. Answer any ONE of the following in 200-250 words each: (1X10=10)

- 1. Give an account of the various things Meursault observes through his balcony after his mothers death.
- 2. What role does Hope play in the second half of the novel?
- 3. What is Meursault and Maries view on their relationship? How do they differ

UNIT IV

(Grammar and writing skills)

IV A. Write an arguementative essay on the following topic:

Is climate change the most serious threat to the world? (1X10=10)

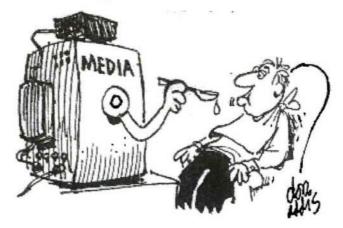
B. Write a movie review on one of the Superhero movies you have

(1X5=5)

C. You are the student president of your college. The college has invited a renowned Musician for the music fest. Write a speech introducing the chief guest: (5x1=5)

D. Analyze the following Cartoon

(5x1=5)



E. Rewrite the following adding Question tags:

 $(10x\frac{1}{2} = 5)$

- a) I am wrong.
- b) She is eating her lunch.
- c) The dog was missing.
- d) They will be visiting us.
- e) The doctor said he's unavailable.
- f) Let's begin.
- g) Red is not a great colour.
- h) He did not want to swim.
- i) I promised you.
- j) Mark can run fast.

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(2019 batch onwards)

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Reg. No:			

St Aloysius College (Autonomous)

Mangaluru

B.A./B.Sc./B.Com./BBA/BCA Semester IV – Degree Examination JULY - 2022

	MALAYALAM	
Time: 3	Hours	Max. Marks: 100
	രണ്ടെണ്ണം വ്യാഖ്യാനിക്കുക	$(2 \times 5 = 10)$
I. 1.	ഒത്തു പതിനെട്ടു കൈകൾ വീണ്ടും	
	ഭിത്തിപടുക്കും പണിതുടർന്നൂ	
2.	മകനേ,നീ നാട്ടു പൌരനാകാതൊരു	IUS COLLEGE LIBRARY
3.	കരളനലപം കിടന്നു പിടക്കവേ MAN	GALURU- 575 003
5.	കരതലത്തിന്നൂർന്നുപോയ് ചൂരലും.	
II.	രണ്ടെണ്ണത്തിനു കുറിപ്പു തയ്യാറാക്കുക	$(2\times5=10)$
4.	സ്കൂൾ വിദ്യാഭ്യാസത്തെക്കുറിച്ചുള്ള മുണ്ടശ്ശേരിയുടെ സൂരണക	અં
	സപ്രഹിക്കിക	
	സാഹിതൃലോകത്തിലേക്ക് കടന്നുവരാൻ മുണ്ടശ്ശേരിക്ക് പ്രചോദാമായിത്തീർന്നതെന്തൊക്കെ?	
6		iom
0.	ധിക്കാരിയാക്കുന്ന സാമൂഹൃന ത്രിയോട് എന്നത്താ	മുത വളരന്നു
	പരാണി സന്ദ്രം വ്യക്തമാക്കിക	$(2 \times 10 = 20)$
III.		നാഹചര്യം
7.	രണ്ടെണ്ണത്തിന് രണ്ടു പുറത്തിൽ കവിയാതെ ഉത്താരുമാടും പോ ഗുരു തൻെറ ഗതകാലസൂരണകളിലേക്ക് പോകാനിടയായ ന	00.1
	വിവരിക്കാക	
8.	അച്ഛൻ മകനോട് ആവിശ്യപ്പെട്ടതെന്ത്?	
9.	കാത്തിനെയാമാക്കത്തെട്ടാത്ത് (ദിമ (ദിർമ്മ ട്രാർദ്യാം മ	
	സഹോദരങ്ങളോടും ആവിഷ്യപ്പെട്ടതെന്ത്	
IV.	ം 2 — — തെ തെന്നെഴിതിക.	(2 × 15 =30) ഭാതിയും
10.		
	സമുദായവും ചെലുത്തിയ സ്വാധ സ്വാധം പ്ര	
	വിവരിക്കാന്നതെങ്ങിനെ?	
11.	'വണക്കമാസം' എന്നൊരേർപ്പാടിനെക്കുറിച്ച് മുണ്ടശ്ശേരി	
)റലിസവു <u>ം</u>
12.	2 0000000 00000000000000000000000000000	m?
	തളരാൻ തുടങ്ങിയ ഫ്യൂട്ലീറ്റവും വളരാന് രു തമ്മുലുള്ള ഏറ്റുമുട്ടൽ എന്ന് മുണ്ടശ്ശേരി വിശേഷിപ്പിച്ചതെന്തിരെ	
V		$(1 \times 15 = 15)$
V.	ഒരെണ്ണത്തിന് മൂന്നു പുറത്തിൽ കുറയാതെ ഉത്തരമെഴുതുക	
13.	ശ്രീകണ്ംൻനായരുടെ രാമായണത്രയത്തിൽ സാകേതം	കാരം മികച്ചു
	നാടകീയതകൊണ്ടും ചടുലമായ സംഭാഷണം കൊണ്ടും എപ്രം	
14	നിൽക്കാന്നു എന്ന് വാക്തമാക്കിയ	
17.	കൈകേയി സാഹചരൃത്തിൻെറ ഇരയാണ്– വൃക്തമക്കുക	\
VI.	ഒരെണ്ണത്തിന് മൂന്നു പുറത്തിൽ കുറയാതെ ഉത്തരമെഴുതുക	$(1 \times 15 = 15)$

15. കോവിഡാനന്തരലോകം

18. സ്ത്രീ ശാക്തീകരണം

16. വിദ്യാർഥികളും പാഠ്യേതര പ്രവർത്തനങ്ങളും

17. വായിച്ച പുസ്തകത്തിന് ഒരാസ്വാദനം തയ്യാറാക്കുക

St. Aloysius 2001 Batch (Autonomous)

Mangaluru

B.A./B.Sc. /B.Com./B.B.A./B.C.A. - Semester IV - Degree Examination July / August - 2022

FRENCH

Time: 3 hrs.

Max Marks: 100

Répondez aux 10 questions

2x10=20

- 1. Ecrivez l'un des résultats de la révolution française.
- 2. Où nous trouvons le tableau de Monalisa?
- 3. Quand la construction de la cathédrale notre dame a-t-elle commencé ?
- 4. La tour Eiffel Construite en deux ans par -----
- 5. Pourqui une entrée est difficile dans la vie professionnelle ?
- 6. Qui a écrit la chanson « Ma France à moi » ?
- 7. Élaborez- CDD
- 8. Nommez les deux partie politique en France.
- 9. Ecrivez une région connu pour le vin français.
- :10. Qu'est-ce que beaucoup de salariés des enterprise craignent ?
- 11. Quele est la salarie (SMIC) minimum en France ?
- 12. Quand les français ont un sentiment d'injustice ?

Répondez aux 5 questions en 7-8 lignes

6×5=30

- 1. Parlez de la révolution Française.
- 2. Quel type de taches ménagères vous faites souvent à la maison.
- 3. Expliquez le système d'éducatif en France.
- 4. Quelle métier aimeriez-vous faire dans votre vie?
- 5. Parlez de l'économie en France.
- 6. Enumérez et discutez l'alimentation française.
- 7. Parlez de la literature française.

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III. Mettez les verbes au temps indique

1x10 = 10

- 1. Jean...... (acheter, future simple) le pain à la boulangerie.
- 2. Vous(aimer, future simple) la ville ou la campagne. ?
- 3. Clotilde.....(sortir, passé composé) du balcon.
- 4. Ils (connaître, passé composé) le rue de chateau.
- 5. Esc-ce que tu...... (porter, présent) des lunnettes.
- 6. Elles (travailler, future proche) dans un restaurant. .
- 7. Nous (manger, imparfait) les poisons pour le repas
- 8. Tu (pouvoir, present) me dire l'adresse?
- 9. Nous(habiter, Future proche) dans une jolie maison.
- 10. Je(être. imparfait) trés sympathiques.

Complétez avec le comparatif IV.

1x5 = 5

- 1. Moi et ma sœur chantent (-)
- 2. Sylvie court (-vite) Ronald
- 3. Les Marocains et les Indiens boivent du café (=)
- 4. Le fauteuil et la chaise (+ confortable)
- 5. L'Océan Atlantique et L'Océan Pacifique (grand +)

Remplacez les mots soulignés avec un pronom possessif V.

1x5 = 5

- 1. Ma tante est belle.
- 2. Ton ecole est ici.
- 3. Votre chambre est grande.
- 4. Leurs chaussures sont blancs.
- 5. Notre ami fête son 20 ans

Repondez en utilisant les pronoms possessifs

1x5 = 5

- 1. C'est son parapluie?
- 2. Tu as tes documents?
- 3. Je n'ai pas de livre. Tu peux me prêter?
- 4. Elle s'occupe de ses affaires et vous vous occupez de.....
- 5. Tu as rangé tes affaires et moi j'ai rangé.......

VII. Repondez en utilisant pronoms dèmonstratifs.

1x5 = 5

- 1. À qui est ce vélo? cede Sonia.
- 2. Ce roman est trop court, et est trop long.
- 3. Les oranges de Californie coûtent moins cher que de Floride.
- 4. J'ai acheté deux cafés ;est décaféiné.
- 5. Je ne peux pas décider entre cette voiture et

VIII. DIALOGUE

1x10 = 10

Vous partez en vacances pour deux mois. Une amie vous demande si vous accepteriez de prêter votre appartement à un de ses cousins. Mais peut-on avoir confiance en lui?

(à deux). Avec un(e) ami(e), vous entrez dans un magasin pour acheter un nouveau téléphone portable (ou un nouveau vêtement, etc.). Regardez, commentez, choisissez.

Lisez le texte et répondez aux questions IX.

(10)

Des gilets de haute visibilité de couleur jaune portés par les manifestants — est un mouvement de protestation non structuré apparu en France en Octobre 2018. Ce mouvement social spontané trouve son origine dans la diffusion, principalement sur les réseaux sociaux, d'appels à manifester contre l'augmentation du prix des carburants automobiles issue de la hausse de la taxe intérieure de consommation sur les produits énergétiques (TICPE).

À partir du 17 novembre 2018, la contestation s'organise autour de blocages de routes et rondspoints et de manifestations tous les samedis. Ces protestations mobilisent surtout les habitants des zones rurales et périurbaines, mais s'organisent également dans des métropoles, où se produisent plusieurs épisodes violents, notamment sur l'avenue des Champs-Élysées.

Rapidement, les revendications du mouvement s'élargissent aux domaines sociaux et politiques. Lors des rassemblements, le plus souvent non déclarés, plusieurs milliers de personnes sont blessées, aussi bien du côté des manifestants que des forces de l'ordre. Des associations comme Amnesty International critiquent une conduite inadaptée du maintien de l'ordre et des institutions comme l'ONU et le Conseil de l'Europe s'interrogent sur l'usage d'armes comme les LBD et les grenades de désencerclement.

Face à l'ampleur de ce mouvement, l'exécutif renonce à la hausse de la TICPE. Le président de la République, Emmanuel Macron, annonce ensuite des mesures, entérinées par la loi portant mesures d'urgence économiques et sociales, puis lance le grand débat national, à l'issue duquel il annonce de nouvelles réformes. Cette réponse ne met pas fin au mouvement : des mobilisations, moins nombreuses, persistent sous différentes formes.

Sous la présidence de François Hollande, l'instauration de la taxe carbone ne rencontre pas une forte hostilité dans l'opinion publique, le prix du pétrole étant plutôt en baisse lors de son quinquennat. Mais entre 2017 et 2018, le prix du baril passe de 40 à 80 dollars environ; la hausse des tarifs s'élève à 28 % pour le fioul domestique, à 22 % pour le gaz naturel, à 21 % pour le diesel, à 13 % pour l'essence³. Le phénomène est amplifié par une augmentation de la taxe carbone, prévue dès sa mise en place mais que le gouvernement d'Édouard Philippe décide d'accélérer.

Alors qu'en 2017, le ministre de la Transition écologique, Nicolas Hulot, n'avait pas eu de difficultés à faire voter les hausses de la fiscalité énergétique, le débat parlementaire est beaucoup plus vif en 2018, *La Tribune* indiquant que « l'incompréhension d'une partie des citoyens provoque une véritable fronde qui se cristallise sur le prix des carburants ». Mais le gouvernement ignore les avertissements de la Commission nationale du débat public, consécutifs au débat public sur la programmation pluriannuelle de l'énergie, sur l'acceptabilité de la hausse de la taxe carbone, qu'elle juge pénalisante pour « les plus dépendants et les plus captifs aux énergies fossiles » en l'absence de refonte de la fiscalité générale.

1. Où se trouve son origine ce mouvement?

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- 2. Ce mouvement, que demande-t-il?
- 3. Champs-Élysées est le point de départ de la manifestation. Vrai ou faux ?
- 4. Pour quelle raison l'institution internationale critique le gouvernement ? (2)
- 5. Qui est Emmanuel Macron?
- 6. Qui sont affecté par la hausse des prix?
- 7. Qu'est-ce-que La Tribune indique ?
- 8. Donnez la forme nominale du verbe augmenter
- 9. Trouvez la former verbale de blessure. Ecrivez l'infinitif du verbe

(2019 Batch Onwards) Reg. No:

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St Aloysius College (Autonomous)

Mangaluru

B.A./B.C.A./B.Sc.- Semester IV – Degree Examination July/August - 2022

FOUNDATION COURSE IN HUMAN RIGHTS AND VALUE EDUCATION

Time: 2 Hours

Max. Marks: 50

PART - A

HUMAN RIGHTS

 Answer the following in one sentence each. ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳನ್ನು ಒಂದು ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿರಿ.

(5x1=5)

- Which day is celebrated as human rights day? ಮಾನವ ಹಕ್ಕುಗಳ ದಿನವೆಂದು ಯಾವ ದಿನವನ್ನು ಆಚರಿಸಲಾಗುತ್ತದೆ?
- 2. Which day is celebrated as International consumer day? ಆಂತರಾಷ್ಟ್ರೀಯ ಗ್ರಾಹಕರ ದಿನವನ್ನು ಯಾವಾಗ ಆಚರಿಸಲಾಗುತ್ತದೆ?
- 3. Who founded PUCL? ಪಿ ಯುಸಿಎಲ್ ನ್ನು ಸ್ಥಾಪಿಸಿದವರಾರು?
- 4. Who appoints the chairman and members of NHRC? ಎನ್ ಎಚ್ ಆರ್ ಸಿ ಯ ಅಧ್ಯಕ್ಷರು ಮತ್ತು ಇದರ ಸದಸ್ಯರನ್ನು ಯಾರು ನೇಮಿಸಿತ್ತಾರೆ?
- 5. Mention the logo of Amnesty international. ಅಂತರಾಷ್ಟ್ರೀಯ ಕ್ಷಮದಾನ ಸಂಸ್ಥೆಯ ಲಾಂಛನವನ್ನು ಬರೆಯಿರಿ.

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- II. Answer any <u>ONE</u> of the following in 8-10 sentences each. (1x5=5) ಕೆಳಗಿನ ಯಾವುದಾದರೂ <u>ಒಂದು</u> ಪ್ರಶ್ನೆಯನ್ನು 8 –10 ವಾಕ್ಯಗಳಲ್ಲಿ ಬರೆಯಿರಿ.
- 6. Write a short note on ICCPR (International Covenant on Civil and Political rights).

 ಐಸಿಸಿಪಿಆರ್ ಇದರ ಬಗ್ಗೆ ಲಘಾ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ.
- 7. Who are refugees? Discuss about their rights. ನಿರಾಶ್ರಿತರೆಂದರೆ ಯಾರು? ಅವರ ಹಕ್ಕುಗಳ ಬಗ್ಗೆ ಚರ್ಚಿಸಿ ಬರೆಯಿರಿ.
- III. Answer any <u>ONE</u> of the following in 15-20 sentences each. (1x10=10) ಕೆಳಗಿನ ಯಾವುದಾದರೂ <u>ಒಂದು</u> ಪ್ರಶ್ನೆಯನ್ನು 15 –20 ವಾಕ್ಯಗಳಲ್ಲಿ ಬರೆಯಿರಿ.
 - 8. Explain the remedies available against the violation of human rights in India. ಮಾನವ ಹಕ್ಕುಗಳ ಉಲ್ಲಂಘನೆಯ ವಿರುದ್ಧದ ಪರಿಹಾರೋಪಾಯಗಳನ್ನು ವಿವರಿಸಿರಿ.
 - 9. Discuss the role of students in promoting human rights. ಮಾನವ ಹಕ್ಕುಗಳ ಅಭಿವೃದ್ಧಿಯಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಗಳಾದ ನಿಮ್ಮ ಪಾತ್ರವನ್ನು ವಿವರಿಸಿರಿ.

- IV. Answer any <u>ONE</u> of the following in 30-35 sentences each. (1x15=15) ಕೆಳಗಿನ ಯಾವುದಾದರೂ <u>ಒಂದು</u> ಪ್ರಶ್ನೆಯನ್ನು 30 –35 ವಾಕ್ಯಗಳಲ್ಲಿ ಬರೆಯಿರಿ.
- 10. Explain the classification of human rights. ಮಾನವ ಹಕ್ಕುಗಳ ವರ್ಗೀಕರಣವನ್ನು ವಿವರಿಸಿರಿ.
- 11. Discuss the powers and functions of Amensty international. ಅಂತರಾಷ್ಟ್ರೀಯ ಕ್ಷಮದಾನ ಸಂಸ್ಥೆಯ ಅಧಿಕಾರ ಮತ್ತು ಕಾರ್ಯಗಳನ್ನು ವಿವರಿಸಿರಿ.

PART - B ST ALOYSIUS COLLEGE LIBRARY MANGALURU- 575 003

VALUE EDUCATION

- I. Answer any <u>ONE</u> of the following in not less than a page. (1x5=5) ಕೆಳಗಿನ ಯಾವುದಾದರೂ <u>ಒಂದು</u> ಪ್ರಶ್ನೆಯನ್ನು ಒಂದು ಪುಟಕ್ಕೆ ಮೀರದಂತೆ ಬರೆಯಿರಿ.
- 12. What is social media? Mention the different types of social media? ಸಾಮಾಜಿಕ ಮಾಧ್ಯಮ ಎಂದರೇನು? ಸಾಮಾಜಿಕ ಮಾಧ್ಯಮದ ವಿಧಗಳನ್ನು ಬರೆಯಿರಿ.
- 13. Write a short note on protection of children from sexual offences (POCSO) Act 2012. ಲೈಂಗಿಕ ಅಪರಾಧಗಳಿಂದ ಮಕ್ಕಳ ರಕ್ಷಣೆ ಕಾಯ್ದೆ 2012 ಇದರ ಬಗ್ಗೆ ಲಘಾ ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ
- II. Answer any <u>ONE</u> of the following in not less than two pages. ಕೆಳಗಿನ ಯಾವುದಾದರೂ <u>ಒಂದು</u> ಪ್ರಶ್ನೆಯನ್ನು ಎರಡು ಪುಟಕ್ಕೆ ಮೀರದಂತೆ ಬರೆಯಿರಿ.
- 14. What is professional ethics? Explain the attributes of professional ethics. ವೃತ್ತಿಪರ ನೀತಿಶಾಸ್ತ್ರ ಎಂದರೇನು? ಇದರ ಗುಣಲಕ್ಷಣಗಳನ್ನು ವಿವರಿಸಿರಿ.
- 15. What is corruption? What are the ways (skills) to curb corruption? ಭ್ರಷ್ಟಾಚಾರ ಎಂದರೇನು? ಭ್ರಷ್ಟಾಚಾರವನ್ನು ನಿಗ್ರಹಿಸಲು ಬೇಕಾಗಿರುವ ಮಾರ್ಗೋಪಾಯಗಳು ಯಾವುವು?