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Question Paper Version : B

First / Second Semester B.E./B.Tech. Degree Examination,
Dec.2024/Jan.2025

Indian Constitution

Time: 1 hr.]

[Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

1. Answer all the fifty questions, each question carries one mark.
2. Use only Black ball point pen for writing / darkening the circles.
3. For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.
4. Darkening two circles for the same question makes the answer invalid.
5. Damaging/overwriting, using whiteners on the OMR sheets are strictly prohibited.

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1. Which Article of Indian Constitution lays down the method of Amendment?
a) Article 360 b) Article 368 c) Article 370 d) Article 376
 2. National Emergency proclamation under Article 352 is issued in case of
a) War b) External Aggression
c) Armed rebellion d) All of these
 3. Governor addresses his resignation to
a) The Prime Minister b) The President
c) Vice President d) Chief Minister
 4. Election Commission of India conducts election to
a) Parliament
b) State Legislatures
c) Office of the President and Vice President
d) All of these
 5. The President is empowered to dissolve :
a) Only Lok Sabha b) Only Rajya Sabha
c) Both Lok Sabha and Rajya Sabha d) None of these
 6. On what grounds the Judges of Supreme Court are removed?
a) Unconstitutional b) Judicial Review
c) Proved Misbehaviour , incapacity d) None of these
 7. How many times the President of India can seek re – election to his post?
a) Once b) Three times
c) Two times d) Any number of times

8. Collectively the cabinet is responsible to the
a) Prime Minister b) Lok Sabha c) Parliament d) President
9. This is not a Fundamental duty
a) Respect to National Flag and National Anthem
b) Safeguard Public property
c) Respect to elders and teachers
d) To preserve culture and heritage of India.
10. President of India address the joint session of both houses of Parliament in
a) First session b) Second session c) Third session d) None of these
11. The Chief Justice and other Judges of High Court continue in office until they attain the age of
a) 60 Years b) 62 Years c) 58 Years d) 65 Years
12. What is the system of legislature in the State of Karnataka?
a) Bicameral b) Unicameral c) Tricameral d) None of these
13. In our Country, the amendment of the Constitution can be initiated by the
a) Parliament b) People c) President d) Supreme Court
14. To declare national emergency, a decision must be taken by
a) Chief Justice b) Lok Sabha c) Rajya Sabha d) Union Cabinet
15. The speaker of Lok Sabha shall be elected by the
a) Member of Rajya Sabha b) President
c) Members of Lok Sabha d) Vice - President
16. The size of the ministry in a State is decided by the
a) Governor b) Chief Minister
c) Chief Justice of High Court d) Members of Legislative Assembly
17. Who presides over the joint session of Parliament?
a) Speaker of Lok Sabha b) President
c) Vice – President d) Prime Minister
18. The maximum number of Minister, including the Chief Minister in a State shall not be more than of Vidhan Sabha's strength.
a) 10 % b) 12 % c) 15 % d) 20 %
19. Which amendment of the Indian Constitution lowered the voting age from 21 to 18?
a) 42nd Amendment b) 44th Amendment c) 73rd Amendment d) 61st Amendment
20. Which one of the following Amendments to the Indian Constitution is called a Mini Constitution?
a) 24th Amendment b) 38th Amendment c) 39th Amendment d) 42nd Amendment
21. The Original constitution classified the Fundamental Rights, into seven categories but not there are only
a) Three categories b) Four categories c) Five categories d) Six categories

22. India has which system of Government?
a) Presidential b) Monarchical c) Parliamentary d) Autocratic
23. The Government of India Act introduced a system of diarchy in the provinces ; Dyarchy means a system of
a) Responsible Government b) Dictatorship
c) Double Government d) Aristocratic Government
24. Reservation in promotion to SC's and ST's permitted in
a) Article 14 b) Article 15 c) Article 16 d) Article 18
25. Which of the following is not covered under Article 20, protection in respect of conviction of offence?
a) Right to livelihood b) No ex – post – facto
c) No double jeopardy d) No self - incrimination
26. Article 19(1) (a) guarantees freedom of speech and expression to
a) All citizen of India b) All Indian and foreigners
c) Only person below 21 years of age d) Only person attained 60 years
27. Cultural and Educational Rights are dealt in
a) Article 30 and 31 b) Article 27 and 28 c) Article 29 and 30 d) Article 14 and 15
28. A new chapter IVA on Fundamental Duties was inserted in the Indian Constitution in
a) 1972 b) 1976 c) 1980 d) 1984
29. Which one of the following Fundamental Right was described by Dr. A. R. Ambedkar as the heart and soul of Constitution?
a) Right to Equality b) Right to Religion
c) Right to Constitutional remedies d) All of these
30. Uniform civil code for all citizen is
a) Directive principles b) Fundamental Duties
c) Fundamental Rights d) None of these
31. The idea of the Constitution of India was flashed for the first time by :
a) M.N. Roy b) Motilal Nehru c) B. R. Ambedkar d) M.K. Gandhi
32. The first session of the Constitution Assembly was held on :
a) 25 December 1949 b) 26 January 1949
c) 09 December 1946 d) 11 November 1946
33. Which one of the following acted as the Provisional President of Constituent Assembly?
a) Dr. Rajendra Prasad b) Jawaharlal Nehru
c) K.M. Munshi d) Dr. Sachidananda Sinha
34. The maximum influence on the Constitution of India was exercised by :
a) The Constitution of USA b) The Constitution of UK
c) The Government of India Act 1935 d) The Constitution of Ireland

35. _____ is the key to open the minds of the makers of the Constitution.
a) Fundamental Rights b) Directive principles of State Policy
c) Preamble d) Fundamental Duties
36. This is not the right of the arrested person
a) To produce before the magistrate immediately
b) To inform him the grounds of his arrest
c) To consult his lawyer
d) To product before the magistrate within 24 hours of his arrest.
37. Under which Amendment, a new Article 21 – A was inserted and it provides for “Right to Education” was made a Fundamental Rights.
a) 76th Amendment b) 86th Amendment c) 91st Amendment d) 42nd Amendment
38. The concept of secular state implies
a) No religion b) Dictatorship
c) Neutrality of religion d) Adoption of a single religion
39. The federal features of the Indian Constitution provides for :
a) Distribution of legislative powers between the Union Government and the State Government.
b) Division of powers between Executive and Judiciary
c) Distribution of powers between Lok Sabha and Rajya Sabha
d) Distribution of powers between Prime Minister and Cabinet.
40. How many times the Preamble of the Indian Constitution has been amended?
a) Once b) Twice c) Trice d) Not amended
41. The Directive principles of State Policy
a) Cannot be enforced in any count
b) Can be enforced in High Courts only
c) Can be enforced in Supreme Court only
d) Can be enforced in both Supreme Court and High Court.
42. The Chief justice of Supreme Court of India is appointed by
a) Prime Minister b) President
c) Council of Ministers d) Parliament
43. To whom the Indian Constitution has given the power to pardon the sentence of death?
a) Chief Justice of Supreme Court b) Governor of State Government
c) President of Union Government d) Both (b) and (c)
44. Fundamental duties are applicable to all ____
a) States b) Foreigners c) Citizens d) All of these
45. President can resign to his office by giving his resignation to
a) Chief Justice of India b) Prime Minister
c) Speaker of Lok Sabha d) Vice President

46. The Vice President has
a) Executive powers
b) Legislative powers
c) Right to preside over Rajya Sabha
d) Right to grant pardon
47. The members of Lok Sabha are elected for a term of
a) 4 years
b) 6 years
c) 12 years
d) 5 years
48. Who appoints the Chairman of the Union Public Service Commission?
a) President
b) Prime Minister
c) Parliament
d) Chief Justice of India
49. The Supreme Court has original jurisdiction to decide
a) Dispute between two or more states
b) Dispute between India and Pakistan
c) Dispute arises at different levels of self government
d) Criminal cases filed directly to Supreme Court by any citizen.
50. President of India is
a) Real executive
b) Head of cabinet
c) Head of the Government
d) Nominal Executive

CBCS SCHEME

BSFHK158/258

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Question Paper Version : A

First/Second Semester B.E./B.Tech Degree Examination,
Dec.2024/Jan.2025

Scientific Foundations of Health

Time: 1 hr.]

[Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

1. Answer all the fifty questions, each question carries one mark.
2. Use only **Black ball point pen** for writing / darkening the circles.
3. For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.
4. Darkening two circles for the same question makes the answer invalid.
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1. Globalization , growth of trade unions, public relations and positive atmosphere are some factors that enable
 - a) Good friendship
 - b) Isolation from society
 - c) Happiness
 - d) Communication growth
2. Which of the following is NOT a characteristic of addiction?
 - a) Denial
 - b) Negative consequences
 - c) Loss of control
 - d) Habitual behavior
3. Denial is person's
 - a) Experience of a blackout episode or memory loss.
 - b) Inability to perceive that a behavior is self – destructive
 - c) Failure to stop an addictive behavior
 - d) Change in usual pattern of drinking or drug use
4. Temporary physical and psychological symptoms that occur when use of an addictive substance is discontinued is
 - a) Relapse
 - b) Compulsion
 - c) Withdrawal
 - d) Addiction
5. Chemicals that relay messages (impulses) from one nerve cell to another or to other cells are
 - a) Enzymes
 - b) Neuro transmitters
 - c) Synapses
 - d) Chemoreceptors

6. What is the definitions of overweight?
 - a) $BMI > 25 \text{ kg/m}^2$
 - b) $BMI = 25 \text{ kg/m}^2$
 - c) $BMI 25 - 29.9 \text{ kg/m}^2$
 - d) $BMI < 25 \text{ kg/m}^2$
7. Communication is a part of ____ skills.
 - a) Soft
 - b) Hard
 - c) Short
 - d) Rough
8. Which of these factors is not required for communication growth?
 - a) Globalisation
 - b) Negative Atmosphere
 - c) Growth size of organizations
 - d) Public relations
9. Body language plays an important role in
 - a) Communication
 - b) Judgment
 - c) Both (a) & (b)
 - d) None of these
10. This causes tunnel vision.
 - a) Smoking
 - b) Alcohol
 - c) Barbiturates
 - d) Vitamins A
11. This causes maximum accumulation of fat in the liver.
 - a) Meat & Egg
 - b) Alcohol
 - c) Saturated fat
 - d) Starch
12. Using abbreviations in communication leads to which type of communication barrier.
 - a) Language / Linguistic
 - b) Physical
 - c) Cultural
 - d) Organizational
13. Obesity occurs due to ; More consumption of
 - a) Calorie
 - b) Protein
 - c) Vitamins
 - d) None of these
14. What is intimately related?
 - a) Body & health
 - b) Body & mind
 - c) Disease & Health
 - d) Body & Spiritual values
15. What influences your health?
 - a) Heredity
 - b) Environment
 - c) Physical environment
 - d) All of these
16. A lack of judgment regarding whether a particular substance or behavior will be healthy of damaging to oneself is known as
 - a) Denial
 - b) Obsession
 - c) Loss of control
 - d) Compulsion
17. Which of the following diseases is transmitted by an insert vector?
 - a) Malaria
 - b) HIV/AIDS
 - c) CTB
 - d) None of these
18. Disease of the heart, joint and nervous system is called
 - a) Degenerative diseases
 - b) Mental diseases
 - c) Communicable diseases
 - d) Deficiency diseases

19. How often one must have a routine body checkup?
a) Once in 10 year b) Twice a year c) Once a year d) Once in 5 year
20. How do puzzles help you?
a) Physical exercise b) They are a time pass
c) They help exercise the brain d) They help you learn numbers
21. Alcohol based hand rub is the preferred method of hand hygiene.
a) False b) True c) Not sure d) None of these
22. Is addiction a
a) Mental disorder b) Physical disorder c) Both (a) & (b) d) None of these
23. Important roles of life are
a) Feeling happy b) Enjoy life c) Fighting diseases d) All of these
24. Signs of mental illness are
a) Abnormal thinking, perception and judgment
b) Abnormal changes in feeling and memory
c) Both (a) & (b)
d) Abnormal changes in behavior towards others.
25. People suffering from mental diseases in India.
a) 1 – 1.5 millions b) 6 – 7 millions c) 10 – 15 millions d) 60 – 70 millions
26. Social health hazards includes.
a) Stigma b) Anti – social behaviour
c) Higher crime records d) All of these
27. Hyper obesity value in terms of BMI.
a) > 25 b) 40 c) > 40 d) < 40
28. Goals of communication
a) To inform, to persuade b) To inform, fear of offending
c) To persuade, fear of offending d) None of these
29. In which year WHO articulated the right to health in its constitution?
a) 2000 b) 1946 c) 1952 d) 1987
30. Spiritual health refers
a) Body composition b) Meditation c) Exercising d) All of these
31. When findings are difficult to generalize to the world outside of the laboratory, we say the research is lacking in _____ validity.
a) Ecological b) Economical c) Empirical d) Experimental

44. What is the goal of social engineering?
a) Sabotage a person's social media
b) To build trust
c) To gain vital personal information
d) To catfish someone.
45. After drinking Alcohol, consumption of this leads to death.
a) Morphine
b) Opium
c) Onion
d) None of these
46. How is substance use disorder treated?
a) Multiple types of treatment
b) Alcohol drinking
c) Recognition of problem
d) Both (a) & (c)
47. What are proactive factors for addictions?
a) Positive relationship
b) Drug experimentation
c) Community poverty
d) All of these
48. Objectives of communication skill are
a) Active listening skill
b) Aware of own communication barrier
c) Both (a) & (b)
d) None of these
49. Post Correspondence Problem (PCP) was originally developed as
a) A drug to induce vomiting
b) An anesthetic used in veterinary practice
c) An anesthetic with which person remains conscious but feels no pain
d) An experimental psychiatric medication.
50. Which of the following statement about amphetamines is true?
a) They are not addictive
b) They are stimulants
c) They have no known side effects
d) They cause drop in heart rate and respiration rate.

CBCS SCHEME

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BPOPS103/203

First/Second Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025

Principles of Programming using C

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. M : Marks , L: Bloom's level , C: Course outcomes.

Module – 1				M	L	C
Q.1	a.	List and explain any 5 characteristics of a computer.	10	L2	CO1	
	b.	Draw the block diagram of a computer, explain all of its blocks such as input, output storage and CPU.	10	L2	CO1	
OR						
Q.2	a.	Explain the following programming paradigms. i) Procedural programming ii) Object-oriented programming	10	L2	CO1	
	b.	Explain the structure of a C program with an example.	10	L2	CO1	
Module – 2						
Q.3	a.	Explain Arithmetic and Relational operators of C with an example.	10	L2	CO2	
	b.	Develop a complete C program to find the real roots of a quadratic equation by accepting the coefficients.	10	L3	CO2	
OR						
Q.4	a.	Explain logical and assignment operators of C with an example.	10	L2	CO2	
	b.	Write a C program to find the factorial of a given integer n. Explain the computation process.	10	L3	CO2	
Module – 3						
Q.5	a.	Write a C program to find the sum and average of n integers.	10	L3	CO3	
	b.	Explain the concept of function declaration and function definition with an example.	10	L2	CO5	
OR						
Q.6	a.	Write a C program to add two m×n matrices.	10	L3	CO3	
	b.	Explain the following with an example. i) Passing the entire array ii) Passing the individual elements of an ID array.	10	L2	CO5	
Module – 4						
Q.7	a.	Write a C program to find the length of a given string without using inbuilt function.	10	L2	CO3	
	b.	What is a pointer? Show the use of two pointer operators & and *.	10	L2	CO3	

OR					
Q.8	a.	Write a C program to compare two given string S1 and S2 without using inbuilt function.	10	L3	CO3
	b.	How do you declare and initialize a pointer in C? Show with an example.	10	L2	CO3
Module – 5					
Q.9	a.	What is recursion? Give one example.	10	L2	CO5
	b.	Differentiate between arrays and structures in C.	10	L3	CO4
OR					
Q.10	a.	Explain the process of opening and closing a file in C.	10	L2	CO5
	b.	Differentiate between structure and unions in C with example programs.	10	L3	CO4

CBCS SCHEME

USN

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BESCK204C

Second Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025

Introduction to Electronics and Communication

Time: 3 hrs.

Max. Marks: 100

**Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.**

Module – 1				M	L	C
Q.1	a.	With neat block diagram, explain the working of a DC power supply also mention the principal components used in each block.	10	L1	CO2	
	b.	With neat circuit diagram and waveform, explain the working operation of a Bi-phase rectifier circuit.	10	L1	CO2	
OR						
Q.2	a.	Define feedback. What are the different types of feedback available, what are the advantages of negative feedback used in amplifier? Derive the overall gain for negative feed back.	10	L2	CO3	
	b.	Define amplifier, what are the different types of amplifier used in real time.	10	L1	CO2	
Module – 2						
Q.3	a.	What is an oscillator and what are the conditions to be satisfied for a device to work as an oscillator.	10	L1	CO2	
	b.	With neat diagram and waveform explain the working of RC phase shift oscillator.	10	L1	CO3	
OR						
Q.4	a.	Explain the concept of openloop voltage gain input and output resistance, input offset voltage and slew rate of op-amp with relevant diagram.	10	L1	CO2	
	b.	What is a operation amplifier? What are the op-amp characteristics in real time?	10	L1	CO2	
Module – 3						
Q.5	a.	Design the AND, OR, NOT gate with the help of truth table.	8	L1	CO2	
	b.	Using 10 complement subtract 72532-3250.	4	L1	CO1	
	c.	Given two binary number X = 1010100 and Y = 1000011 perform the subtraction i) X-Y ii) Y-Y using 2's complement.	8	L2	CO2	

BESCK204C					
OR					
Q.6	a.	Express the Boolean $F = A + B'C$ in a sum of minterms and $G = xy + x'z$ in a product of maxterms.	10	L2	CO2
	b.	Design a half adder by constructing the truth table and simplify the output equations.	10	L1	CO2
Module – 4					
Q.7	a.	i) Write any 5 differences between RISC and CISC processor. ii) Write any 5 differences between Microprocessor and Microcontroller.	10	L2	CO3
	b.	Write the differences between embedded system vs general computing system.	10	L2	CO2
OR					
Q.8	a.	With neat diagram, explain the major elements of embedded system.	10	L1	CO2
	b.	Define embedded system and explain the classification of embedded system.	10	L1	CO2
Module – 5					
Q.9	a.	With neat diagram, explain the basic blocks used in communication system.	10	L1	CO2
	b.	What are the advantages and disadvantages of digital communication over analog communication?	10	L1	CO2
OR					
Q.10	a.	Explain the types of communication system available with neat diagram.	10	L1	CO2
	b.	Explain the need for modulation and explain briefly the types of modulation techniques used for communication.	10	L1	CO1

Second Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025
Mathematics – II for CSE Stream

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. VTU Formula Hand Book is permitted.

3. *M* : Marks , *L*: Bloom's level , *C*: Course outcomes.

Module – 1			M	L	C
Q.1	a.	Evaluate $\int_{-c}^c \int_{-b}^b \int_{-a}^a (x^2 + y^2 + z^2) dz dy dx$	07	L2	CO1
	b.	Prove that $\beta(m, n) = \frac{\mathbf{m} \cdot \mathbf{n}}{(\mathbf{m} + \mathbf{n})}$	07	L2	CO1
	c.	Evaluate $\int_0^\infty \int_0^\infty e^{-(x^2+y^2)} dy dx$ by changing to polar coordinates.	06	L3	CO1
OR					
Q.2	a.	Evaluate $\int_0^{4a} \int_{\frac{x^2}{4a}}^{2\sqrt{ax}} xy dy dx$ by change the order of integration.	07	L2	CO1
	b.	Show that $\int_0^{\pi/2} \frac{d\theta}{\sqrt{\sin \theta}} \times \int_0^{\pi/2} \sqrt{\sin \theta} d\theta = \pi$	07	L2	CO1
	c.	Write a program to find the volume of the tetrahedron bounded by the planes $x = 0, y = 0, z = 0, \frac{x}{a} + \frac{y}{b} + \frac{z}{c} = 1$.	06	L3	CO5
Module – 2					
Q.3	a.	Find the directional derivative of $\phi = 4xz^3 - 3x^2y^2z$ at the point $(2, -1, 2)$ along $2\hat{i} - 3\hat{j} + 6\hat{k}$.	07	L2	CO2
	b.	Find the value of the constants a, b, c such that $\vec{F} = (x + y + az)\hat{i} + (bx + 2y - z)\hat{j} + (x + cy + 2z)\hat{k}$ is irrotational.	07	L2	CO2
	c.	Show that the cylindrical co-ordinate system is orthogonal.	06	L3	CO2
OR					
Q.4	a.	Find the value of the constants 'a' such that the vector field, $\vec{F} = (axy - z^3)\hat{i} + (a - 2)x^2\hat{j} + (1 - a)xz^2\hat{k}$ is irrotational.	07	L2	CO2
	b.	Find the angle between the surfaces $x^2 + y^2 + z^2 = 9$ and $z = x^2 + y^2 - 3$ at the point $(2, -1, 2)$.	07	L2	CO2
	c.	Write a program to verify whether the following vectors $(2, 1, 5, 4)$ and $(3, 4, 7, 8)$ are orthogonal.	06	L3	CO5

Module – 3

Q.5	a.	Express the matrix $A = \begin{bmatrix} 3 & -1 \\ 1 & -2 \end{bmatrix}$ in the vector spaces of 2×2 matrices as a linear combination of $B = \begin{bmatrix} 1 & 1 \\ 0 & -1 \end{bmatrix}$, $C = \begin{bmatrix} 1 & 1 \\ -1 & 0 \end{bmatrix}$, $D = \begin{bmatrix} 1 & -1 \\ 0 & 0 \end{bmatrix}$	07	L2	CO3
	b.	Determine whether the vectors $V_1 = (1, 2, 3)$, $V_2 = (3, 1, 7)$ and $V_3 = (2, 5, 8)$ are linearly dependent or linearly independent.	07	L2	CO3
	c.	Verify the rank nullity theorem for the linear transformation $T: \mathbb{R}^3 \rightarrow \mathbb{R}^3$ defined by $T(x, y, z) = (x + 2y - z, y + z, x + y - 2z)$	06	L3	CO3

OR

Q.6	a.	Let W be the subspace of $\mathbb{R}^5$ spanned by $x_1 = (1, 2, -1, 3, 4)$, $x_2 = (2, 4, -2, 6, 8)$, $x_3 = (1, 3, 2, 2, 6)$, $x_4 = (1, 4, 5, 1, 8)$ and $x_5 = (2, 7, 3, 3, 9)$. Find a subset of vectors which forms a basis of W .	07	L2	CO3
	b.	Consider the following polynomials in $p(t)$ and inner product : $f(t) = t + 2$, $g(t) = 3t - 2$, $h(t) = t^3 - 2t - 3$ and $\langle f, g \rangle = \int_0^1 f(t)g(t) dt$. (i) Find $\langle f, g \rangle$ and $\langle f, h \rangle$ (ii) Find $\ f\ $ and $\ g\ $	07	L2	CO3
	c.	If V is a vector space of polynomials over $\mathbb{R}$. Find a basis and dimension of the subspaces W and V , spanned by the polynomials. $x_1 = t^3 - 2t^2 + 4t + 1$, $x_2 = 2t^3 - 3t^2 + 9t - 1$ $x_3 = t^3 + 6t - 5$, $x_4 = 2t^3 - 5t^2 + 7t + 5$	06	L2	CO3

Module – 4

Q.7	a.	Find the real root of the equation $x \log_{10} x - 1.2 = 0$ by Regular Falsi method. Correct to four decimal places.	07	L2	CO4												
	b.	From the following table find the number of students who have obtained less than 45 marks. <table border="1"><tr><td>Marks</td><td>30 – 40</td><td>40 – 50</td><td>50 – 60</td><td>60 – 70</td><td>70 – 80</td></tr><tr><td>No. of students</td><td>31</td><td>42</td><td>51</td><td>35</td><td>31</td></tr></table>	Marks	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80	No. of students	31	42	51	35	31	07	L2	CO4
Marks	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80												
No. of students	31	42	51	35	31												
	c.	Evaluate $\int_0^1 \frac{dx}{1+x^2}$ by using Simpson's $(1/3)^{\text{rd}}$ rule taking four equal strips.	06	L3	CO4												

OR

Q.8	a.	Fit the polynomial for the following data using Newton's divided difference formula and hence find $f(3)$. <table><tr><td>x</td><td>2</td><td>4</td><td>5</td><td>6</td><td>8</td><td>10</td></tr><tr><td>y</td><td>10</td><td>96</td><td>196</td><td>350</td><td>868</td><td>1746</td></tr></table>	x	2	4	5	6	8	10	y	10	96	196	350	868	1746	07	L2	CO4
x	2	4	5	6	8	10													
y	10	96	196	350	868	1746													
	b.	Using Lagrange's interpolation formula find $f(4)$. <table><tr><td>x</td><td>0</td><td>2</td><td>3</td><td>6</td></tr><tr><td>y</td><td>- 4</td><td>2</td><td>14</td><td>158</td></tr></table>	x	0	2	3	6	y	- 4	2	14	158	07	L2	CO4				
x	0	2	3	6															
y	- 4	2	14	158															

Q.8	c.	Use Simpson's $(3/8)^{\text{th}}$ rule to evaluate $\int_1^4 e^{1/x} dx$ by taking four ordinates.	06	L3	CO4
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Module – 5

Q.9	a.	Employ Taylor's series method to solve the initial value problem $\frac{dy}{dx} = x - y^2$; $y(0) = 1$ at the point $x = 0.1$ by considering upto 4^{th} degree terms.	07	L2	CO4
	b.	Apply Milne's method to compute $y(1.4)$ for the differential equation $\frac{dy}{dx} = x^2 + \frac{y}{2}$, given that $y(1) = 2$, $y(1.1) = 2.2156$, $y(1.3) = 2.4649$ and $y(1.3) = 2.7514$ correct to four decimal places.	07	L2	CO4
	c.	Use fourth order Runge Kutta method to find the value of y at $x = 0.1$, given that $\frac{dy}{dx} = 3e^x + 2y$, $y(0) = 0$ and $h = 0.1$.	06	L2	CO4

OR

Q.10	a.	Use Modified Euler's method to compute $y(0.1)$, given that $\frac{dy}{dx} = x^2 + y$; $y(0) = 1$ by taking $h = 0.05$.	07	L2	CO4
	b.	If $\frac{dy}{dx} = 2e^x - y$; $y(0) = 2$, $y(0.1) = 2.010$, $y(0.2) = 2.040$ and $y(0.3) = 2.090$. Find the value of y at $x = 0.4$ correct to four decimal places by applying Milne's predictor and corrector method.	07	L2	CO4
	c.	Write a program to solve : $\frac{dy}{dx} - 2y = 3e^x$ with $y(0) = 0$ using Taylor's series method at $x_1 = 0.1$, $x_2 = 0.2$ and $x_3 = 0.3$.	06	L3	CO5

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**First/Second Semester B.E./B.Tech. Degree Examination,
Dec.2024/Jan.2025**

Applied Chemistry for CSE Stream

Time: 3 hrs.

Max. Marks: 100

- Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. VTU Formula Hand Book is permitted.
3. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1			M	L	C
Q.1	a.	Explain the working principle of conductometric sensors (Conductometry) and applied sensors (Colorimetry).	7	L2	CO1
	b.	Write a note on Disposable sensors? Explain its advantages over classical sensors.	7	L3	CO2
	c.	Describe the construction, working and applications of Lithium-ion battery and mention its applications.	6	L4	CO3
OR					
Q.2	a.	What are Electrochemical Sensors? Explain its applications in the measurement of Dissolved Oxygen (DO).	7	L3	CO2
	b.	What are Transducers? Explain the applications of Electrochemical gas sensors in sensing SO _x and NO _x .	7	L3	CO5
	c.	Describe the construction, working and applications of Sodium-ion battery and mention its applications.	6	L4	CO3
Module – 2					
Q.3	a.	Explain the types of organic memory devices by taking P-type and n-type semiconductor materials.	7	L2	CO2
	b.	What are Memory Devices? Explain the classification of electronic memory devices with examples.	7	L1	CO2
	c.	Explain any four properties of polythiophenes (P3HT) suitable for optoelectronic devices.	6	L2	CO4
OR					
Q.4	a.	Mention any four properties and applications of QLED.	7	L2	CO3
	b.	Mention any four properties and applications of LCD-displays.	7	L2	CO3
	c.	What are nanomaterials? Explain any four properties of poly (9-vinyl Carbazole) (PVK) suitable for optoelectronic devices.	6	L2	CO4
Module – 3					
Q.5	a.	Define metallic corrosion. Describe the electrochemical theory of corrosion by taking iron as an example.	7	L3	CO2

	b.	Describe galvanizing and mention its applications.	7	L2	CO3
	c.	Define electrolyte concentration cell. A galvanic cell is obtained by combining two copper electrodes of concentrations 0.1 and 0.5 M immersed in copper sulphate solution at 25°C. Give the cell reaction and calculate EMF of the cell.	6	L3	CO4
OR					
Q.6	a.	Explain the construction, working and applications of Calomel Electrode.	7	L2	CO2
	b.	What is CPR? A thick sheet of area 600 cm ² (93 inch ²) is exposed to air near the ocean. After a 6 months it was found to experience a weight loss of 360 g due to corrosion, if the density of the steel is 7.9 g/cm ³ . Calculate the corrosion penetration rate in mpy and mmpy (Given K = 534 in mpy and 87.6 mm/y)	7	L3	CO4
	c.	Explain : (i) Differential metal corrosion (ii) Water line corrosion.	6	L2	CO2
Module – 4					
Q.7	a.	In a sample of a polymer, 150 molecules have the molecular mass 100 g/mol, 200 molecules have the molecular mass 1000 g/mol, 350 molecules have the molecular mass 10,000 g/mol. Determine number average and weight average molecular mass. Find the Index of Polydispersity.	7	L3	CO4
	b.	Explain the preparation, properties and commercial applications of Kevlar.	7	L2	CO2
	c.	Explain the generation of hydrogen of Alkaline Water Electrolysis.	6	L2	CO3
OR					
Q.8	a.	Explain the synthesis of polyacetylene and mention its applications.	7	L2	CO2
	b.	Explain the generation of hydrogen by proton exchange membrane Electrolysis of water.	7	L2	CO3
	c.	Describe the construction and working of photovoltaic cells.	6	L2	CO2
Module – 5					
Q.9	a.	Describe the sources and composition of e-waste materials.	7	L2	CO1
	b.	Explain the ill effects of toxic materials used in manufacturing electrical and electronic products.	7	L2	CO1
	c.	Discuss the extraction of gold from e-waste.	6	L2	CO3
OR					
Q.10	a.	What are e-wastes? Explain the need for e-waste management.	7	L2	CO1
	b.	Write a brief note on role of stakeholders for example : Producers, Consumers, Recyclers and Statutory bodies.	7	L2	CO1
	c.	Explain the pyrometallurgy and direct recycling methods.	6	L2	CO2

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First/Second Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025

Chemistry for EEE Stream

Time: 3 hrs.

Max. Marks: 100

- Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. VTU Formula Hand Book is permitted.
3. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1			M	L	C
Q.1	a.	Explain the conductors, semiconductors and insulators based on band theory.	7	L2	CO1
	b.	Describe the purification of electronic grade Silicon by Float zone method.	6	L2	CO1
	c.	What are conducting polymers? Explain the mechanism of conduction in polyacetylene.	7	L2	CO1
OR					
Q.2	a.	What is electroless plating? Describe electroless plating of copper in the manufacture of double sided PCB.	6	L2	CO1
	b.	Explain the preparation, properties and commercial applications of graphene oxide.	7	L2	CO1
	c.	Define number average and weight average molecular weights. In a sample of a polymer, 20% molecules have molecular mass 15000 g/mol, 35% molecules have molecular mass 25000 g/mol and remaining molecules have molecular mass 20000 g/mol. Calculate the number average and weight average molecular weights of the polymer. Calculate PDI and comment on it.	7	L3	CO1
Module – 2					
Q.3	a.	What are PV cells? Explain the construction and working of a typical PV cell. Mention its advantages.	6	L2	CO2
	b.	What are fuel cells? Describe the construction and working of methanol-oxygen fuel cell.	7	L2	CO2
	c.	Explain the construction and working of Lithium polymer battery. Mention its applications.	7	L2	CO2
OR					
Q.4	a.	What are batteries? Describe the classification of battery with suitable examples.	6	L2	CO2
	b.	Explain the construction and working of Vanadium flow battery. Mention its applications.	7	L2	CO2

	c.	Explain the construction and working of sodium ion battery. Mention its applications.	7	L2	CO2
Module – 3					
Q.5	a.	Define Corrosion. Describe electrochemical theory of corrosion taking iron as an example.	7	L2	CO3
	b.	What is anodisation? Explain anodisation of aluminium and mention its applications.	7	L2	CO3
	c.	Define corrosion penetration rate. A thick brass sheet of area 400 inch ² is exposed to moist air. After 2 years of period, it was found to experience a weight loss of 375 g due to corrosion. If the density of brass is 8.73 gram/cm ³ . Calculate CPR in mpy and mmpy units.	6	L3	CO3
OR					
Q.6	a.	What is differential aeration corrosion? Describe differential aeration corrosion with suitable examples.	7	L2	CO3
	b.	Describe sacrificial anodic method of corrosion control with example.	6	L2	CO3
	c.	What is e-waste? Describe the ill effects of e-waste on environment and human health.	7	L2	CO3
Module – 4					
Q.7	a.	Mention the properties and application of nano sensors and nano fibers.	6	L2	CO4
	b.	Describe the synthesis of nanomaterial by Sol-gel method. Mention its advantages and disadvantages.	7	L2	CO4
	c.	What are QLED's? Mention their properties and applications.	7	L2	CO4
OR					
Q.8	a.	What are nano materials? Explain the following size dependent properties of nano materials: (i) Surface area (ii) Conducting property (iii) Catalytic property	7	L2	CO4
	b.	What are OLED's? Mention their properties and applications.	6	L2	CO4
	c.	What are perovskites materials? Give the properties and applications of perovskites materials in optoelectronic devices.	7	L2	CO4
Module – 5					
Q.9	a.	What are concentration cells? The emf of a cell $\text{Ag(s)} \text{AgNO}_3(0.02\text{M}) \text{AgNO}_3(x\text{M}) \text{Ag(s)}$ found to be 0.084 V at 298 K. Write the cell reactions and calculate the value of x.	6	L3	CO5
	b.	Describe the principle, instrumentation and application of potentiometric sensors for the estimation of Iron.	7	L3	CO5

	c.	What are reference electrodes? Explain the construction and working of Calomel electrode.	7	L2	CO5
OR					
Q.10	a.	Describe the principle, instrumentation and application of conductometric sensors for the estimation of weak acid.	7	L3	CO5
	b.	What are ion selective electrodes? Explain the construction and working of glass electrode.	7	L2	CO5
	c.	Explain the principle and working of colorimetric sensors for the estimation of copper.	6	L3	CO5

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CBCS 2022 – SCHEME

BCEDK103/203

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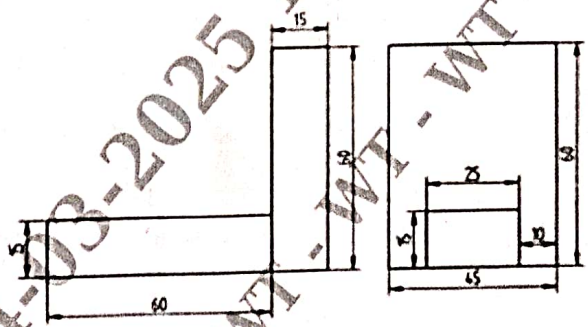
First / Second Semester B.E. Degree Examination, Dec.2024/Jan.2025

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours (COMMON TO ALL BRANCHES) Max.Marks:100

Note: 1. Answer all four full question

2. Grid sheets may be provided for making preparatory sketches

Module – 1		
Q. No.		Marks
1	A rectangular lamina of 35 mm x 20 mm rests on HP on one of its shorter edges. The lamina is rotated about the edge on which it rests till it appears as a square in the top view. The edge on which the lamina rests being parallel to both HP and VP. Draw its projections and find its inclinations to HP and VP.	20
Module – 2		
2	A hexagonal pyramid 25 mm sides of base and 50 mm axis length rests on HP on one of its slant edges. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° .	30
Module – 3		
3	Following figure shows the front and top views of solid. Draw the isometric projection of the solid. 	25
Module – 4		
4	A cube of its side 40 mm is resting on HP with its base on HP such that one of its vertical faces is inclined at 30° to the VP. It is cut by a section plane perpendicular to VP, inclined to HP at an angle 45° and passes through the midpoint of the axis. Draw the development of the lower lateral surface of the cube.	25

Examiner 1:
Name:
Signature:

Examiner 2:
Name: *Ramesh B. G.*
Signature: *[Signature]*

8-30 - 11:30 am

CBCS 2022 – SCHEME

BCEDK103/203

USN

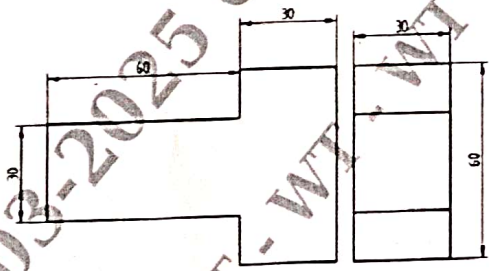
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First / Second Semester B.E. Degree Examination, Dec.2024/Jan.2025

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours (COMMON TO ALL BRANCHES) Max.Marks:100

- Note: 1. Answer all four full question
2. Grid sheets may be provided for making preparatory sketches

Module - 1		
Q. No.		Marks
1	A circular lamina of 30 mm diameter rests on HP such that the surface of the lamina is inclined at 30° to HP and the diameter passing through the corner on which the lamina rests on HP is inclined at 45° to VP. Draw its top and front views in this position.	20
Module - 2		
2	A pentagonal pyramid 25 mm sides of base and 50 mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projection of the pyramid when the axis of the pyramid is inclined to HP at 40° and appears to be inclined to VP at 45° .	30
Module - 3		
3	Following figure shows the front and side views of solid. Draw the isometric projection of the solid. 	25
Module - 4		
4	A square prism of base sides 30 mm and axis length 60 mm is resting on HP with all the vertical faces equally inclined to VP. It is cut by an inclined plane 60° to HP and perpendicular to VP and is passing through a point on the axis at a distance of 50 mm from the base. Obtain the development for the truncated portion of the solid.	25

Examiner 1:

Name:

Signature:

Examiner 2:

Name:

Signature:

First Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025 Mathematics – I for CSE Stream

Time: 3 hrs.

Max. Marks: 100

- Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. VTU Formula Hand Book is permitted.
3. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1			M	L	C
Q.1	a.	Find the angle between the curves, $r = \frac{a}{1 + \cos \theta}$ and $r = \frac{b}{1 - \cos \theta}$.	6	L2	CO1
	b.	Find the pedal equations of the curve $r^m = a^m \cos(m\theta)$.	7	L2	CO1
	c.	Determine the radius of curvature of the curve $r^2 \sec(2\theta) = a^2$.	7	L2	CO1
OR					
Q.2	a.	With usual notation prove that $\tan \phi = r \frac{d\theta}{dr}$.	8	L2	CO1
	b.	Show that tangents to the cardioid $r = a(1 + \cos \theta)$ at the points $\theta = \frac{\pi}{3}$ and $\theta = \frac{2\pi}{3}$ are respectively parallel and perpendicular to the initial line.	7	L2	CO1
	c.	Using modern mathematical tool write a programme/code to plot $r = 2 \cos 2\theta $.	5	L3	CO5
Module – 2					
Q.3	a.	Expand $\sqrt{1 + \sin 2x}$ as Maclaurin's series up to fourth degree terms.	6	L2	CO1
	b.	If $u = f(y - z, z - x, x - y)$, prove that $\frac{\partial u}{\partial x} + \frac{\partial u}{\partial y} + \frac{\partial u}{\partial z} = 0$.	7	L2	CO1
	c.	Compute $J = \frac{\partial(x, y, z)}{\partial(\rho, \phi, z)}$ for $x = \rho \cos \phi$, $y = \rho \sin \phi$ and $z = z$.	7	L2	CO1
OR					
Q.4	a.	If $u = e^{(ax+by)} f(ax - by)$, prove that $b \frac{\partial u}{\partial x} + a \frac{\partial u}{\partial y} = 2abu$.	8	L2	CO1
	b.	Prove that $x^2 \frac{\partial u}{\partial x} + y^2 \frac{\partial u}{\partial y} + z^2 \frac{\partial u}{\partial z} = 0$ for $u = f\left(\frac{y-x}{xy}, \frac{z-x}{xz}\right)$.	7	L2	CO1
	c.	Using modern mathematical tool write a programe/code to show that $u_{xx} + u_{yy} = 0$, given that $u = e^x(x \cos y - y \sin y)$.	5	L2	CO5
Module – 3					
Q.5	a.	Solve $\left[y\left(1 + \frac{1}{x}\right) + \cos y\right] dx + [x + \log x - x \sin y] dy = 0$	6	L2	CO2
	b.	Show that the curve $y^2 = 4a(x + a)$ is self-orthogonal.	7	L3	CO2
	c.	A 12-volts battery connected to a series circuit in which the inductance is $\frac{1}{2}$ henry and resistance is 10 ohms. Find the current 'i' if the initial current is zero.	7	L3	CO2

OR					
Q.6	a.	Solve $x \frac{dy}{dx} + y = x^3 y^6$.	6	L2	CO2
	b.	Find orthogonal trajectories of the family $r^n \cos n\theta = a^n$.	7	L3	CO2
	c.	Find the general solutions of the equations $(px - y)(py + x) = a^2 P$ by reducing into Clairaut's form by taking $u = x^2$, $v = y^2$.	7	L2	CO2
Module – 4					
Q.7	a.	Find remainder when $(349 \times 74 \times 36)$ is divided by 3.	6	L1	CO3
	b.	Solve linear Diophantine equations $13x + 17y = 5$.	7	L2	CO3
	c.	Solve the system of linear congruence $x \equiv 2(\text{mod } 3)$, $x \equiv 3(\text{mod } 5)$ and $x \equiv 2(\text{mod } 7)$, using remainder theorem.	7	L2	CO3
OR					
Q.8	a.	Find the last digit in 7^{126} .	6	L2	CO3
	b.	Solve $2x + 6y \equiv 1(\text{mod } 7)$ $4x + 3y \equiv 2(\text{mod } 7)$	7	L2	CO3
	c.	Find the remainder when 7^{121} is divisible by 13.	7	L2	CO3
Module – 5					
Q.9	a.	Solve the system of equation by using Gauss-Jordan method. $x + y + z = 9$, $2x + y - z = 0$, $2x + 5y + 7z = 52$.	6	L2	CO4
	b.	For what values λ and μ the system of equations, $x + y + z = 6$, $x + 2y + 3z = 10$, $x + 2y + \lambda z = \mu$ has (i) no solution (ii) a unique solution and (iii) Many solutions.	7	L2	CO4
	c.	Using power method, find the largest eigen value and corresponding vector of the matrix, $A = \begin{bmatrix} 6 & -2 & 2 \\ -2 & 3 & -1 \\ 2 & -1 & 3 \end{bmatrix}$.	7	L2	CO4
OR					
Q.10	a.	Determine the rank of the matrix $A = \begin{bmatrix} 91 & 92 & 93 & 94 & 95 \\ 92 & 93 & 94 & 95 & 96 \\ 93 & 94 & 95 & 96 & 97 \\ 94 & 95 & 96 & 97 & 98 \\ 95 & 96 & 97 & 98 & 99 \end{bmatrix}$.	8	L1	CO4
	b.	Using the Gauss-Seidel iteration method, solve the equation $27x + 6y - z = 85$, $6x + 15y + 2z = 72$, $x + y + 54z = 110$. Carry out four iterations.	7	L2	CO4
	c.	Using modern mathematical tool, write a program/code to find the largest eigen value of $A = \begin{bmatrix} 1 & 1 & 3 \\ 1 & 5 & 1 \\ 3 & 1 & 1 \end{bmatrix}$ by power method.	5	L3	CO5

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First Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025 Mathematics - I for EEE Stream

Time: 3 hrs.

Max. Marks: 100

- Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.
3. VTU Formula Handbook is permitted.*

Module - 1				M	L	C
Q.1	a.	With usual notations , prove that $\tan \phi = r \cdot \frac{d\theta}{dr}$.		6	L2	CO1
	b.	Show that the curves $r = a(1 + \cos \theta)$ and $r = b(1 - \cos \theta)$ intersects orthogonally.		7	L2	CO1
	c.	Find the radius of curvature for the curve $x^3 + y^3 = 3axy$ at $(\frac{3a}{2}, \frac{3a}{2})$.		7	L3	CO1
OR						
Q.2	a.	Find the angle of intersection between curves $r^n = a^n \cos n\theta$ and $r^n = b^n \sin n\theta$.		7	L2	CO1
	b.	Find the pedal equation of the curve $r^m = a^m (\cos m\theta + \sin m\theta)$.		8	L2	CO1
	c.	Using modern mathematical tool, write a program to plot the curve $r = 2 \cos 2\theta $.		5	L3	CO1
Module - 2						
Q.3	a.	Expand $\sqrt{1 + \sin 2x}$ using Maclaurin's series expansion upto terms containing x^6 .		6	L2	CO1
	b.	If $u = f\left(\frac{x}{y}, \frac{y}{z}, \frac{z}{x}\right)$ then prove that $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} + z \frac{\partial u}{\partial z} = 0$.		7	L2	CO1
	c.	Show that the function $f(x, y) = x^3 + y^3 - 3xy + 1$ is minimum at the point $(1, 1)$.		7	L3	CO1
OR						
Q.4	a.	If $u = \frac{xy}{z}$, $v = \frac{yz}{x}$ and $w = \frac{xz}{y}$ then show that $J\left(\frac{u, v, w}{x, y, z}\right) = 4$.		7	L2	CO1
	b.	Find the extreme values of the function $f(x, y) = x^3 + y^3 - 3x - 12y + 20$.		8	L3	CO1
	c.	Using modern tool write a program to evaluate $\lim_{x \rightarrow \infty} \left(1 + \frac{1}{x}\right)^x$.		5	L3	CO5

Module – 3						
Q.5	a.	Solve $x \frac{dy}{dx} + y = x^3 y^6$.	6	L2	CO2	
	b.	Find the orthogonal trajectories of a family of curves $\frac{2a}{r} = 1 - \cos\theta$.	7	L3	CO2	
	c.	Solve $xy(p^2) - (x^2 + y^2)p + xy = 0$.	7	L2	CO2	
OR						
Q.6	a.	Solve $(x^2 + y^2 + x)dx + xy dy = 0$.	6	L2	CO2	
	b.	A series circuit with resistance R , inductance L and electromotive force E is governed by the differential equation $L \frac{di}{dt} + Ri = E$, where L and R are constants and initially the current i is zero. Find the current at any time t .	7	L3	CO2	
	c.	Solve $(px - y)(py + x) = a^2 p$ by reducing into Clairaut's form using the substitution $X = x^2$ and $Y = y^2$.	7	L2	CO2	
Module – 4						
Q.7	a.	Evaluate $\int_{-1}^{+1} \int_0^z \int_{x-z}^{x+z} (x + y + z) dy dx dz$.	6	L2	CO3	
	b.	Change the order of integration and evaluate $\int_0^1 \int_x^{\sqrt{x}} xy dy dx$.	7	L2	CO3	
	c.	Prove that $\beta(m, n) = \frac{\sqrt{m} \cdot \sqrt{n}}{\sqrt{m+n}}$.	7	L2	CO3	
OR						
Q.8	a.	Evaluate $\int_0^\infty \int_0^\infty \frac{1}{e^{(x^2 + y^2)}} dx dy$ by changing into polar coordinates.	6	L2	CO3	
	b.	Evaluate $\int_0^{\pi/2} \sqrt{\cot\theta} d\theta$ by expressing in terms of gamma functions.	7	L2	CO3	
	c.	Using double integration find the area between the curves $y^2 = 4ax$ and $x^2 = 4ay$.	7	L3	CO3	

Module – 5				
Q.9	a.	Find the rank of the matrix $A = \begin{bmatrix} 2 & -1 & -3 & -1 \\ 1 & 2 & 3 & -1 \\ 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & -1 \end{bmatrix}$	6	L2 CO4
	b.	Investigate the values of λ and μ such that the system of equations $x + y + z = 6$, $x + 2y + 3z = 10$ and $x + 2y + \lambda z = \mu$ may have i) Unique solution ii) Infinite solution iii) No solution.	7	L3 CO4
	c.	Using Rayleigh's power method find the largest eigen value and the corresponding eigen vector of the matrix $\begin{bmatrix} 6 & -2 & 2 \\ -2 & 3 & -1 \\ 2 & -1 & 3 \end{bmatrix}$ by taking $[1, 1, 1]^T$ as initial eigen vector.	7	L3 CO4
OR				
Q.10	a.	Solve by using Gauss – Jordan method $x + y + z = 9$, $x - 2y + 3z = 8$ and $2x + y - z = 3$.	7	L2 CO4
	b.	Solve by using Gauss – Siedel method $20x + y - 2z = 17$, $3x + 20y - z = -18$ and $2x - 3y + 20z = 25$.	8	L2 CO4
	c.	Using modern mathematical model, write a program to test the consistency of the equations $x + 2y - z = 1$, $2x + y + 4z = 2$ and $3x + 3y + 4z = 1$.	5	L3 CO5

CBCS SCHEME

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BPLCK105B

First Semester B.E/B.Tech. Degree Examination, Dec.2024/Jan.2025 Introduction to Python Programming

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level, C: Course outcomes.

Module – 1			M	L	C
1	a.	Explain basic data types like int, float, double and string with an example.	6	L2	CO1
	b.	Differentiate between local scope and global scope.	6	L2	CO1
	c.	Develop a program to calculate factorial of a number. Program to compute binomial coefficient (Given N and R).	8	L3	CO1
OR					
2	a.	Define functions. Explain how to pass parameters through the function with return statement.	6	L2	CO1
	b.	What is exception? How exception are handled in python? Write a program to solve divide by zero exception.	6	L2	CO1
	c.	Develop a program to generate Fibonacci sequence of length (N). Read N from the console.	8	L3	CO1
Module – 2					
3	a.	Explain Augmented short hand assignment operators with an example.	7	L2	CO2
	b.	Explain different type of methods like append(), Remove(), sort(), pop() in python programming list.	7	L2	CO2
	c.	Develop a program to find mean, variance and standard deviation.	6	L3	CO3
OR					
4	a.	Explain set() and setdefault() method in dictionary.	7	L2	CO2
	b.	Develop a python to print area of rectangle.	6	L3	CO2
	c.	Define pretty printing. How does pretty print work in python with an example.	7	L2	CO2
Module – 3					
5	a.	Explain useful string functions like : i) Capitalize ii) Count iii) Find iv) Lower v) Upper vi) Replace with an example.	8	L2	CO3
	b.	Develop a python code to determine whether given string is a palindrome or not a palindrome.	6	L3	CO3
	c.	Explain : i) isalpha ii) isalnum iii) isspace().	6	L2	CO3
1 of 2					

OR

6	a.	Explain OS path module with an example.	6	L3	CO2
	b.	Explain the concept of file path. Also discuss absolute and relative file path.	8	L3	CO3
	c.	Program to print of multi clipboard with appropriate message.	6	L3	CO3

Module – 4

7	a.	Develop a program to backing up a given folder (folder in a current working directory) into a zip file by using relevant modules and suitable methods.	6	L3	CO4
	b.	List out the difference between <code>shutil.copy()</code> and <code>shutil.copytree()</code> method.	6	L1	CO4
	c.	Explain the following file operations in python with suitable example : i) Copying files and folders ii) Moving files and folders iii) Permanently deleting files and folders.	8	L2	CO4

OR

8	a.	Briefly explain assertion and raising a exception.	8	L2	CO4
	b.	List out the benefits of using logging module with an example.	6	L1	CO4
	c.	Write a function named DivExp which takes two parameters a, b and returns a value $C(c = a/b)$. Write suitable assertion for a 70 in function DivExp and raise an exception for when $b = 0$. Develop a suitable program which reads two values from the console and calls a function DivExp.	6	L3	CO4

Module – 5

9	a.	Define a function which takes two objects representing complex numbers and returns a new complex number with a addition of two complex numbers. Define a suitable class 'complex' to represent the complex number. Develop a program to read $N(N \geq 2)$ complex numbers and compute the addition of 10 complex numbers.	8	L3	CO5
	b.	Explain the concept of inheritance with an example.	6	L2	CO5
	c.	Explain the <code>__str__</code> and the <code>__init__</code> method with an example.	6	L2	CO5

OR

10	a.	Define a class and object, construct the class called rectangle and initialize it with height = 100, width = 200, starting point as $(x = 0, y = 0)$. Write a program to display the centre pint co-ordinates of a rectangle.	8	L3	CO5
	b.	Briefly explain the printing of objects with an example.	6	L2	CO5
	c.	Differentiate operator over loading and operator overriding in python.	6	L2	CO5

CBCS SCHEME

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BETCK105I

First Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025

Introduction to Cyber Security

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. M : Marks , L: Bloom's level , C: Course outcomes.

Module – 1				M	L	C
Q.1	a.	Define Cyber Crime. Discuss about cyberpunk and cyberterrorism.		8	L2	CO2
	b.	List the various cybercrime against property and against organization.		6	L2	CO3
	c.	What is Spam? Interpret the difficulties involved to control spamming.		6	L3	CO3
OR						
Q.2	a.	Who are cyber criminals? Discuss three groups of cyber criminals.		8	L2	CO1
	b.	Discuss about cyber defamation in detail.		6	L2	CO2
	c.	Explain credit card frauds and pornographic offenses in detail.		6	L2	CO3
Module – 2						
Q.3	a.	What is Social Engineering? Discuss human based Social Engineering with a suitable example.		8	L3	CO2
	b.	Explain the different phases involved in planning cyber crime.		6	L2	CO3
	c.	Explain any six tips for safety and security while using computer in a cybercafé.		6	L2	CO3
OR						
Q.4	a.	Define Cyber Stalking. Discuss the difference between types of stalkers.		6	L2	CO2
	b.	What is an attack vector? Describe various attack vectors in detail.		6	L2	CO3
	c.	Define Botnet. With a neat diagram, explain how botnets create business.		8	L2	CO3
Module – 3						
Q.5	a.	What are software key loggers and Anti Key loggers? List the advantages of using anti key loggers.		6	L1	CO2
	b.	What is Proxy Server? How does proxy server is operated? Explain it's significance.		8	L3	CO4
	c.	What is Malware? Discuss how Malwares are classified.		6	L2	CO3

OR					
Q.6	a.	Discuss various types of viruses categorized based on attacks on various elements of the system.	6	L3	CO2
	b.	Differentiate between weak and strong password.	6	L3	CO3
	c.	Discuss 4 types of DOS attacks.	8	L2	CO3
Module – 4					
Q.7	a.	Explain the different methods used by the Phisher to reveal personal information on internet.	10	L2	CO2
	b.	Discuss various types of phishing scams.	10	L2	CO3
OR					
Q.8	a.	How does phishers use various techniques to launch phishing attacks?	6	L3	CO2
	b.	Discuss any 5 different types of identity theft technique.	10	L2	CO3
	c.	Explain the myths and facts about identity theft.	4	L2	CO4
Module – 5					
Q.9	a.	Explain the guidelines to be followed during the digital evidence collection phase.	8	L2	CO2
	b.	Discuss how fake email is detected using forensics analysis.	6	L3	CO3
	c.	What is chain of custody? Explain with an example.	6	L2	CO3
OR					
Q.10	a.	With a neat diagram, explain digital forensics life cycle model.	8	L2	CO3
	b.	Describe the need for concept of computer forensics.	6	L2	CO3
	c.	Explain network forensics in detail.	6	L2	CO2

CBCS SCHEME

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BESCK104C

First Semester B.E/B.Tech. Degree Examination, Dec.2024/Jan.2025

Introduction to Electronics and Communication

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. M : Marks , L: Bloom's level , C: Course outcomes.

3.VTU formula Handbook is permitted.

Module – 1			M	L	C
1	a.	With a neat block diagram, explain the DC power supply.	6	L2	CO1
	b.	With a circuit diagram explain the working of voltage doubler.	6	L2	CO1
	c.	With circuit diagram and waveforms, explain the working of Bi – Phase full wave rectifier.	8	L2	CO1
OR					
2	a.	Draw the circuit of Zener diode voltage regulator and explain the working.	6	L2	CO1
	b.	What is multistage amplifier? Show that the overall gain of multistage amplifier is product of individual stage gains.	6	L3	CO1
	c.	What are the advantages of negative feedback? Derive an expression for overall voltage gain of negative feedback amplifier.	8	L3	CO1
Module – 2					
3	a.	State and explain conditions for oscillations (Barkhausen criterion).	6	L1	CO2
	b.	With circuit diagram, explain the working Wein Bridge Oscillator.	6	L2	CO2
	c.	With circuit diagram and waveforms, explain the working of single stage astable multivibrator circuit using op-amp.	8	L2	CO2
OR					
4	a.	List the ideal characteristics of op-Amp.	6	L1	CO2
	b.	Explain the following parameters of the op-Amp. i) Slew Rate ii) Input offset voltage iii) CMRR.	6	L1	CO2
	c.	How op-Amp can be used as an integrator with necessary output equation and waveforms.	8	L2	CO2
Module – 3					
5	a.	i) Convert $(256.45)_{10} = (?)_2 = (?)_{16}$ ii) Find x if $(211)_x = (152)_8$ iii) Convert $(357.14)_8 = (?)_{16}$.	8	L3	CO3
	b.	Subtract $(1010.11)_2$ from $(1001.10)_2$ using 1's and 2's complement methods.	6	L3	CO3
	c.	State and prove DeMorgan's theorems for 3 input variables.	6	L2	CO3
1 of 2					

OR

6	a.	Simplify the following Boolean expressions : i) $f_1 = \bar{x}\bar{y} + xy + \bar{x}y$ ii) $f_2 = x \oplus y \oplus z$.	6	L4	CO3
	b.	Obtain canonical forms of the following Boolean expressions [SoP form]. i) $f = a + \bar{b}c$ ii) $f = xy + \bar{x}z$.	6	L3	CO3
	c.	Design full adder circuit using basic gates.	8	L3	CO3

Module – 4

7	a.	Define embedded system. Differentiate between embedded systems and general purpose computing system.	6	L1	CO4
	b.	Draw the block diagram of embedded system and explain the different elements.	6	L2	CO4
	c.	Differentiate between : i) Microprocessor Vs Microcontroller ii) RISC Vs CISC.	8	L1	CO4

OR

8	a.	Draw the block diagram of instrumentation system and explain.	8	L2	CO4
	b.	What is seven segment display? Explain the types of seven segment display.	8	L2	CO4
	c.	What are sensors and Actuators?	4	L2	CO4

Module – 5

9	a.	With a neat diagram, explain modern communication system.	6	L2	CO5
	b.	Define modulation and explain amplitude modulation with waveforms.	6	L2	CO5
	c.	With waveforms, explain ASK, FSK and SPK modulation techniques.	8	L2	CO5

OR

10	a.	Explain different modes of radio wave propagation.	8	L1	CO5
	b.	What is multiplexing? Explain different types of multiplexing in communication system.	8	L2	CO5
	c.	Explain the advantages of digital communication over analog communication.	4	L1	CO5

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BESCK104E

First Semester B.E/B.Tech. Degree Examination, Dec.2024/Jan.2025

Introduction C Programming

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

Module – 1				M	L	C
1	a.	Classify the different types of input devices and briefly explain the wireless keyboard.		7	L2	CO1
	b.	Provide a brief explanation of the process involved in compiling and executing a C program.		7	L2	CO1
	c.	Explain the structure of a C program, emphasizing key components through an example.		6	L2	CO1
OR						
2	a.	Describe the working of a printer and an LCD monitor with detailed sketches.		8	L2	CO1
	b.	What are variables? Provide an example of how to declare and initialize a variable of different datatypes.		6	L2	CO1
	c.	Write a C program that demonstrates the use of standard libraries for performing input and output operations.		6	L3	CO1
Module – 2						
3	a.	Classify the different types of binary operators supported in C language. Explain the bitwise logical operator.		7	L2	CO2
	b.	Use a simple if statement to determine if a person's age qualifies them to vote.		6	L3	CO2
	c.	Write a C program to calculate the sum of numbers from m to n.		7	L3	CO2
OR						
4	a.	Write a program to convert integer number into the corresponding floating-point number.		6	L3	CO2
	b.	With a flow chart, explain the concept of switch statement.		7	L2	CO2
	c.	Write a C program to generate the pattern * ** *** ****		7	L3	CO2
Module – 3						
5	a.	What is the difference between a function definition and a function prototype? Illustrate with an example code.		7	L2	CO3
	b.	Name the different storage classes and explain the purpose of each.		6	L2	CO3
	c.	Write a program to read n numbers into an array from the user and arrange them in ascending order using bubble sort.		7	L3	CO3

OR

6	a.	What is the difference between pass-by-value and pass-by-reference in function arguments? Provide an example for each.	7	L3	CO2
	b.	Write a program to call the function addNumbers(int a, int b) with values a = 5 and b = 10. Print the result inside the main function.	6	L3	CO3
	c.	Write a C program that prompts the user to enter a key element and searches for it within an array. The program should return the index of the element if found, or indicate that the element is not present in the array.	7	L3	CO3

Module – 4

7	a.	Write a program to transpose the elements of a 3×3 matrix.	7	L4	CO3
	b.	Write a C program to input two $m \times n$ matrices and then calculate the sum of their corresponding elements and store it in a third $m \times n$ matrix.	8	L4	CO3
	c.	State the importance of using scanf to read a string. Explain.	5	L4	CO2

OR

8	a.	Write a program that multiplies two 2D matrices.	10	L3	CO4
	b.	Discuss the different functions available for reading and writing strings along with syntax or example code.	10	L2	CO4

Module – 5

9	a.	Briefly explain string taxonomy.	6	L2	CO5
	b.	Write a C program to calculate area of circle using pointers.	7	L3	CO5
	c.	Describe a structure to store customer information.	7	L2	CO5

OR

10	a.	Write a program to find the length of a string without using the library function.	7	L3	CO5
	b.	Define a pointer. With an example show the declaration of pointers and their usage to assign value to a variable.	7	L2	CO5
	c.	Write the syntax and example to declare a structure.	6	L2	CO5

Second Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025 Introduction to Python Programming

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1				M	L	C
Q.1	a.	Describe the following flow control statements in python programming: (i) if (ii) else (iii) while	8	L1	CO1	
	b.	Write a function to calculate factorial of a number.	8	L3	CO1	
	c.	Define def statements with parameters.	4	L1	CO1	
OR						
Q.2	a.	Explain the syntax and control flow diagrams for break and continue statement.	8	L2	CO1	
	b.	Illustrate the dissection of python program.	8	L2	CO1	
	c.	Describe the return values and return statements.	4	L1	CO1	
Module – 2						
Q.3	a.	Read N numbers from the console and create a list. Develop a program to print, mean, variance and standard deviation with suitable messages.	8	L3	CO2	
	b.	Summarize the sequence data types of python programming.	8	L2	CO2	
	c.	Compare and contrast dictionaries Vs lists.	4	L2	CO2	
OR						
Q.4	a.	Develop a program to print 10 most frequently appearing words in a text file. [Hint : Use dictionary with distinct words and their frequency of occurrences. Sort the dictionary in reverse order of frequency and display dictionary slice of first 10 items].	8	L3	CO2	
	b.	Explain the slots of tic – tac – toe board with its corresponding keys using data structures in python programming.	6	L2	CO2	
	c.	Paraphrase the working with lists in python programming.	6	L1	CO2	
Module – 3						
Q.5	a.	Describe the Python string handling methods with examples : Split (), endswith (), ljust (), center (), lstrip ().	10	L2	CO3	
	b.	Summarize the process of input validation in python programming.	10	L2	CO3	

OR					
Q.6	a.	Explain Python string handling methods with examples : join (), startswith (), rjust (), strip (),rstrip ().	10	L2	CO3
	b.	Demonstrate the process of copying and pasting strings with pyperclip module.	10	L2	CO3
Module – 4					
Q.7	a.	Develop a program to backing up a given folder (Folder in a current working directory) into a zip file by using relevant modules and suitable methods.	10	L3	CO3
	b.	Describe the file reading or writing process in python programming.	10	L2	CO3
OR					
Q.8	a.	Explain the process of compressing files with the zip file module.	10	L2	CO3
	b.	Summarize the organization of files using shutil module.	10	L3	CO3
Module – 5					
Q.9	a.	Explain about class and objects.	10	L2	CO4
	b.	Explain purefunction and modifier.	10	L2	CO4
OR					
Q.10	a.	Illustrate operator overloading and polymorphism in python with an example.	10	L2	CO4
	b.	Explain _init_ and _str_ method with examples.	10	L2	CO4

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Question Paper Version : A

**First / Second Semester B.E./B.Tech Degree Examination,
Dec.2024/Jan.2025**

Professional Writing Skills in English

Time: 1 hr.]

[Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

1. Answer all the **fifty** questions, each question carries one mark.
2. Use only **Black ball point pen** for writing / darkening the circles.
3. **For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.**
4. Darkening two circles for the same question makes the answer invalid.
5. **Damaging/overwriting, using whiteners on the OMR sheets are strictly prohibited.**

-
1. Identify the correct phrasal verb "I need to _____ my old clothes to make space for the new ones".
 a) thrown in b) thrown off c) thrown out d) thrown up
 2. Which phrasal verb means "to begin to understand something"?
 a) Catch on b) Hold on c) Put on d) Turn on
 3. Choose the correct phrasal verb to complete the sentence:
 "I need to _____ this report before tomorrow's meeting".
 a) bring up b) bring out c) bring in d) bring forward
 4. What is the meaning of the word "Capricious"?
 a) Friendly and outgoing b) Predictable and reliable
 c) Unpredictable and impulsive d) Serious and solemn
 5. Choose the correct definition of "Obfuscate".
 a) To clarify or elucidate b) To confuse or obscure
 c) To enlighten or illuminate d) To simplify or streamline
 6. What does the word "cogent" mean?
 a) Weak or unconvincing b) Clear, logical and convincing
 c) Indecisive or hesitant d) Fanciful or imaginative
 7. Select the synonym for "perfidious".
 a) Loyal b) Trustworthy c) Faithful d) Treacherous

8. Arrange the following sentences in the correct order :
- He woke up early in the morning
 - After breakfast, he went for a jog
 - Then, he took a shower
 - Finally, he got ready for work.
- a) i, ii, iii, iv b) iii, ii, i, iv c) ii, iv, iii, i d) iv, iii, ii, i
9. Arrange the following sentences to form a coherent paragraph :
- The company announced a new product launch.
 - Customers eagerly awaited the release
 - The product received positive reviews from critics.
 - Sales exceeded expectations.
- a) i, ii, iii, iv b) iii, ii, i, iv c) ii, iii, iv, i d) ii, i, iii, iv
10. Identify the error in the sentence : "She don't have enough time to finish the project".
- a) she b) don't c) have d) enough
11. Choose the correct sentence :
- The children is playing in the park yesterday
 - The children was playing in the park yesterday
 - The children were playing in the park yesterday
 - The children are playing in the park yesterday.
12. Identify the error in sentence : "The price of these shoes are too high".
- a) The price b) of these shoes c) are d) too high
13. Choose the correct sentence :
- She enjoys to read
 - She enjoys reading
 - She enjoys reads
 - She enjoys read
14. Identify the error in the sentence : "He speak French fluently".
- a) He b) Speak c) French fluently d) No error
15. Choose the correct sentence :
- The news are interesting
 - The news is interesting
 - The news were interesting
 - The news an interesting
16. Which option best completes the collocation : "_____ a shower"?
- a) Take b) Do c) Make d) Have
17. Identify the correct collocation : "_____ a cup of coffee".
- a) Make b) Do c) Have d) Take
18. Choose the correct collocation : "_____ a decision".
- a) Make b) Do c) Have d) Take
19. What is the contraction of "they are"?
- a) Their b) They're c) There d) Theres
20. Choose the correct contraction : "He will not" becomes _____.
- a) He'll not b) He's not c) He won't d) He'sn't
21. Identify the contraction of "could not" :
- a) Couldn't b) Could'nt c) Could'not d) Could'nat

22. What is the correct word order for a question in English?
 a) Subject – Verb - Object b) Object – Verb – Subject
 c) Verb – Subject - Object d) Subject – Object - Verb
23. Which option represents the correct word order for an affirmative sentence in English?
 a) Subject – Object - Verb b) Object – Verb – Subject
 c) Verb – Subject - Object d) Subject – Verb - Object
24. Choose the correct word order for a negative sentence in English :
 a) Object – Verb – Subject b) Subject – Verb - Object
 c) Verb – Subject - Object d) Subject – Object - Verb
25. Identify the correct word order for a sentence in English :
 a) She eats breakfast every morning b) Eats she breakfast every morning
 c) Every morning she eats breakfast d) East breakfast she every morning
26. Choose the sentence in the passive voice :
 a) She wrote a letter b) A letter was written by her
 c) She is writing a letter d) She has written a letter
27. Choose the sentence with the correct transformation into reported speech :
 “He said, “I will help you tomorrow”.”
 a) He said that he would help me the next day
 b) He says that he will help me tomorrow
 c) He said that he help me tomorrow
 d) He said that he helped me the next day
28. Which part of the sentence contains the error:
 “The children is playing in the park yesterday”.
 a) The children b) is playing c) in the park d) yesterday
29. Find the error in the sentence : “He are a talented musician”.
 a) He b) are c) a talented musician d) No error
30. Where is the error in the sentence : “The cake is laying on the table”.
 a) The cake b) is laying c) on the table d) No error
31. Identify the correct usage of the word “whom” :
 a) To who shall I address this letter? b) Whom did you see at the party?
 c) Whom is responsible for this mess? d) Whom wants to go to the concert?
32. Choose the correct transformation of the sentence into reported speech :
 “She said, ‘I have already finished my work’.”
 a) She said that she already finished her work
 b) She says that she has already finished her work
 c) She said that she had already finished her work
 d) She says that she had already finished her work.

33. Select the option with correct subject – verb agreement :
- The committee is discussing the issue now
 - The committee are discussing the issue now
 - The committee were discussing the issue now
 - The committee am discussing the issue now.
34. Identify the error in the sentence : “She ~~don't~~ have enough time to finish the project”.
- She
 - don't
 - have
 - enough
35. Which part of the sentence contains the error :
“The children are playing in the park yesterday”.
- The children
 - are playing
 - in the park
 - yesterday
36. Find the error in the sentence : “He are a talented musician”.
- He
 - are
 - a talented musician
 - No error
37. Where is the error in the sentence : “The cake is laying on the table”.
- The cake
 - is laying
 - on the table
 - No error
38. Which sentence demonstrates correct subject – verb agreement?
- There is many books on the shelf
 - There are many books on the shelf
 - There was many books on the shelf
 - There were many books on the shelf
39. Identify the sentence with correct subject – verb agreement :
- Neither of the boys are going to the party
 - Neither of the boys is going to the party
 - Neither of the boys were going to the party
 - Neither of the boys am going to the party
40. Choose the sentence with correct subject – verb agreement.
- The news are interesting
 - The news is interesting
 - The news were interesting
 - The news am interesting
41. Identify the sentence with correct subject – verb agreement :
- The majority of the population is happy with the new policy
 - The majority of the population are happy with the new policy
 - The majority of the population were happy with the new policy
 - The majority of the population am happy with the new policy
42. Choose the sentence with correct subject – verb agreement :
- My family is going on vacation next week
 - My family are going on vacation next week
 - My family were going on vacation next week
 - My family am going on vacation next week
43. Identify the sentence with correct subject – verb agreement :
- The price of these shoes are too high
 - The price of these shoes is too high
 - The price of these shoes were too high
 - The price of these shoes am too high

44. Choose the correct form of the verb to complete the sentence:
"She _____ her homework before dinner".
a) finish b) finishes c) finished d) finishing
45. Which sentence uses the verb "to swim" in the past tense correctly?
a) She swimmmed across the lake b) She swam across the lake
c) She swims across the lake d) She has swum across the lake
46. Identify the sentence with the correct form of the verb "to be" in the present progressive tense :
a) He are studying for the exam b) He am studying for the exam
c) He is studying for the exam d) He be studying for the exam
47. Choose the correct idiom to complete the sentence :
"She was able to think on her _____ during the presentation".
a) head b) feet c) nose d) ears
48. Which idiom means "to tell someone a secret"?
a) Spill the beans b) Hit the sack c) Kick the bucket d) Break the ice
49. Choose the correct phrasal verb to complete the sentence :
"Can you please _____ the window? It's getting hot in here".
a) break up b) break down c) break in d) break out
50. What does the phrasal verb "to put off" mean?
a) To postpone b) To turn off c) To put away d) To put on

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Question Paper Version : D

First/Second Semester B.E./B.Tech Degree Examination,
Dec.2024/Jan.2025

Balake Kannada

Time: 1 hr.]

[Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

1. Answer all the fifty questions, each question carries one mark.
2. Use only **Black ball point pen** for writing / darkening the circles.
3. For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.
4. Darkening two circles for the same question makes the answer invalid.
5. Damaging/overwriting, using whiteners on the OMR sheets are strictly prohibited.

Translate the following Kannada words as per the given model [Q.No. 1 and 2]
Example : Kacheri – Kacheriyalli.

1. Mane
a) Manadalli b) Maneyinda c) Maneyalli d) Mane
2. Angadi
a) Angadiyalli b) Angadihattira c) Angadiyage d) Angadiyolage
3. How would you write “This is my Book” in Kannada?
a) Adu Nanna pustaka b) idu nanna pustaka
c) Idu Avaru pustaka d) idu nannadu
4. How would you write “what is this” in Kannada?
a) Idu elli b) Idu yarige c) Idu yavudu d) Idu Avaradu
5. How would you write Fruit in Kannada
a) Hoovu b) Ele c) HaNNU d) BaNNa
6. How would you write “why sir” in Kannada?
a) Elli sir b) Yaake Saar c) Hogi Saar d) Banni Saar
7. What is the meaning of “Student” in Kannada?
a) Huduga b) Vidyarthi c) Jana d) Shale

8. How would you write "don't" in Kannada?

- a) Beku b) Beke c) Beda d) Yaake

9. How would you write "Marriage" in Kannada?

- a) Habba b) Maduve c) Sabe d) Prarthane

Write the English word for the following :

10. Chikka

- a) Big b) Huge c) Small d) House

11. PaaTa

- a) Story b) Lesson c) Book d) Drink

12. aNNa

- a) Sister b) Mother c) Father d) Brother

13. Ketta

- a) Good b) Bad c) New d) Big

14. Huduga

- a) Son b) Boy c) Daughter d) Sister

Match the following using the Table given below :

a) Fruit	i) Vaidya
b) Tree	ii) Desha
c) Flower	iii) Mara
d) Doctor	iv) Hannu
e) Country	v) Hoovu

15. Fruit

- a) = i b) = ii c) = iii d) = iv

16. Tree

- a) = i b) = ii c) = iii d) = iv

17. Flower

- a) = i b) = iii c) = iv d) = v

18. Doctor

- a) = i b) = ii c) = iii d) = v

19. Country

- a) = i b) = ii c) = iv d) = v

Translate the following English sentence into Kannada sentence :

20. Who are they?

- a) Neenu yaaru b) Avaru yaaru c) Neenu yelli d) Avaru Enu

21. What is her Name?
 a) Avalu yaru
 b) Avana hesarenu
 c) Avalu hesarenu
 d) Ninna hesarenu
22. This is my Nation
 a) Idu Avara desha
 b) Idu Nanna desha
 c) Adu Ninna desha
 d) Idu Ninna desha
23. What is your name?
 a) Avala Hesaru Enu?
 b) Avana Hesaru Enu?
 c) Ninna Hesaru Enu?
 d) Nanna Hesaru Enu?
24. This is my pen.
 a) Idu nanna pustaka
 b) Idu Avara vastu
 c) Idu Avara Lekhani
 d) Idu Nanna Lekhani

Fill in the blank for the given English words into Kannada meaning :

25. Small
 a) Udda
 b) agala
 c) Dappa
 d) Chikka
26. Salty
 a) huLi
 b) Uppu
 c) Khara
 d) Sihi
27. Simple
 a) Khatina
 b) Tappu
 c) Sarala
 d) Khasagi
28. Daily
 a) Nale
 b) Nenne
 c) Nadiddu
 d) Dina Nitya
29. Dignity
 a) Samasye
 b) Ghanathe
 c) Sari
 d) Olleya

Write the Kannada Vocabulary for the following English words :

30. Child _____
 a) navu
 b) Avaru
 c) Magu
 d) vidyarthi
31. Plant _____
 a) Mara
 b) Gida
 c) Hoova
 d) Rembe
32. Story _____
 a) Kate
 b) Angadi
 c) Mane
 d) Kavana
33. Where _____
 a) Enu
 b) Eke
 c) yaaru
 d) Elli
34. Bad _____
 a) hosa
 b) Naataka
 c) Ketta
 d) Olleya

Translate the following Kannada words into English :

35. Maga
a) Father b) Sister c) Daughter d) Son
36. Mane
a) Temple b) House c) Church d) Hospital
37. Kempu BaNNa
a) Black colour b) Red colour c) White colour d) Green colour

Translate the following English words into Kannada :

38. We
a) Naavu b) Namma c) Namage d) Nimage
39. This
a) Adu b) Alli c) Idu d) Both (a) and (b)
40. He
a) Avanu b) Avalu c) Naanu d) Neenu

Match the following using Table given below :

a)	White	i)	Hudugi
b)	Girl	ii)	Sihi
c)	Daughter	iii)	Granthalaya
d)	Sweet	iv)	Bili
e)	Library	v)	Magalu

41. White
a) = i b) = ii c) = iii d) = iv
42. Girl
a) = i b) = ii c) = iii d) = v
43. Daughter
a) = i b) = ii c) = iv d) = v
44. Sweet
a) = i b) = ii c) = iii d) = iv
45. Library
a) = i b) = ii c) = iii d) = iv

Write appropriate words for the following :

46. Mother
a) Huduga b) Hudugi c) Tayi d) Tande

47. Festival
a) Maduve b) Habba c) Mahe d) Raste
48. Bitter
a) Sihi b) Khara c) Uppu d) Kahi
49. Holiday
a) Mara b) Raje c) Nagu d) Ooru
50. Town
a) Halli b) Angadi c) Nagara d) Rajya

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First/Second Semester B.E/B.Tech. Degree Examination, Dec.2024/Jan.2025

ಸಂಸ್ಕೃತಿಕ ಕನ್ನಡ

(COMMON TO ALL BRANCHES)

Time: 1 hrs.]

[Max. Marks: 50

ಸೂಚನೆಗಳು

1. ಎಲ್ಲ ಜಿಂ ಪ್ರಶ್ನೆಗಳಿಗೂ ಉತ್ತರಿಸಿರಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ ಒಂದು ಅಂಕ.
2. ಓ.ಎಂ.ಆರ್ ಉತ್ತರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಯು.ಎಸ್.ಎನ್ ಸಂಖ್ಯೆ ಹಾಗೂ ಪಶ್ಚಿಮ ಶ್ರೇಣಿಯನ್ನು ಅಂದರೆ A, B, C ಅಥವಾ D ಯನ್ನು ತಪ್ಪಿಲ್ಲದಂತೆ ಕಡ್ಡಾಯವಾಗಿ ಗುರುತಿಸುವುದು ಅಭ್ಯರ್ಥಿಯ ಜವಾಬ್ದಾರಿಯಾಗಿರುತ್ತದೆ.
3. ಓ.ಎಂ.ಆರ್ ಉತ್ತರ ಪತ್ರಿಕೆಯಲ್ಲಿ ನಿಗದಿಪಡಿಸಿರುವ ಸ್ಥಳದಲ್ಲಿ ಭರ್ತಿಮಾಡದ ಹಾಗೆಯೇ ಬಿಟ್ಟಲ್ಲಿ ಅಥವಾ ಭರ್ತಿಮಾಡಿದ ಮಾಹಿತಿಯಲ್ಲಿ ಯಾವುದೇ ವ್ಯತ್ಯಾಸವಿದ್ದಲ್ಲಿ ಅಂತಹ ಉತ್ತರ ಪತ್ರಿಕೆಗಳನ್ನು ರದ್ದು ಪಡಿಸಲಾಗುವುದು.
4. ಕೇವಲ ಒಂದು ಉತ್ತರವನ್ನು ಮಾತ್ರ ಉತ್ತರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಗುರುತಿಸತಕ್ಕದ್ದು. ಒಂದೆ ಪ್ರಶ್ನೆಗೆ ಎರಡು ಉತ್ತರವನ್ನು ಗುರುತಿಸುವುದು ಅಮಾನ್ಯ.
5. ಎಲ್ಲಾ ಉತ್ತರಗಳನ್ನು ನಿಮಗೆ ಒದಗಿಸಲಾದ ಓ.ಎಂ.ಆರ್ ಉತ್ತರ ಪತ್ರಿಕೆಯ ಹಾಳೆಯ ಮೇಲೆ ಕಪ್ಪು ಅಥವಾ ನೀಲಿ ಶಾಹಿಯ ಬಾಲ್‌ಪಾಯಿಂಟ್ ಪೆನ್ನಿನಿಂದ ಗುರುತು ಮಾಡಬೇಕು.

1. ಹಂಪನಾಗರಾಜಯ್ಯನವರು ಹುಟ್ಟಿದ ವರ್ಷ.
 - a) 1936
 - b) 1946
 - c) 1947
 - d) 1935
2. ಕನ್ನಡ ಬರಹಗಳಿಗೆ _____ ವರ್ಷಗಳ ಇತಿಹಾಸವಿದೆ.
 - a) 1956
 - b) 1884
 - c) 1956
 - d) 1500
3. ಹುಲ್ಲಾಗು ಬೆಟ್ಟದಡಿ ಮನೆಗೆ _____ ಆಗು.
 - a) ಸಂಪಿಗೆ
 - b) ಮಲ್ಲಿಗೆ
 - c) ಇಂಪಿಗೆ
 - d) ತಂಪಿಗೆ
4. ಶಿಶುನಾಳ ಷರೀಫರ ಪ್ರಕಾರ ಕುಂಬಾರನಿಗೆ ಚಿನ್ನ ಎಂದರೆ.
 - a) ಬಂಗಾರ
 - b) ಮಣ್ಣು
 - c) ತೋಟ
 - d) ಕಾಯ
5. ಪಥ ಪದದ ಅರ್ಥ.
 - a) ರಕ್ತ
 - b) ಸ್ವರ್ಗ ಜೀವನ
 - c) ದಾರಿ
 - d) ಜ್ಞಾನಿ

6. ಜನಪದ ಅಕಾಡೆಮಿಯ ಅಧ್ಯಕ್ಷರು _____
 a) ಹುಚ್ಚಪ್ಪ ಮಾಸ್ತರ
 b) ಶ್ರೀ.ಎಸ್.ಕೆ.ಕರೀಂಖಾನ್
 c) ಹಿ.ಚಿ.ಬೋರಲಿಂಗಯ್ಯ
 d) ಶ್ರೀನಿವಾಸಮೂರ್ತಿ
7. ಕವಿರಾಜಮಾರ್ಗದಲ್ಲಿ _____ ಅವರನ್ನು ಕುರಿತು ವರ್ಣಿಸಲಾಗಿದೆ?
 a) ತಮಿಳರು b) ಕೇರಳಿಗರು c) ಕನ್ನಡಿಗರು d) ಮರಾಠಿಗರು
8. ಕನ್ನಡ ಭಾಷೆಗೆ ಎಷ್ಟು ಪ್ರಮುಖ ಕೌಶಲ್ಯಗಳಿವೆ?
 a) 10 b) 20 c) 4 d) 8.
9. ವಚನ ಎಂದರೆ _____
 a) ಮಾತು b) ಸಮಾಜ c) ಭಾಷೆ d) ದೇಶ
10. ಸುಂಕ ಪದದ ಅರ್ಥ.
 a) ಕಾಸು b) ಆಣಿ c) ತೆರಿಗೆ d) ನೋವು.
11. ವಸುಧೇಂದ್ರರವರು ಬರೆದ ಕಾದಂಬರಿ ಇದಾಗಿದೆ.
 a) ಮನೀಷ b) ಕೃತಿ c) ಕರ್ತೃ d) ಸಂಕಲನ
12. ಪ್ರಹ್ಲಾದ _____ ಇಂಜಿನಿಯರ್.
 a) ಸಾಫ್ಟ್‌ವೇರ್ b) ಇಂಜಿನಿಯರ್ c) ಸಿವಿಲ್ ಇಂಜಿನಿಯರ್ d) ಮೆಕಾನಿಕ್
13. ವಿಜಯನಗರ ಸಾಮ್ರಾಜ್ಯದ ರಾಜಧಾನಿ
 a) ಹಂಪೆ b) ಬೇಲೂರು c) ಹಳೇಬೀಡು d) ಕೋಲಾರ
14. ನಮ್ಮ ರಾಜ್ಯದಲ್ಲಿ _____ ಸೂತ್ರ ಬಳಕೆಯಲ್ಲಿದೆ.
 a) ಏಕಭಾಷಾ b) ದ್ವಿಭಾಷಾ c) ತ್ರಿಭಾಷಾ d) ಭಾಷಾ
15. ಧರ್ಮಸಹಿಷ್ಣುತೆ ಬಗ್ಗೆ ಹೇಳುವ ಶಾಸನ _____
 a) ಹಳೇಬೀಡು b) ಬೇಲೂರು c) ಹಂಪಿ d) ಹಾಸನ
16. ಬುಕ್ಕರಾಯನ ಕಾಲ ಸರಿಸುಮಾರು _____ ವರ್ಷ.
 a) 1368 b) 1468 c) 1568 d) 1668.

17. ಕುರುಡು ಕಾಂಚಾಣ ಪದ್ಯದ ಕವಿ.
 a) ಕುವೆಂಪು
 b) ದ.ರಾ.ಬೇಂದ್ರೆ
 c) ಡಿ.ವಿ.ಜಿ
 d) ಗೋಕಾಕ್
18. ಯುಗಾದಿ ಕಥೆಯಲ್ಲಿ ಯಾರನ್ನು 'ಖಡಕ್' ಮಾಸ್ತರ ಎಂದು ಕರೆಯಲಾಗಿದೆ.
 a) ಗೋಪಣ್ಣ
 b) ಪ್ರಹ್ಲಾದ
 c) ಇಸ್ಮಾಯಿಲ್
 d) ಕಾಸಿಂಸಾಬ್
19. ಯದ್ಧದಲ್ಲಿ ಗೆದ್ದು ಬಂದರೆ ಕೀರ್ತಿ, ಸತ್ತರೆ ____
 a) ನರಕ
 b) ಹಣ
 c) ಪ್ರಶಸ್ತಿ
 d) ಸ್ವರ್ಗ
20. ಹಲವು ಕಾಲ ಕಲ್ಲು ನೀರೊಳಗಿದ್ದರೇನು? ಬಲುನೆನೆದು ____ ಆಗುವುದೆ.
 a) ಅಮೃತಶಿಲೆ
 b) ಹವಳ
 c) ಕಪ್ಪೆ
 d) ನಿಧಿ.
21. ಕಳ್ಳಗಂಜಿ ____ ಹೊಕ್ಕಡೆ ಹುಲಿ ತಿಂಬುದ ಮಾಬುದೇ?
 a) ಮನೆ
 b) ಕಾಡು
 c) ಸ್ಮಶಾನ
 d) ಹುತ್ತ.
22. ಕರಿ ಘನ ____ ಕಿರಿದೆನ್ನಬಹುದೆ ಬಾರದಯ್ಯ.
 a) ಜ್ಯೋತಿ
 b) ನೆನಪು
 c) ಮರೆಪು
 d) ಅಂಕುಶ.
23. ತೊರೆಯೊಳು ____ ದುರಿತ ಪೋಗುವುದೆ?
 a) ಮಿಂದರೆ
 b) ಹಾಡಿದರೆ
 c) ಕುಣಿದರೆ
 d) ಮರೆತರೆ.
24. ಪವಳದ ಲತೆಗೆ ____ ಇಟ್ಟವರು ಯಾರು ?
 a) ಕಪ್ಪು
 b) ಹಸಿರು
 c) ಚಿತ್ರ
 d) ಕೆಂಪು.
25. ಬ್ರಹ್ಮಾಡವನ್ನೆಲ್ಲ ಯಾರು ತುಂಬಿಕೊಂಡಿದ್ದಾರೆಂದು ಶರೀಫರು ಹೇಳಿದ್ದಾರೆ?
 a) ಕುಂಬಾರ
 b) ಬಡಿಗೆ
 c) ಕುಂಬಾರಕಿ
 d) ಗಾಣತಿ
26. ಎಷ್ಟು ಕಾಸಿಗೆ ಕುಂಬಾರಕಿ ಒಂದು ಕುಡಕಿಯನ್ನು ಮಾರುವಳು?
 a) 3
 b) 6
 c) 9
 d) 10
27. ನಗುವು ಸಹಜದ ಧರ್ಮ ನಗಿಸುವುದು ____
 a) ಪರಧರ್ಮ
 b) ಅಧರ್ಮ
 c) ಧರ್ಮ
 d) ಮನುಷ್ಯ ಧರ್ಮ

28. ವಿಶ್ವೇಶ್ವರಯ್ಯ ಅವರ ತವರೂರು ಯಾವುದು?
 a) ರಾಣಿಬೆನ್ನೂರು b) ಮಂಡ್ಯ c) ಮೈಸೂರು d) ಮುದ್ದೇನಹಳ್ಳಿ
29. ಗ್ರಂಥಕರ್ತರ ಸಮ್ಮೇಳನವು ____ ರಲ್ಲಿ ನಡೆಯಿತು.
 a) 1977 b) 1907 c) 1970 d) 1974.
30. ಭಾರತ ಸರ್ಕಾರವು ಕನ್ನಡ ಭಾಷೆಯನ್ನು _____ ಎಂದು ಘೋಷಿಸಿದೆ.
 a) ಶಾಸ್ತ್ರೀಯ ಭಾಷೆ
 b) ಕನ್ನಡಭಾಷೆ
 c) ತ್ರಿಭಾಷೆ
 d) ಲಿಪಿ.
31. ವಿಫಲವಾದ ಪದದ ಅರ್ಥ.
 a) ಕ್ರಾಂತಿ b) ಸ್ವರ್ಗ c) ಕವಿತೆ d) ಕಾರ್ಯ
32. ಶಿಶುನಾಳ ಷರೀಫರ ಪ್ರಕಾರ 'ಆಚಾರ' ಎಂದರೆ
 a) ಅವಿಗೆ ಅಥವಾ ಮುಚ್ಚಳ b) ಮಣ್ಣು
 c) ನೀರು d) ಮನ.
33. ವಿಶ್ವೇಶ್ವರಯ್ಯ ಕಬ್ಬಿಣ ಮತ್ತು ಉಕ್ಕಿನ ಕಾರ್ಖಾನೆ ಯಾವ ಜಿಲ್ಲೆಯಲ್ಲಿದೆ?
 a) ಮಂಡ್ಯ b) ಮಂಗಳೂರು
 c) ಮೈಸೂರು d) ಶಿವಮೊಗ್ಗ
34. ಗಾಂಧೀಜಿಯವರು ಯಾರನ್ನು "ಅನ್ನಬ್ರಹ್ಮ" ಎಂದು ಕರೆದಿದ್ದಾರೆ?
 a) ಕುವೆಂಪು
 b) ಸರ್. ಎಂ. ವಿಶ್ವೇಶ್ವರಯ್ಯ
 c) ಡಿ.ವಿ.ಜಿ
 d) ಅಕ್ಕಿಹೆಬ್ಬಾಳು ನರಸಿಂಹಮೂರ್ತಿ
35. ಯುಗಾದಿ ಕಥೆಯ ಲೇಖಕರು ಯಾರು?
 a) ಡಿ.ವಿ.ಜಿ b) ವಸುಧೇಂದ್ರ c) ಅ.ನ.ಕೃ d) ವಿ.ಕೃ.ಗೋಕಾಕ್
36. ಕಾಸಿಂಸಾಬರ ಮಗಳ ಹೆಸರೇನು?
 a) ಚಾಂದಿನಿ b) ಹಂಸ c) ರೇಖಾ d) ರೂಪ.

37. ಹಸಿವಾದರೆ ಉರೋಳಗೆ ಭಿಕ್ಷಾನ್ನಗಳುಂಟು, ತೃಷೆಯಾದರೆ ಕೆರೆ ಬಾವಿ ಹಳ್ಳಗಳುಂಟು, ಶಯನಕ್ಕೆ ಹಾಳುದೇಗುಲಗಳುಂಟು, ಈ ವಚನವನ್ನು ರಚಿಸಿದವರು.

- a) ಅಕ್ಕಮಾಹಾದೇವಿ
- b) ಬಸವಣ್ಣ
- c) ರಾಮನಾಥ
- d) ಅಲ್ಲಮ ಪ್ರಭು

38. ವಿದ್ಯಾವರ್ಧಕ ಸಂಘವನ್ನು ಯಾವ ಕಾರಣಕ್ಕಾಗಿ ಸ್ಥಾಪಿಸಲಾಯಿತು.

- a) ಕರ್ನಾಟಕ ಸಂಸ್ಕೃತಿಗಾಗಿ
- b) ದೇಶಕ್ಕಾಗಿ
- c) ಭಾಷೆಗಾಗಿ
- d) ಕರ್ನಾಟಕ ಏಕೀಕರಣಕ್ಕಾಗಿ

39. ತಲ್ಲಣಿಸದಿರು ಕಂಡ್ಯ ತಾಳು ಮನವೇ ಕೀರ್ತನೆಯ ಕೀರ್ತನಕಾರರು ಯಾರು?

- a) ಪುರಂದರದಾಸರು
- b) ಶ್ರೀರಂಗರು
- c) ಕನಕದಾಸರು
- d) ವೆಂಕಟಸುಬ್ಬಯ್ಯ

40. ವೀರರ ಜೀವನ ಸ್ಮಾರಕಗಳನ್ನು ಏನೆಂದು ಕರೆಯುವರು?

- a) ಸಿಡಿತಲೆ
- b) ವೀರಗಲ್ಲು
- c) ಮಾಸ್ತಿಗಲ್ಲು
- d) ಬರಹದಕಲ್ಲು

41. ಜೇಡರ ದಾಸಿಮಯ್ಯನವರ ಅಂಕಿತನಾಮ

- a) ಚನ್ನ
- b) ಶಿವಪ್ಪ
- c) ಗುಹೇಶ್ವರ
- d) ರಾಮನಾಥ.

42. ಅಲಿಸುವ ಅಥವಾ ಗ್ರಹಿಸುವ ಕೌಶಲ ಈ ವಾಕ್ಯದಲ್ಲಿರುವ ಪದ್ಯಿ ವಿಭಕ್ತಿ ಯಾವುದು?

- a) ಆ
- b) ಎಲ್ಲಿ
- c) ಗೆ
- d) ದೆಸೆಯಿಂದ

43. ವಿನೋಬಾ ಭಾವೆಯವರು ಕನ್ನಡ ಲಿಪಿಯನ್ನು ಏನೆಂದು ಕರೆದಿದ್ದಾರೆ?

- a) ರಾಜರಾಣಿ
- b) ಲಿಪಿಗಳ ರಾಣಿ
- c) ಕನ್ನಡಭಾಷೆ
- d) ಕುಸುಮರಾಣಿ

44. ಧಾಮಸ್ ಮನ್ಮೋರವರ ಯಾವ ಜಿಲ್ಲೆಯಲ್ಲಿ ಕಲೆಕ್ಟರ್ ಆಗಿ ಕಾರ್ಯ ನಿರ್ವಹಿಸಿದ್ದರು?
a) ಬಾಗಲಕೋಟೆ b) ಬೆಳಗಾವಿ c) ಬೀದರ್ d) ಬಳ್ಳಾರಿ.
45. ಕಳೆದ ಪದದ ಸಮನಾರ್ಥಕ ಪದ
a) ರಾಗಿ b) ಜೋಳ c) ಭತ್ತ d) ಗೋಧಿ
46. ಹಂಪ ನಾಗರಾಜಯ್ಯನವರ ಹುಟ್ಟಿದ ಸ್ಥಳ
a) ಹಂಪ ನಂದ್ರ b) ಮಂಡ್ಯ c) ಬಳ್ಳಾರಿ d) ಮೈಸೂರು.
47. ಕಬ್ಬಿಗರ ಕಾವ್ಯ ಕೃತಿಯನ್ನು ರಚಿಸಿದ ಕವಿ ಯಾರು?
a) ಪಂಪ b) ರನ್ನ c) ಜನ್ನ d) ಅಂಡಯ್ಯ
48. ತಂತ್ರಜ್ಞಾನದ ಬೆಳವಣಿಗೆಯ ಫಲವಾಗಿ ಕನ್ನಡ ಭಾಷೆಗೆ ಸಾಕಷ್ಟು _____ ಪದಗಳು ಸೇರಿಕೊಂಡಿವೆ.
a) ತೆಲಗು b) ತಮಿಳು c) ಇಂಗ್ಲೀಷ್ d) ಮಲಯಾಳಿ
49. ಶರಣರ ಚಳುವಳಿಗೆ ಪ್ರೇರಕ ಶಕ್ತಿಯಾಗಿ ನಿಂತ ಮಹಾ ಮಾನವತಾವಾದಿ.
a) ಅಕ್ಕಮಹಾದೇವಿ b) ಆಯ್ದಕ್ಕಿಮಾರಯ್ಯ
c) ಬಸವಣ್ಣ d) ಆಯ್ದಕ್ಕಿ ಲಕ್ಕಮ್ಮ
50. ಭಕ್ತಿ ಪದದ ತದ್ಭವ ರೂಪ _____
a) ಪ್ರಕೃತಿ b) ವಿಕೃತಿ c) ಸಂಸ್ಕೃತಿ d) ಭಕುತಿ
