BGS College Of Engineering and Technology

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Bengaluru - 86

VTU - Model & May 2023 - Exam Question Papers

Physics Cycle

Physics Cycle 2022-Scheme
Model & Theory Question Papers for 1st Semester

Sl, No	Name of the Subject	
1	Mathematics-1 for CSE Stream	Model Question Paper
2	Applied Physics for CSE Stream	Model Question Paper
3	Principles of Programming Using C-(MQP 1-3)	Model Question Paper
4	Introduction to Electrical Engineering	Model Question Paper
5	Renewable Energy Sources for CSE Stream	Model Question Paper
6	Mathematics-1 for CSE Stream	Theory Question Paper
7	Applied Physics for CSE Stream	Theory Question Paper
8	Principles of Programming Using C	Theory Question Paper
9	Introduction to Electrical Engineering	Theory Question Paper
10	Renewable Energy Sources for CSE Stream	Theory Question Paper
11	Introduction for Internet of Things	Theory Question Paper
12	Communicative English	Theory Question Paper
13	Samskruthika Kannada	Theory Question Paper
14	Balake Kannada	Theory Question Paper
15	Innovation & Design Thinking	Theory Question Paper

Model Question Paper- I with effect from 2022

CBCS SCHEME

First Semester B.E Degree Examination_____

Mathematics-I for Computer Science Engineering Stream (BMATS101)

TIME: 03Hours   Max.Marks:100

1. Note: *Answer any **FIVE** full questions, choosing at least **ONE** 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	With usual notation prove that $\tan\phi = r\dfrac{d\theta}{dr}$.	6	L2	CO1
	b	Find the anglebetweenthe curves $r = a\log\theta,\ r = \dfrac{\theta}{\log\theta}$	7	L2	CO1
	c	Show that the radius of curvature at any point of the cycloid $x = a(\theta + \sin\theta),\ y = a(1 - \cos\theta)$ is $4a\cos\left(\dfrac{\theta}{2}\right)$.	7	L3	CO1
		OR			
Q.2	a	Show that the curves $r = a(1 + \sin\theta)$ and $r = a(1 + \sin\theta)$ cut each other orthogonally.	7	L2	CO1
	b	Find the pedal equation of the curve $\dfrac{2a}{r} = (1 + \cos\theta)$	8	L1	CO1
	c	Using modern mathematical tool write a program/code to plot the curve $r = 2|\cos 2\theta|$.	5	L3	CO5
		Module - 2			
Q.3	a	Expand $\log(\sec x)$ byMaclaurin'sseries up to thetermcontaining x^4.	6	L2	CO1
	b	If $u = e^{(ax+by)}f(ax - by)$, prove that $b\dfrac{\partial u}{\partial x} + a\dfrac{\partial u}{\partial y} = 2abu$ by using concepts composite functions.	7	L2	CO1
	c	Find the extreme values of the function $f(x, y) = x^3 + 3xy^2 - 3y^2 - 3x^2 + 4$	7	L3	CO1
		OR			
Q.4	a	Evaluate (i) $\lim\limits_{x\to 0}\left(\dfrac{a^x + b^x}{2}\right)^{\frac{1}{x}}$. (ii) $\lim\limits_{x\to 0}\left(\dfrac{\tan x}{x}\right)^{1/x}$.	7	L2	CO1

	b	If $x+y+z=u, y+z=uv, z=uvw$ find $\dfrac{\partial(x,y,z)}{\partial(u,v,w)}$.	8	L2	CO1
	c	Using modern mathematical tool write a program/code to show that $u_{xx}+u_{yy}=0$ given $u=e^x(x\cos(y)-y\sin(y))$.	5	L3	CO5
Module 3					
Q.5	a	Solve: $\dfrac{dy}{dx}+\dfrac{y}{x}=x^2 y^6$.	6	L2	CO2
	b	Find the orthogonal trajectories of $\dfrac{x^2}{a^2}+\dfrac{y^2}{b^2+\lambda}=1$, where λ is a parameter.	7	L3	CO2
	c	Solve $xyp^2-(x^2+y^2)y+xy=0$.	7	L2	CO2
OR					
Q.6	a	Solve $(x^2+y^2+x)dx+xy\,dy=0$	6	L2	CO2
	b	When a switch is closed in a circuit containing a battery E, a resistance R and an inductance L, the current i build up at a rate given by $L\dfrac{di}{dt}+Ri=E$. Find i as a function of t. How long will it be, before the current has reached one-half its final value, if E=6 volts, R=100 Ohms and L=0.1 Henry?	7	L3	CO2
	c	Find the general solution of the equation $(px-y)(py+x)=a^2 p$ by reducing into Clairaut's form by taking the substitution $X=x^2$, $Y=y^2$.	7	L2	CO2
Module – 4					
Q.7	a	Find the least positive values of x such that (i) $71 \equiv x\,(mod\,8)$ (ii) $78+x \equiv 3\,(mod\,5)$ (iii) $89 \equiv (x+3)(mod\,4)$	6	L1	CO3
	b	Find the remainder when $(349\times 74\times 36)$ is divided by 3.	7	L2	CO3
	c	Solve: $2x+6y \equiv 1(mod\,7)$ and $4x+2y \equiv 2(mod\,7)$.	7	L3	CO3
OR					
Q.8	a	(i) Find the last digit of 7^{2013} (ii) Find the last digit of 13^{37}.	6	L2	CO3
	b	Find the remainder when the number 2^{1000} is divided by 13.	7	L3	CO3
	c	Find the remainder when 14! is divided by 17.	7	L2	CO3

Model Question Paper- I with effect from 2022

		Module – 5			
			6	1.2	CO4
Q.9	a	Find the rank of the matrix $\begin{bmatrix} 2 & 3 & -1 & -1 \\ 1 & -1 & -2 & -4 \\ 3 & 1 & 3 & -2 \\ 6 & 3 & 0 & -7 \end{bmatrix}$			
	b	Solve the system of equations by Gauss-Jordan method $x+y+z=10,\ 2x-y+3z=19,\ x+2y+3z=22.$	7	L3	CO4
	c	For what values λ and μ the system of equations $2x+3y+5z=9,\ 7x+3y-2z=8,\ 2x+3y+\lambda z=\mu,$ has (i) no solution (ii) a unique solution and (iii) infinite number of solutions.	7	1.2	CO4
		OR			
Q.10	a	Solve the following system of equations by Gauss – Seidel method $10x+y+z=12,\ x+10y+z=12,\ x+y+10z=12.$	8	L3	CO4
	b	Solve the following system of equations by Gauss-Elimination method $x+y+z=9,\ x-2y+3z=8,\ 2x+y-z=3.$	7	L3	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

Model Question Paper-I with effect from 2022-23 (CBCS Scheme)

USN | | | | | | | | | | |

First/Second Semester B.E. Degree Examination

Applied Physics for Computer Science Stream

TIME: 03 Hours **Max. Marks: 100**

Note:
01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.
02. Draw neat sketches where ever necessary.
03. **Constants :** Speed of Light 'c' $= 3 \times 10^8$ ms^{-1}, Boltzmann Constant 'k' $= 1.38 \times 10^{-23}$ JK^{-1}, Planck's Constant 'h' $= 6.625 \times 10^{-34}$ Js, Acceleration due to gravity 'g' $= 9.8$ ms^{-2}, Permittivity of free space 'ε_0' $= 8.854 \times 10^{-12}$ F m^{-1}.

		Module -1	*Bloom's Taxonomy Level	Marks
Q.01	a	Define LASER and Discuss the interaction of radiation with matter.	L2	7
	b	Define Acceptance angle and Numerical Aperture and hence derive an expression for NA in terms of RIs core, cladding and surrounding.	L2	8
	c	A LASER source has a power output of 10^{-3} W. Calculate the number of photons emitted per second given the wavelength of LASER 692.8 nanometer.	L3	5
		OR		
Q.02	a	Illustrate the construction and working of Semiconductor LASER with a neat sketch and energy level diagram also mention its applications.	L2	9
	b	Discuss the types of optical fibers based on Modes of Propagation and RI profile.	L2	6
	c	Obtain the attenuation co-efficient of the given fiber of length 1500 m given the input and output power 100 mW and 70 mW.	L3	5
		Module-2		
Q.03	a	Setup SchrÖdinger time independent wave equation in one dimension.	L2	8
	b	State and Explain Heisenberg's Uncertainty principle and Principle of Complementarity.	L2	7
	c	An electron is kinetic energy 500 keV is in vacuum. Calculate the group velocity and de Broglie wavelength assuming the mass of the moving electron is equal to the rest mass of electron.	L3	5
		OR		
Q.04	a	Discuss the motion of a quantum particle in a one-dimensional infinite potential well of width 'a' and also obtain the eigen functions and energy eigen states.	L2	10
	b	Explain the physical significance of the Wave Function.	L2	5
	c	The speed of electron is measured to with in an uncertainty of 2×10^4 ms^{-1} in one dimension. What is the minimum width required by the electron to be confined in an atom?	L3	5
		Module-3		
Q.05	a	Define a bit and qbit and explain the properties of qubit.	L2	6
	b	Discuss the CNOT gate and its operation on four different input states.	L2	6
	c	A Linear Operator 'X' operates such that $X |0\rangle = |1\rangle$ and $X |1\rangle = |0\rangle$. Find the matrix representation of 'X'.	L3	8
		OR		
Q.06	a	State the Pauli matrices and apply Pauli matrices on the states $|0\rangle$ and $|1\rangle$.	L2	8
	b	Elucidate the differences between classical and quantum computing.	L2	6

	c	Describe the working of controlled-Z gate mentioning its matrix representation and truth-table.	L3	6
		Module-4		
Q.07	a	Define Fermi Factor and Discuss the variation of Fermi factor with temperature and energy.	L2	7
	b	Explain DC and AC Josephson effects and mention the applications of superconductivity in quantum computing.	L2	8
	c	Calculate the probability of occupation of an energy level 0.2 eV above fermi level at temperature 27°C.	L3	5
		OR		
Q.08	a	Describe Meissner's Effect and hence classify superconductors into Soft and Hard superconductors using M-H graphs.	L2	9
	b	Enumerate the assumptions of Quantum free Electron Theory of Metals	L2	6
	c	Lead has superconducting transition temperature of 7.26 K. If the initial field at 0K is 50×10^3 Am^{-1} Calculate the critical field at 6k.	L3	5
		Module-5		
Q.09	a	Discuss timing in Linear motion, Uniform motion, slow in and slow out.	L2	8
	b	Distinguish between descriptive and inferential statistics.	L2	6
	c	Illustrate the odd rule and odd rule multipliers with a suitable example.	L3	6
		OR		
Q.10	a	Describe Jumping and parts of jump.	L2	8
	b	Discuss the salient features of Normal distribution using bell curves.	L2	7
	c	The number of particles emitted per second by a random radioactive source has a Poisson's distribution with $\lambda = 4$. Calculate the probability of $P(X = 0)$ and $P(X = 1)$.	L3	5

*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.

Table showing the Bloom's Taxonomy Level, Course Outcome and Program Outcome				
Question		Bloom's Taxonomy Level attached	Course Outcome	Program Outcome
Q.1	(a)	L2	1	1,2,12
	(b)	L2	1	1
	(c)	L3	1	1,2
Q.2	(a)	L2	1	1
	(b)	L2	1	1,2
	(c)	L3	1	1,2,12
Q.3	(a)	L2	2	1,2
	(b)	L2	2	1,2,12
	(c)	L3	2	1,2
Q.4	(a)	L2	2	1,2
	(b)	L2	2	1,2,12
	(c)	L3	2	1,2
Q.5	(a)	L2	2	1,2
	(b)	L2	2	1,2
	(c)	L3	2	1,2,12
Q.6	(a)	L3	2	1,2,12
	(b)	L2	2	1,2
	(c)	L2	2	1,2
Q.7	(a)	L2	3	1,2
	(b)	L2	3	1,2
	(c)	L3	3	1,2,12
Q.8	(a)	L2	3	1,2
	(b)	L2	3	1,2
	(c)	L3	3	1,2
Q.9	(a)	L1	4	1,2
	(b)	L2	4	1,2,12
	(c)	L3	4	1,2,5
Q.10	(a)	L2	4	1,2
	(b)	L2	4	1,2,12
	(c)	L3	4	1,2

Model Question Paper-II with effect from 2022-23 (CBCS Scheme)

USN

First/Second Semester B.E. Degree Examination
Applied Physics for Computer Science Stream

TIME: 03 Hours   Max. Marks: 100

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.
02. Draw neat sketches where ever necessary.
03. **Constants** : Speed of Light 'c' = 3×10^8 ms^{-1}, Boltzmann Constant 'k' = 1.38×10^{-23} JK^{-1}, Planck's Constant 'h' = 6.625×10^{-34} Js, Acceleration due to gravity 'g' = 9.8 ms^{-2}, Permittivity of free space 'ε_0'=8.854×10^{-12} F m^{-1}.

		Module -1	*Bloom's Taxonomy Level	Marks
Q.01	a	Obtain the expression for Energy Density using Einstein's A and B coefficients and thus conclude on $B_{12}=B_{21}$.	L2	8
	b	Describe attenuation and explain the various fiber losses.	L2	7
	c	Given the Numerical Aperture 0.30 and RI of core 1.49 Calculate the critical angle for the core-cladding interface.	L3	5
		OR		
Q.02	a	Discuss the applications of LASER in bar-code scanner and LASER Cooling.	L2	9
	b	Discuss Point to Point communication using optical fibers.	L2	6
	c	Calculate the ratio of population for a given pair of energy levels corresponding to emission of radiation 694.3 nm at a temperature of 300 K.	L3	5
		Module-2		
Q.03	a	Derive an expression for de Broglie wavelength by analogy and hence discuss the significance of de Broglie waves.	L2	6
	b	Explain the Wave function with mathematical form and Discuss the physical significance of a wave function.	L2	9
	c	Calculate the energy of the first three states for an electron in one dimensional potential well of width 0.1 nm.	L3	5
		OR		
Q.04	a	Explain Eigen functions and Eigen Values and hence derive the eigen function of a particle inside infinite potential well of width 'a' using the method of normalization.	L2	10
	b	Show that electron does not exist inside the nucleus using Heisenberg's uncertainty principle.	L2	5
	c	An electron is associated with a de Broglie wavelength of 1nm. Calculate the energy and the corresponding momentum of the electron.	L3	5
		Module-3		
Q.05	a	Discuss the working of phase gate mentioning its matrix representation and truth table.	L2	6
	b	Explain Orthogonality and Orthonormality with an example for each.	L2	6
	c	Given $\|\psi\rangle = \begin{pmatrix} \alpha_1 \\ \alpha_2 \end{pmatrix}$ and $\|\phi\rangle = \begin{pmatrix} \beta_1 \\ \beta_2 \end{pmatrix}$ Prove that $\langle\phi\|\psi\rangle = \langle\psi\|\phi\rangle^*$	L3	8
		OR		
Q.06	a	Explain the representation of qubit using Bloch Sphere.	L2	6
	b	Explain Single qubit gate and multiple qubit gate with an example for each	L2	8

	c	Explain the Matrix representation of 0 and 1 States and apply identity operator I to $|0\rangle$ and $|1\rangle$ states,	L3	6
Module-4				
Q.07	a	Enumerate the failures of classical free electro theory and assumptions of quantum free electron theory of metals.	L2	7
	b	Explain Meissner's Effect and the variation of critical field with temperature.	L2	8
	c	A superconducting tin has a critical temperature of 3.7 K at zero magnetic field and a critical field of 0.0306 Tesla at 0 K. Find the critical field at 2 K.	L3	5
OR				
Q.08	a	Explain the phenomenon of superconductivity and Discuss qualitatively the BCS theory of superconductivity for negligible resistance of metal at temperatures close to absolute zero.	L2	9
	b	Give the qualitative explanation of RF Squid with the help of a neat sketch.	L2	6
	c	Find the temperature at which there is 1% probability that a state with an energy 0.5 eV above Fermi energy is occupied.	L3	5
Module-5				
Q.09	a	Elucidate the importance of size & scale and weight and strength in animations.	L2	8
	b	Mention the general pattern of monte Carlo method and hence determine the value of π.	L2	6
	c	Describe the calculation of Push time and stop time with examples.	L3	6
OR				
Q.10	a	Sketch and explain the motion graphs for linear, easy ease, easy ease in and easy ease out cases of animation.	L2	8
	b	Discuss modeling the probability for proton decay.	L2	7
	c	A slowing-in object in an animation has a first frame distance 0.5m and the first slow in frame 0.35m. Calculate the base distance and the number of frames in sequence.	L3	5

*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.

Question		Bloom's Taxonomy Level attached	Course Outcome	Program Outcome
Q.1	(a)	L2	1	1,2,12
	(b)	L2	1	1
	(c)	L3	1	1,2
Q.2	(a)	L2	1	1,2
	(b)	L2	1	1,2,12
	(c)	L3	1	1,2
Q.3	(a)	L2	2	1,2
	(b)	L2	2	1,2,12
	(c)	L3	2	1,2
Q.4	(a)	L2	2	1,2,12
	(b)	L2	2	1,2
	(c)	L3	2	1,2
Q.5	(a)	L2	2	1,2
	(b)	L2	2	1,2
	(c)	L3	2	1,2
Q.6	(a)	L2	2	1,2,
	(b)	L2	2	1,2
	(c)	L3	2	1,2,12
Q.7	(a)	L2	3	1,2,12
	(b)	L2	3	1,2
	(c)	L3	3	1,2
Q.8	(a)	L2	3	1,2
	(b)	L2	3	1,2,12
	(c)	L3	3	1,2
Q.9	(a)	L2	4	1,2,5
	(b)	L2	4	1,2,12
	(c)	L3	4	1,2
Q.10	(a)	L2	4	1,2,5, 12
	(b)	L2	4	1,2
	(c)	L3	4	1,2

Model Question Paper-I/II with effect from 2022-23 (CBCS Scheme)

USN

First/Second Semester B.E. Degree Examination
Introduction to Internet of Things (IOT)

TIME: 03 Hours

Max. Marks: 100

Note: 01. Answer any FIVE full questions, choosing at least ONE question from each MODULE.

		Module -1	*Bloom's Taxonomy Level	Marks
Q.01	a	Name the four broad categories of computer network based on reachability and explain them briefly.	L1	8
	b	Differentiate between IoT and M2M.	L1	6
	c	With a neat diagram explain the network communication between two hosts following the OSI model.	L1	6
		OR		
Q.02	a	What is IoT? Write the characteristics of IoT System.	L1	5
s	b	With a neat diagram explain the inter dependency technology for IoT Planes.	L2	10
	c	With a neat diagram explain Internet protocol suite.	L1	5
		Module-2		
Q. 03	a	With a neat diagram explain the working mechanism of actuator.	L1	6
	b	Explain the types of actuators.	L1	8
	c	Define sensor and explain the characteristics of sensor.	L2	6
		OR		
Q.04	a	List and explain the characteristics of Actuators.	L2	8
	b	Explain the major factors influence the choice of sensors in IoT-based sensing solutions.	L1	8
	c	With a neat diagram explain scalar and Multimedia sensing technics.	L1	4
		Module-3		
Q. 05	a	List and explain common data types in IoT applications	L1	5
	b	With a neat diagram explain offsite processing topology.	L1	10

			L1	5
	c	Write a short note on offloading considerations.		
		OR		
			L1	5
Q. 06	a	With a neat diagram explain onsite processing topology.		
	b	Explain IoT Device Design and Selection Considerations	L2	8
	c	Write a short note on offload location and offload decision making.	L1	7
		Module-4		
			L1	8
Q. 07	a	Define Virtualization. Discuss advantages of virtualization		
	b	Summarize the case study related to Smart irrigation management system.	L2	5
	c	With the help of neat diagrams explain the of cloud models.	L1	7
		OR		
			L1	8
Q. 08	a	With a neat diagram explain Architecture of a sensor-cloud platform		
	b	With a neat diagram explain Components of an agricultural IoT	L1	5
	c	With the help of neat diagrams describe the difference between Network computing and cloud computing	L1	7
		Module-5		
			L1	7
Q. 09	a	With a neat diagram explain the Architecture of vehicular IoT.		
	b	Define Machine learning and explain the advantages of ML.	L1	6
	c	With a neat diagram explain Architecture of healthcare IoT.	L1	7
		OR		
			L1	7
Q. 10	a	List the advantages of vehicular IoT.		
	b	With a neat diagram explain the types of Machine learning.	L1	6
	c	Write note on advantages and risk of healthcare IoT.	L1	7

Model Question Paper-I with effect from 2022-23 (CBCS Scheme)

USN ☐☐☐☐☐☐☐☐☐☐

First/Second Semester B.E. Degree Examination

Introduction to Internet of Things (IOT)

TIME: 03 Hours

Max. Marks: 100

Note: 01. Answer any FIVE full questions, choosing at least ONE question from each MODULE.

		Module -1	*Bloom's Taxonomy Level	Marks
Q.01	a	Classify network types based on physical topologies and connection types with schematic diagrams.	L2	10
	b	Explain the IoT planes, various enablers of IoT, and the complex interdependencies among them with a block diagram.	L2	10
		OR		
Q.02	a	Explain networked communication between two hosts following the TCP/IP suite with a block diagram.	L2	08
	b	Outline the interdependence and reach of IoT over various application domains and networking paradigms.	L2	08
	c	Summarize the characteristic features of IoT systems.	L2	04
		Module-2		
Q.03	a	Outline the basic differences between transducers, sensors, and actuators.	L2	06
	c	Compare mechanical, soft, and shape memory polymer based actuators.	L2	06
	b	Classify sensing types based on the nature of the environment and the physical sensors.	L2	08
		OR		
Q.04	a	Compare the common commercially available sensors used for IoT-based sensing applications.	L2	06
	b	Outline a simple actuation mechanism.	L2	06
	c	Explain four common characteristics actuators used for selection.	L2	08
		Module-3		
Q.05	a	Explain event detection using an off-site remote processing topology with a block diagram.	L2	10
	b	Explain the data offloading strategies: Offload location and Offload decision making.	L2	10
		OR		
Q.06	a	Contrast between structured and unstructured data. Outline various data generating and storage sources with a block schematic.	L2	10
	b	Outline an IoT deployment (processing offloading) with the various layers of processing involving different application domains with a diagram.	L2	10
		Module-4		
Q.07	a	Explain the architecture of a smart irrigation management system.	L2	06
	b	Classify the deployment model of Cloud with relevant explanation.	L2	06
	c	Explain the importance and metrics of Service-Level Agreement (SLA) in Cloud Computing.	L2	08
		OR		
Q.08	a	Classify virtualization based on the requirements of the users. Explain.	L2	08
	b	Explain architecture of a sensor-cloud platform with bock diagram.	L2	08
	c	Explain the features of CloudSim.	L2	04
		Module-5		
Q.09	a	Explain fog framework for intelligent public safety in vehicular environments	L2	10

		(fog-FISVER) with a block diagram.		
	b	Explain hardware components and front end design features of AmbuSens system.	L2	10
		OR		
Q. 10	a	Explain the architecture and components of healthcare IoT with block diagrams.	L2	12
	b	Summarize the advantages of Machine Learning (ML) in IoT.	L2	06

*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.

Model Question Paper-I/II with effect from 2022-23 (CBCS Scheme)

USN

First/Second Semester B.E. Degree Examination

Principles of Programming Using C

TIME: 03 Hours

Max. Marks: 100

Note: Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	*Bloom's Taxonomy Level	Marks
Q.01	a	Define computer. Describe the various types of computers based on speed, memory and cost.	L1	8
	b	Develop an algorithm to find the area and perimeter of a circle. Also define an algorithm.	L2	6
	c	Write a short note on the characteristics of a computer	L1	6
		OR		
Q.02	a	What is variable? What are the rules to construct variable? Classify the following as valid/invalid Identifiers. i) num2 ii) $num1 iii) +add iv) a_2 v) 199_space vi) _apple vii)#12	L1	8
	b	Draw a flowchart and C program which takes as input p,t,r. Compute the simple interest and display the result.	L2	6
	c	Write a note on the following operators. i) Relational ii) Logical iii) Conditional		6
		Module-2		
Q. 03	a	Develop a C program that takes three coefficients (a, b, and c) of a quadratic equation ; (ax² + bx + c) as input and compute all possible roots and print them with appropriate messages.	L3	8
	b	Explain the working of goto statement in C with example.	L2	6
	c	Explain switch statement with syntax and example	L2	7
		OR		
Q.04	a	Develop a simple calculator program in C language to do simple operations like addition, subtraction, multiplication and division. Use switch statement in your program	L3	8
	b	Explain with examples formatted input output statements in C	L1	6
	c	Explain with syntax, if and if-else statements in C program.	L2	7
		Module-3		
Q. 05	a	Write a C program to swapping of 2 numbers using call by reference and call by value.	L3	8
	b			
	c	Discuss the implementation of user defined function with suitable example.	L2	6
		OR		
Q. 06	a	Write a C program to find the product of two given matrix.	L3	8
	b	Explain the working of recursion with suitable example.	L2	6
	c	Explain the declaration and initialization of one dimensional and two dimensional	L2	6

		arrays with an example.		
		Module-4		
Q. 07	a	Develop a C program to concatenate 2 strings without using built-in function.	L3	6
	b		L2	10
		Define String. Explain any 4 string manipulation function with suitable example.		
	c	Explain the difference between gets() and scanf() functions.	L2	4
		OR		
Q. 08	a	Develop a C program to find the largest of three numbers using pointer.	L3	6
	b	Define Pointer. Explain pointer variable declaration and initialization with	L2	10
		suitable example.		
	c	Explain the difference between a null pointer and a void pointer.	L2	4
		Module-5		
Q. 09	a	Discuss the general syntax of structure variable declaration of structure to store	L3	8
		book information.		
	b	Differentiate between structure and union.	L2	6
	c		L3	6
		Write a program to write employees details in a file called employee.txt. Then read the record of the nth employee and calculate his salary.		
		OR		
Q. 10	a	Discuss the different modes of operation on files with suitable example.	L3	8
	b	Differentiate between gets() and fgets().	L2	6
	c	Implement structures to read, write and compute average- marks of the students, list the students scoring above and below the average marks for a class of N students.	L3	6

Model Question Paper-I/II with effect from 2022-23 (CBCS Scheme)

USN

First/Second Semester B.E. Degree Examination
Principles of Programming Using C

Max. Marks: 100

TIME: 03 Hours

Note: Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	*Bloom's Taxonomy Level	Marks
Q.01	a	Explain the components of a computer with a neat diagram.	2	6
	b	Describe any three input devices	2	6
	c	Design an algorithm, flowchart and program to compute area of a circle.	3	8
		OR		
Q.02	a	Define Identifiers and explain its rules. State whether the following identifiers are valid or invalid with justification. i.　　$roll no ii.　　_name123 iii.　　If iv.　　Name__123	3	6
	b	Summarize the formatted input and output statements with suitable syntax and example	2	6
	c	Explain the SDLC life cycle for the efficient design of a program with a neat diagram.	2	8
		Module-2		
Q. 03	a	Describe any 4 types of operators in C with example	2	6
	b	Differentiate between type conversion and type casting in C	4	6
	c	Write a program to compute the roots of quadratic equation by accepting coefficients	3	8
		OR		
Q.04	a	Define looping. Explain while and do-while with suitable example	2	6
	b	Implement a C program to simulate a simple calculator that performs arithmetical operations using switch statements.	3	6
	c	Explain unconditional statements with example	2	8
		Module-3		
Q. 05	a	Explain the syntax of Function Declaration and Function Definition with example.	3	6
	b	Write a C program to swap two integers using call by value method of passing arguments to a function.	3	6
	c	Describe different types of storage classes with example.	2	8
		OR		
Q. 06	a	What is an array? Explain how two dimensional arrays are declared and initialized.	2	8
	b	Write a C program to find transpose of a 3x3 matrix.	3	6
	c	Discuss any three operations that can be performed on arrays with example.	2	6

Module-4				
Q. 07	a	What are strings? Mention different operations that can be performed on strings? Explain any two with an example?	2	8
	b	Explain array of strings with an example?	2	4
	c	Discuss the working of the following string manipulation functions with suitable code: i) strchr ii) strspn iii) strcmp iv) strcpy	3	8
OR				
Q. 08	a	Define pointers and explain how to declare a pointer variable? Differentiate null pointer and void pointer with suitable example?	2	8
	b	Write a program to add two integers by passing pointer variable as parameters to functions?	3	7
	c	Write a program to print all even numbers from m to n using pointers?	3	5
Module-5				
Q. 09	a	What is structure? Explain the C syntax of structure declaration with example	2	6
	b	Differentiate between Structure and Union.	4	6
	c	Write a C program to maintain a record of "n" students details using an array of structures with four fields (roll no, name, marks and grade).Assume appropriate data type for each field. Print the names of the student with marks>=70.	3	8
OR				
Q. 10	a	Explain I/O stream and Data I/P stream used in files.	2	6
	b	Define Enumerated data type. Explain the declaration and access of enumerated data types with a code in C.	2	6
	c	Write a function to perform the following i) Read data from a fileii) Write data to a file	2	8

*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of questions.

Model Question Paper-I/II with effect from 2022-23 (CBCS Scheme)

USN ☐☐☐☐☐☐☐☐☐☐

First/Second Semester B.E. Degree Examination
PRINCIPLES OF PROGRAMMING USING C

TIME: 03 Hours

Max. Marks: 100

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

02. Use C code snippet to illustrate a specific code design or a purpose.

		Module -1	*Bloom's Taxonomy Level	Marks
Q.01	a	Explain the structure of C program in detail. Write a sample program to demonstrate the components in the structure of C program	L2	8
	b	Demonstrate formatted output of integer in C with suitable example	L3	6
	c	Discuss different types of error occur in program	L2	6
		OR		
Q.02	a	Explain the various rules for forming identifiers names. Give examples for valid and invalid identifiers for the same.	L2	8
	b	Mention various output devices and explain hardcopy devices	L1	6
	c	Discuss the variants of microcomputer that are widely used today	L2	6
		Module-2		
Q. 03	a	Demonstrate the functioning of Bitwise operator in C	L3	6
	b	Write a C program to find roots of quadratic equation	L3	8
	c	Distinguish between the break and continue statement	L4	6
		OR		
Q.04	a	Illustrate Nested loops in C with suitable example	L3	6
	b	Write a C program to print whether a given number is palindrome or not	L3	7
	c	Explain switch statement with syntax. Write a C program to simulate calculator	L3	7
		Module-3		
Q. 05	a	Write a C program to implement Bubble sort technique(ascending order)	L3	8
	b	Illustrate the concept of recursive function with example	L3	6
	c	Discuss various scope of variables	L2	6
		OR		
Q. 06	a	Differentiate between call by value and call by reference. Using suitable example	L4	8
	b	Write a C program to transpose a MxN matrix	L3	8
	c	Discuss the various storage classes	L2	4
		Module-4		
Q. 07	a	Mention various operations that can be performed on string using built-in functions. Explain any two function	L2	8
	b	Develop a program using pointer to compute the sum, mean and standard	L4	8

				L2	4
		deviation of all element stored in array of N real number			
	c	Explain how strings are represented in main memory			
		OR		L3	8
Q. 08	a	Write a program to compare two strings without using built-in function		L2	6
	b	What is pointer? Discuss pointer arithmetic with suitable C code		L2	6
	c	Explain gets() and puts() function with example			
		Module-5		L2	7
Q. 09	a	Explain various modes in which file can be opened for processing		L3	8
	b	Implement structure to read, write and compute average marks of the students. List the students scoring above and below the average marks for a class of n students			
	c	What are enumeration variable? How are they declared		L1	5
		OR		L2	8
Q. 10	a	Write a short note on functions used to Read data from a file Write data to a file			
	b	Differentiate structures and unions with syntax and example		L4	6
	c	How to detect END-OF-FILE		L2	6

Table showing the Bloom's Taxonomy level, course outcome and program outcomes

Questions		Bloom's Taxonomy	Course Outcome	Program Outcomes
Q. 1	a	L2	CO1	PO1,PO2
	b	L3	CO2	PO1,PO2
	c	L2	CO2	PO1,PO2
Q.2	a	L2	CO2	PO1,PO2
	b	L1	CO1	PO1
	c	L2	CO1	PO1
Q.3	a	L3	CO2	PO1,PO2
	b	L3	CO2,CO5	PO1,PO2,PO3
	c	L4	CO2	PO1,PO2
Q.4	a	L3	CO2	PO1,PO2
	b	L3	CO2,CO5	PO1,PO2,PO3
	c	L3	CO2,CO5	PO1,PO2
Q.5	a	L3	CO3	PO1,PO2, PO3
	b	L3	CO3,CO5	PO1,PO2,PO3
	c	L2	CO2	PO1,PO2
Q.6	a	L4	CO4	PO1,PO2,PO3
	b	L3	CO3	PO1,PO2,PO3
	c	L2	CO2	PO1,PO2
Q.7	a	L2	CO5	PO1,PO2, PO3
	b	L4	CO4	PO1,PO2,PO3
	c	L2	CO2	PO1
Q.8	a	L3	CO5	PO1,PO2,PO3
	b	L2	CO4	PO1,PO2
	c	L2	CO2	PO1

Q.9	a	L2	CO5	PO1,PO2
	b	L3	CO4,CO5	PO1,PO2,PO3
	c	L1	CO4	PO1
Q.10	a	L2	CO2,CO5	PO1,PO2
	b	L4	CO4	PO1,PO2
	c	L2	CO2	PO1

Model Question Paper-I/II with effect from 2022 (CBCS Scheme)

USN | | | | | | | | | | |

First Semester BE Degree Examination
Course Title – Introduction to Electrical Engineering

TIME: 03 Hours   Max. Marks: 100

Note: Answer any FIVE full questions, choosing at least ONE question from each MODULE.

Q. No.		Module1	Marks
Q1	a	With neat single line diagram explain the various steps of electrical power transmission and distribution system.	06
	b	State and explain Kirchhoff's current and voltage law.	06
	c	A circuit of two parallel resistors having resistances of 20Ω and 30Ω connected in series with 15Ω. If the current through 15Ω resistor is 3A. Find i) current in 20Ω and 30Ω resistors ii) voltage across the whole circuit iii) the total power and power consumed in all resistors.	08
		OR	
Q2	a	With block diagram explain hydel power generation.	06
	b	State and explain Ohm's law with its limitations.	06
	c	For the circuit shown in fig (i) find the current in 2Ω resistor.	08
		Module 2	
Q3	a	Define the following by referring a sine wave i) RMS value ii) average value iii) form factor iv) peak factor v) phase and vi) phase difference.	06
	b	Show that the current through purely capacitive circuit leads the applied voltage by $90°$ and average power consumed is zero. Draw the wave shapes of current, voltage and power.	08
	c	An inductive coil takes a current of 10A from a supply of 100V, 50Hz and lags the voltage by $30°$. Calculate i) parameters of the circuit ii) power factor iii) active, reactive and apparent power.	06
		OR	
Q4	a	With the help of circuit diagram and phasor diagram, find the phase angle, impedance and power in case of R-L series circuit.	06
	b	A circuit consists of a resistance of 20Ω, an inductance of 0.05H, connected in series. A single phase supply of 230V, 50Hz is applied across the circuit. Find i) impedance ii) current iii) power factor iv) power consumed by the circuit v) voltage drop across R&L vi) draw the vector diagram.	08

	c	Three coils having resistance of 10Ω and inductance of 0.02H are connected in star across 440V, 50Hz three phase supply. Calculate the line current, power factor and total power consumed.	06

Module 3

Q5	a	With a neat diagram explain the construction of D.C. generator.	08
	b	Derive an expression of armature torque developed in a D. C. motor.	08
	c	An 8 pole generator has 500 armature conductors and has a useful flux per pole of 0.065wb. What will be the emf generated if it is lap connected and runs at 1000rpm? What must be the speed at which it is to be driven to produce the same emf if it is wave wound?	04

OR

Q6	a	Explain the various methods used to control the speed of D.C. series motor.	08
	b	A 4 pole D.C. shunt motor takes 25A from a 250V supply. The armature and field resistances are 0.5Ω and 125Ω respectively. The wave wound armature has 30 slots and each slot containing 10 conductors. If the flux per pole is 0.02wb, calculate i) speed ii) torque developed iii) power developed.	08
	c	With usual notations derive an emf equation of D.C. generator.	04

Module 4

Q7	a	Derive the emf equation of a transformer and hence obtain the voltage and current transformation ratios.	08
	b	With neat diagram explain the types of three phase induction motor.	06
	c	A transformer is rated at 100 kVA. At full load its copper loss is 1200W and its iron loss is 960W. Calculate: i) the efficiency at full load, UPF ii) the efficiency at half load, 0.8 p.f. iii) the load kVA at which maximum efficiency will occur iv) maximum efficiency at 0.85 p.f.	08

OR

Q8	a	Explain the various losses in a transformer and how to minimize them?	08
	b	With diagrams explain the concept of rotating magnetic field.	06
	c	A three phase induction motor with 4 poles is supplied from the alternator having 6 poles running at 1000rpm. Calculate synchronous speed, rotor speed of the induction motor when slip is 0.04 and frequency of the rotor emf when the speed is 600rpm.	08

Module 5

Q9	a	With neat circuit diagram and switching table explain two way and three way control of load.	08
	b	With diagram explain the working of fuse.	08
	c	What is earthing? With neat diagram explain the pipe earthing.	06

OR

Q10	a	Define "unit" used for consumption of electrical energy and explain the two part tariff with its advantages and disadvantages.	08
	b	What is electric shock? Give the list of preventive measures against the shock.	08
	c	List out the power rating of household appliances including air conditioners, PCs, laptops, printers, etc. Find the total power consumed.	06

Table showing the Bloom's Taxonomy Level, Course Outcome and Program Outcome				
Question		Bloom's Taxonomy Level attached	Course Outcome	Program Outcome
Q. 1	a	L2	CO5	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	b	L2	CO1	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	c	L3	CO2	PO1, PO2, PO3, PO4, PO5, PO6
Q. 2	a	L2	CO1	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	b	L2	CO1	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	c	L3	CO2	PO1, PO2, PO3, PO4, PO5, PO6
Q. 3	a	L2	CO1	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	b	L4	CO2	PO1, PO2, PO3, PO4, PO5, PO6
	c	L3	CO2	PO1, PO2, PO3, PO4, PO5, PO6
Q. 4	a	L3	CO2	PO1, PO2, PO3, PO4, PO5, PO6
	b	L3	CO2	PO1, PO2, PO3, PO4, PO5, PO6
	c	L3	CO2	PO1, PO2, PO3, PO4, PO5, PO6
Q.5	a	L2	CO3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8
	b	L3	CO3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8
	c	L3	CO3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8
Q. 6	a	L3	CO3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8
	b	L2	CO3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8
	c	L3	CO3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8
Q. 7	a	L4	CO4	PO1, PO2, PO3, PO4, PO6, PO7, PO8
	b	L2	CO4	PO1, PO2, PO3, PO4, PO6, PO7, PO8
	c	L3	CO4	PO1, PO2, PO3, PO4, PO6, PO7, PO8
Q. 8	a	L2	CO3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8
	b	L3	CO3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8
	c	L3	CO4	PO1, PO2, PO3, PO4, PO6, PO7, PO8
Q. 9	a	L2	CO5	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	b	L4	CO5	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	c	L2	CO5	PO1, PO2, PO3, PO5, PO6, PO7, PO8
Q. 10	a	L2	CO5	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	b	L2	CO5	PO1, PO2, PO3, PO5, PO6, PO7, PO8
	c	L4	CO5	PO1, PO2, PO3, PO5, PO6, PO7, PO8

Blooms Taxonomy Levels	Lower order thinking skills		
	Remembering(knowledge):L1	Understanding Comprehension): L2	Applying (Application): L3
	Higher order thinking skills		
	Analyzing (Analysis): L4	Valuating (Evaluation): L5	Creating (Synthesis): L6

Model Question Paper- I with effect from 2022

CBCS SCHEME

First Semester B.E Degree Examination

Renewable Energy Sources for Computer Science Engineering Stream
(BETCK105E)

TIME: 03Hours　　　　　　　　　　　　　　　　　　Max.Marks:100

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

		Module – 1	M	BLs	COs
Q.1	a	Discuss the social implications of renewable energy sources?	6	L1	CO1
	b	Differentiate between renewable and non renewable energy sources?	8	L2	CO1
	c	Briefly explain renewable energy availability in India?	6	L1	CO2
		OR			
Q.2	a	What are the advantages and disadvantages of solar energy?	8	L1	CO1
	b	Discuss briefly geothermal energy?	6	L1	CO3
	c	Write a note on Internet of Energy(IOE)	6	L2	CO4
		Module – 2			
Q.3	a	Define beam and diffuse radiation?	6	L1	CO3
	b	Explain the working principle of pyrheliometer with line diagram?	8	L1	CO3
	c	What are the basic features of ideal pyranometer?	6	L1	CO3
		OR			
Q.4	a	What are the limitations and applications of solar photovoltaic system	8	L1	CO3
	b	With a simple line diagram explain solar flat plate collector?	8	L1	CO3
	c	Write a note on solar cell	4	L2	CO3
		Module – 3			
Q5	a	What are the major problems associated with wind power system.	6	L2	CO4
	b	With a simple line diagram explain main components of Horizontal axis wind turbine (HAWT).	8	L1	CO3

Model Question Paper- I with effect from 2022

	c	Classify wind energy conversion system (WECS)	6	L2	CO3
		OR			
Q.6	a	Explain different types of biofuels.	6	L1	CO2
	b	Explain the process of photosynthesis?	8	L1	CO3
	c	What are the main advantages and disadvantages of biomass energy?	6	L1	CO2
		Module – 4			
Q.7	a	What are the fundamental characteristics of tidal power plant?	6	L2	CO3
	b	Describe with simple line diagram single basin tidal power plant?	8	L1	CO3
	c	What are the limitations of tidal power plant?	6	L2	CO4
		OR			
Q.8	a	Describe with a line diagram closed cycle OTEC system?	8	L1	CO3
	b	What are the environmental impacts of OTEC plant?	6	L2	CO4
	c	What are relative advantages and limitations of OTEC plant?	6	L2	CO4
		Module – 5			
Q.9	a	Describe the classification of the fuel cells?	8	L1	CO2
	b	Describe various methods of storage of hydrogen?	6	L2	CO4
	c	What are the problems associated with hydrogen energy?	6	L2	CO4
		OR			
Q.10	a	What are the benefits of hydrogen energy ?	6	L1	CO2
	b	What are the various fuels used in fuels cells? Explain.	8	L2	CO3
	c	Write a note on Zero energy concepts?	6	L2	CO4

CBCS SCHEME

First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
Mathematics – I for Computer Science Engineering 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.	With usual notations, prove that $\tan\phi = r\dfrac{d\theta}{dr}$.	6	L2	CO1
	b.	Find the angle of intersection between the curves $\gamma = \dfrac{a\theta}{1+\theta}$, $\gamma = \dfrac{a}{1+\theta^2}$.	7	L2	CO1
	c.	Find radius of curvature of the curve $y = a\log\sec\left(\dfrac{x}{a}\right)$ at any point (x, y).	7	L2	CO1
		OR			
Q.2	a.	With usual notations prove that $\dfrac{1}{p^2} = \dfrac{1}{r^2} + \dfrac{1}{r^4}\left(\dfrac{dr}{d\theta}\right)^2$	8	L2	CO1
	b.	Find the radius of the curvature of the curve $r = a(1 + \cos\theta)$.	7	L2	CO1
	c.	Using modern mathematical tool write a program/code to plot the Sine and Cosine curve.	5	L3	CO5
		Module – 2			
Q.3	a.	Using Maclaurin's series prove that $\sqrt{1+\sin 2x} = 1 + x - \dfrac{x^2}{2!} - \dfrac{x^3}{3!} + \dfrac{x^4}{4!} + \ldots\ldots$	6	L2	CO1
	b.	If $Z = e^{ax+by}\,f(ax-by)$, prove that $b\dfrac{\partial z}{\partial x} + a\dfrac{\partial z}{\partial y} = 2abz$.	7	L2	CO1
	c.	Find the extreme values of the function $f(x, y) = x^3 + y^3 - 3x - 12y + 20$.	7	L3	CO1
		OR			
Q.4	a.	Evaluate $\displaystyle\lim_{x \to 0}\left(\dfrac{a^x + b^x + c^x + d^x}{4}\right)^{1/x}$.	8	L2	CO1
	b.	If $u = \dfrac{2yz}{x}$, $v = \dfrac{3xz}{y}$, $w = \dfrac{4xy}{z}$ find $J\left(\dfrac{u,v,w}{x,y,z}\right)$.	7	L2	CO1

3

	c.	Using modern mathematical tool write a program code to evaluate $\underset{x \to \infty}{Lt} \left(1 + \frac{1}{x}\right)^x$.	5	L3	CO5

Module – 3					
Q.5	a.	Solve $\frac{dy}{dx} + y \tan x = y^3 \sec x$.	6	L2	CO2
	b.	Find orthogonal trajectories of family of curves $r^n = a^n \cos n\theta$.	7	L3	CO2
	c.	Solve $x^2 p^2 + 3xyp + 2y^2 = 0$.	7	L2	CO2

OR					
Q.6	a.	Solve $(x^2 - y^2 + x)dx + xydy = 0$.	6	L2	CO2
	b.	Find the general solution of the equation $(px - y)(py + x) = 2p$ by reducing into Clairaut's form by taking the substitution $X = x^2$, $Y = y^2$.	7	L2	CO2
	c.	A 12 volts battery is connected to a series circuit in which the inductance is $\frac{1}{2}$ Henry and resistance is 10 ohms. Determine current I, if the initial current is zero.	7	L3	CO2

Module – 4					
Q.7	a.	i) Find the last digit in 13^{27}. ii) Find the remainder when 7^{119} is divided by 10.	6	L2	CO3
	b.	Find the solutions of the linear congruence $12x \equiv 6(\bmod 21)$.	7	L2	CO3
	c.	Find the general solution of linear Dio-phantine equation $70x + 112y = 168$.	7	L2	CO3

OR					
Q.8	a.	Find the remainder when 14! is divided by 17.	6	L2	CO3
	b.	Find the solution of system of linear congruences $7x + 3y \equiv 10(\bmod 16)$ $2x + 5y \equiv 9(\bmod 16)$	7	L2	CO3
	c.	Solve $x \equiv 3(\bmod 5)$, $x \equiv 2(\bmod 6)$, $x \equiv 4(\bmod 7)$ using Chinese remainder theorem.	7	L3	CO3

Module – 5					
Q.9	a.	Find the rank of matrix $A = \begin{bmatrix} 0 & 1 & -3 & -1 \\ 1 & 0 & 1 & 1 \\ 3 & 1 & 0 & 2 \\ 1 & 1 & -2 & 0 \end{bmatrix}$	6	L2	CO4

	b.	Solve the system of equations by Gauss-Jordan method. $x + y + z = 9$; $2x + y - z = 0$; $2x + 5y + 7z = 52$.	7	L3	CO4
	c.	Find the largest eigen value and the corresponding eigen vector of the matrix $A = \begin{bmatrix} 2 & -1 & 0 \\ -1 & 2 & -1 \\ 0 & -1 & 2 \end{bmatrix}$ taking $\begin{bmatrix} 1 & 1 & 1 \end{bmatrix}^t$ as initial eigen vector, using power method.	7	L3	CO4

<div align="center">OR</div>

Q.10	a.	Find the values of λ and μ for which the system $x + y + z = 6$; $x + 2y + 3z = 10$; $x + 2y + \lambda z = \mu$ has i) Unique solution ii) Infinitely many solutions iii) no solution.	8	L2	CO4
	b.	Solve the following system of equations by Gauss-Elimination method $2x - y + 4z = 12$, $4x + 11y - z = 33$, $8x - 3y + 2z = 20$.	7	L3	CO4
	c.	Using modern mathematical tool, write a program/code to test the consistency of the equations $x + 2y - z = 1$, $2x + y + 4z = 2$, $3x + 3y - 4z = 1$	5	L3	CO5

<div align="center">* * * * *</div>

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First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
Applied Physics 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 construction and working of a semiconductor laser with the help of energy level diagram.	8	L2	CO1
	b.	What is refractive index profile? Discuss three different types of optical fibres based on modes of propagation and refractive index profile.	7	L2	CO1
	c.	The angle of acceptance of an optical fibre is 30° when kept in air. Find the angle of acceptance when it is in a medium of refractive index 1.33.	5	L3	CO5
		OR			
Q.2	a.	Define acceptance angle and numerical aperture. Derive an expression for numerical aperture in terms of refractive indices of core, cladding and surrounding.	8	L2	CO1
	b.	Derive an expression for energy density for a system in thermal equilibrium in terms of Einstein's co-efficient.	7	L2	CO1
	c.	In a diffraction grating experiment the laser light undergoes second order diffraction for diffraction angle 1.48°. The grating constant is 5.08×10^{-7} m and the distance between the grating and the source is 80 cm, find the wave length of LASER light.	5	L3	CO5
		Module – 2			
Q.3	a.	Assuming the time independent Schrodinger's wave equation discuss the solution for a particle in one dimensional potential well of infinite height and hence obtain the normalized wave equation.	9	L2	CO2
	b.	State and explain Heisenberg uncertainty principle. Show that an electron doesn't exists inside the nucleus.	7	L2	CO2
	c.	Compute the deBroglie wavelength for a neutron moving with one tenth part of velocity of light. Given the mass of the neutron is 1.674×10^{-27} kg.	4	L3	CO2
		OR			
Q.4	a.	Setup Schrodinger time independent wave equation in one dimension.	9	L2	CO2
	b.	Define phase velocity and group velocity. Derive an expression for De Broglie wavelength of an electron.	7	L2	CO2
	c.	An electron has a speed of 100 m/s. The inherent uncertainity in its measurement is 0.005%. Calculate the corresponding uncertainity in the measurement of the position.	4	L3	CO2
		Module – 3			
Q.5	a.	Explain the Pauli matrices and apply Pauli matrices on the state $|0\rangle$ and $|1\rangle$.	9	L2	CO2
	b.	Differentiate between classical and quantum computing.	6	L2	CO2
	c.	Explain the Hadamard gate. Show that the Hadamard gate is unitary.	5	L2	CO2

		OR	5	L2	CO2
Q.6	a.	A Linear operator 'X' operates such that $X|0\rangle = |1\rangle$ and $X|1\rangle = |0\rangle$. Find the matrix representation of 'X'.			
	b.	Describe the working of CNOT gate mentioning its matrix representation and truth table.	9	L2	CO2
	c.	Explain the representation of qubit using Bloch sphere.	6	L2	CO2
		Module – 4			
Q.7	a.	Enumerate the failures of classical free electron theory and discuss the success of quantum free electron theory of metals.	8	L2	CO3
	b.	Explain DC and AC Josephson effects and mention any two applications of superconductivity in quantum computing.	7	L2	CO3
	c.	Find the temperature at which there is 1% probability that a state with an energy 0.5 eV above the Fermi energy is occupied.	5	L3	CO3
		OR			
Q.8	a.	Explain Meissner's effect and the variation of critical field with temperature.	8	L2	CO3
	b.	Define Fermi factor. Discuss the variation of Fermi factor with temperature and energy.	7	L2	CO3
	c.	The critical temperature of Nb is 9.15 K. At zero Kelvin, the critical field is 0.196T. Calculate the critical field at 8 K.	5	L3	CO3
		Module – 5			
Q.9	a.	Discuss timing in Linear motion, Uniform motion, Slow in and Slow out.	8	L2	CO4
	b.	Describe Jumping and parts of jumping in animation.	7	L2	CO4
	c.	A slowing-in object in an animation has a first frame distance 0.5 m and first slow in frame 0.35 m. Calculate the base distance and the number of frames in sequence.	5	L3	CO5
		OR			
Q.10	a.	Illustrate the odd rule and odd rule multiplier with suitable example.	8	L2	CO4
	b.	Discuss modeling the probability for proton decay.	7	L2	CO4
	c.	In an optical fibre experiment the Laser light propagating through optical fibre cable of 1.5 m, made a spot diameter of 8 mm on the screen. The distance between the end of the optical fibre cable and the screen is 3.4 cm. Calculate the angle of contact and numerical aperture of given optical fibre.	5	L3	CO5

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CBCS SCHEME

BPOPS103

USN [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
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. VTU Formula Hand Book is permitted.
3. M : Marks , L: Bloom's level , C: Course outcomes.

			M	L	C
		Module – 1			
Q.1	a.	Explain the organization of Basic computer model with neat diagram.	8	L1	CO2
	b.	Explain Input/Output statement in C.	8	L1	CO2
	c.	List and explain any two input-output devices.	4	L1	CO2
		OR			
Q.2	a.	What are the basic datatypes available in C?	6	L2	CO2
	b.	Define variable. Explain the rules to declare a variable with example.	6	L2	CO2
	c.	With suitable example – Explain the basic structure of C program.	8	L2	CO2
		Module – 2			
Q.3	a.	What is type casting? Explain its types with suitable example.	6	L2	CO2
	b.	Write a C program to find the largest of three numbers using ternary operator.	6	L3	CO2
	c.	List and explain unconditional branching statements with example.	8	L1	CO2
		OR			
Q.4	a.	List the conditional branching statements in 'C'. Explain any two with example.	6	L1	CO2
	b.	Write a C program to compute the roots of a quadratic equation by accepting the coefficients print appropriate messages.	6	L3	CO2
	c.	Explain different types of loops in C. Justify with its syntax and example.	8	L2	CO2
		Module – 3			
Q.5	a.	Define an array. Explain with example. How to declare and initialize 2D-array.	6	L2	CO3
	b.	Write a C program to search an element using binary search technique (for numericals).	6	L3	CO3
	c.	Write a C program to perform addition of 2-dimensional matrix (consider 3×3 ordered matrices A and B).	8	L3	CO3
		OR			

Q.6	a.	Define function. Explain the type of functions based on parameters.	8	L2	CO3
	b.	Write a C program to sort the elements using bubble sort technique by passing array as function argument.	6	L3	CO4
	c.	Write a C program to find the n_{c_r}. $\left[n_{c_r} = \dfrac{n!}{(n-r)!r!} \right]$	6	L3	CO3
Module – 4					
Q.7	a.	Define a string. List the string manipulation functions. Explain any two with examples.	8	L2	CO2
	b.	Write a C program to find the length of a given string without using built-in function.	6	L3	CO3
	c.	Write a C program to check whether the given string is Palindrome or not without using built in function.	6	L3	CO2
OR					
Q.8	a.	Define Pointer. Explain how the pointer is declared and initialized with example.	6	L2	CO4
	b.	Write a C program using pointers to compute the sum, mean and standard deviation of all elements stored in an array of 'n' real numbers.	8	L3	CO4
	c.	Write a C program to replace each constant in a string with the text one except letter 'z', 'Z' and 'a''A', for the string "Corona Virus" should be modified as "DpSpoa Wjsvt".	6	L3	CO3
Module – 5					
Q.9	a.	Differentiate between structures and Union.	6	L2	CO4
	b.	Write a C program to implement structures to read and write Book-Title, Book-Author and Book-id of n books.	8	L3	CO3
	c.	Write a note on files.	6	L3	CO4
OR					
Q.10	a.	List and explain any four file operations in C.	6	L2	CO2
	b.	Write a C program to store and print name, USN, Subject and IA marks of students using structure.	8	L3	CO4
	c.	Write a note on enumerated data type.	6	L2	CO4

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CBCS SCHEME

USN ☐☐☐☐☐☐☐☐☐☐   BESCK104B /BESCKB104

First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
Introduction to Electrical Engineering

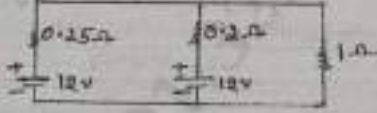Time: 3 hrs.   Max. Marks: 100

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.	With the help of single line diagram, explain the electrical power transmission and distribution system.	6	L2	CO2
	b.	Explain the working of hydro power generation using relevant block diagram.	8	L2	CO1
	c.	A resistance R is connected in series with a parallel circuit comprising of two resistance 12Ω and 8Ω. The total power in the circuit is 70W, when the applied voltage is 20V. Calculate R.	6	L3	CO1
		OR			
Q.2	a.	State Kirchhoff's law for DC circuits. Illustrate with an example.	6	L2	CO1
	b.	With the help of block diagram, explain the working of Solar power generation.	8	L2	CO1
	c.	For the circuit shown in Fig. Q2(c), find the current supplied by each battery and power dissipated in 1Ω resistor. Fig. Q2(c)	6	L3	CO2
		Module – 2			
Q.3	a.	A pure inductor excited by sinusoidal varying AC voltage, show that the average power consumed by inductor is zero.	8	L2	CO1
	b.	Define i) Real power ii) Reactive power iii) Apparent power iv) Power factor.	6	L1	CO1
	c.	The current in a circuit is $(8 – j10)$A, when the applied voltage is $(50 + j25)$ volts. Determine i) The magnitude of the current ii) Impedance iii) The circuit elements iv) Power factor v) Power.	6	L3	CO2
		OR			
Q.4	a.	Develop an equation for the power consumed by a R – C series circuit. Draw the waveform of voltage, current and power.	8	L2	CO3
	b.	With relevant diagrams, explain the concept of line values of voltage and current and phase values of voltage and currents in 3ϕ star and delta connections.	6	L2	CO3

	c.	A circuit having a resistance of 12Ω on inductors of 0.15H and a capacitance of 100μF in series is connected across a 100V, 50Hz supply. Calculate i) Impedance ii) Current iii) Power factor iv) Phase difference between the current and supply voltage v) Power.	6	L3	CO3

<div align="center">Module – 3</div>

Q.5	a.	With the help of neat diagram, explain the construction of DC generator.	8	L2	CO4
	b.	With usual notations, derive the torque equation of a DC motor.	6	L2	CO4
	c.	A d.c. shunt generator has a shunt field winding resistance of 100Ω, it is supplying a load of 5kW at a voltage of 250V. If its armature resistance is 0.22Ω and per brush voltage drop is 1 volt. Calculate the induced e.m.f of generator.	6	L3	CO4

<div align="center">OR</div>

Q.6	a.	Give the classification of DC generator. Obtain the expression for EMF equation of a DC generator.	8	L2	CO4
	b.	With neat diagrams, explain the speed control of DC shunt motor.	6	L2	CO4
	c.	A 4 pole dc shunt motor takes 22 A from 220V supply. the armature and field resistances are respectively 0.5Ω and 100Ω. The armature is lap connected with 300 conductors. If the flux per pole is 20 mwb, calculate i) Speed ii) Gross torque.	6	L3	CO4

<div align="center">Module – 4</div>

Q.7	a.	Explain the working principle of single phase transformer and its necessity in power system.	8	L1	CO1
	b.	Explain the concept of rotating magnetic field in a 3 – phase induction motor with neat vector diagrams.	6	L2	CO2
	c.	The maximum efficiency at full load and unity power factor of a single – phase 25KVA, 500V/1000V, 50Hz, transformer is 98%. Determine its efficiency at i) 75% load, 0.9 p.f. ii) 50% load, 0.8 p.f.	6	L3	CO2

<div align="center">OR</div>

Q.8	a.	With relevant diagrams, explain the construction of 3 – phase induction motors.	8	L2	CO2
	b.	Derive an EMF equation of single phase transformer with usual notation.	6	L2	CO2
	c.	A 3 – phase, 50Hz, 4 pole induction motor, its rotor induced e.m.f is 1.5 Hz frequency. Calculate i) Synchronous speed ii) Full load slip iii) Actual speed.	6	L3	CO3

<div align="center">Module – 5</div>

Q.9	a.	List the types of wiring system used for domestic / industry. Explain suitable wiring used for staircase, give the schematic / circuit diagram.	6	L1	CO5
	b.	What is Earthing? With a neat diagram, explain plate earthing.	8	L2	CO5
	c.	Define Unit and Tariff. Explain the two port tariff with its merits and demerits.	6	L2	CO5

			OR			
Q.10	a.	What is Fuse? With neat diagram, explain the working principle of fuse.		6	L2	CO5
	b.	Define Electric shock. What are the safety precaution to be taken against to avoid electric shock?		8	L2	CO5
	c.	An electric boiler draws 6A current at 230V for 4 hrs. The electricity costs Rs 3/- per unit. Determine the total cost.		6	L3	CO5

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USN ☐☐☐☐☐☐☐☐☐☐

Question Paper Version : C

First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
Innovation & Design Thinking

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. What is the usual order of problem solving process?
   a) Try, Reflect, Prepare, Define
   b) Prepare, Try Define, Reflect
   c) Try and Reflect
   d) Define, Prepare, Try, Reflect

2. Reframing a Design Challenge -
   a) Changes the Conceptual view point to an individual perspective
   b) Helps us come up with the Right Problem to solve.
   c) Challenges us to design to a marketing focus
   d) None of these

3. Which of the following is true?
   a) By Empathizing one can define a Problem Well, Conceive a creative solution resulting in break through innovation.
   b) Empathy makes you a better human, but innovation requires out of the box thinking and not Empathy
   c) Inventions are sudden Eureka moments and is not really part of the long-term Research or Exploration.
   d) You become an innovator by Questioning the status Quo.

4. Malini is in the Ideate phase. What is her goal?
   a) To Come up with one or two great ideas
   b) To come up with us many ideas as possible, good and bad.
   c) To test his best idea.
   d) To figure out which problem he's going to solve

5. During which stage would you start looking for a alternative ways of viewing the problem.
   a) Prototype
   b) Define
   c) Ideate
   d) Empathize

6. Design Thinkers create low-fidelity prototypes to :
    a) Test concepts quickly and cheaply with potential users.
    b) Validate concepts for the market.
    c) Build Production-Ready products
    d) Estimate the price of production

7. Which of the following well known consulting firms are offering Design Thinking as a solution?
    a) McKinsey & Co.   b) BCG
    c) Bain & Co.   d) All of above

8. Design Thinking is sometimes visualized as a linear process, but it is actually :
    a) Impactful   b) Incapacitating   c) Intentional   d) Iterative

9. Which of the following is NOT part of the idea-selection process in DT?
    a) Grouping Related concepts together   b) Identifying selection criteria
    c) Deliberating   d) Prototyping

10. Robert researches statistics about the average age of school dropouts. Which stage is he in?
    a) Empathize   b) Define problem statement
    c) Ideate   d) Prototype

11. Which of the following is the least true about open innovation?
    a) It accelerates development process
    b) It reduces cost of product development.
    c) It helps in creating product differentiation
    d) It helps to beat competition

12. People Centered Design methodology involves,
    a) A problem-solving approach for people that is linear and convergent.
    b) A problem-solving approach which is abstract and Results in making people by products.
    c) A problem solving approach for people that both diverges and converges.
    d) None of these

13. User journey map helps you to,
    a) Understand the touch point and pain points of the user.
    b) iterate, iterate, iterate
    c) Identify the user's credibility, expertise and skills.
    d) None of these

14. What is the role of the Define Stage of design thinking?
    a) To define the parameters for a prototype.
    b) To define the audience, you're trying to Reach.
    c) To define the problem that needs to be solved.
    d) To define all of the ideas for solving a problem.

15. What is a problem statement in design thinking?
    a) A written expression of problems from the prototype.
    b) A written expression of the problem to be solved
    c) A written expression of problems inside the group.
    d) A written expression of problems with target market.

16. What purpose does Point Of Veiw (POV) serve in design thinking?
    a) It serves as the guide for developing the prototype.
    b) It illustrates what your competitors are doing better.
    c) It is used in the testing phase for receiving feedback.
    d) It provides focus for the design team's brain storming.

17. In this Point of View (POV) statement, which part is considered the insight? "Senior adults with arthritis need Easy-Open bottles because they struggle to open childproof lids"
    a) Because they struggle to open childproof lids.
    b) Need easy-open bottles.
    c) Senior citizens
    d) None of these

18. What is Point Of View (POV) in design thinking?
    a) A Report from the design team about the product.
    b) A Customer's opinion about interactions with you brand.
    c) A written statement of a Customer's problem of need.
    d) The opinion of the manager about how to brain storm.

19. Where do the insights in Point Of View (POV) in design thinking come from?
    a) Researching other products on the market.
    b) Interviewing the general Public on Social media.
    c) Synthesizing the data that has been gathered
    d) Developing ideas during brainstorming

20. People centered Design is -
    a) How the product behaves in the real context.
    b) How a product works on the outside where a person comes into contact with it and has to use it.
    c) All of the above
    d) None of the above

21. Design thinking Approach leads to -
    a) Technology centric designs   b) Marketing centric designs
    c) People centric designs   d) All of the above

22. Design-Impacts the business
    a) True   b) False

23. Empathy is -
    a) to understand people and the contexts of their use of a product
    b) to know the way the product works
    c) to imagine people's behavior in different contexts
    d) None of these

24. Design thinking encompasses -
    a) Desirability   b) Feasibility
    c) Viability   d) All of these

25. Which one of the following is not the mindset of a design thinker?
    a) Quick design   b) Prototype refinement
    c) Coding   d) Engineer product

26. Which of the following is not the mindset of a Design Thinker?
    a) Make it
    b) Learn from Failure
    c) Self oriented
    d) Empathy

27. Where does the information for defining the problem in the define phase come from?
    a) The Terting stage
    b) The prototype stage
    c) The Ideate stage
    d) The Empathize stage

28. Crafting a Point Of View (POV) requires three key elements including all of these Except which?
    a) Design
    b) User
    c) Insight
    d) Need

29. Who is the recommended group that you should test out the prototypes with?
    a) Your target customers
    b) People in your team
    c) Professional designers
    d) Experts

30. Which is not one of the types of prototype of prototyping Mode 1?
    a) Horizontal prototype
    b) Vertical Prototype
    c) Diagonal prototype
    d) Domain prototype

31. What is your First model/design of a product called?
    a) Draft
    b) Rough Draft
    c) Prototype
    d) Practice Design

32. The final step in the Design process is to _____
    a) Test
    b) Define
    c) Ideate
    d) Empathize

33. _____ was IDEO's first expression of design thinking.
    a) Deep-Design
    b) Deep-Dive
    c) Deep-Structure
    d) Study-Dive

34. Frank Robinson defined and coined the term
    a) Design thinking
    b) Mind mapping
    c) MVP
    d) Hypothesis

35. Which of the below is incorrect?
    a) Peprico has turned Design Thinking into its strategy.
    b) Air BnB avoided bankruptcy and turned profitable using Design Thinking
    c) Google has a 3 step process to bring about new innovation
    d) All of the above are correct

36. At what step do you want to complete the POV-Point Of View?
    a) Empathy
    b) Prototype
    c) Define
    d) Ideate

37. The initial design brief iS provided by,
    a) Designer
    b) User
    c) Both of them
    d) Client

38. What Element of user Experience Design would the design strategy fall under,
    a) Interaction Design
    b) Experience strategy
    c) User Research
    d) Information Architecture

39. When testing a new prototype, how many people do you need to interview per Persona to detect the main usability issues?
    a) The more Persona the better
    b) 20 Persons per Persona
    c) 10 Persons per Persona
    d) Five Persons per Persona

40. Readiness of the organization for strategic innovation means,
    a) Changing innovation process in the organization
    b) Ready for the change in the organization
    c) Ready for change in the capabilities of the organization
    d) All of the above

41. What is design considerations are not linked with?
    a) Products   b) Services   c) Business   d) Computers

42. To Empathize, one has to,
    a) Observe   b) Engage   c) Listen   d) All of the above

43. _____ story telling is the most compelling type of story,
    a) Aural   b) Visual   c) Textual   d) All of these

44. Design thinker in an organization are,
    a) People   b) Employees   c) Managers   d) All of these

45. Comprehensive principle of Design thinking does not include
    a) Relationship   b) Collaboration   c) Communication   d) Suppliers

46. In design, where does the information used to put together a problem statement come from?
    a) The Design Stage   b) The Ideate Stage
    c) The Define stage   d) The testing stage

47. MVP stands for,
    a) Minimum Viable product   b) Maximum Viable Product
    c) Most viable product   d) None of these

48. Journey mapping is also called _____ mapping.
    a) Path   b) Experience   c) Conduct   d) Feedback

49. Which of the following are NOT tools of Design Thinking?
    a) Co-creation   b) Prototyping   c) Mind mapping   d) Online marketing

50. A Prototype is a simple experimental model of a proposed solution used to,
    a) Test ideas   b) Validate ideas   c) both   d) None of these

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USN ☐☐☐☐☐☐☐☐☐☐

Question Paper Version : D

First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
Innovation & Design Thinking

Time: 1 hr.]

[Max. Marks: 50

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23. User journey map helps you to,
    a) Understand the touch point and pain points of the user.
    b) iterate, iterate, iterate
    c) Identify the user's credibility, expertise and skills.
    d) None of these

24. What is the role of the Define Stage of design thinking?
    a) To define the parameters for a prototype.
    b) To define the audience, you're trying to Reach.
    c) To define the problem that needs to be solved.
    d) To define all of the ideas for solving a problem.

25. What is a problem statement in design thinking?
    a) A written expression of problems from the prototype.
    b) A written expression of the problem to be solved.
    c) A written expression of problems inside the group.
    d) A written expression of problems with target market.

26. What purpose does Point Of Veiw (POV) serve in design thinking?
    a) It serves as the guide for developing the prototype.
    b) It illustrates what your competitors are doing better.
    c) It is used in the testing phase for receiving feedback.
    d) It provides focus for the design team's brain storming.

27. In this Point of View (POV) statement, which part is considered the insight? "Senior adults with arthrit is need Easy-Open bottles because they struggle to open childproof lids"
    a) Because they struggle to open childproof lids.
    b) Need easy-open bottles.
    c) Senior citizens
    d) None of these

28. What is Point Of View (POV) in design thinking?
    a) A Report from the design team about the product.
    b) A Customer's opinion about interactions with you brand.
    c) A written statement of a Customer's problem of need.
    d) The opinion of the manager about how to brain storm.

29. Where do the insights in Point Of View (POV) in design thinking come from?
    a) Researching other products on the market.
    b) Interviewing the general Public on Social media.
    c) Synthesizing the data that has been gathered
    d) Developing ideas during brainstorming

30. People centered Design is -
    a) How the product behaves in the real context.
    b) How a product works on the outside where a person comes into contact with it and has to use it.
    c) All of the above
    d) None of the above

31. What is the usual order of problem solving process?
    a) Try, Reflect, Prepare, Define
    b) Prepare, Try Define, Reflect
    c) Try and Reflect
    d) Define, Prepare, Try, Reflect

32. Reframing a Design Challenge -
    a) Changes the Conceptual view point to an individual perspective
    b) Helps us come up with the Right Problem to solve.
    c) Challenges us to design to a marketing focus
    d) None of these

33. Which of the following is true?
    a) By Empathizing one can define a Problem Well, Conceive a creative solution resulting in break through innovation.
    b) Empathy makes you a better human, but innovation requires out of the box thinking and not Empathy
    c) Inventions are sudden Eureka moments and is not really part of the long-term Research or Exploration.
    d) You become an innovator by Questioning the status Quo.

34. Malini is in the Ideate phase. What is her goal?
    a) To Come up with one or two great ideas
    b) To come up with us many ideas as possible, good and bad.
    c) To test his best idea.
    d) To figure out which problem he's going to solve

35. During which stage would you : start looking for a alternative ways of viewing the problem.
    a) Prototype   b) Define   c) Ideate   d) Empathize

36. Design Thinkers create low-fidelity prototypes to :
    a) Test concepts quickly and cheaply with potential users.
    b) Validate concepts for the market.
    c) Build Production-Ready products.
    d) Estimate the price of production

37. Which of the following well known consulting firms are offering Design Thinking as a solution?
    a) McKinsey & Co.
    b) BCG
    c) Bain & Co.
    d) All of above

38. Design Thinking is sometimes visualized as a linear process, but it is actually :
    a) Impactful   b) Incapacitating   c) Intentional   d) Iterative

39. Which of the following is NOT part of the idea-selection process in DT?
a) Grouping Related concepts together
b) Identifying selection criteria
c) Deliberating
d) Prototyping

40. Robert researches statistics about the average age of school dropouts. Which stage is he in?
a) Empathize
b) Define problem statement
c) Ideate
d) Prototype

41. What is your First model/design of a product called?
a) Draft
b) Rough Draft
c) Prototype
d) Practice Design

42. The final step in the Design process is to _____
a) Test
b) Define
c) Ideate
d) Empathize

43. _____ was IDEO's first expression of design thinking.
a) Deep-Design
b) Deep-Dive
c) Deep-Structure
d) Study-Dive

44. Frank Robinson defined and coined the term.
a) Design thinking
b) Mind mapping
c) MVP
d) Hypothesis

45. Which of the below is incorrect?
a) Peprico has turned Design Thinking into its strategy.
b) Air BnB avoided bankruptcy and turned profitable using Design Thinking
c) Google has a 3 step process to bring about new innovation
d) All of the above are correct

46. At what step do you want to complete the POV-Point Of View?
a) Empathy
b) Prototype
c) Define
d) Ideate

47. The initial design brief iS provided by,
a) Designer
b) User
c) Both of them
d) Client

48. What Element of user Experience Design would the design strategy fall under,
a) Interaction Design
b) Experience strategy
c) User Research
d) Information Architecture

49. When testing a new prototype, how many people do you need to interview per Persona to detect the main usability issues?
a) The more Persona the better
b) 20 Persons per Persona
c) 10 Persons per Persona
d) Five Persons per Persona

50. Readiness of the organization for strategic innovation means,
a) Changing innovation process in the organization
b) Ready for the change in the organization
c) Ready for change in the capabilities of the organization
d) All of the above

* * * * *

BKSKK107

USN ☐☐☐☐☐☐☐☐☐☐

Question Paper Version : A

First Semester B.E. Degree Examination, Jan./Feb. 2023

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ

(COMMON TO ALL BRANCHES)

Time: 1 hrs.]

[Max. Marks: 50

ಸೂಚನೆಗಳು

1. ಎಲ್ಲಾ 40 ಪ್ರಶ್ನೆಗಳಿಗೂ ಉತ್ತರಿಸಿರಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ ಒಂದು ಅಂಕ.

2. ಟಿ.ಎಂ.ಆರ್ ಉತ್ತರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಯು.ಎಸ್.ಎನ್ ಸಂಖ್ಯೆ ಹಾಗೂ ಪಶ್ಯೆ ಪತ್ರಿಕೆಯ ಶ್ರೇಣಿಯನ್ನು ಅಂದರೆ A, B, C ಅಥವಾ D ಯನ್ನು ತಪ್ಪಿಲ್ಲದಂತೆ ಕಡ್ಡಾಯವಾಗಿ ಗುರುತಿಸುವುದು ಅಭ್ಯರ್ಥಿಯ ಜವಾಬ್ದಾರಿಯಾಗಿರುತ್ತದೆ.

3. ಟಿ.ಎಂ.ಆರ್ ಉತ್ತರ ಪತ್ರಿಕೆಯಲ್ಲಿ ನಿಗದಿಪಡಿಸಿರುವ ಸ್ಥಳದಲ್ಲಿ ಭರ್ತಿಮಾಡದೆ 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 ಟಿ.ಎಂ.ಆರ್ ಉತ್ತರ ಪತ್ರಿಕೆಯ ಹಾಳೆಯ ಮೇಲೆ ಕಪ್ಪು ಅಥವಾ ನೀಲಿ ಶಾಹಿಯ ಬಾಲ್‌ಪಾಯಿಂಟ್ ಪೆನ್ನಿಂದ ಗುರುತು ಮಾಡಬೇಕು.

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1. 1800 ರಲ್ಲಿ ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯ ಕಲೆಕ್ಟರ್ ಆಗಿದ್ದವರು----------.

   A) ಡಿಸಿ   B) ಪಂಡಿತ   C) ಸರ್ ಥಾಮಸ್ ಮನ್ರೋ   D) ಅಧಿಕಾರಿ

2. ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಲಿಪಿಗಳ ರಾಣಿ ಎಂದು ಕರೆದವರು----------.

   A) ಅಕ್ಕಮಹಾದೇವಿ   B) ತ್ರಿವೇಣಿ   C) ಜನಪದಸ್ತ್ರೀ   D) ವಿನೋಬಾ ಭಾವೆ

3. ಕನ್ನಡ ನಾಡಿನ ಜನತೆಯನ್ನು ವರ್ಣಿಸಿರುವ ಗ್ರಂಥ ----------.

   A) ಗರಿ   B) ಸವಿಗೀತ   C) ಕಗ್ಗ   D) ಕವಿರಾಜಮಾರ್ಗ

4. ವಿದ್ಯಾವರ್ಧಕ ಸಂಘವು ಎಲ್ಲಿ ಸ್ಥಾಪನೆಯಾಯಿತು?

   A) ಧಾರವಾಡ   B) ಹುಬ್ಬಳ್ಳಿ   C) ಹರಿಹರ   D) ದಾವಣಗೆರೆ

5. ಜನಪದ ಸಾಹಿತ್ಯದ ಪ್ರಕಾರಗಳು ----------.

A) ಕವನ

B) ಕಾದಂಬರಿ

C) ಹಾಡು, ಒಗಟು, ಒಡಪು, ಭಾವಗೀತೆ

D) ಚಿತ್ರಗೀತೆ.

6. ನಗುವು ಸಹಜದ ಧರ್ಮ, ನಗೆಸುವುದು ----------.

A) ಧರ್ಮ

B) ಅಧರ್ಮ

C) ಹುಟ್ಟು

D) ಪರಧರ್ಮ.

7. ವಸುಧೆಯೊಳ್ ಶಿಶುನಾಳಧೀಶನ ಮುಂದೆ ದ್ಯಾನದ ಮಗಿಯೊಂದು ಇರುವಾಕಿ ----------.

A) ಅಗಸಗಿತ್ತಿ

B) ಕುಂಬಾರತಿ

C) ಬಳೆಗಾರ್ತಿ

D) ಮುದುಕಿ.

8. ಕೊತ್ತು ಕಣಕಣಿ ಮಣ್ಣುಗೆದ್ದರಿರುವಗಳು ಕಟ್ಟಡಗೂಡಿಗೆ ಸೇರುವುದು ----------.

A) ಗಿಳಿ

B) ಗೀಜಗ

C) ಗುಬ್ಬಿ

D) ಸರ್ಪ.

9. ಕೊಟ್ಟು ಕುದಿಯಲುಬೇಡ, ಇಟ್ಟು ಹಂಗಿಸಬೇಡ, ಎಪ್ಪುಂದರೆಂದು ಅಸಬೇಡ, ಈ ಮೂರು ಮುಟ್ಟಾಪು ---------- ಸದರೇಗಿ.

A) ಬ್ರಹ್ಮನ

B) ವಿಷ್ಣುವಿನ

C) ಮಹೇಶ್ವರನ

D) ಶಿವನ

10. ತಲ್ಲಣಿಸದಿರು ಕಂಡ್ಯ ತಾಳು ಮನವೇ, ಕೀರ್ತನೆಯ ರಚನೆಕಾರರು ----------.

A) ಶರಣರು

B) ವಚನಕಾರರು

C) ಕನಕದಾಸರು

D) ಪುರಂದರದಾಸರು.

11. ಕುರುಡು ಕಾಂಚಾಣದ ಕುಣಿತ ಮೊಮ್ಮೊಲು ಕುಣಿತವಲ್ಲ ಅದು ಎಲ್ಲಾ ---------- ಯ ಮೊತ್ತ.

A) ಆಕೃತಿ

B) ಸ್ಮೃತಿ

C) ವಿಕೃತಿ

D) ಸಂಪತ್ತು.

12. ಗೋಪಾಳ ಮಾಸ್ತರರ ಮಗನ ಹೆಸರೇನು ----------?

A) ಕರೀಂಖಾನ್

B) ಪ್ರಹ್ಲಾದ

C) ರಾಮು

D) ಶಿವಪ್ರಸಾದ.

13. ಕಾಸಿಂಸಾಬರ ಮಗಳ ಹೆಸರು ----------.

A) ರುಕ್ಮಿಣಿ

B) ರೇಖಾ

C) ರಾಧಾ

D) ಚಾಂದಿನಿ.

14. ಅಪಾರ್ಟಮೆಂಟಿನ ಜನರು ಗೋಪಣ್ಣ ಮಾಸ್ತರರನ್ನು ಕರೆದಿದ್ದು ಹೀಗೆ ------.
    A) ತಾತ   B) ಮಾಸ್ತರ   C) ಓಲ್ಡ್ ಮ್ಯಾನ್   D) ಮುದುಕ.

15. ಕನಕದಾಸರ ಅಂತಿತನಾಮ ------.
    A) ಕನಕಪ್ಪ   B) ದಾಸ
    C) ತಿಮ್ಮಪ್ಪನಾಯಕ   D) ಕಾಗಿನೆಲೆ ಆದಿಕೇಶವರಾಯ.

16. ಅಧಿಕವಾಗಿ ಹಾಗು ಸಾಮಾಜಿಕವಾಹಿ ಕೆಳಸ್ತರದಲ್ಲಿರುವ ವ್ಯಕ್ತಿಗಳು ಉಳಿಸಿಕೊಂಡು ಬಂದಿರುವ ಸಾಂಪ್ರದಾಯಿಕ ಮೌಲ್ಯಗಳ ತಿರುಳಾಗಿರುವ ಕತೆಯೇ, ಇಟಾಗಿದೆ.
    A) ಕರೆಪಂಜರ   B) ಚೋಮನದುಡಿ   C) ನಾಗರಹಾವು   D) ಯುಗಾದಿ.

17. ಕಳವೆ ಪದದ ಅರ್ಥ ------.
    A) ಚೆಲ   B) ಭತ್ತ   C) ರಾಗಿ   D) ಜೋಳ.

18. ಸಮುದಾಯಕ್ಕಾಗಿ ಪ್ರಾಣತ್ಯಾಗ ಮಾಡುವ ಶೌರ್ಯದ ಸಂಕೇತಿಕವಾಗಿ ನಿಲ್ಲಿಸುವ ಕಲ್ಲೇ.
    A) ಶಾಸನ   B) ಗಡಿಕಲ್ಲು   C) ಶಿಲಾಶಾಸನ   D) ವೀರಗಲ್ಲು.

19. ಕುರುಡ ಕಣ್ಣು ಕಾಣಲರಿಯದೆ ------ ಬಯ್ಯದು.
    A) ಕಿವಿ   B) ಕಣ್ಣು   C) ಕನ್ನಡಿ   D) ದೇವರು.

20. ಕೂಲಿ ಕಂಬಳಿಯವರ ಪಾಲಿನ ಮೈದೊಗಲ ಧೂಳಿಯ ------ ಹಳೆಯೊಳಗಿತ್ತೂ.
    A) ಕುಂಕುಮ   B) ಭಂಡಾರ   C) ಅಂಗಾರ   D) ಶ್ರಮ.

21. ಹುಲ್ಲಾಗು ಬೆಟ್ಟದಡಿ ಮನೆಗೆ ------ ಆಗು.
    A) ಮಲ್ಲಿಗೆ   B) ಆಬಲಿಗೆ   C) ಜಾಜಿ   D) ಸಂಪಿಗೆ

22. ಸಿಂಹಾಸನ ಕೊಸೆಗಾಲ ಬಂದಿರುವುದು ------.
    A) ಇಂದ್ರ   B) ಕೌರವರು   C) ರಾಮ   D) ಮಂತ್ರಿ.

23. ಕನ್ನಡಕ್ಕೆ ಪ್ರಥಮ ಜ್ಞಾನಪೀಠ ಪ್ರಶಸ್ತಿ ತಂದು ಕೊಟ್ಟವರು ----------
   A) ಮಾಸ್ತಿ ವೆಂಕಟೇಶ ಅಯ್ಯಂಗಾರ   B) ಶಿವರಾಮ ಕಾರಂತ
   C) ಕುವೆಂಪು   D) ಜಿ. ಎಸ್. ಶಿವರುದ್ರಪ್ಪ

24. ಧರ್ಮ ಸಹಿಷ್ಣುತೆ ಬಗ್ಗೆ ಹೇಳುವ ಶಾಸನ ಇದಾಗಿದೆ ----------
   A) ಶ್ರವಣಬೆಳಗೊಳದ ಶಾಸನ   B) ಹಲ್ಮಿಡಿಶಾಸನ
   C) ಚಂದ್ರವಳ್ಳಿ ಶಾಸನ   D) ಬೇಲೂರು ಶಾಸನ.

25. ನವಿಲಿಗೆ ---------- ಬರೆದವರು ಯಾರು?
   A) ಕಣ್ಣು   B) ಕಿವಿ   C) ಕಣ್ಣೆ   D) ಚಿತ್ರ.

26. ---------- ಸಹಜಧರ್ಮ.
   A) ಕೇಳುವುದು   B) ಹೇಳುವುದು   C) ಅಳುವುದು   D) ನಗುವುದು

27. ಯಾವ ಆವಿಗೆಯನ್ನು ಕುಂಬಾರಿಕೆ ಮುಚ್ಚುವೆಳ ---------- ?
   A) ಗಡಿಗೆ   B) ಆಚಾರ   C) ಗುಣ   D) ಶಕ್ತಿ.

28. ಕರ್ನಾಟಕ ಸಂಗೀತದ ಪಿತಾಮಹ ಯಾರು ---------- ?
   A) ಆಲೂರು ವೆಂಕಟರಾಯರು   B) ಕನಕದಾಸರು
   C) ಪುರಂಧರದಾಸರು   D) ಹರಿದಾಸರು.

29. ಯಾರ ಎಲುಬನ್ನು ಕಾಂಚಾಣ ಕಿರುಗೆಜ್ಜೆಯಾಗಿ ಮಾಡಿಕೊಂಡಿದೆ ---------- ?
   A) ಮಕ್ಕಳು   B) ಮುದುಕರು   C) ಹೆಂಗಸರು   D) ಬಾಡಂತಿ.

30. ಹೊಸ ಚಿಗುರು ---------- ಕೂಡಿರಲು ಮರಸೊಬಗು.
   A) ಎಲೆ   B) ಹಸಿರು   C) ಕಾಂಡ   D) ಹಳೆಬೇರು.

31. ತೇಲಾಡುವ ಮೇಘಗಳ ಮಧ್ಯ ಇರುವುದರಿಂದಲೇ ಇದಕ್ಕೆ ---------- ಎಂಬ ಹೆಸರು ಬಂದಿದೆ.
   A) ಸಹ್ಯಾದ್ರಿ   B) ಕುಬಿ   C) ಪರ್ವತ   D) ಮೇಗಾನೆ.

32. ಹಾಸನದ ಬಯಲು ಸೀಮೆಯಿಂದ ಆಕಸ್ಮಾತ್ತಾಗಿ ಮೇಗಾನ ಸೇರಿರುವವರು ---------.

    A) ಸೀತಮ್ಮ   B) ಗೀತಮ್ಮ   C) ಲಕ್ಷ್ಮ   D)ಮಾರಮ್ಮ

33. ಸಂಗೀತಪುರವು ಈ ಹಿಂದೆ ಯಾರ ಊರಾಗಿತ್ತು?

    A) ಕ್ರಿಸ್ತರು   B) ಹಿಂದೂಗಳು   C) ಜೈನರು   D) ಕಾಡಿನ ಜನರ.

34. ಮನುಕುಲದ ಚರಿತ್ರೆಯಲ್ಲಿ ಮಹಿಳೆಯರ ಕೈಕಸುಬಾಗಿ ಅರಂಭವಾದ ಕಲೆಯೇ ---------.

    A) ಉದ್ಯಮ   B) ಗೃಹೋತೆಯೋಗಿ   C) ಕರಕುಶಲ ಕಲೆ.   D) ಕಲೆ.

35. ಸರ್ವರಿಗೂ ಸಮಪಾಲು, ಸರ್ವರಿಗೂ ಸಮಬಾಳು ಇದು --------- ದ ವಾಣಿ.

    A) ಕಲಿಯುಗ   B) ತ್ರೈತಾಯುಗ   C) ನವಯುಗ   D) ಶಿಲಾಯುಗ.

36. ಹೋಳಿ, ಸಿಗ್ಮಾನರ್ತನ, ಕೋಲುಪದ, ಗಮೆಟ್ ಪದಗಳ ರಸದೌತಣ ಇವು ಕುಣಬಿಯವರ ---------.

    A) ಮಾತುಗಳು   B) ಹಾಡುಗಳು   C) ಆಭರಣಗಳು   D) ನೃತ್ಯಗಳು.

37. ಬಟ್ಟೆಯ ಮೇಲಿನ ಮುದ್ರಣಕಲೆಗೆ ಮೂಲ ನೆಲೆಯಾದ ದೇಶ ---------.

    A) ಅಮೇರಿಕಾ   B) ಆಫ್ರಿಕಾ   C) ಭಾರತ   D) ಇಂಗ್ಲೆಂಡ್.

38. ಸತ್ಯ ತನ್ನ ಸತ್ಯತೆಯಿಂದಲೇ ಪ್ರಭಾವಶಾಲಿಯಾಗಬಲ್ಲದೆಂಬುದು ವಿಶ್ವೇಶ್ವರಯ್ಯನವರ ---------.

    A) ಪ್ರೀತಿ   B) ವಿಶ್ವಾಸ   C) ಧರ್ಮ   D) ನಂಬಿಕೆ.

39. "ದುಡಿದವನಿಗೆ ಪ್ರತಿಫಲ ದೊರೆಯಲೇಬೇಕು" ಎಂಬ ತತ್ವ ---------.

    A) ಗಾಂಧೀಜಿಯವರದು   B) ನೆಹರುರವರದು

    C) ವಿಶ್ವೇಶ್ವರಯ್ಯನವರದು   D) ಕುವೆಂಪುರವರದು.

40. ಕನ್ನಡ ಸಂಸ್ಕೃತಿ ಈ ರೀತಿಯಾಗಿದೆ.

    A) ಬಹುರೂಪಿಯಾಗಿದೆ.   B) ವರ್ಣರಂಜಿತವಾಗಿದೆ

    C) ಜೀವಂತವಾಗಿದೆ   D) ಮೇಲಿನ ಎಲ್ಲವೂ.

41. ಕನ್ನಡಕ್ಕೆ ಅಪರೂಪದ ನಿಘಂಟನ್ನು ರಚಿಸಿಕೊಟ್ಟ ಜರ್ಮನ್ ದೇಶದ ಕವಿ ——————.

    A) ಕಿಟಲ್   B) ಅಂಟೋನಿ   C) ಅರಬಾನಿ   D) ಮೆಕಾಲೆ.

42 ಭಾರತ ಸರ್ಕಾರವು ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಏನೆಂದು ಘೋಷಿಸಿದೆ?

    A) ಲಿಪಿ   B) ಮಾತೃಭಾಷೆ   C) ಆಡಳಿತ ಭಾಷೆ   D) ಶಾಸ್ತ್ರೀಯ ಭಾಷೆ.

43. ಯುಗಾದಿ ಕಥೆಯಲ್ಲಿರುವ ಪ್ರಹ್ಲಾದ ——————— ಇಂಜಿನಿಯರ್.

    A) ಹಾರ್ಡ್ ವೇರ್ ಇಂಜಿನಿಯರ್   B) ಸಿವಿಲ್ ಇಂಜಿನಿಯರ್

    C) ಸಾಫ್ಟ್ ವೇರ್ ಇಂಜಿನಿಯರ್   D) ಮೆಕ್ಯಾನಿಕಲ್ ಇಂಜಿನಿಯರ್.

44. ಮೊದಲ ಬಾರಿ ಜೋಗ ಜಲಪಾತ ಕಂಡು ವಿಶ್ವೇಶ್ವರಯ್ಯ ಅವರು ಉದ್ಗರಿಸಿದ್ದು ——————.

    A) ಎಷ್ಟೊಂದು ಶಕ್ತಿ ಪೋಲಾಗುತ್ತಿದೆ.   B) ಎಷ್ಟೊಂದು ಭೀಕರವಾಗಿದೆ.

    C) ಎಷ್ಟೊಂದು ಗಲೀಜಾಗಿದೆ   D) ಇದನ್ನು ನೋಡಿದ ನಾನೇ ಧನ್ಯ.

45. ಮಂಡ್ಯಜಿಲ್ಲೆಯ ಜನರಿಗೆ ಅನ್ನಬ್ರಹ್ಮನಾಗಿ ಅವತಾರ ಪುರುಷನಾಗಿ ಕಾಣಿಸಿಕೊಂಡವರು ——————.

    A) ಎ.ಎನ್. ಮೂರ್ತಿರಾವ್   B) ಸರ್. ಎಂ. ವಿಶ್ವೇಶ್ವರಯ್ಯ

    C) ಕಂಬಾರ   D) ಕುವೆಂಪು.

46. ಗೋಪಣ್ಣ ಮಾಸ್ತರರ ಆತ್ಮೀಯ ಗೆಳೆಯ————————

    A) ಕಾಸಿಂಸಾಬರು   B) ನರಸಿಂಹಮೂರ್ತಿ   C) ಪ್ರಹ್ಲಾದ   D) ಬ್ರಾಹ್ಮಣ.

47. ರಸಋಷಿ ಎಂದು ಕರೆಯಲ್ಪಡುವ ಕವಿ ———————

    A) ಡಿವಿಜಿ   B) ಕುವೆಂಪು   C) ಜಿ.ಎಸ್. ಶಿವರುದ್ರಪ್ಪ   D) ಗೋವಿಂದ ಪೈ.

48. ಕಲ್ಲಿಗಳ ಕಾವ್ಯ ಕೃತಿಯನ್ನು ರಚಿಸಿದವರು ——————.

    A) ಪಂಪ   B) ಅಂಡಯ್ಯ   C) ಹಲ್ಮಿಡಿ ಶಾಸನ   D) ಕಾವ್ಯ.

49. ಕುಣಬಿ ಜನಾಂಗಭವರು ಮೂಲತಃ ಯಾವ ರಾಜ್ಯದ ಹಿನ್ನೆಲ ಹೊಂದಿದ್ದಾರೆ.

    A) ಮಧ್ಯಪ್ರದೇಶ   B) ರಾಜಸ್ಥಾನ್   C) ಆಂಧ್ರಪ್ರದೇಶ   D) ಗೋವಾ.

50. ಭಾರತದಲ್ಲಿ ಬಟ್ಟೆಗಳ ತಯಾರಿಕೆಗೆ ಬೇರೆ ಬೇರೆ ಬಣ್ಣಗಳನ್ನು ನೀಡುವ ಸುಮಾರು ——————.

    A) 300   B) 2500   C) 600   D) 200.

* * * * *

BKSKK107

USN

Question Paper Version : B

First Semester B.E. Degree Examination, Jan./Feb. 2023

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ

(COMMON TO ALL BRANCHES)

Time: 1 hrs.]

[Max. Marks: 50

ಸೂಚನೆಗಳು

1. ಎಲ್ಲ ೫೦ ಪ್ರಶ್ನೆಗಳಿಗೂ ಉತ್ತರಿಸಿರಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಗೆ ಒಂದು ಅಂಕ.

2. ಓ.ಎಂ.ಆರ್ ಉತ್ತರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಯು.ಎಸ್.ಎನ್ ಸಂಖ್ಯೆ ಹಾಗೂ ಪಶ್ನೆ ಪತ್ರಿಕೆಯ ಶ್ರೇಣಿಯನ್ನು ಅದರೆ A, B, C ಅಥವಾ D ಯನ್ನು ತಪ್ಪಿಲ್ಲದಂತೆ ಕಡ್ಡಾಯವಾಗಿ ಗುರುತಿಸುವುದು ಅಭ್ಯರ್ಥಿಯ ಜವಾಬ್ದಾರಿಯಾಗಿರುತ್ತದೆ.

3. ಓ.ಎಂ.ಆರ್ ಉತ್ತರ ಪತ್ರಿಕೆಯಲ್ಲಿ ನಿಗದಿಪಡಿಸಿರುವ ಸ್ಥಳದಲ್ಲಿ ಭರ್ತಿಮಾಡದೆ ಹಾಗೆಯೇ ಬಿಟ್ಟಲ್ಲಿ ಅಥವಾ ಭರ್ತಿಮಾಡಿದ ಮಾಹಿತಿಯಲ್ಲಿ ಯಾವುದೇ ವ್ಯತ್ಯಾಸವಿದ್ದಲ್ಲಿ ಅಂತಹ ಉತ್ತರ ಪತ್ರಿಕೆಗಳನ್ನು ರದ್ದು ಪಡಿಸಲಾಗುವುದು.

4. ಕೇವಲ ಒಂದು ಉತ್ತರವನ್ನು ಮಾತ್ರ ಉತ್ತರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಗುರುತಿಸತಕ್ಕದ್ದು. ಒಂದೇ 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.

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1. ಕನ್ನಡಕ್ಕೆ ಅಪರೂಪದ ನಿಘಂಟನ್ನು ರಚಿಸಿಕೊಟ್ಟ ಜರ್ಮನ್ ದೇಶದ ಕವಿ --------.
   A) ರಿಟಲ್   B) ಆಂಟೋನಿ   C) ಅಂಬಾನಿ   D) ಮೆಕಾಲೆ.

2. ಭಾರತ ಸರ್ಕಾರವು ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಏನೆಂದು ಘೋಷಿಸಿದೆ?
   A) ಲಿಪಿ   B) ಮಾತೃಭಾಷೆ   C) ಆಡಳಿತ ಭಾಷೆ   D) ಶಾಸ್ತ್ರೀಯ ಭಾಷೆ

3. ಯುಗಾದಿ ಕಥೆಯಲ್ಲಿರುವ ಪ್ರಹ್ಲಾದ -------- ಇಂಜಿನಿಯರ್.
   A) ಹಾರ್ಡ್‌ವೇರ್ ಇಂಜಿನಿಯರ್   B) ಸಿವಿಲ್ ಇಂಜಿನಿಯರ್
   C) ಸಾಫ್ಟ್‌ವೇರ್ ಇಂಜಿನಿಯರ್   D) ಮೆಕ್ಯಾನಿಕಲ್ ಇಂಜಿನಿಯರ್

4. ಮೊದಲ ಬಾರಿ ಜೋಗ ಜಲಪಾತ ಕಂಡು ವಿಶ್ವೇಶ್ವರಯ್ಯ ಅವರು ಉದ್ಗರಿಸಿದ್ದು --------.
   A) ಎಷ್ಟೊಂದು ಶಕ್ತಿ ಪೋಲಾಗುತ್ತಿದೆ.   B) ಎಷ್ಟೊಂದು ಭೀಕರವಾಗಿದೆ.
   C) ಎಷ್ಟೊಂದು ಗಲೀಜಾಗಿದೆ   D) ಇದನ್ನು ನೋಡಿದ ನಾನೇ ಧನ್ಯ.

5. ಮಂಡ್ಯಜಿಲ್ಲೆಯ ಜನರಿಗೆ ಅನ್ನಬ್ರಹ್ಮನಾಗಿ ಅವತಾರ ಪುರುಷನಾಗಿ ಕಾಣಿಸಿಕೊಂಡವರು ------.

A) ಎ.ಎನ್. ಮೂರ್ತಿರಾವ್
B) ಸರ್. ಎಂ. ವಿಶ್ವೇಶ್ವರಯ್ಯ
C) ಕಂಬಾರ
D) ಕುವೆಂಪು

6. ಗೋವಿನ ಮಾಸ್ತರರ ಆತ್ಮೀಯ ಗೆಳೆಯ------

A) ಕಾಸಿಂಸಾಬರು
B) ನರಸಿಂಹಮೂರ್ತಿ
C) ಪ್ರಹ್ಲಾದ
D) ಬ್ರಾಹ್ಮಣ.

7. ರಸಋಷಿ ಎಂದು ಕರೆಯಲ್ಪಡುವ ಕವಿ ------.

A) ಡಿವಿಜಿ
B) ಕುವೆಂಪು
C) ಜಿ.ಎಸ್. ಶಿವರುದ್ರಪ್ಪ
D) ಗೋವೆಂದ ಪೈ

8. ಕಬ್ಬಿಗರ ಕಾವ್ಯ ಕೃತಿಯನ್ನು ರಚಿಸಿದವರು ------.

A) ಪಂಪ
B) ಆಂಡಯ್ಯ
C) ಹಲ್ಮಿಡಿ ಶಾಸನ
D) ಕಾವ್ಯ.

9. ಕುಡಬಿ ಜನಾಂಗದವರು ಮೂಲತಃ ಯಾವ ರಾಜ್ಯದ ಹಿನ್ನೆಲೆ ಹೊಂದಿದ್ದಾರೆ.

A) ಮಧ್ಯಪ್ರದೇಶ
B) ರಾಜಸ್ತಾನ್
C) ಆಂಧ್ರಪ್ರದೇಶ
D) ಗೋವಾ.

10. ಭಾರತದಲ್ಲಿ ಬಟ್ಟೆಗಳ ತಯಾರಿಕೆಗೆ ಬೇರೆ ಬೇರೆ ಬಣ್ಣಗಳನ್ನು ನೀಡುವ ಸುಮಾರು ------.

A) 300
B) 2500
C) 600
D) 200.

11. ತೇಲಾಡುವ ಮೇಘಗಳ ಮಧ್ಯ ಇರುವುದರಿಂದಲೇ ಇದಕ್ಕೆ ------ ಎಂಬ ಹೆಸರು ಬಂದಿದೆ.

A) ಸಹ್ಯಾದ್ರಿ
B) ಕುಡಬಿ
C) ಪರ್ವತ
D) ಮೆಗಾನೆ.

12. ಕಾಸನದ ಬಯಲು ಸೀಮೆಯಿಂದ ಅಕಸ್ಮಾತ್ತಾಗಿ ಮೆಗಾನೆ ಸೇರಿಯಪವವರು ------.

A) ಸೀತಮ್ಮ
B) ಗೀತಮ್ಮ
C) ಲಕ್ಷ್ಮ
D) ಮಾರಮ್ಮ

13. ಸಂಗೀತಪುರವು ಈ ಹಿಂದೆ ಯಾರದ ಊರಾಗಿತ್ತು?

A) ಕ್ರಿಸ್ತರು
B) ಹಿಂದೂಗಳು
C) ಜೈನರು
D) ಕಾಡಿನ ಜನರ.

14. ಮನುಕುಲದ ಚರಿತ್ರೆಯಲ್ಲಿ ಮಹಿಳೆಯರ ಕೈಕಸುಬಾಗಿ ಆರಂಭವಾದ ಕಲೆಯೇ ------.

A) ಉದ್ಯಮ
B) ಗೃಹೋಪಯೋಗಿ
C) ಕರಕುಶಲ ಕಲೆ
D) ಕಲೆ.

15. ಸರ್ವರಿಗೂ ಸಮಪಾಲು, ಸರ್ವರಿಗೂ ಸಮಬಾಳು ಇದು -------- ದ ವಾಣಿ

   A) ಕಲಿಯುಗ   B) ತ್ರೇತಾಯುಗ   C) ಸರ್ವಯುಗ   D) ಕೃತಯುಗ.

16. ಹೋಳಿ, ಸಿಗ್ಮಾನೃತನ, ಕೋಲಾಟದ, ಗಮಟೆ, ಪದಗಳ ರಸದೌತಣ ಇವು ಕೂಡಿಯವೆ --------.

   A) ಮಾತುಗಳು   B) ಹಾಡುಗಳು   C) ಅಚರಣಗಳು   D) ನೃತ್ಯಗಳು.

17. ಬಟ್ಟೆಯ ಮೇಲಿನ ಮುದ್ರಣಕಲೆಗೆ ಮೂಲ ನೆಲೆಯಾದ ದೇಶ --------.

   A) ಅಮೇರಿಕಾ   B) ಆಫ್ರಿಕಾ   C) ಭಾರತ   D) ಇಂಗ್ಲೆಂಡ್.

18. ಸತ್ಯ ತನ್ನ ಸತ್ಯತೆಯಿಂದಲೇ ಪ್ರಭಾವಶಾಲಿಯಾಗಬಲ್ಲದೆಂಬುದು ವಿಶ್ವೇಶ್ವರಯ್ಯನವರ --------.

   A) ಪ್ರೀತಿ   B) ವಿಶ್ವಾಸ   C) ಧರ್ಮ   D) ನಂಬಿಕೆ.

19. "ದುಡಿದವನಿಗೆ ಪ್ರತಿಫಲ ದೊರೆಯಲೇಬೇಕು" ಎಂಬ ತತ್ವ --------.

   A) ಗಾಂಧೀಜಿಯವರದು   B) ನೆಹರೂರವರದು

   C) ವಿಶ್ವೇಶ್ವರಯ್ಯನವರದು   D) ಕುವೆಂಪುರವರದು.

20. ಕನ್ನಡ ಸಂಸ್ಕೃತಿ ಈ ರೀತಿಯಾಗಿದೆ.

   A) ಬಹುರೂಪಿಯಾಗಿದೆ.   B) ವರ್ಣರಂಜಿತವಾಗಿದೆ

   C) ಜೀವಂತವಾಗಿದೆ   D) ಮೇಲಿನ ಎಲ್ಲವೂ.

21. ಕುರುಡು ಕಾಂಚಾಣದ ಕುಣಿತ ಮಾಮೂಲು ಕುಣಿತವಲ್ಲ ಅದು ಎಲ್ಲಾ -------- ಯ ಮೊತ್ತ.

   A) ಆಕೃತಿ   B) ಸ್ವೀಕೃತಿ   C) ವಿಕೃತಿ   D) ಸಂಪತ್ತು.

22. ಗೋಪಣ್ಣ ಮಾಸ್ತರರ ಮಗನ ಹೆಸರೇನು --------?

   A) ಕರೀಂಖಾನ್   B) ಪ್ರಹ್ಲಾದ   C) ರಾಮು   D) ಶಿವಪ್ರಸಾದ.

23. ಕಾಸಿಂಸಾಬರ ಮಗಳ ಹೆಸರು --------.

   A) ರುಕ್ಮಿಣಿ   B) ರೇಖಾ   C) ರಾಧಾ   D) ಚಾಂದಿನಿ.

24. ಅಶಾರ್ಗಮೆಂಟಿನ ಜನರು ಗೋಪಣ್ಣ ಮಾಸ್ಟರರನ್ನು ಕರೆದಿದ್ದು ಹೀಗೆ ------.
   A) ತಾತ   B) ಮಾಸ್ತರ   C) ಓಲ್ಡ ಮ್ಯಾನ್   D) ಮುದುಕ.

25. ಕನಕದಾಸರ ಅಂಕಿತನಾಮ ------.
   A) ಕನಕಪ್ಪ   B) ದಾಸ
   C) ತಿಮ್ಮಪ್ಪನಾಯಕ   D) ಕಾಗಿನೆಲೆ ಆದಿಕೇಶವರಾಯ.

26. ಆರ್ಥಿಕವಾಗಿ ಹಾಗು ಸಾಮಾಜಿಕವಾಹಿ ಕೆಳಸ್ತರದಲ್ಲಿರುವ ವ್ಯಕ್ತಿಗಳು ಉಳಿಸಿಕೊಂಡು ಬಂದಿರುವ ಸಾಂಪ್ರದಾಯಿಕ ಮೌಲ್ಯಗಳ ತಿರುಳಾಗಿರುವ ಕತೆಯೇ, ಇದಾಗಿದೆ.
   A) ಶರವಂಜರ   B) ಚೋಮನದುಡಿ   C) ನಾಗರಹಾವು   D) ಯುಗಾದಿ.

27. ಕಳವೆ ಪದದ ಅರ್ಥ ------.
   A) ಚೇಲ   B) ಭತ್ತ   C) ರಾಗಿ   D) ಜೋಳ.

28. ಸಮುದಾಯಕ್ಕಾಗಿ ಪ್ರಾಣತ್ಯಾಗ ಮಾಡುವ ಶೌರ್ಯದ ಸಂಕೇತಿಕವಾಗಿ ನಿಲ್ಲಿಸುವ ಕಲ್ಲೇ.
   A) ಶಾಸನ   B) ಗಡಿಕಲ್ಲು   C) ಶಿಲಾಶಾಸನ   D) ವೀರಗಲ್ಲು.

29. ಕುರುಡ ಕಣ್ಣು ಕಾಣಲರಿಯದೆ ------ ಬಯ್ಯದು.
   A) ಕಿವಿ   B) ಕಣ್ಣು   C) ಕನ್ನಡಿ   D) ದೇವರು.

30. ಕೂಲಿ ಕಂಬಳಿಯವರ ಕಾಲಿನ ಮೈದೊಗಲ ಧೂಳಿಯು ------ ಹಣೆಯೊಳಗಿಟ್ಟೂ.
   A) ಕುಂಕುಮ   B) ಭಂಡಾರ   C) ಅಂಗಾರ   D) ಶ್ರಮ.

31. 1800 ರಲ್ಲಿ ಬಳ್ಳಾರಿ ಜಿಲ್ಲೆಯ ಕಲೆಕ್ಟರ್ ಆಗಿದ್ದವರು ------.
   A) ಡಿಸಿ   B) ಪಂಡಿತ   C) ಸರ್ ಥಾಮಸ್ ಮನ್ರೋ   D) ಅಧಿಕಾರಿ.

32. ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಲಿಪಿಗಳ ರಾಣಿ ಎಂದು ಕರೆದವರು ------.
   A) ಅಕ್ಕಮಹಾದೇವಿ   B) ತ್ರಿವೇಣಿ   C) ಜನಪದಸ್ತ್ರೀ   D) ವಿನೋಬಾ ಭಾವೆ.

33. ಕನ್ನಡ ನಾಡಿನ ಜನತೆಯನ್ನು ವರ್ಣಿಸಿರುವ ಗ್ರಂಥ —————.

A) ಗರಿ   B) ಸವಿಗೀತ   C) ಕಣ್   D) ಕವಿರಾಜಮಾರ್ಗ.

34. ಎದ್ಯಾವರ್ಧಕ ಸಂಘವು ಎಲ್ಲಿ ಸ್ಥಾಪನೆಯಾಯಿತು?

A) ಧಾರವಾಡ   B) ಹುಬ್ಬಳ್ಳಿ   C) ಹರಿಹರ   D) ದಾವಣಗೆರೆ.

35. ಜನಪದ ಸಾಹಿತ್ಯದ ಪ್ರಕಾರಗಳು —————.

A) ಕವನ   B) ಕಾದಂಬರಿ

C) ಕಾಡು, ಒಗಟು, ಒಡವು, ಭಾವಗೀತ   D) ಚಿತ್ರಗೀತ.

36. ನಗುವು ಸಹಜದ ಧರ್ಮ, ನೆಗೆಸುವುದು —————.

A) ಧರ್ಮ   B) ಅಧರ್ಮ   C) ಹುಬ್ಬ   D) ಪರಧರ್ಮ.

37. ಪನುಡೆಯೊಳ್ ಶಿಶುನಾಳಧೀಶನ ಮುಂದೆ ಧ್ಯಾನದ ಮಗಿಯೊಂದು ಇದುವಾಸಿ —————.

A) ಅಗಸಗಿತ್ತಿ   B) ಕುಂಬಾರತಿ   C) ಬಳೆಗಾರ್ತಿ   D) ಮುದುಕಿ.

38. ಹೊತ್ತು ಕಣಕಣದಿ ಮಣ್ಣನುಗ್ಧರಿರುವೆಗಳು ಕಟ್ಟದಗೂಡಿಗೆ ಸೇರುವುದು —————.

A) ಗಿಳಿ   B) ಗೀಜಗ   C) ಗುಬ್ಬಿ   D) ಸರ್ಪ.

39. ಕೂಟ್ಟು ಕುಡಿಯಲುಬೇಡ, ಇಟ್ಟು ಹಂಗಿಸಬೇಡ, ಎಪ್ಪುಂಡರೆಂದು ಅನಬೇಡ, ಈ ಮೂರು ಮಟ್ಟಾವು ————— ಸದರಿಗೆ.

A) ಬ್ರಹ್ಮನೆ   B) ವಿಷ್ಣುನೆ   C) ಮಹೇಶ್ವರನ   D) ಶಿವನ

40. ತಲ್ಲಡಿಸದಿರು ಕಂಡ್ಯ ತಾಳು ಮನವೇ, ಕೀರ್ತನೆಯ ರಚನೆಕಾರರು —————.

A) ಶರಣರು   B) ವಚನಕಾರರು   C) ಕನಕದಾಸರು   D) ಪುರಂದರದಾಸರು.

41. ಹುಲ್ಲಾಗು ಬೆಟ್ಟದಡಿ ಮನೆಗೆ ————— ಆಗು.

A) ಮಲ್ಲಿಗೆ   B) ಅಬರಿಗೆ   C) ಜಾಜಿ   D) ಸಂಪಿಗೆ.

42. ಸಿಂಹಾಸನಕ ಕೂನೆಗಾಲ ಬಂದಿರುವುದು —————.

A) ಇಂದ್ರ   B) ಕೌರವರು   C) ರಾಮ   D) ಮಂತ್ರಿ.

43. ಕನ್ನಡಕ್ಕೆ ಪ್ರಥಮ ಜ್ಞಾನಪೀಠ ಪ್ರಶಸ್ತಿ ತಂದು ಕೊಟ್ಟವರು -----------.
   A) ಮಾಸ್ತಿ ವೆಂಕಟೇಶ ಅಯ್ಯಂಗಾರ
   B) ಶಿವರಾಮ ಕಾರಂತ
   C) ಕುವೆಂಪು
   D) ಜಿ. ಎಸ್. ಶಿವರುದ್ರಪ್ಪ.

44. ಧರ್ಮ ಸಹಿಷ್ಣುತೆ ಬಗ್ಗೆ ಹೇಳುವ ಶಾಸನ ಇದಾಗಿದೆ -----------.
   A) ಶ್ರವಣಬೆಳಗೊಳದ ಶಾಸನ
   B) ಹಲ್ಮಿಡಿಶಾಸನ
   C) ಚಂದ್ರವಳ್ಳಿ ಶಾಸನ
   D) ಬೇಲೂರು ಶಾಸನ.

45. ನವಿರಿಗೆ ----------- ಬರೆದವರು ಯಾರು?
   A) ಕಣ್ಣು   B) ಕಿವಿ   C) ರೆಕ್ಕೆ   D) ಚಿತ್ರ.

46. -------- ಸಹಜಧರ್ಮ
   A) ಕೇಳುವುದು   B) ಹೇಳುವುದು   C) ಅಳುವುದು   D) ನಗುವುದು

47. ಯಾವ ಆವಿಗೆಯನ್ನು ಕುಂಬಾರತಿ ಮುಚ್ಚುವಳು ------- ?
   A) ಗಡಿಗೆ   B) ಆಚಾರ   C) ಗುಣ   D) ಭಕ್ತಿ.

48. ಕರ್ನಾಟಕ ಸಂಗೀತದ ಪಿತಾಮಹ ಯಾರು -------- ?
   A) ಆಲೂರು ವೆಂಕಟರಾಯರು   B) ಕನಕದಾಸರು
   C) ಪುರಂದರದಾಸರು   D) ಹರಿದಾಸರು.

49. ಯಾರ ಎಲುಬನ್ನು ಕಾಂಚಾಣ ಕಿರುಗೆಜ್ಜೆಯಾಗಿ ಮಾಡಿಕೊಂಡಿದೆ ------- ?
   A) ಮಕ್ಕಳು   B) ಮುದುಕರು   C) ಹೆಂಗಸರು   D) ಬಾಣಂತಿ.

50. ಹೊಸ ಚಿಗುರು -------- ಕೂಡಿರಲು ಮರವೊಬ್ಬರು
   A) ಎಲೆ   B) ಹಸಿರು   C) ಕಾಂಡ   D) ಹಳೆಬೇರು.

* * * * *

CBCS SCHEME

BKBKK107

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 of the following are the hints for correct and polite conversation?
   a) pronounce the words properly   b) use plural forms to address others
   c) use simple sentences for conversation   d) All of these

Fill in the blank by translating the given English word to Kannada.

2. We : _____
   a) NaaVu   b) Namage
   c) Namma   d) Nimage

3. She : _____
   a) Neenu   b) Avanu
   c) Naanu   d) Avalu

4. This : _____
   a) Adu   b) Alli
   c) Idu   d) Both a and b

5. Yaaru : _____
   a) where   b) who
   c) what   d) when

Complete the following:

6. Naanu : Nanna ; Neenu : _____
   a) Avala   b) Ninna
   c) Avana   d) Avara

7. Amma : Mother ; Tangi : _____
    a) Sister
    b) Brother
    c) Father
    d) Friend

8. What : Enu ; Where : _____
    a) Elli
    b) Hege
    c) Eeke
    d) Yaaru

9. The meaning of Vidyarthi in English
    a) School
    b) College
    c) Teacher
    d) Student

10. Choose the correct Kannada Translation of "Nimma Hesaru eenu?"
    a) What is your age?
    b) What is your name?
    c) What are you doing?
    d) What is the college name?

11. "Prarthana's book is Blue". Pusthakada Banna Yaavudu?
    a) Kappu
    b) Bili
    c) Neeli
    d) Hasiru

Note : Match the correct answer using the table given below for Q.12 to Q.17

English word		Kannada word	
i	- Red	a	- Dappa
ii	- Long	b	- chikka
iii	- Green	c	- gidda
iv	- Thick	d	- Kempu
v	- Short	e	- udda
vi	- Small	f	- Hasiru

12. Meaning of Red _____
    a) i - f
    b) i - a
    c) i - d
    d) i - b

13. Meaning of Long _____
    a) ii - c
    b) ii - b
    c) ii - d
    d) ii - e

14. Meaning of green _____
    a) iii - f
    b) iii - e
    c) iii - d
    d) iii - a

15. Meaning of Thick _____
    a) iv - e
    b) iv - b
    c) iv - d
    d) iv - a

16. Meaning of Short _____
    a) v - c
    b) v - e
    c) v - d
    d) v - f

17. Meaning of Small _____
    a) vi - a
    b) vi - e
    c) vi - b
    d) vi - d

18. Avanu _____ Huduga.
a) JaaNa
b) Vidhyarthi
c) Kelasa
d) All of these

19. Bengaluru _____ Nagara.
a) Dodda
b) Bili
c) Jaasti
d) Halli

20. In Kannada what to say for "Little"
a) Ishta
b) Jaasti
c) Swalpa
d) None of these

Note : Complete the analogy (from Q.21 to Q.23)

21. Raaja : Rajanadu :: Akka : _____
a) Akkanadu
b) Akkadu
c) Akkaninda
d) None of these

22. Mane : Maneyali :: uuru : _____
a) uurinind
b) uurige
c) uuralli
d) uurunnu

23. Seven : Elu :: Ten : _____
a) Muuru
b) Aaru
c) Hattu
d) Ondu

Note : Translate into English for the given Kannada sentences:

24. Neevu Yaaru?
a) Who are you?
b) What is your name?
c) Had your dinner?
d) Where are you?

25. oota aita?
a) Had your food?
b) Had your exams?
c) Where is oota?
d) How was the food?

26. Nanna Hesaru Amar.
a) My friend is Amar.
b) My name is Amar.
c) Amar is my brother.
d) Amar is my friend.

27. Kannada gotta?
a) I love Kannada
b) Kannada is a language
c) I know Kannada
d) Do you know Kannada

28. Ivaru Nanna Amma.
a) She is my mother
b) She is my friend
c) She is my sister
d) None of these

Note : Fill in the blank choosing the right word (Q.29 to Q.33)

29. Granthalaya means _____
a) Library
b) Class room
c) Temple
d) Lab

30. "Arogya" means
    a) Shelter
    c) Wealth
    b) House
    d) Health

31. "Shubhodaya" means
    a) Good morning
    c) Have a nice day
    b) Good night
    d) Good evening

32. "Good night" means
    a) Shubha Raatri
    c) Kshamisi
    b) Danyavadagalu
    d) None of these

33. "Ishta Ilia" means
    a) I will not do
    c) Both a and b are correct
    b) I don't like
    d) I will do

Note : Choose the appropriate answer (Q.No. 34 to Q.No. 36)

34. Hogu : Hogona :: Ba : _____
    a) Baralla
    c) Hodanu
    b) Barona
    d) Bandanu

35. Kalegu + inda : Kalegininda :: Mane + inda : _____
    a) Maneyalli
    c) Maneyinda
    b) Manege
    d) Maneyannu

36. Kudi : Kudiyiri :: Haaki : _____
    a) Haakona
    c) Hakuvudilla
    b) Beku
    d) Haakiri

37. "Naanu collegige hogutiddene". Change this to simple past.
    a) Naanu collegige Barolla
    c) Namma collegige Raje Ide
    b) Naanu collegige hogalla
    d) Naanu collegige Hogidde

38. Had your breakfast? Choose the correct answer in Kannada.
    a) Aitu
    c) Both a and b
    b) Beda
    d) None of these

Write the English word for the given Kannada word

39. Tale _____
    a) Neck
    c) Leg
    b) Head
    d) Hand

40. Kaalu _____
    a) neck
    c) Leg
    b) Hand
    d) Head

41. Tarakaari _____
    a) Vegetable
    c) Banana
    b) Fruit
    d) Milk

42. Habba _____
   a) Festival
   c) Heritage
   b) Marriage
   d) Ritual

43. Maga _____
   a) Father
   c) Son
   b) Mother
   d) Daughter

44. Mane _____
   a) Temple
   c) Hospital
   b) House
   d) Church

Note : Write Kannada word for the given English word.

45. Holiday _____
   a) Health
   c) Celeberations
   b) Festival
   d) Raje

46. Song _____
   a) Kadime
   c) Vignana
   b) Nrutya
   d) Haadu

Note : Choose the correct word to complete the sentence.

47. Ivaru Nanna _____
   a) Doddadu
   c) Chikkadu
   b) Sari Ide
   d) Tande

48. Nanna _____ Bengaluru.
   a) ooru
   c) ishta
   b) Kaalu
   d) Nagu

49. Nanage Kannada _____
   a) Red
   c) Blue
   b) Gottu
   d) Green

50. Neenu _____ Baa
   a) Anna
   c) Bega
   b) Akka
   d) Tande

* * * * *

USN ☐☐☐☐☐☐☐☐☐☐   Question Paper Version : B

First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
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.**

Note : Choose the correct word to complete the sentence.

1. Ivaru Nanna _____
   a) Doddadu   b) Sari Ide
   c) Chikkadu   d) Tande

2. Nanna _____ Bengaluru.
   a) ooru   b) Kaalu
   c) ishta   d) Nagu

3. Nanage Kannada _____
   a) Red - Kempu   b) Gottu - know
   c) Blue - neeli   d) Green - hasiru

4. Neenu _____ Baa
   a) Anna - elder brother   b) Akka - elder Sister
   c) Bega - quick   d) Tande - Father

Note : Write Kannada word for the given English word.

5. Holiday _____
   a) Health - Aarogya   b) Festival - Habba
   c) Celeberations - AacharaNe   d) Raje

6. Song _____
   a) Kadime - less   b) Nrutya - Dance
   c) Vignana - Science   d) Haadu

Write the English word for the given Kannada word

7. Tale _____
   a) Neck – kuttige
   c) Leg – kaalu
   b) Head
   d) Hand – kayyi

8. Kaalu _____
   a) neck
   c) Leg
   b) Hand
   d) Head

9. Tarakaari _____
   a) Vegetable
   c) Banana – baalehannu
   b) Fruit – haNNu
   d) Milk – haalu

10. Habba _____
    a) Festival
    c) Heritage
    b) Marriage – maduve
    d) Ritual

11. Maga _____
    a) Father – Tande
    c) Son
    b) Mother – Taayi
    d) Daughter – magaLu

12. Mane _____
    a) Temple – devastaana
    c) Hospital – aaspate
    b) House
    d) Church

13. "Naanu collegige hogutiddene". Change this to simple past.
    a) Naanu collegige Barolla
    c) Namma collegige Raje Ide
    b) Naanu collegige hogalla
    d) Naanu collegige Hogidde

14. Had your breakfast? Choose the correct answer in Kannada.
    a) Aitu
    c) Both a and b
    b) Beda
    d) None of these   oota ayta

Note : Choose the appropriate answer (Q.No. 15 to Q.No. 17)

15. Hogu : Hogona :: Ba : _____
    a) Baralla
    c) Hodanu
    b) Barona
    d) Bandanu

16. Kalegu + inda : Kalegininda :: Mane + inda : _____
    a) Maneyalli
    c) Maneyinda
    b) Manege – To home
    d) Maneyannu

17. Kudi : Kudiyiri :: Haaki : _____
    a) Haakona
    c) Hakuvudilla
    b) Beku – Want
    d) Haakiri

Note : Fill in the blank choosing the right word (Q.18 to Q.22)

18. Granthalaya means _____
    a) Library
    c) Temple – devastaana
    b) Class room – koTTaDi
    d) Lab – Lyabu

19. "Arogya" means
    a) Shelter
    c) Wealth
    b) House
    d) Health

20. "Shubhodaya" means
    a) Good morning
    c) Have a nice day
    b) Good night — Shubha Raatri
    d) Good evening

21. "Good night" means
    a) Shubha Raatri
    c) Kshamisi
    b) Dhanyavadagalu — Thanks
    d) None of these

22. "Ishta Illa" means
    a) I will not do
    c) Both a and b are correct
    b) I don't like
    d) I will do

Note : Complete the analogy (from Q.23 to Q.25)

23. Raaja : Rajanadu :: Akka : _____
    a) Akkanadu
    c) Akkaninda
    b) Akkadu
    d) None of these

24. Mane : Maneyali :: uuru : _____
    a) uurinind
    c) uuralli
    b) uurige
    d) uurannu

25. Seven : Elu :: Ten : _____
    a) Muuru — Three
    c) Hattu
    b) Aaru — Six
    d) Ondu — One

Note : Translate into English for the given Kannada sentences:

26. Neevu Yaaru?
    a) Who are you?
    c) Had your dinner?
    b) What is your name?
    d) Where are you?

27. oota aita?
    a) Had your food?
    c) Where is oota?
    b) Had your exams?
    d) How was the food?

28. Nanna Hesaru Amar.
    a) My friend is Amar.
    c) Amar is my brother.
    b) My name is Amar.
    d) Amar is my friend.

29. Kannada gotta?
    a) I love Kannada
    c) I know Kannada
    b) Kannada is a language
    d) Do you know Kannada

30. Ivaru Nanna Amma.
    a) She is my mother
    c) She is my sister
    b) She is my friend
    d) None of these

31. Avanu _____ Huduga.
    a) JaaNa - Clever
    b) Vidhyarthi
    c) Kelasa
    d) All of these

32. Bengaluru _____ Nagara.
    a) Dodda - big
    b) Bill - white
    c) Jaasti - more
    d) Halli - Village

33. In Kannada what to say for "Little"
    a) Ishta - Like
    b) Jaasti - more
    c) Swalpa -
    d) None of these

Note : Match the correct answer using the table given below for Q.34 to Q.39

English word		Kannada word	
i	- Red	a	- Dappa
ii	- Long	b	- chikka
iii	- Green	c	- gidda
iv	- Thick	d	- Kempu
v	- Short	e	- udda
vi	- Small	f	- Hasiru

34. Meaning of Red _____
    a) i - f
    b) i - a
    c) i - d
    d) i - b

35. Meaning of Long _____
    a) ii – e
    b) ii – b
    c) ii – d
    d) ii – c

36. Meaning of green. _____
    a) iii – f
    b) iii – e
    c) iii – d
    d) iii – a

37. Meaning of Thick _____
    a) iv – e
    b) iv – b
    c) iv – d
    d) iv – a

38. Meaning of Short _____
    a) v – c
    b) v – e
    c) v – d
    d) v – f

39. Meaning of Small _____
    a) vi – a
    b) vi – e
    c) vi – b
    d) vi – d

Complete the following:

40. Naanu : Nanna ; Neenu : _____
    a) Avala
    b) Ninna
    c) Avana
    d) Avara

41. Amma : Mother ; Tangi : _____
    a) Sister
    b) Brother
    c) Father
    d) Friend

42. What : Enu ; Where : _____
    a) Elli
    b) Hege
    c) Eeke
    d) Yaaru

43. The meaning of Vidyarthi in English
    a) School — *Shaale*
    b) College — *kaaleje*
    c) Teacher — *adhyapaka/adhyapali*
    d) Student

44. Choose the correct Kannada Translation of
    "Nimma Hesaru eenu?"
    a) What is your age?
    b) What is your name?
    c) What are you doing?
    d) What is the college name?

45. "Prarthana's book is Blue", Pusthakada Banna Yaavudu?
    a) Kappu — *Black*
    b) Bili — *white*
    c) Neeli
    d) Hasiru — *green*

Fill in the blank by translating the given English word to Kannada.

46. We : _____
    a) NaaVu
    b) Namage — *us*
    c) Namma — *our*
    d) Nimage

47. She : _____
    a) Neenu
    b) Avanu
    c) Naanu
    d) Avalu

48. This : _____
    a) Adu — *Play*
    b) Alli — *there*
    c) Idu
    d) Both a and b

49. Yaaru : _____
    a) where — *elli*
    b) who
    c) what — *enu*
    d) when — *yavaga*

50. Which of the following are the hints for correct and polite conversation?
    a) pronounce the words properly
    b) use plural forms to address others
    c) use simple sentences for conversation
    d) All of these

* * * * *

CBCS SCHEME

USN | | | | | | | |

First/Second Semester B.E./B.Tech. Degree Examination, June/July 2023
Communicative 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. _____ Rukumi on Sunday will arrive you. (Fill in the correct conjunction.)
   a) but   b) either   c) and   d) none of these

2. What is the root word in the word 'BILINGUAL'?
   a) bi   b) bil   c) lingua   d) lingual

3. What is the full form of B2C?
   a) Business to Counter   b) Business to Consumer
   c) Bank to Customer   d) Brand to Consumer

4. What is the full form of CTO?
   a) Chief Transmission Officer   b) Chief Telecom Officer
   c) Chief Technology Officer   d) Chief Technology Operator

5. The correct command form of 'would not' is?
   a) wouldn't   b) wouldnot   c) wouldn't   d) wouldint'

6. Tick the minimal pair with medial sound difference.
   a) ring/rig   b) ship/sheep   c) cab/cap   d) pit/bit

7. Tick the minimal pair with final sound difference.
   a) lamp/lost   b) day/day/toy   c) mat/sat   d) pull/pool

8. She was very fond of chocolate. (Tick suitable Question Tag.)
   a) Wasn't she?   b) Do I?   c) Isn't it?   d) Isn't she?

9. Have some more cold coffee. (Tick suitable Question Tag.)
   a) Have you?   b) Will/would you?   c) Won't you?   d) Weren't you?

10. Punctuate. (Tick the word having closest meaning.)
    a) meticulous   b) casual   c) Frail   d) none of these

11. Oral communication in different forms written communication as it is ____
    a) spoken in transitory   b) written
    c) spoken and permanent   d) non verbal

12. Which element is the medium through which a message is sent?
    a) correct   b) sender   c) channel   d) noise

13. When colleagues share the official communication it is ____
    a) radial   b) informal   c) horizontal   d) vertical

14. When the communication is in between managers and workers it is ____
    a) informal   b) vertical   c) horizontal   d) crosswise

15. Manager pass along tips to the team as ____
    a) critically downward   b) formal
    c) radial   d) vertical

16. In communication, the observation of a receiver response is called ____
    a) message   b) feedback   c) survey   d) channel

17. Written diary every day is an example of which communication?
    a) interpersonal   b) intrapersonal   c) organizational   d) extra personal

18. The management circulates a memorandum regarding new bonus and incentive schemes among all the employees, it is a case of ____ communication.
    a) radial   b) upward   c) downward   d) crosswise

19. What is the type of communication which takes place within an individual?
    a) interpersonal   b) intrapersonal   c) organizational   d) extrapersonal

20. A rumour in the city is a form of ____ communication.
    a) Grapevine   b) downward   c) radial   d) horizontal

21. Opulence. (Tick the word having closest meaning.)
    a) poverty   b) pomp   c) affluence   d) indigence

22. Mr. Chatterjee is ____ M.L.A. Which article will be suitable to fill this blank?
    a) A   b) An   c) The   d) None

23. My brother studies in ____ university. Which article will be suitable to fill this blank?
    a) A   b) An   c) The   d) None of the above

24. He did not wash the clothes. Tick the present progressive form if the sentence.
    a) He is not washing the clothes   b) He will not be washing the clothes
    c) He was not washing the clothes   d) He has not washed the clothes

25. It has been raining. Choose the Future indicative form of the sentence.
    a) It would rain   b) It will have been raining
    c) It should rain   d) It will rain

26. The train waited at the railway station. Choose the past perfect form of the sentence.
a) The train had reached at the station
b) The train is reaching at the railway station
c) The train will reach at the railway station
d) The train reaches at the railway station

27. The gardener had been watering the plants for two hours. Which is the tense of the sentence?
a) Present Indefinite
b) Past Perfect
c) Past Perfect Continuous
d) Present Perfect Continuous

28. The Sun rises in the East. Choose the Future Perfect Continuous form of the sentence.
a) The Sun will have been rising in the East
b) The Sun will have risen in the East
c) The Sun will rise in the East
d) The Sun will be rising in the East

29. 'r' The sound is present in.
a) thin
b) chin
c) this
d) tin

30. 'r' sound is there in
a) feet
b) treat
c) soup
d) shirt

31. In which of the following words my silent letter is present.
a) cup
b) same
c) Proof
d) pull

32. In which of the following words letter P is not as sound.
a) cupboard
b) precautions
c) soup
d) None of these

33. Find collective noun in the sentence : "He was part of the film crew.
a) He
b) Film
c) Crew
d) None of these

34. Find adjective noun in : 'The dream was engulfed in darkness'.
a) Theatre
b) Darkness
c) Both A & B
d) None of these

35. Someone's life history written by another writer _____
a) autobiography
b) biography
c) biography
d) airy

36. Person who does not believe in the existence of God.
a) Heretic
b) Female
c) Atheist
d) Theist

37. Tendency to favour one's relatives.
a) Favouritism
b) Nepotism
c) Expiation
d) Spinster

38. One who mostly abstains from drinking _____
a) Heretic
b) Teetotaller
c) Pilgrim
d) Snob

39. What is the emphatic form of pronoun "I"?
a) I
b) Me
c) Mine
d) Myself

40. I have _____ my holidays in Kolkata. (Fill with correct verb.)
a) spent
b) spend
c) spends
d) spended

41. How many IPAs are there?
a) 46
b) 44
c) 21
d) 36

42. Do not boast _____ your wealth.
a) for
b) of
c) in
d) from

43. The ship was bound _____ India.
a) to
b) for
c) of
d) with

44. I prefer tea _____ cold drinks.
a) to
b) from
c) than
d) for

45. Tick the correct phonetic transcription of the word 'Shop'.
a) /ʃɒp/
b) /ʃʌp/
c) /ʃ p/
d) /ʃiɪp/

46. Tick the correct phonetic transcription of the word 'Judge'.
a) /dʒʌdʒ/
b) /dʒʌɪ/
c) /dʒaɪʤ/
d) /ʤuʤ/

47. Tick the correct phonetic transcription of the word 'These'.
a) /ðiːz/
b) /ðiz/
c) /θiːz/
d) /diz/

48. Tick the correct phonetic transcription of the word 'Cheese'.
a) /tʃiz/
b) /tʃiːz/
c) /tʃeɪz/
d) /siːz/

49. Tick the correct phonetic transcription of the word 'Teacher'.
a) /tiːtʃə/
b) /tiːtʃər/
c) /tiːtʃɑ/
d) /tetʃər/

50. Tick the correct phonetic transcription of the word 'Church'.
a) /tʃɜːtʃ/
b) /tʃɜːtʃ/
c) /tʃɜːtʃ/
d) /tʃɜːtʃ/