SCHEME OF

STUDIES AND SYLLABUS

OF

THIRD SEMESTER

DIPLOMA IN

COMPUTER SCIENCE

& ENGINEERING

(C-21)(34)

JSS MAHAVIDYAPEETHA

JSS POLYTECHNIC FOR THE DIFFERENTLY ABLED, MYSURU-06

CURRICULUM STRUCTURE

III Semester Scheme of Studies-Diploma in Computer Science and Engineering (C-21)

Sl. No.	Course Category / Teaching Department	Course Code	Course Title	Hours per Week			Total contact hours per week	Credits	CIE Marks		SEE Marks		Total Marks	Min Marks for Passing (including CIE)
				L	T	P			Max	Min	Max	Min		
INTEGRATED COURSES														
1	PC/CS	**3431**	Python Programming	3	1	4	8	6	60	24	40	16	100	40
2	PC/CS	**3432**	Computer Hardware, Maintenance and Administration	3	1	4	8	6	60	24	40	16	100	40
3	PC/CS	**3433**	Computer Networks	3	1	4	8	6	60	24	40	16	100	40
4	PC/CS	**3434**	Database System Concepts and PL/SQL	3	1	4	8	6	60	24	40	16	100	40
AUDIT COURSES														
6	AU/KA	**21KA3T/ 21NK3T**	ಸಾಹಿತ್ಯ ಸಿಂಚನ-II/ ಬಳಕೆ ಕನಡ-II	2	0	0	2	2	50	20	-	-	50	20
			Total	**14**	**4**	**16**	**34**	**26**	**290**	**116**	**160**	**64**	**450**	**180**

PC: Programme Core::AU-Audit Course::KA: Kannada::L:lecture::T:Tutorial::P:Practice

Note:

1. Assigned Grade, Grade Point, SGPA and CGPA to be recorded in the Grade / Marks Card.
2. Practical course CIE and SEE is conducted for the 100 marks (3 Hours Duration)
3. Code 3431 Indicates(From Left): 1st Digit ->Serial No. of Department, 2nd Digit -> No. of Syllabus Revision, 3rd Digit->Semester, 4th Digit->Course Serial Number

Programme Coordinator **Principal**

Government of Karnataka

DEPARTMENT OF COLLEGIATE AND TECHNICAL EDUCATION

JSS POLYTECHNIC FOR THE DIFFERENTLY ABLED, MYSURU-06

Program	Computer Science & Engineering	**Semester**	III
Course Code	3431	**Type of Course**	Program Core
Course Name	Python Programming	**Contact Hours**	8 hours/week 128 hours/semester
Teaching Scheme	L:T:P::3:1:4	**Credits**	6
CIE Marks	60	**SEE Marks**	40

1. Rationale:

Computer programming is the core of the Computer Science and strong fundamentals of programming can give competitive edge in this technology driven world. It not only instills coding skills but also enhances problem solving ability. Python is one of the programming languages which is versatile, rich in features, simple / easy to learn and has applications in various domains. Python programming sets the basis for further study of Web Development, Data Science, IoT, Machine Learning etc.

2. Course Outcomes: At the end of the Course, the student will be able to:

CO-1	Install the latest version of python distribution and configure it for an appropriate workspace as needed for a given project.
CO-2	Write a program by selecting python constructs needed to solve a given problem and then code, execute, test and debug the program to obtain the desired result.
CO-3	Demonstrate how a program can be optimized by using modular programming approach.
CO-4	Identify and resolve both syntactical and semantic errors in a given code snippet.

Mapping of CO with PO & PSO

COURSE	COs	Program Outcomes (POs)							Program Specific Outcomes (PSOs)	
		1	**2**	**3**	**4**	**5**	**6**	**7**	**1**	**2**
Python Programming	CO-1	1	0	0	2	0	0	0	2	0
	CO-2	1	2	0	2	0	0	0	0	2
	CO-3	1	2	0	2	0	0	0	0	2
	CO-4	1	2	0	2	0	0	0	0	2
AVG		**1**	**2**	**0**	**2**	**0**	**0**	**0**	**2**	**2**

Level 3: Highly Mapped ***Level 2:*** Moderately Mapped ***Level 1:*** Low Mapped ***Level 0***: Not Mapped

3. Course Content:

Week	CO	PO	Lecture (Knowledge Criteria)	Tutorial (Activity Criteria)	Practice (Performance Criteria)
			3 hours/week	1 hour/ week	4 hours/week (2 hours /batch twice in a week)
1, 2	1,2	1,4	**Fundamental Concepts:** Brief history, features, applications of python, python distributions, versions, python IDEs, Python interpreter, Execution of python programs, debugging python code, Indentation, Comments, best practices for python programming, Character set, tokens, keywords, variables, naming rules for variables, Assignment. **Basics I/O operations** Input- input (), raw_input() ; output – print (), formatting output.	**Refer Table 1**	1. Setup python environment 2. Executing python: explore different ways to run python program 3. debug python code 4. Use i/o statements
3	2,4	1,2, 4	**Data types** Scalar type: Numeric (int, long, float, complex), Boolean, bytes, None; Type casting **Operators** Arithmetic, Comparison/Relational, Logical/Boolean, Bitwise; string operators; Expressions and operator precedence	**Refer Table 1**	1. Code, execute and debug programs that a) Evaluate expressions and displays formatted output b) Evaluate expressions to examine the operator precedence 2. Identify and resolve syntactic and semantic issues in the given code snippet
4	2,4	1,2, 4	**Control Flow: Conditional blocks** If statement: general format; Multi-way branching; Sufficient examples;		1. Identify and Code, execute and debug programs using conditional statements. 2. Identify and resolve syntactic and semantic issues in the given code snippet 3.
5	2,4	1,2, 4	**Control Flow: Loops** While loop: general format; examples For loop: general format, examples. Range();nesting loops		1. Code, execute and debug programs using loops. 2. Code, execute and debug programs using loops and conditional statements

			and conditional statements; Controlling loop execution: Break, continue, pass statements;		3. Identify and resolve syntactic and semantic issues in the given code snippet
6, 7	2,4	1,2, 4	**Data Collections** Concept of mutability Set: features, declaration, initialization, operations, comprehension; Tuple: features; declaration, initialization, basic operations; indexing; slicing; built in functions; Nested tuples;	**Refer Table 1**	1. Code, execute and debug programs to perform following ▪ set operations ▪ set comprehension 2. Code, execute and debug programs to perform following ▪ basic operations on tuples ▪ tuple indexing and slicing 3. Identify and resolve syntactic and semantic issues in the given code snippet
8	2,4	1,2, 4	**List:** features; declaration, initialization, basic operations; indexing; List iterations; Slicing; built in functions; Nested Lists; Comprehensions; Applications		1. Write code snippet to perform following on List ▪ basic operations on List ▪ indexing and slicing ▪ comprehension 2. Identify and resolve syntactic and semantic issues in the given code snippet
9	2,4	1,2, 4	**Dictionary** features; declaration, initialization, basic operations; indexing; adding and removing keys, iterating through dictionaries; built in functions; Comprehensions; Applications		1. Code, execute and debug programs to perform basic operations on Dictionary 2. Code, execute and debug programs to perform Dictionary indexing Iterating comprehension 3. Identify and resolve syntactic and semantic issues in the given code snippet

10	2,4	1,2, 4	**Arrays and Strings** Arrays: features; create, initialize, indexing, traversal, manipulation; Strings: create, assign, indexing, built in functions;		1. Code, execute and debug programs to perform string manipulation 2. Code, execute and debug programs to perform array manipulation 3. Identify and resolve syntactic and semantic issues in the given code snippet
11	2,3,4	1,2, 4	**Functions** Need of function; types; define function, calling function, function arguments; return and yield; None keyword; Scope of variables; Recursion; anonymous functions; sufficient examples;	**Refer Table 1**	1. Code, execute and debug programs to solve the given problem using built in functions 2. Code, execute and debug programs to solve the given problem by defining a function 3. Code, execute and debug programs to solve the given problem using recursion 4. Define anonymous function and code to solve the given problem 5. Identify and resolve syntactic and semantic issues in the given code snippet
12	2,3, 4	1,2, 4	**Modules and Packages** Why modules? Module creation; Importing modules; Module Namespace; Packages: basics; path setting; Package_init__.py Files; Commonly used modules: Math, random; Emoji;		1. Create Modules and Packages 2. Code, execute and debug programs using built in modules
13 14	2,3, 4	1,2, 4	**NumPy** Brief about NumPy module; NumPy arithmetic functions; NumPy array manipulation functions; NumPy statistical functions; **Pandas** Introduction, series, data frame; Create data frames; formatting data; fundamental data frame operations;		1. Code, execute and debug programs using NumPy module. 2. Code, execute and debug programs using series. 3. Code, execute and debug programs using data frames. 4. Identify and resolve syntactic and semantic issues in the given code snippet
15	2,3, 4	1,2, 4			1. write code snippet to perform following

			Files Concept; features; file operations; Opening Files; Closing Files; Writing to Files; Reading to Files; File methods; Working with files using data frame.		operations on different types of files ▪ read file ▪ write to file. 2. Write code to perform file operations using data frames on different file types. 3. Identify and resolve syntactic and semantic issues in the given code snippet
16	2,3, 4	1,2, 4	**Error and Exception Handling:** Python errors; exceptions: built in, user defined. How to catch exceptions? Raising exceptions;	Refer Table 1	1. Integrate exception handling into above code 2. Write code snippet to raise exceptions 3. Identify and resolve syntactic and semantic issues in the given code snippet
Total in Hours			**48**	**16**	**64**

Table 1: Suggestive Activities for Tutorials:

Sl. No.	Activity
1	1. Compare and contrast excel and python 2. Identify various python IDEs and identify differences between them.
2	1. Identify use cases like reading student name and contact details and display in a required format 2. Compare and contrast input () and raw_input() and identify its appropriate use. 3. Identify use of operators and develop algorithms to solve the same 4. Compare and contrast different types of operators
3	1. Identify use cases that involve decision making and develop algorithms to solve the same 2. Identify common syntactical errors when using control flow statements
4	1. Identify use cases that involve iteration and develop algorithms to solve the same 2. Compare and contrast different types of loops 3. Identify common syntactical errors when using loops
5	1. Identify use cases and solve them using sets 2. Identify use cases and solve them using tuples 3. Identify common syntactical errors when working with sets and tuples
6	1. Identify use cases and solve them using List 2. Identify common syntactical errors when working with List 3. Re-implement built in list functions
7	1. Identify use cases and solve them using dictionary 2. Re-implement built in dictionary functions 3. Identify common syntactical errors when working with dictionary
8	1. Identify use cases and solve them using arrays 2. Re-implement built in string functions 3. Identify common syntactical errors when working with arrays and strings
9	1. Optimize previously written programs by using modular programming approach

10	1. Identify and present pros and cons of modules and packages 2. Explore and present python built in modules.
11	1. Identify the applications of Pandas
12	1.Perform data analysis using Pandas module on a dataset
13	1.Identify use cases on files concept and develop algorithms to solve the same
14	1. Explore regular expressions and present how they can be used for file manipulation
15	1.Compare and contrast error and exception
16	1.Rewrite the programs using exceptions if needed

4. CIE and SEE Assessment Methodologies:

Sl. No.	**Assessment**	**Test week**	**Duration** in Minutes	**Max Marks**	**Conversion**
1	CIE-1 Written Test	6	80	30	Average of 3 tests **30**
2	CIE-2 Written Test	11	80	30	
3	CIE-3 Written Test	15	80	30	
4	CIE-4 Skill Test Practice	8	180	100	Average of two skill tests reduced to **20**
5	CIE-5 Skill Test Practice	16	180	100	
6	CIE-6 Portfolio continuous evaluation of Activity through Rubrics	1-16		10	**10**
				Total CIE Marks	**60**
Semester End Examination (Practice)			180	100	**40**
				Total Marks	**100**

5. Format for CIE Written Test:

Course Name	**Python Programming**	Test	I/II/III	Sem	III
Course Code	3431	Duration	80 Min	Marks	30
Note: Answer any one full question from each section. Each full question carries 10 marks.					
Section	**Assessment Questions**		**Cognitive Levels**	**Course Outcome**	**Marks**
I	A or B				
II	C or D				
III	E or F				
Note for the Course coordinator: Each question may have one, two or three subdivisions. Optional questions in each section carry the same weightage of marks, Cognitive level and course outcomes.					

6. Rubrics for Assessment of Activity (Qualitative Assessment):

Sl. No.	Dimension	Beginner	Satisfactory	Good	Excellent	Outstanding	Student score
		2	4	6	8	10	
1	Problem Understanding	Not understood the problem	Partially understood the problem	understood the overall problem	Well understood aspect of the problem	Well understood each and every aspect of the problem	
2	Program Correctness	Program not works	Program only works correctly in very limited cases	Major details of the specification are missed & program works correctly only for a few inputs.	Few details of program specification are missed & program works correctly for some inputs.	No errors & program works correctly for all types of input and meets the specifications.	
3	Readability	No comments present throughout the program.	Complicated lines or sections of code are not commented	At least one major issue with indentation, whitespace, variable names, or organization.	Minor issues with consistent indentation, use of whitespace, variable naming, or general organization.	No errors, understandable, and well-organized.	
4	Code Efficiency		No efficiency at all, very poor approach used	Not so efficient	Moderately efficient with respect to space and time	Very efficient with respect to space and time	
						Average Marks=Total/4	

7.Reference:

Sl. No.	Description
1	Core python programming, Wesley J. Chun Publisher: Prentice Hall PTR
2	Fluent Python by Luciano Ramalho
3	https://www.softcover.io/read/e4cd0fd9/conversational-python
4	https://realpython.com/
5	https://www.python-course.eu/
6	https://www.datacamp.com/
7	https://www.w3schools.com/

8. CIE Skill Test and SEE Scheme of Evaluation

Sl. No.	Particulars/Dimension	Marks
1	Develop an algorithmic solution for the given problem statement based on the documentation of each of the steps involved, including input, output and logic.	20
2	Write program for the above given problem choosing relevant python constructs	20
3	Code, execute, test and debug the above program	30
4	Demonstrate how your program has solved the given problem In the event of, a student fails to get the desired result (with no syntactical and least semantic errors), the examiner shall use viva voce to assess the student's problem solving and python programming skills	20
5	Portfolio evaluation based on aggregate of all practice sessions	10
	Total Marks	**100**

9. Equipment/software list with Specification for a batch of 20 students:

Sl. No.	Particulars	Specification	Qty.
1	Python 3.8 3		
2	Editor such as iPython, Jupyter, spider, PyCharm , google CoLab		
3	Computers		20

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DEPARTMENT OF COLLEGIATE AND TECHNICAL EDUCATION

JSS POLYTECHNIC FOR THE DIFFERENTLY ABLED, MYSURU-06

Programme	Computer Science and Engineering	**Semester**	III
Course Code	3432	**Type of Course**	Programme Core
Course Name	Computer Hardware, Maintenance and Administration	**Contact Hours**	8 Hours/week 128 Hours/semester
Teaching Scheme	L:T:P :: 3:1:4	**Credits**	6
CIE Marks	60	**SEE Marks**	40

1. Rationale

Professional computer maintenance ensures computer hardware and software systems run efficiently to increase productivity while lowering the chances of downtime. This course aims to help understand the internal working of computers/laptops and prepare the student for a role as an entry-level IT support technician. This course sets a basis for different facets of information technology like computer hardware, software, trouble shooting and customer service.

2. Course Outcomes: At the end of this course, students will be able to:

CO-1	Assemble a computer as per given technical specifications following all necessary safety protocols and install, configure and setup an administrator for a Windows Operating System.
CO-2	Diagnose a computer using the right diagnostic tools, identify the hardware problem and troubleshoot to resolve the problem following all safety protocols.

CO-3	Diagnose an installed software using the right diagnostic tools, identify the bug/issue,troubleshoot to resolve bugs/issues and ensure all data and applications are backed up before troubleshooting.
CO-4	Explain e-waste protocols to be followed while disposing computer hardware, to ensurecompliance with all required state pollution control board regulations.

CO-PO/PSO Mapping Matrix:

Course	CO's	PO's							PSO's		
		1	2	3	4	5	6	7	1	2	3
Computer Hardware, Maintenance & Administration	CO1	2	1	-	1	1	-	3	3	-	2
	CO2	2	3	1	3	2	1	3	3	2	2
	CO3	2	3	1	3	2	1	3	3	2	2
	CO4	-	1	-	-	3	-	1	-	-	2
AVERAGE		**2**	**2**	**1**	**2.33**	**2**	**1**	**2.5**	**2.5**	**2**	**2**

Level 3- Highly Mapped, Level 2-Moderately Mapped,

Level 1-Low Mapped, Level 0-Not Mapped

3. Course Content

Week	CO	PO	Lecture (Knowledge Criteria)	Tutorial (Activity Criteria)	Practice (Performance Criteria)
			3 hours/week	1 hour/week	4 hours/week (2 hours/batch twice ina week)
1	01	1,4	**I/O devices and Interfaces** Types of I/O devices and ports ona standard PC for connecting I/O devices. Function of serial port, parallelport, and brief principle of communication through these ports, types of devices that can be connected and interface standards. Explain basic cable types, features and their purposes. Importance of USB and HDMI interfaces- Types and Features. Working of Common Input/Output devices- Keyboard,Mouse, display monitor, printer and speaker.	**Refer Table 1**	1. Hardware Identification: • Computer Case- Types, Features- Front panel, backpanel; A look inside the computer case. • Identify the front and rear panel controls and ports on aPC cabinet. • Identify and understand different cables and connectors: Video cables- VGA, HDMI, Mini-HDMI, Display port,DVI; Peripheral cables- Serial; Hard drive cables- SATA, PATA, IDE, SCSI; Adapters-DVI to HDMI,USB to Ethernet, DVI to VGA. • Installation of a local printer. • Shared printer. • Installing wireless and cloudprinters.
2	01	1,4	**Power supplies** Safety Basics: safety protocols; anti- static basic hand tools, Know the danger of static electricity, power variation; Precautions to be taken while mounting and un mounting power supply into/ from the cabinet; DC power source to PC - Need for SMPS, Specifications, Rating of SMPS based on type of motherboard and devices used (AT/ATX, Micro ATX, mini ATX, higher watts PSU for		1. Unmount the power supply from PC cabinet. Identify the types of output connectors. 2. Identify output voltages usingcolor coding. 3. Measure voltage levels usingmulti meter. 4. Mount the power supply into the PC cabinet, connect different components and testPC.

			gaming PC),color coding adopted, Types of connectors used- ATX, ATX12V, Molex, SATA, PCI etc; Output voltage levels, measuring technique; choosing power supply based on wattage rating; Heat sink; 80 plus rating system; Modular power supply. Symptoms of SMPS failure; Common problems from a faulty SMPS. Trouble shooting Power supplies.		5. Trouble shoot Power supplythrough SMPS fan. Diagnose power supply faultsusing PSU Tester.
3	1	1, 4	Basic Electronics – Electricity, Electrical quantities- Voltage, current and resistance; Active components: Diodes- PN junction diodes, biasing conditions- forward bias and reverse bias, transistors- BJT, MOSFET; Passivecomponents- Resistors, capacitors, inductors, transformers, sensors, and transducers; Integrated Circuits Digital Electronics- PWM, Opto - coupler; checking AC to DC converter.		1. Identify the electrical and electronic components used ina computer and tabulate them as active and passive components. 2. Identify the working and non-working state of basic components and semiconductor devices. 3. Using multi meter- CheckOutput voltage of basic components and semiconductor devices. 4. Check different voltage levels of Opto-coupler, PWM andrectifier.
4	1, 3	1, 4	**Mother board** – Example Motherboards; Functional description of mother board; specification and variation. Form factor- what is Motherboard Form factor? Types and features of Motherboard form factors-ATX, Micro-ATX, Mini-ITX, Nano-ITX, and Pico-ITX. Functional components of Motherboard; CPU	**Refer Table 1**	1. Precautions to be taken before removing the mother board from PC cabinet. 2. Using the CPUID CPU-Z tool, find different features of CPU. 3. Check the Electric flow pathand data flow path 4. Windows resource monitor 5. Using the CPUID CPU-Z tool, identify the CPU cache features of your working system.

			and CPU socket-Types of sockets; Overview of micro architecture of INTEL and AMD CPU.		
5	1, 3	1,4	Chipsets- Function, Types and Features. Buses- System bus architecture Importance of POST; UEFI – why is it required, possible configurations through UEFI. IDE ports; Methods of adding SCSI drives. CMOS battery: Why? Its specifications. Impact of Removing the battery from mother board.		1. Identify system faults usingPOST diagnostics card. 2. Understand basic onboard configurations through UEFI. 3. Test different motherboards to determine support for UEFI 4. Replace the CMOS battery in acomputer following the procedures. 5. Understand and modify BIOSsettings and observe the consequences of CMOS failure.
6	1, 3	1,4	Memory– Memory Units (B, KB, MB,GB, TB), memory locations and address space, Access methods, Memory Classification. Main memory Types and Features. Auxiliary memory –Types and features. Memory modules.		1. Identify RAM chips and HDD/SSD, study their featuresand note their technical specifications. 2. Identify SIMM and DIMM memory modules, their number of pins, specs and type. 3. Identify the interface type of a hard drive and connect it to aPC for data recovery.
7	1, 3	1,4	RAM Technology- SDRAM, DDR,DDR2, DDR3, DDR4 – Clock speed, Bandwidth, Memory speed rating, PC speed rating; RAM capacity- single- sided anddouble-sided RAM, Channels; RAM features- Parity/ECC RAM,SODIMM, SPDR		**1.** Use CPUID-CPUZ tool to identifycapacity, speed, technology, andrelated features of RAM. **2.** Check for RAM and Motherboard compatibility andinstall additional RAM stick. **3.** Find on Windows system properties to check the RAM forcorrect installation. 4. Query the SPD RAM chip toidentify all

			chip.		possible information using CPUID CPUZ.
8	1,3	1,4	Mass storage media- Hard drive, Principle of working, reliability, performance, SSD, optical drive; Logical Block Addressing (LBA); Memory capacity- physical and logical addressing; M.2 drives, SATA,NVMe. Causes of Hard drive failure; Signs of failure; Backup and recovery of data;		1. hard disk checking 2. hard disk partitioning 3. defragmentation 4. temporary file cleaning 5. Backup andrecovery of data
9	2, 3	1,2, 3	Windows Installation – Overview windows 10; general features; Versions;architecture; prerequisites for windows 10 installation: hardware compatibility, BIOS compatibility, driver requirements.		1. Windows Installation Inspectprerequisites for windows 10 installation on a givencomputer. 2. Perform clean installation. 3. Upgrade to windows10.
10	2, 3	1,2, 3	Clean install of windows 10; upgrade to windows 10; disk partitioning; troubleshooting installation problems; Multiple boot options; windows service packs. Imaging: create a Windows system image; How to Backup/Restore your Windowspartition with the bootable image.	**Refer Table 1**	1. Create dual boot for a given system, learn and rectify errors in dual boot. 2. Practice on recovery partition. 3. Practice 10 registry weaks. 4. Practice disk managementutilities.
11	2, 3	1,2, 3	File system overview, types,properties, conversion fromone file system to another, and configuration. Configuring system and datarecovery: Recover files, recover apps and the registry; recover windows 10.		1. Practice data recovery methods 2. Working with task manager to troubleshoot configuration andother performance related issues.
12		1,2, 3	Configure and manage windows updates: auto/manually; testing		1. Working with task manager to troubleshoot configuration and other

	2, 3		and troubleshooting updates. Monitor and manage: Performance monitoring; optimize windows services; tune scheduled tasks. Customizing windows desktop.		performance related issues. 2. Working with task scheduler. Customizing windowsdesktop.
13	1, 3	1,4, 7	Windows Command line; Power Shell; basic commands; writing simple Power Shell scripts. File security.		1. Execute basic commands in Windows using command prompt and Power Shell like listing the drives in a system, creating a new file, removing a file or directory, retrieving the list of processes and services, etc., 2. Use command line to encryptand decrypt files and folders.
14	2, 3, 4	1,4	**Portable computing-Troubleshooting Laptops-I** Difference between laptop and desktop Motherboards; Checking Power connector and adaptor pins, AC adapter of Laptop circuitdiagram, Fault finding; trouble-shooting voltage transfer section, AC-DC conversion, Generation of stand by voltage, fault finding- No power ON, power switch, Battery charging circuit;		1. Observe the layout of a laptop and compare it with a desktop. 2. Follow/review manufacturer maintenance guide for repair and maintenance. 3. Power Issues: Battery notcharging, No power. 4. Trouble shoot computer hardware issues in the followingscenarios- -Unexpected shutdowns. -Lockups -POST & Boot -Continuous reboot -No Power -Loud Noises. -Intermittent device failure -Smoke and burning smell 5. -Indicator lights.

15	3, 4,	1,4	**Troubleshooting Laptops- II** Dual MOSFET pin details, Two N- channel MOSFET in place of dual MOSFET, one p-channel and one N-channel MOSFET, problems and faultfinding; CPU voltage generation circuits, keyboard interface, problem and fault finding. Touch pad connector, BIOS details, SATA HDD details, Audio section, internal display, LED screen pin details. Malware mitigation: introduction, types, symptoms, malware removal;		1. Perform the same operations in week#7on a laptop. 2. LCD display trouble-shoot: No display/dim video/flickering video. 3. Wireless troubleshooting: Multiple antennae, check presence of wireless cards. 4. Scan and remove malwares in each computer or mobile device. 5. Perform Antivirus and anti-malware updates.
16	4,	1,4	**E-waste management:** What is EEE and E-waste? Different scenarios of E-waste management, StEP initiatives to solve e-waste problems, impact of e-waste on health ofchildren and workers. **E-waste management in India:** EPR and e-waste, the informal sector in e-waste management, Technologies for e-waste management, Financing e-waste management systems- Key steps, milestones to achieve a robust E-waste system. **Case studies.**	**Refer Table 1**	• Visit https://greene.gov.in and https://kspcb.karnataka.gov.in/ to find the latest regulations and policies taken up by the Government of India. • Visit a nearby e-waste management plant and understand the managementprocess.
Total in hours			**48**	**16**	**64**

Table 1: Suggestive activities for tutorials (the list is only shared as an example and not inclusive of all possible activities for that course. Student and faculty are encouraged to choose activities that are relevant to the topic and the availability of such resources at their institution)

SL NO	Activity
1	1. Study multipurpose cables used with different models of computers and theirapplications. 2. Identify the cables and list the devices that can be connected to computer using these cables. 3. Identify commercially available brands of keyboard, mouse and monitor and theirdistinguishable features.
2	1. Identify preventive measures that help to eliminate or reduce electrostatic discharge. 2. Describe effective ways to reduce the risk of injury or damage while working with respect topower supply in computer systems. 3. Make your observations on why a technician may choose to use a UPS instead of a surgesuppress or to protect a computer.
3	1. Identify the components that are powered by the PSU. 2. Identify the common causes of PSU/SMPS failure and explain how it can be maintained in ahealthy state. 3. Explain the factors on which the PSU wattage is decided. 4. Describe the features of different Power supplies available commercially that support a gaming PC.
4	1. Calculate the value of resistors onboard using the color code. 2. Identify the terminals of a BJT and MOSFET.
5	1. Identify the units MHz and GHz with respect to CPU. 2. Compare and contrast the characteristics of different motherboard form factors. 3. Identify and present the factors to select an appropriate Motherboard based on the purpose-Basic applications, Gaming, Workstations/servers.
6	1. Study the features and specifications of the processors (Intel: Pentium family, dual core,quad core, core 2 duo, i3, i5, i7, i9 and AMD processors). 2. Study the CPU benchmarks of the trending processors. 3. Compare features of CPU and GPU.

7	1. Explain bus standards with respect to evolution, speed, and recent trends (ISA, PCI, AGP). 2. Explain how to clear CMOS password. 3. Explain the importance of UEFI and configuration settings for – a Over clocking of CPU frequencies b Set RAM timings 4. Setting BIOS passwords Specify boot options.
8	1. Describe the classification of memories. 2. Study different types of memory devices and features that are commercially available.
9	1. Study the characteristics of different types of SSDs. 2. Compare DDR4 and DDR5 memory.
10	1. Study and identify what happens when the hard drive fails.
11	1. Identify system requirements for Windows 10 installation. 2. Study and list the features of different versions of windows 10. 3. Explore file backup in Windows file history feature.
12	1. Study best practices followed in scheduled backups and scheduled disk maintenance. 2. Study the necessity of TPM in Windows 11.
13	**1.** Compare relative merits and demerits of the two command shells.
14	1. Relate the components of a laptop to a desktop and compare their features. 2. Identify the upgradable and non- upgradable components in laptops.
15	**1.** Document the common faults that may occur on the motherboard.
16	1. Study the e-waste rules 2016 and their amendments there-off as prescribed by the Karnataka state pollution control board and explain the process for the polytechnic to follow safe disposal of e-waste. 2. Study the global e-waste key statistics. 3. Sketch the e-waste policies and regulations, you think, must be regulated at each stakeholder's level.

4. CIE and SEE Assessment Methodologies

Sl. No	Assessment	Test Week	Duration In minutes	Max marks	Conversion
1.	CIE-1 Written Test	6	80	30	Average of three tests 30
2.	CIE-2 Written Test	11	80	30	
3	CIE-3 Written Test	15	80	30	
4.	CIE-4 Skill Test-Practice	8	180	100	Average of two skilltests reduced to 20
5	CIE-5 Skill Test-Practice	16	180	100	
6	CIE-6 Portfolio continuous evaluation of Activity through Rubrics	1-16		10	10
				Total CIE Marks	60
	Semester End Examination (Practice)		180	100	40
				Total Marks	**100**

5. Format for CIE written Test

Course Name	**Computer Hardware, Maintenance and Administration**	Test	I/II/III	Sem	III/IV
Course Code	**3432**	Duration	80 Min	Marks	30

Note: Answer any one full question from each section. Each full question carries 10 marks.

Section	Assessment Questions	Cognitive Levels	Course Outcome	Marks
I	1. **OR** 2.			
II	3. **OR** 4.			
III	5. **OR** 6.			

Note for the Course coordinator: Each question may have one, two or three subdivisions. Optional questions in each
section carry the same weightage of marks, Cognitive level and course outcomes.

6. Rubrics for Assessment of Activity (Qualitative Assessment)

Rubrics: Student Activity Assessment						
Dimension	**Poor**	**Below average**	**Average**	**Good**	**Exemplary**	**Student Score**
	4	**8**	**12**	**16**	**20**	
Collection of data	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collect much information; but very limited relate to the topic	Collects some basic information; most refer to the topic	Collects a great deal of information; all refer to the topic	
Fulfill team's roles/& duties	Does not perform any duties assigned to the team role	Performs very little duties but unreliable.	Performs very little duties	Performs nearly all duties	Performs all duties of assigned team roles	
Shares work equally	Always relies on others to do the work	Rarely does the assigned work; often needs reminding	Usually does the assigned work; rarely needs reminding	Normally does the assigned work	Always does the assigned work without having to be reminded.	
Listen to other Teammates	Is always talking; never allows anyone else to speak	Usually does most of the talking; rarely allows others to speak	Talks good; but never show interest in listening others	Listens, but sometimes talk too much	Listens and speaks a fair amount	
Average / Total Marks:						

Note: Dimension and Descriptor shall be defined by the respective course coordinator as per the activities

7. Reference:

Sl. No.	Description
1	https://www.dell.com/support/kbdoc/en-in/000139662/what-does-the-msconfig-utitility-do-in-windows-7-on-your-dell-pc#TOC
2	https://www.google.co.in/amp/s/www.ufsexplorer.com/amp/articles/how-to/connect-sata-disks-instruction.php
3	http://www.qiguaninc.com/met/faq/faq35_en.html
4	https://www.ciscopress.com/articles/article.asp?p=2999386&seqNum=3
5	https://www.crucial.in/articles/pc-builders/what-is-computer-hardware
6	https://www.udemy.com
7	https://www.pluralsight.com

8. CIE Skill Test and SEE Scheme of Evaluation

SL. No.	Particulars/Dimension	Marks
1	Document technical specifications of the right hardware components to assemble a computer to meet the given requirement and also necessary safety protocols to be followed.	20
2	Demonstrate the configuration and setting up an administrator for a WindowsOperating System.	10
3	Identify the hardware problem and trouble shoot using appropriate diagnostictools in a given computer following all safety protocols.	20
4	Identify the software issues and trouble shoot using appropriate diagnostic tools in a given computer ensuring that all data and applications are backed up.	20
5	Explain the issues identified and how they have been resolved: In the event of student failing to diagnose and troubleshoot the issues either software or hardware, the examiner shall use viva-voce to explain the protocols tobe followed in e-waste management.	20
6	Portfolio evaluation of practice sessions	10
	Total Marks	**100**

9. Equipment/software list with Specification for a batch of 20 students

Sl. No.	Particulars	Specification	Quantity
1	Computers		10
2	PSU Tester		10
3	Multimeter		10
4	Individual components- SMPS/PSU	400 watts	10
5	SMPS/PSU	800 watts	10
6	Motherboard – ATX		10
7	Motherboard – Micro ITX		10
8	RAM stick – DDR3		10
9	RAM stick – DDR4		10
10	CMOS battery		10
11	Windows 10/11 OS user license for multi users		
12	POST diagnostic card		10

Government of Karnataka

DEPARTMENT OF COLLEGIATE AND TECHNICAL EDUCATION

JSS POLYTECHNIC FOR THE DIFFERENTLY ABLED, MYSURU-06

Programme	Computer Science and Engineering	**Semester**	III
Course Code	3433	**Type of Course**	Programme Core
Course Name	Computer Networks	**Contact Hours**	8 hours/week 128 hours/semester
Teaching Scheme	L:T:P :: 3:1:4	**Credits**	6
CIE Marks	60	**SEE Marks**	40

1. **Rationale**

   The computer networking skills are essential in today's information and communication technology driven world. It enables students with essential skills and knowledge to explore the world of communication and networking for further study and career.

2. **Course Outcomes:** At the end of the course, the student will be able to:

CO-1	Select an appropriate communication technology for a given network and ensure optimal performance by addressing issues arising from transmission impairments.
CO-2	Design a network for a given specification by using the right network components, devices, topologies, protocols and software.
CO-3	Design, build, test and troubleshoot a SOHO network for a given premises.
CO-4	Demonstrate the configuration of IP address, routing, sub netting, client-server interaction (TCP,UDP) and DNS for a given WAN network using a network simulator and troubleshoot common network issues

Mapping of CO with PO & PSO

COURSE	CO'S	Programme Outcomes (POs)							Program Specific Outcomes (PSOs)	
		1	**2**	**3**	**4**	**5**	**6**	**7**	**1**	**2**
Computer Networks	CO1	3	3	2	2	2	0	2	0	3
	CO2	3	3	3	0	0	0	2	0	3
	CO3	3	3	3	3	0	0	3	0	3
	CO4	3	2	2	2	0	0	3	0	3
AVG		**3**	**2.75**	**2.5**	**2.3**	**2**	**0**	**2.5**	**0**	**3**
Level 3- Highly Mapped, Level 2-Moderately Mapped, Level 1-Low Mapped, Level 0- Not Mapped										

3. Course Content

Week	CO	PO	Lecture (Knowledge Criteria)	Tutorial (Activity Criteria)	Practice (Performance Criteria)
			3 hours/week	1 hour/week	4 hours/week(2 hours/batch twice in a week)
1	0 1	1,2	**Electromagnetic waves** - Generation of electromagnetic waves and their properties **Electromagnetic spectrum -** classification and its applications **Communication Systems** - Basic elements of communication systems with block diagram, List commonly used terms in electronic communication systems, Data representation, Data flow, Modulation, Demodulation Analog and Digital Signals, Periodic and Non-Periodic Signals, Sine Wave, Phase, Wavelength, Digital Signals, Bit-rate, Bit-length.	**Refer Table 1**	1. Build a circuit to Generate and detect of BASK signal and BFSK signal using communication kit.
2	01	1,2	**Transmission Impairment** –Attenuation, Distortion and Noise, **Performance** - Bandwidth, Throughput, Latency, Jitter (Basic concepts only). **Transmission Modes** – Parallel and Serial Transmission. Asynchronous and Synchronous Transmission. **Satellite communication**- Introduction, advantages and disadvantages		1. Explore all ISP in your 2. area/locality and select best internet ISP/plan based on cost and performance. 3. Test the download/upload speed in your computer/mobile phone also check type, bandwidth and ISP. 4. Explore Bluetooth, Wi-Fi, NFC in your Smartphone and note their key technical attributes (Radio spectrum band, range, path loss, throughput, mode etc)
3	01, 02	1,2,3	Perspectives on Networking – End user perspectives on Networking and Internet, Overview of Networking.		1. My Protocol Rules Objectives a) Relate computer network protocols to the rules that

			Categories of networks - LAN, MAN, WAN, Internetworking (Illustrate Network from LAN connected using a HUB to Internetwork). The communication rules (Method, language, Confirmation) – Protocols, the Internet. The Network Standard Organizations, Protocol Stack. OSI Model: OSI Layers and Their Functions, OSI Layering Concepts and Benefits, OSI Encapsulation Terminology.		you use every day for various forms of communication. b) Define the rules that govern how to communicate in a group of students. Play the communication game. c) List what would happen if the sender and receiver did not agree on the details of the protocol. 2. Manual and Automatic address assignment (Windows) a) IPv4 address b) Subnet mask c) DNS 3. Manual and Automatic address assignment (Android) a) IPv4 address b) Subnet mask c) DNS
4,5	01,02	1,2,3	**TCP/IP Networking Model** - History Leading to TCP/IP, Overview of the TCP/IP Networking Model. TCP/IP Application Layer, HTTP Overview, HTTP Protocol Mechanisms. TCP/IP Transport Layer, TCP Error Recovery Basics, Same-Layer and Adjacent-Layer Interactions. TCP/IP Network Layer, Internet Protocol and the Postal Service, Internet Protocol Addressing Basics, IP Routing Basics. TCP/IP Link Layer (Data Link Plus Physical), TCP/IP Model and Terminology, Data Encapsulation Terminology. Names of TCP/IP Messages.		1. Organize and play games to understand working of TCP/IP like: 2. Create 2 group of students, each playing role of a layers of TCP/IP (intermediate network devices roles can also be considered). 3. Start the communication between two with a sender and receiver. 4. Determine the IP Address Configuration of a Computer (Windows) and Test the Network Interface 5. TCP/IP Stack (Ping).

6	02, 03	1, 2, 4	**Hardware and Software components of Network** - Common network devices - Computers, Access points, Hub, Switch, Router, repeaters, NIC, Modem. LAN Cables – Co-axial, twisted pair, optical fibre, LAN connectors- co-axial cable, and twisted pair cable, optical fibre, Connectors, Firewall, Firm wares, ISPs.		1. Demonstrate working of common network devices. 2. Demonstrate different network cables and connectors. 3. Install and configure NIC. 4. Crimping of RJ45: Straight and Cross. a) Punching Cat 6 cable to I/O Box. Use punching tool. b) Check connectivity using LAN tester
7	01, 02	1, 2, 3, 4	**Overview of network topologies** - Basic topologies- bus, ring, star, mesh and hybrid. **Network Simulator**: Network simulator like Packet Tracer, Installation, and User Interface. Deploy devices and cables GUI and CLI Configuration. Configure end Devices		1. Install Network simulator like Cisco packet tracer. 2. Create simple network in simulator. 3. Create and Demonstrate all possible network topologies using simulator
8,9	02, 03	1, 2, 3, 4	**An Overview of LANs** - Typical SOHO LANs, Typical Enterprise LANs, The Variety of Ethernet Physical Layer Standards, Consistent Behaviour over All Links Using the Ethernet Data Link Layer. Building Physical Ethernet Networks with UTP - Transmitting Data Using Twisted Pairs, Breaking Down a UTP Ethernet Link, UTP Cabling Pinouts for 10BASE-T and 100BASE-T, Straight- Through Cable Pinout, Crossover Cable Pinout, Choosing the Right Cable Pinouts, UTP Cabling Pinouts for 1000BASE-T, Sending Data in Ethernet		Build a physical Ethernet LAN Network and demonstrate file sharing, printer sharing. Install and configure wireless access point over the LAN. Use pathping command to find actual path between source to destination with information about network latency/delay & network loss.

			Networks.		
10,11	02, 03	1, 2, 3, 4	**Ethernet Data Link Protocols** – The Rise of Ethernet, The Ethernet MAC address and Ethernet Addressing, Identifying Network Layer Protocols with the Ethernet Type Field, Error Detection with FCS. Encapsulation, Ethernet Frame. **Hierarchical Network Design** – Physical and logical addresses, Benefits of a Hierarchical Design, Access, Distribution, and Core layers Sending Ethernet Frames with Switches and Hubs, Sending in Modern Ethernet LANs Using Full-Duplex, Using Half-Duplex with LAN Hubs. **Ethernet access layer devices** – Hub, Switch, The MAC address table, Ethernet Broadcast and Broadcast domain, ARP.		1. Determine the MAC Address of a Host (PC and Phone). 2. View Wireless and Wired NIC Information and make a table explaining each. 3. Configure and install a ethernet switch/Hub (Use simulator if hardware devices are not available) 4. Create/model a simple Ethernet network using 3 hosts and a switch, Observe traffic behavior on the network and Observer data flow of ARP broadcasts and pings
12	02, 03, 04	1, 2, 3, 4	**Routing:** The Need for Routing - Criteria for Dividing the Local Network - Now We Need Routing **Overview of Network Layer Functions** - Network Layer Routing (Forwarding) Logic, Host Forwarding Logic: Send the Packet to the Default Router, Routing Data Across the Network, Delivering Data to the End Destination, How Network Layer Routing Uses LANs and WANs, IP Addressing and How Addressing Helps IP Routing, Routing Protocols. **IPv4 Addressing** - Rules for IP Addresses, Rules for Grouping IP Addresses, Class A, B, and C IP Networks, The Actual Class		1. Build a simple peer-to-peer network and verify physical connectivity and Assign various IPv4 addresses to hosts and observe the effects on network communication 2. Configure IP addresses of a network (real or simulated) and ping across to test and troubleshoot. 3. Subnetting of a network (either using real network or in Simulator). 4. Connect to web server using simulator, Observe how packets are sent across the Internet using IP addresses.

			A, B, and C IP Networks, IP Subnetting, How to create subnets, Subnet mask, CIDR, variable length subnet mask.		
13	02, 03, 04	1, 2, 3, 4, 7	**IPv4 Routing** - IPv4 Host Routing, Router, Forwarding Decisions and the IP Routing Table, The default gateway, A Summary of Router Forwarding Logic, A Detailed Routing Example. **Routing Protocols** - IPv4 Routing Protocols – static and dynamic. **Other Network Layer Features** - Using Names and the Domain Name System, The Address Resolution Protocol, ICMP Echo and the ping Command. **DHCP** – Static address assignment, Dynamic address assignment, DHCP servers.		1. Implement simple static routing. 2. Troubleshooting of IP Addressing- a) Change a routing table entry b) Wrong address c) incorrect subnet mask 3. Configure and test DHCP on a wireless router (real or simulated)
14	02, 03, 04	1, 2, 3, 4	**Pv4 and IPv6 Address Management** - Network Boundaries -Gateways to Other Networks, Routers as Gateways. **Network Address Translation** - Introduction, NAT operation. **IPv4 Issues** - Need of IPv6, Ipv4 vs IPv6, IPv4 and IPv6 Coexistence. **IPv6 features** - IPv6 Address Representation. **Concept of Virtual LAN's**(VLAN's)		1. Packet Tracer - Examine NAT on a Wireless Router 2. Identify IPv6 Addresses a) Identify the different types of IPv6 addresses. b) Examine a host IPv6 network interface and address. c) Practice IPv6 address abbreviation. 3. Setup, configure and test VPN in your Smartphone.
15	02, 03, 04	1, 2, 3, 4	**The Client Server relationship** – Client Server interaction. URI, URN, URL **TCP/IP Layer 4 Protocols**: TCP and UDP - Transmission Control Protocol, Multiplexing Using TCP Port Numbers, Popular TCP/IP		1. Create a client – server model in simulator and observe the client interaction between the server and PC using packet tracer. 2. Observe DNS Name Resolution a) Observe the conversion of a

			Applications, Connection Establishment and Termination, User Datagram Protocol. **Port Numbers** – TCP and UDP. Socket pairs, the netstat command. **Application Layer Services -** Common Network Application Services, Domain Name System, Domain Name Translation, DNS Servers, HTTP, Web Clients and Servers, FTP, Virtual Terminals, Remote Access with Telnet or SSH, Telnet, Security Issues with Telnet, SSH, Email- Email protocols, Simple Mail Transfer Protocol (SMTP), Post Office Protocol (POP3), Internet Message Access Protocol (IMAP4).		URL to an IP address. b) Observe DNS lookup using the nslookup command. 3. Use simulator to demonstrate Telnet and SSH
16	02, 03, 04	1, 2, 3, 4	**Troubleshoot Common Network Problems** - The Troubleshooting Process, Network Troubleshooting Overview, Gather Information - Nature of problem, Equipment, Configuration and Topology, Previous Troubleshooting. **Structured Troubleshooting Methods** - Bottom-Up, Top-Down, Divide-and-Conquer, Follow-the-Path, Substitution, Comparison, and Educated Guess. Guidelines for Selecting a Troubleshooting Method **Troubleshoot Wireless Issues** - Causes of Wireless Issues, Authentication and Association Errors.		1. Demonstrate troubleshooting Commands with a scenario- ipconfig, ping, netstat, tracert, nslookup. 2. Interpret the output of commonly used network command line utilities and Determine which network utility can provide the necessary information to perform troubleshooting activities in a bottom-up troubleshooting strategy 3. Physical Layer Problems - Common Layer 1 Problems, how to use the five senses to troubleshoot, Wireless Router LEDs, Cabling Problems 4. Common Internet Connectivity Issues - DHCP Server Configuration Errors, Check Internet Configuration, Check Firewall Settings.
Total in hours			**48**	**16**	**64**

Table 1: Suggestive activities for tutorials (the list is only shared as an example and not inclusive of all possible activities for that course. Student and faculty are encouraged to choose activities that are relevant to the topic and the availability of such resources at their institution)

Sl. No.	Activity
1.	Prepare a report on advanced communication systems and suggest best way to connect remote villages of India.
2.	Prepare a report on Communication satellites of Indian Space Research Organization.
3.	Prepare a presentation on 5 networking protocols being used in your smart phone.
4.	My Protocol Rules Objectives a) Relate computer network protocols to the rules that you use every day for various forms of communication. b) Define the rules that govern how you send and interpret text messages. c) Explain what would happen if the sender and receiver did not agree on the details of the Protocol.
5.	My Local Network a) Record all the different network-attached devices in your home or classroom. b) Investigate how each device connects to the network to send and receive information. c) Create a diagram showing the topology of your network. d) Label each device with its function within the network.
6.	Detailed study of Packet tracer and present the same.
7.	Trace a Route a) Determine network connectivity to a destination host b) Trace a route to a remote server using tracert
8.	Presentation on wireless Ethernet protocols
9.	1. Calculate whether destination address is local or remote using IP address. 2. Calculate whether destination address is local or remote using mask.
10.	Use logical AND to determine network address
11.	Identify IPv6 Addresses a)Identify the different types of IPv6 addresses.
12.	Identify IPv6 Addresses a)Examine a host IPv6 network interface and address.
13.	Identify IPv6 Addresses a)Practice IPv6 address abbreviation.
14.	Prepare a report on ICANN List the popular port numbers with their use.
15.	Prepare a report on popular application layer protocols and present the same.
16.	Identify and correct any misconfiguration of a wireless device (Scenario : A small business owner learns that a wireless user is unable to access the network. All the PCs are configured with static IP addressing. Identify and resolve the issue)

4. CIE and SEE Assessment Methodologies

Sl. No.	Assessment	Test Week	Duration	Max Marks	Conversion
1.	CIE-1 Written Test	6	80	30	Average of three tests 30
2.	CIE-2Written Test	11	80	30	
3.	CIE-3Written Test	15	80	30	
4.	CIE-4 Skill Test-Practice	8	180	100	Average of two skill tests reduced to 20
5.	CIE-5 Skill Test-Practice	16	180	100	
6.	CIE-6 Portfolio continuous evaluation of Activity through Rubrics	1-16		10	10
Total CIE Marks					60
Semester End Examination (Practice)			180	100	40
Total Marks					**100**

5. Format for CIE written Test

Course Name	**Computer Network**	**Test**	**I/II/III**	**Sem**	**III/IV**
Course Code	**3433**	**Duration**	**80 Min**	**Marks**	**30**
Note: Answer any one full question from each section. Each full question carries 10 marks.					
Section	Assessment Questions		Cognitive Levels	Course Outcome	Marks
I	1				
	2				
II	3				
	4				
III	5				
	6				
Note for the Course coordinator: Each question may have one, two or three subdivisions. Optional questions in each section carry the same weightage of marks, Cognitive level and course outcomes.					

6. Rubrics for Assessment of Activity (Qualitative Assessment)

Rubrics: Student Activity Assessment						
Dimension	**Poor**	**Below average**	**Average**	**Good**	**Exemplary**	**Student Score**
	4	**8**	**12**	**16**	**20**	
Collection of data	Does not collectany information relating to the topic	Collects very limited information; some relate to the topic	Collect much information; but very limited relate to the topic	Collects some basic information; most refer to the topic	Collects a great deal of information; all refer to the topic	
Fulfill team's roles/& duties	Does not perform any duties assignedto the team role	Performs very little duties but unreliable.	Performs very little duties	Performs nearly all duties	Performs all duties of assigned team roles	
Shares work equally	Always relies on others to dothe work	Rarely does the assigned work; often needs reminding	Usually does the assigned work; rarely needs reminding	Normally does the assigned work	Always does the assigned work without having to be reminded.	
Listen to other Teammates	Is always talking; never allows anyoneelse to speak	Usually doesmost of the talking; rarely allows others to speak	Talks good; but never show interest in listening others	Listens, but sometimes talk too much	Listens and speaks a fair amount	
Average / Total Marks:						

Note: Dimension and Descriptor shall be defined by the respective course coordinator as per the activities

7. Reference

Sl. No.	Description
1.	www.netcad.com
2.	Computer Networks - Behrouz A. Forouzan
3.	www.howtonetwork.com
4.	vlab.co.in

8. CIE Skill Test and SEE Scheme of Evaluation

No.	Particular s/Dimension	rks
1.	Identify the network devices, cables, Connectors, software and other tools required as per the given specification and write their technical details.	20
2.	Design/Create/Configure the given network as per the specification given.	25
3.	Configure and troubleshoot the network (devices, address, port, software, tools, and protocol).	25
4.	Demonstrate the solution. In the event of, a student fails to get the desired result, the examiner shall use viva voce to assess the student's understanding of computer networks.	20
5.	Portfolio evaluation based on aggregate of all practice sessions.	10
	Total Marks	**100**

9. Equipment/Software list with Specification for a batch of 20 students

. No.	Particulars	Specification	Quality
1.	Computer		20
2.	Lan cable		20
3.	Crimping tool		20
4.	Networking Switch, Modem		2
5.	Network simulator like packet tracer		20
6.	Communication trainer kit		10

Government of Karnataka

DEPARTMENT OF COLLEGIATE AND TECHNICAL EDUCATION

JSS POLYTECHNIC FOR THE DIFFERENTLY ABLED, MYSURU-06

Programme	Computer Science and Engineering	**Semester**	III
Course Code	3434	**Type of Course**	Programme Core
Course Name	Database System Concepts and PL/SQL	**Contact Hours**	8 hours/week 128 hours/semester
Teaching Scheme	L:T:P :: 3:1:4	**Credits**	6
CIE Marks	60	**SEE Marks**	40

1. Rationale

Data, factual information, is the main driving force that is changing the face of our world. Database is an organized collection of related data which is stored and accessed electronically using a computer. Database management has evolved from a specialized computer application to a central component of virtually all enterprises, and, as a result, knowledge about database systems has become an essential part of an education in computer science. SQL is a powerful language for both querying and updating data in relational databases. Study of SQL empowers students to implement and work with relational data model.

2. Course Outcomes: At the end of the course, the student will be able to:

CO-01	Identify the elements of ER model for a given requirement, draw ER diagram and validate with the given requirement.
CO-02	Translate the given ER diagram to a relational model and verify against integrity constraints. Also refine and normalize the relational database design against first three normal forms.
CO-03	Use appropriate SQL statements to create a database and other DB objects using DBMS software.
CO-04	Perform insert, delete and/or update operations on the database and query the database to retrieve the required information using appropriate SQL statements and clauses.

Mapping of CO with PO & PSO

COURSE	CO'S	Programme Outcomes (POs)							Program Specific Outcomes (PSOs)	
		1	2	3	4	5	6	7	1	2
Database System Concepts and PL/SQL	CO1	3	3	2	2	2	0	2	0	3
	CO2	3	3	2	0	0	0	2	0	3
	CO3	3	3	0	2	0	0	2	0	3
	CO4	3	0	0	2	0	0	2	0	3
AVG		**3**	**3**	**2**	**2**	**2**	**0**	**2**	**0**	**3**

Level 3- Highly Mapped, Level 2-Moderately Mapped, Level 1-Low Mapped, Level 0- Not Mapped

3. Course Content

Week	CO	PO	Lecture (Knowledge Criteria)	Tutorial (Activity Criteria)	Practice (Performance Criteria)
			3 hours/week	**1 hour/ week**	**4 hours/week (2 hours/batch twice in a week)**
1,2	1	1,4	**Introduction** Overview of DB: why a database? Purpose of database; Classification; Application; DBMS: features, providers; Functional components of DBMS; Types ofDBMS architecture; View of data in DBMS; Database users; Roleand responsibilities of DBA; Case study: Example of any database application, recruitment database	**Refer Table 1**	1. Install and setupDBMS software such as MySQL, PostgreSQL 2. Learn the interfaceand explore the features of installed DBMS

3,4	1	1,3,4	**Database design** Data model; types; importance of data modeling; Overview of database design; phases of database design; database development life cycle; Conceptual design: ER-Model: entity: types; attribute: types; relationships: types, constraints, Symbols and Notations; Case study: conceptual design for a set of specifications i. Restaurant ii. Retail shop iii. Recruitment iv. College v. Library		1. Identify and ER-model elements and draw ER diagram for the given specifications using tools.
5.	2	1,3	**Relational model:** Overview; characteristics; Constraints: types; Operations; Advantages and Disadvantages; applications; Design anomalies; Features of good DB design;		1. Map ER Model to relational model 2. Identify various constraints
6.	2	1,3	**Functional dependency:** overview, rules, types; Normalization: normalization process; Importance of normalization; 1NF,2NF,3NF Sufficient examples to understand the concept		1. Normalize the above design
7.	3	1,4	**Database languages:** types, commands/tasks ineach type; Integrity constraints; MySQL/PostgreSQL: overview; features; datatypes; Standardization guidelines;	**Refer Table 1**	1. Validate the above design against integrity constraints
8.	3	1,3,4	**Defining Data:** DDL CREATE, ALTER, DROP different DB objects;Temporary		1. Use MySQL/PostgreSQL DDL statements to create database and other DB objects for

			tables: types, create and use; external tables; Managing constraints		above design.
9.	3,4	1,3,4	Insert, delete and update data Modifying data: UPDATE and DELETE Update anomalies; impact of constraints Querying of available data: SELECT; Aliases; sorting data: ORDER BY		1. Perform single table and multi table insertion 2. Perform delete and update operations 3. Querying single table 4. Sort the result set of a query
10.	4	1,4	**Filtering data:** WHERE, AND, OR, row limiting clause, IN, BETWEEN, LIKE; Joining table: INNER JOIN, LEFT JOIN,		1. Querying single table 2. Filtering data 3. query multiple tables with joins
11.	4	1,4	**Grouping data:** Aggregate functions, GROUPBY, HAVING; Set operators: UNION, INTERSECT, MINUS;		1. Queries that use setoperators 2. Report aggregated data using group functions
12.	4	1,4	**Subqueries:** Comparator operators; subqueries: Single Row Subqueries; Multiple Row Subqueries; correlated subqueries; EXISTS, NOT EXISTS, ANY, ALL, SOME;		1. Write sub queries to retrieve information from the created database
13.	4	1,4	**Views:** create, drop and update; realization of views based on single and multiple tables; DCL: Controlling user access Differentiating syster privileges from objec privileges; Grantin privileges on tables		1. Create view and query 2. Create users and assign privileges for DB operations
14.	4	1,4	**PL/SQL:** variables, datatypes; control statements (decision making); Stored procedures and Functions Concept; syntax and structure of store procedure; Syntax and structure of functions; calling a	**Refer Table 1**	1. Create and execute store procedures 2. Create and execute functions

			function; Examples;		
	4	1,4	**Managing and controlling transactions:** Introduction of transaction, ACID properties; states of transaction; Transaction control; Overview of transaction management, using transaction control commands: COMMIT, ROLLBACK, SAVE POINT, SET TRANSACTION; sufficient examples;		1. Create and execute transactions 2. Call previously created store procedure or function in transaction
Total in Hours			**48**	**16**	**64**

Table 1: Suggestive activities for tutorials (the list is only shared as an example and not inclusive of all possible activities for that course. Student and faculty are encouraged to choose activities that are relevant to the topic and the availability of such resources at their institution)

1.	1. Identify the drawbacks of file system and how DB enables us to overcome them. Identify distinguishable features of each of DBMS available in the market.
2.	1. Transform given n-ary relationship to binary relationship 2. Document the steps to create ER diagram. 3. Identify the components of ER model in the given requirements.
3.	1. Document the steps to create logical design
4.	1. Discuss and document Codd's 12 rules
5.	1. Explore and document other normal forms
6.	1. study and present the working of SQL optimizer
7.	1. Learn and demonstrate use of DISTINCT, ALL, IS NULL;
8.	Learn and report optimization techniques
9.	Learn and present RIGHT JOIN;
10.	1. Identify the advantages of Cascading Referential Integrity Constraints
11.	1. Identify need of subqueries
12.	1. identify the advantages and disadvantages of store procedure and functions,

13.	1. presentation on the latest developments in research and industry related to this course
14.	1. Learn and present need of scalar subqueries
15.	1. Learn iterative statements in PL/SQL
16.	1. Does Relational model support storage of unstructured data, if no, what are the alternatives to store unstructured data.

4. CIE AND SEE Assessment Methodologies

Sl. No.	Assessment	Test Week	Duration in minutes	Max. Marks	Conversion
1.	CIE-1 Written Test	6	80	30	Average of three tests 30
2.	CIE-2 Written Test	11	80	30	
3.	CIE-3 Written Test	15	80	30	
4.	CIE-4 Skill Test	8	180	100	Average of two Skill tests 20
5.	CIE-5 Skill Test	16	180	100	
6.	CIE-6 Portfolio continuous evaluation of Activity throughRubrics	1-16	-	10	10
Total CIE Marks					**60**
Semester End Examination(Practice)			180	100	40
Total Marks					**100**

5. Format for CIE Written Test

Course Name	Database System Concepts and PL/SQL	Test	I/II/III	Sem	III/IV
Course Code		**Duration**	**80 Min**	**Marks**	**30**

te: Answer any one full question from each section. Each full question carries 10 marks.

Section	Assessment Questions	Cognitive Levels	Course Outcome	Marks
I.	**1 or 2**			
II.	**3 or 4**			
III.	**5 or 6**			

Note for the Course coordinator: Each question may have one, two or three subdivisions. Optional questions in each section carry the same weightage of marks, Cognitive level and course outcomes.

6. Rubrics for Assessment of Activity (Qualitative Assessment)

Rubrics: Student Activity Assessment						
Dimension	**Poor**	**Below average**	**Average**	**Good**	**Exemplary**	**Student Score**
	4	**8**	**12**	**16**	**20**	
Collection of data	Does not collectany information relating to the topic	Collects verylimited information;some relate to the topic	Collect much information;but very limited relate to thetopic	Collects some basic information;most refer to the topic	Collects a great deal of information;all refer to the topic	
Fulfill team's roles/& duties	Does not perform any duties assignedto the team role	Performs very little duties but unreliable.	Performs very little duties	Performs nearly all duties	Performs allduties of assigned team roles	
Shares work equally	Always relies on others to dothe work	Rarely does the assigned work; often needs reminding	Usually doesthe assigned work; rarely needs reminding	Normally does the assigned work	Always doesthe assigned work without having to be reminded.	
Listen to other Teammates	Is always talking; never allows anyone else to speak	Usually doesmost of the talking; rarely allows others to speak	Talks good; but never show interest in listening others	Listens, but sometimes talk too much	Listens and speaks a fairamount	
Average / Total Marks:						

Note: Dimension and Descriptor shall be defined by the respective course coordinator as per the activities

7. Reference:

Sl. No.	Description
1.	Database System Concepts by Abraham Silberschatz, Henry F. Korth, S . Sudarshan
2.	https://binaryterms.com/
3.	https://beginnersbook.com/
4.	https://www.oracletutorial.com/

8. CIE Skill Test Scheme of Evaluation

SL. No.	Particulars/Dimension	Marks
1.	Draw ER diagram for the given specifications.	30
2.	Translate ER diagram to relational model, verify against integrity constraints and refine and normalize DB design	40
3.	Explain above DB design In the event of student failing to verify integrity constraints and apply normalization the examiner shall use viva voce to assess the student understanding of normal forms and integrity constraints	20
4.	Portfolio evaluation of practice sessions	10
Total Marks		**100**
Note: For CIE skill test 2, SEE scheme of evaluation shall be used.		

9. SEE Scheme of Evaluation

SL. No.	Particulars/Dimension	Marks
1.	Draw ER diagram for the given specifications.	10
2.	Translate ER diagram to relational model, verify against integrity constraints and refine and normalize DB design	20
3.	Use appropriate SQL statements to create the database and other DB objects using a DBMS software for the above design	10
4.	Perform insert, delete and/or update operations on the database and query the database to retrieve the required information using appropriate SQL statementsand clauses.	30
5.	Demonstrate the working of above queries. In the event of not working of above queries (with no syntactical errors), the examiner shall use viva voce to assess the student understanding of ER model, Relational model concepts and SQL.	20
6.	Portfolio evaluation of practice sessions	10
Total Marks		**100**

10.Equipment/software list with Specification for a batch of 20 students

Sl. No.	Particulars	Specification	Quantity
1.	Computers		20
2.	MySQL workbench/ or equivalent software; Lucid chart,draw.io		

ತೃತೀಯ ಸೆಮಿಸ್ಟರ್

ಜೆಎಸ್‌ಎಸ್ ಮಹಾವಿದ್ಯಾಪೀಠ

ಜೆಎಸ್‌ಎಸ್ ವಿಶೇಷಚೇತನರ ಪಾಲಿಟೆಕ್ನಿಕ್ ಮೈಸೂರು

ಕನ್ನಡ ಬಲ್ಲ ಡಿಪ್ಲೋಮಾ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ನಿಗದಿಪಡಿಸಿದ ಪಠ್ಯಪುಸ್ತಕ

(ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ, ಸಂಸ್ಕೃತಿ ಮತ್ತು ಪರಂಪರೆ ಕುರಿತು)

Course Code	21KA3T	Semester : III	Course Group – AU / KA
Course Title	ಸಾಹಿತ್ಯ ಸಿಂಚನ – 2	Category : PC	Lecture Course
No. of Credits	2	Type of Course	CIE Marks : 50
Total Contact Hours	02 Hrs Per Week 32 Hrs Per Semester	Teaching Scheme (L:T:P) = 2:0:0	SEE Marks : Nil

ಸಾಹಿತ್ಯ ಸಿಂಚನ – 2 (ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕ) KA - 21KA3T

ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕದ ಪರಿವಿಡಿ	ಬೋಧನಾ ಅವಧಿ 32 ಗಂಟೆಗಳು
1. ಹೊಸಗನ್ನಡ ಸಾಹಿತ್ಯ ಚರಿತ್ರೆಯ ಪ್ರಭಾವಗಳು ಮತ್ತು ಪ್ರೇರಣೆಗಳು	02 ಗಂಟೆ
2. ಹೊಸಗನ್ನಡ ಕಾವ್ಯದ ಪ್ರಕಾರಗಳು - • ನವೋದಯ ಸಾಹಿತ್ಯ - ಲಕ್ಷಣಗಳು ಮತ್ತು ಪ್ರೇರಣೆ, ಪ್ರಮುಖ ಕವಿಗಳು ಮತ್ತು ಸಾಹಿತ್ಯದ ಕೊಡುಗೆಗಳು. • ನವ್ಯ ಸಾಹಿತ್ಯ - ಲಕ್ಷಣಗಳು ಮತ್ತು ಪ್ರೇರಣೆ, ಪ್ರಮುಖ ಕವಿಗಳು ಮತ್ತು ಸಾಹಿತ್ಯದ ಕೊಡುಗೆಗಳು. • ಬಂಡಾಯ ಮತ್ತು ಪ್ರಗತಿಪರ ಸಾಹಿತ್ಯ - ಲಕ್ಷಣಗಳು ಮತ್ತು ಪ್ರೇರಣೆ, ಪ್ರಮುಖ ಕವಿಗಳು ಮತ್ತು ಸಾಹಿತ್ಯದ ಕೊಡುಗೆಗಳು. • ದಲಿತ ಸಾಹಿತ್ಯ, ಮಹಿಳಾ ಸಾಹಿತ್ಯ, ವಿಜ್ಞಾನ ಸಾಹಿತ್ಯ ಮತ್ತು • ಇತ್ತೀಚಿನ ಪ್ರಚಲಿತ ಕನ್ನಡ ಸಾಹಿತ್ಯದ - ಲಕ್ಷಣಗಳು ಮತ್ತು ಪ್ರೇರಣೆ, ಪ್ರಮುಖ ಕವಿಗಳು ಮತ್ತು ಸಾಹಿತ್ಯದ ಕೊಡುಗೆಗಳು.	04 ಗಂಟೆ 04 ಗಂಟೆ 04 ಗಂಟೆ 04 ಗಂಟೆ
3. ವೈಚಾರಿಕತೆ ಕುರಿತಾದ ಲೇಖನ - ಜಿ ಎಸ್. ಶಿವರುದ್ರಪ್ಪ, ಕಥೆ - ನೇಮಿಚಂದ್ರ ಪ್ರವಾಸ ಕಥನ - ಹಿ.ಚಿ.ಬೋರಲಿಂಗಯ್ಯರವರ - (ಕುಪ್ಪಳ್ಳಿ ಡೈರಿ ಪುಸ್ತಕದಿಂದ)	04 ಗಂಟೆ
4: ಪರಿಸರ, ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಕುರಿತಾದ ಲೇಖನಗಳು , ಪ್ರಬಂಧ - ಗೊರೂರು ರಾಮಸ್ವಾಮಿ ಅಯ್ಯಂಗಾರ ಕರ್ನಾಟಕ ಏಕೀಕರಣ ಚಳುವಳಿ - ಪ್ರೊ. ಜಿ. ವೆಂಕಟಸುಬ್ಬಯ್ಯ ಕನ್ನಡ ಸಿನಿಮಾರಂಗ ಬೆಳೆದು ಬಂದ ದಾರಿ ಮತ್ತು ನಾಡು - ನುಡಿ ಹಾಗೂ ನಾಡಿನ ಸಂಸ್ಕೃತಿಯ ಮೇಲೆ ಬೀರಿದ ಪ್ರಭಾವಗಳು. ಕನ್ನಡದ ಸಾಮಾಜಿಕ ಉಪಭಾಷೆಗಳು (ಭಾಷಾ ಪ್ರಭೇದಗಳು)	06 ಗಂಟೆ
5. ಕರ್ನಾಟಕ ರಾಜ್ಯ ಕುರಿತಾದ ಸಾಮಾನ್ಯ ಜ್ಞಾನದ ಮಾಹಿತಿಗಳು ಕರ್ನಾಟಕದ ಕಲೆ ಮತ್ತು ಸಾಂಸ್ಕೃತಿಕ ವಿಷಯಗಳ ಮಾಹಿತಿ. ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಪ್ರಮುಖ ವ್ಯಕ್ತಿಗಳು ಮತ್ತು ಪ್ರೇಕ್ಷಣೀಯ ಸ್ಥಳಗಳ ಮಾಹಿತಿ. ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಮಠಗಳ ಪರಂಪರೆ ಮತ್ತು ಧಾರ್ಮಿಕ ವಿಷಯಗಳ ಪರಿಚಯ.	04 ಗಂಟೆ
ಒಟ್ಟು ಬೋಧನಾ ಅವಧಿ	32 ಗಂಟೆಗಳು

"ಸಾಹಿತ್ಯ ಸಿಂಚನ – 2"

ಈ ಕಾರ್ಯಪಠ್ಯಪುಸ್ತಕದ ಬೋಧನೆ ಮತ್ತು ಅಳವಡಿಕೆಗೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಶಿಕ್ಷಕರು ಮತ್ತು ವಿದ್ಯಾರ್ಥಿಗಳು ಕಡ್ಡಾಯವಾಗಿ ಪಾಲಿಸಬೇಕಾದ ಸೂಚನೆಗಳು :

1. ಈ ಪಠ್ಯಪುಸ್ತಕವು ಪ್ರಧಾನವಾಗಿ ಕಾರ್ಯ ಪುಸ್ತಕವಾಗಿ ರೂಪಿಸಲ್ಪಟ್ಟಿದೆ ಆದುದರಿಂದ ಶಿಕ್ಷಕರು ಕನ್ನಡ ಸಾಹಿತ್ಯ ಮತ್ತು ಪರಂಪರೆ ಹಾಗೂ ಇತಿಹಾಸ ಈ ಮೊದಲಾದ ಎಲ್ಲ ವಿಷಯಗಳ ಬೋಧನೆಯನ್ನು ಚಟುವಟಿಕೆಗಳ ಆಧಾರದ ಮೇಲೆ ಮತ್ತು ಪರಂಪರೆ ಹಾಗೂ ಇತಿಹಾಸ ಈ ಮೊದಲಾದ ಎಲ್ಲ ವಿಷಯಗಳ ಬೋಧನೆಯನ್ನು ಚಟುವಟಿಕೆಗಳ ಆಧಾರದ ಮೇಲೆ ಮತ್ತು ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಸಂಭಾಷಣೆಗೆ ಮತ್ತು ಚರ್ಚೆಗೆ ಒಳಪಡಿಸುವುದರ ಮುಖಾಂತರ ಬೋಧಿಸಬೇಕು.

2. ಪ್ರತಿಯೊಬ್ಬ ವಿದ್ಯಾರ್ಥಿಯು **ಪೂರ್ಣ ಪ್ರಮಾಣದ (ಬೈಂಡಿಂಗ್ ಮಾಡಿಸಿದ) ಈ ಕಾರ್ಯಪಸ್ತಕವನ್ನು ಬೋಧನೆಯ ಸಮಯದಲ್ಲಿ ತರಗತಿಯಲ್ಲಿ ಕಡ್ಡಾಯವಾಗಿ ಇಟ್ಟುಕೊಂಡಿರಬೇಕು. ಪ್ರತಿ ಪಾಠದ ನಂತರದ ಚಟುವಟಿಕೆಗಳು ಮತ್ತು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಗಳನ್ನು ತಪ್ಪದೆ ಹಾಲಿ ಬಿಟ್ಟಿರುವ ಜಾಗದಲ್ಲಿ ಬರೆದು ತರಗತಿ ಶಿಕ್ಷಕರಿಂದ ಮೌಲ್ಯಮಾಪನವನ್ನು ಮಾಡಿಸಿಕೊಳ್ಳಬೇಕು.**

3. ಕಾಲೇಜು ಹಂತದ ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನ ಪರೀಕ್ಷಾ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಈ ವಿಷಯದ ಮೌಲ್ಯಮಾಪನಕ್ಕೆ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿರುತ್ತದೆ. **ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದ ಪರೀಕ್ಷೆ ಇರುವುದಿಲ್ಲ.**

4. ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನ ಪರೀಕ್ಷಾ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಅಳವಡಿಸಿಕೊಂಡಿರುವುದರಿಂದ. ಬೋಧನೆಯನ್ನು ಶಿಕ್ಷಕರು. ಚಟುವಟಿಕೆಗಳ ಆಧಾರದ ಮೇಲೆ ಮತ್ತು ಕಾರ್ಯ ಪುಸ್ತಕದಲ್ಲಿ ನೀಡಿರುವ ಪ್ರತಿ ಪಾಠ ಮತ್ತು ವಿಷಯಗಳ ಬೋಧನೆಯ ನಂತರ ವಿದ್ಯಾರ್ಥಿಗಳ ಕಲಿಕೆಯನ್ನು ಮತ್ತು ಮೌಲ್ಯಮಾಪನವನ್ನು ಕಡ್ಡಾಯವಾಗಿ ಮಾಡಬೇಕು.

5. **ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯ ಬೋಧನೆಯ** ಈ ಕಾರ್ಯ ಪುಸ್ತಕವನ್ನು ಪ್ರಯೋಗಾಲಯದ ಕಾರ್ಯ ಪುಸ್ತಕದಂತೆ (ಲ್ಯಾಬ್ ರೆಕಾರ್ಡ್ ನಂತೆ) ಬಳಸಬೇಕು. ಬೋಧನೆಯ ನಂತರ ಪ್ರತಿಯೊಂದು ಪಾಠದ ಚಟುವಟಿಕೆಗಳು ಮತ್ತು ವಿದ್ಯಾರ್ಥಿ ಬರೆದ ಉತ್ತರಗಳನ್ನು ತರಗತಿಯ ಕನ್ನಡ ಶಿಕ್ಷಕರು ಕಡ್ಡಾಯವಾಗಿ ಮೌಲ್ಯಮಾಪನವನ್ನು ಮಾಡುವುದರ ಮುಖಾಂತರ ದೃಢೀಕರಿಸಬೇಕು.

6. **ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದ ನಂತರ ಈ ಕಾರ್ಯ ಪುಸ್ತಕವನ್ನು ಕಡ್ಡಾಯವಾಗಿ ಅಧ್ಯಯನ ದೃಢೀಕರಣ ಪತ್ರದ ಸಮೇತ ಕಾಲೇಜಿನ ಪ್ರಾಂಶುಪಾಲರು / ವಿಭಾಗಾಧಿಕಾರಿಗಳ ಮೇಲು ಸಹಿಯೊಂದಿಗೆ ಇಲಾಖೆಯ ಪರಿಶೀಲನೆಗೆ ಸಿದ್ಧವಾಗಿಸಿ ಇಟ್ಟಿರಬೇಕು.**

7. ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಬಲ್ಲ ಅಂದರೆ ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಓದಲು, ಬರೆಯಲು ಮತ್ತು ಮಾತನಾಡಲು ಹಾಗೂ ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಒಂದು ವಿಷಯವನ್ನಾಗಿ 10ನೇ ತರಗತಿಯಲ್ಲಿ ಅಧ್ಯಯನ ಮಾಡಿರುವ ಎಲ್ಲ ವಿದ್ಯಾರ್ಥಿಗಳು **"ಸಾಹಿತ್ಯ ಸಿಂಚನ – 2"**. ಈ ಕಾರ್ಯಪುಸ್ತಕವನ್ನು ಅಧ್ಯಯನ ಮಾಡಲು ಅರ್ಹರಾಗಿರುತ್ತಾರೆ.

8. ಈ ಮೇಲೆ ತಿಳಿಸಿದ ಎಲ್ಲಾ ಸೂಚನೆಗಳನ್ನು ಕಡ್ಡಾಯವಾಗಿ ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯದ ಅಧ್ಯಯನಕ್ಕೆಂದು ರೂಪಿತವಾಗಿರುವ **"ಸಾಹಿತ್ಯ ಸಿಂಚನ – 2"**. ಈ ಕಾರ್ಯ ಪುಸ್ತಕದ ಬೋಧನೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳುವುದು.

9. ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದ ಪರೀಕ್ಷಾ ವಿಧಾನಕ್ಕೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಹೆಚ್ಚಿನ ಮಾಹಿತಿಗಾಗಿ ಇಲಾಖೆಯ ಈಗಾಗಲೇ ತನ್ನ ವೆಬ್‌ಸೈಟ್‌ನಲ್ಲಿ ಪ್ರಕಟಿಸಿರುವ ಅ – 20 ಪಠ್ಯಕ್ರಮದ ಪ್ರತಿಯನ್ನು ಗಮನಿಸುವುದು.

ಕಿರು ಪರೀಕ್ಷೆಗಳನ್ನು ಮತ್ತು CIE – ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದಲ್ಲಿ ಕಡ್ಡಾಯವಾಗಿ ಅಳವಡಿಸಿಕೊಳ್ಳಬೇಕಾದ ಮಾನದಂಡಗಳು ಮತ್ತು ಇಲಾಖೆಯ ಸೂಚನೆಗಳು:

ಭಾಗ – 1: ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ 03 ಕಿರುಪರೀಕ್ಷೆಗಳನ್ನು ನಡೆಸಬೇಕು:

1. 3ನೇ ವಾರದ ಅಂತ್ಯದಲ್ಲಿ ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ ಮೊದಲ ಕಿರುಪರೀಕ್ಷೆ
2. 7ನೇ ವಾರದ ಅಂತ್ಯದಲ್ಲಿ ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ ಎರಡನೆ ಕಿರುಪರೀಕ್ಷೆ
3. 15ನೇ ವಾರದ ಅಂತ್ಯದಲ್ಲಿ ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ ಮೂರನೇ ಕಿರುಪರೀಕ್ಷೆ

ಭಾಗ – 2: ಗರಿಷ್ಠ 20 ಅಂಕಗಳಿಗೆ 03 ವಿಭಿನ್ನರೀತಿಯ ಆಂತರಿಕ ಪರೀಕ್ಷೆಗಳನ್ನು ನಡೆಸಬೇಕು:

1. ಭಾಗ 2 ರ ಗರಿಷ್ಠ 20 ಅಂಕಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸಾಹಿತ್ಯ ಸಿಂಚನ ಭಾಗ–2 / ಬಳಕೆ ಕನ್ನಡ – 2 ಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಪ್ರಶ್ನೆಗಳು ಹೆಜ್ಜಾಗಿ ಚಟುವಟಿಕೆಯ ಮಾದರಿಯಲ್ಲಿ ಇರುವದರಿಂದ 5ನೇ, 9ನೇ ಮತ್ತು 11ನೇ ವಾರದ ಮೂರೂ ಪರೀಕ್ಷೆಗಳಿಗೆ ಕಾರ್ಯಪಠ್ಯವನ್ನು ಆಧಾರವಾಗಿ ಪರಿಗಣಿಸುವುದು ಮತ್ತು ಈ ಪುಸ್ತಕವನ್ನು ವಿಭಾಗಾಧಿಕಾರಿಗಳ ಮೇಲುಸಹಿಯನ್ನು ತೆಗೆದುಕೊಳ್ಳುವುದರ ಮುಖಾಂತರ ಪುಸ್ತಕಕ್ಕೆ ಅಂಕಗಳನ್ನು ನೀಡಿ ಲ್ಯಾಬ್ ರೆಕಾರ್ಡ್ ನಂತೆ ವಿಭಾಗದಲ್ಲಿ ಸಂರಕ್ಷಿಸಿಡಬೇಕು.

ಭಾಗ – 3: ಗರಿಷ್ಠ 50 ಅಂಕಗಳಿಗೆ:

1. ಭಾಗ–1 ರಿಂದ ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ ಮೂರು ಕಿರುಪರೀಕ್ಷೆಗಳಿಂದ ಸರಾಸರಿ ಅಂಕಗಳ ಪರಿಗಣನೆ
2. ಭಾಗ–2 ರಿಂದ ಗರಿಷ್ಠ 20 ಅಂಕಗಳಿಗೆ ಮೂರು ಕಿರುಪರೀಕ್ಷೆಗಳಿಂದ ಸರಾಸರಿ ಅಂಕಗಳ ಪರಿಗಣನೆ
3. ಭಾಗ–1 ಮತ್ತು ಭಾಗ–2 ಅನ್ನು ಒಟ್ಟಿಗೆ ಸೇರಿಸುವುದರ ಮುಖಾಂತರ ಗರಿಷ್ಠ 50 ಅಂಕಗಳಿಗೆ ಅಖಇ – ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನವನ್ನು ಸೆಮಿಸ್ಟರ್ ಪ್ರಾರಂಭದಿಂದ ಅಂತ್ಯದವರೆಗೆ ನಡೆದ ಎಲ್ಲಾ ಪರೀಕ್ಷೆಗಳನ್ನು ಪರಿಗಣಿಸಿ ಸರಾಸರಿ ಅಂಕಗಳನ್ನು ಪರಿಗಣಿಸಬೇಕು.

ವಿಶೇಷ ಸೂಚನೆಗಳು :

1. ಎಲ್ಲಾ ಕಿರುಪರೀಕ್ಷೆಗಳನ್ನು ಪ್ರತ್ಯೇಕ ಬ್ಲೂಬುಕ್ ನಲ್ಲಿ ಬರೆಸಬೇಕು.
2. ಪ್ರತಿಯೊಂದು 30 ಅಥವಾ 20 ಅಂಕಗಳ ಕಿರುಪರೀಕ್ಷೆಯಲ್ಲಿ ಸಮನಾಂತರವಾಗಿ (10 + 10 + 10) ಅಥವಾ (08 + 08 + 08) ಮೂರು ಹಂತದ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಬೇಕು. 2 ಅಥವಾ 5 ಅಂಕಗಳ ಪ್ರಶ್ನೆಗಳು ಹಾಗೂ ವಿದ್ಯಾರ್ಥಿಗಳ ಸೃಜನಶೀಲತೆ ಮತ್ತು ಕ್ರಿಯಾಶಕ್ತಿಯನ್ನು ಪರೀಕ್ಷಿಸುವಂತಹ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಬೇಕು.
3. ಕಿರು ಪರೀಕ್ಷೆಗಳ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಗಳಲ್ಲಿ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಕಾರ್ಯ ಪುಸ್ತಕದ ಪ್ರತಿಯೊಂದು ಅಧ್ಯಾಯದ ಅಂತ್ಯದಲ್ಲಿ ನೀಡಿರುವ ಚಟುವಟಿಕೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಮರು ಬಳಸಿಕೊಳ್ಳಬಹುದು.
4. ಸಾಹಿತ್ಯ ಸಿಂಚನ ಭಾಗ–2 / ಬಳಕೆ ಕನ್ನಡ ಭಾಗ–2 ಕಾರ್ಯ ಪಠ್ಯಕ್ರಮದಲ್ಲಿನ ಎಲ್ಲಾ ಚಟುವಟಿಕೆಗಳನ್ನು ತರಗತಿ ಶಿಕ್ಷಕರು ಸರಾಸರಿ 20 ಅಂಕಗಳಿಗೆ ಮೌಲ್ಯಮಾಪನ ಮಾಡಿ ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕದಲ್ಲಿ (Portfolio Evaluation) 11ನೇ ವಾರಂತ್ಯಕ್ಕೆ CIE Assessment - 6 ಗೆ ಪರಿಗಣಿಸುವುದು.
5. ಈ ಅಧ್ಯಯನ ಪ್ರಮಾಣ ಪತ್ರದೊಂದಿಗೆ ಒಟ್ಟು ಅಂಕಗಳನ್ನು ನಮೂದಿಸುವ ಮುಖಾಂತರ ಕಾರ್ಯಪುಸ್ತಕವನ್ನು ಪ್ರಯೋಗಾಲಯದ ರೆಕಾರ್ಡ್ ಬುಕ್‌ನಂತೆ ವಿದ್ಯಾರ್ಥಿಗಳಿಂದ ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದಲ್ಲಿ ತೆಗೆದುಕೊಂಡು ಇಲಾಖಾ ತಪಾಸಣೆಗೆ ಸಿದ್ಧವಿಟ್ಟಿರಬೇಕು.

20 ಅಂಕಗಳ ಕಿರುಪರೀಕ್ಷೆಗೆ ವಿವರಣೆ

ಗರಿಷ್ಠ 20 ಅಂಕಗಳ ಪರೀಕ್ಷೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಅಂಕಗಳನ್ನು ನೀಡಲು ಸೆಮಿಸ್ಟರ್ ಪ್ರಾರಂಭದಿಂದ ಅಂತ್ಯದವರೆಗೂ ವಿದ್ಯಾರ್ಥಿಗಳು ಬಳಸಿದ **ಸಾಹಿತ್ಯ ಸಿಂಚನ ಭಾಗ–2 / ಬಳಕೆ ಕನ್ನಡ ಭಾಗ–2** ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕವನ್ನು ತರಗತಿಯ ಶಿಕ್ಷಕರು ಪ್ರತಿಯೊಂದು ಪಾಠವನ್ನು ದೃಢೀಕರಿಸುವುದು ಮತ್ತು ವಿಭಾಗಾಧಿಕಾರಿಗಳ ಮೇಲುಸಹಿಯನ್ನು ತೆಗೆದುಕೊಳ್ಳುವುದರ ಮುಖಾಂತರ ಪುಸ್ತಕಕ್ಕೆ ಅಂಕಗಳನ್ನು ನೀಡಿ ಲ್ಯಾಬ್ ರೆಕಾರ್ಡ್ ನಂತೆ ವಿಭಾಗದಲ್ಲಿ ಸಂರಕ್ಷಿಸಿಡಬೇಕು.

ಸಾಹಿತ್ಯ ಸಿಂಚನ ಭಾಗ – 2 / ಬಳಕೆ ಕನ್ನಡ ಭಾಗ – 2 ಈ ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕಗಳಲ್ಲಿಯೇ ಬಹುಆಯ್ಕೆ ಮಾದರಿಯ ಪ್ರಶ್ನೆಗಳು ಪ್ರತಿ ಪಾಠದ ಅಭ್ಯಾಸ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ಇರುತ್ತವೆ. ಮತ್ತು ಪ್ರತಿ ಪಾಠದ ಅಭ್ಯಾಸ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಯು ತೆರೆದ ಪುಸ್ತಕ ಮಾದರಿಯಲ್ಲಿ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಗಳನ್ನು ಬರೆಯಲು ಅವಕಾಶವಿರುತ್ತದೆ. ಮುಂದುವರೆದು ವಿದ್ಯಾರ್ಥಿಯ ಭಾಷೆಯ ಬಳಕೆ ಮತ್ತು ಸಂವಹನ ಕೌಶಲ್ಯದ ನಿರೂಪಣೆಗೆ ಪ್ರತಿ ಪಾಠದ ಅಭ್ಯಾಸ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ಅವಕಾಶವಿರುವುದರಿಂದ ಈ ಪುಸ್ತಕವನ್ನು ಲ್ಯಾಬ್ ರೆಕಾರ್ಡ್ ಬುಕ್ ನಂತೇ ವಿವಿಧ ರೀತಿಯ 20 ಅಂಕಗಳ ಮೂರು ಪರೀಕ್ಷೆಗಳಿಗೆ ಈ ಪುಸ್ತಕವನ್ನು ಕೇಂದ್ರೀಕರಿಸಿ ಪರಿಗಣಿಸುವುದು.

30 ಅಂಕಗಳ ಕಿರು ಪರೀಕ್ಷೆಯ ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ

ಭಾಗ – 1 : 10 ಅಂಕಗಳಿಗೆ ಒಂದು ಅಥವಾ ಎರಡು ಅಂಕಗಳ ಪ್ರಶ್ನೆಗಳು, ಬಹು ಆಯ್ಕೆ ಮಾದರಿಯ ಪ್ರಶ್ನೆಗಳು ಅಥವಾ ಬಿಟ್ಟಸ್ಥಳ ತುಂಬಿ ಮೊದಲಾದ ಪ್ರಶ್ನೆಗಳು

ಭಾಗ – 2 : 10 ಅಂಕಗಳಿಗೆ **ಎರೆಡು** ಅಂಕಗಳ **ಐದು** ಪ್ರಶ್ನೆಗಳು

ಭಾಗ – 3 : 10 ಅಂಕಗಳಿಗೆ **ಐದು ಅಂಕಗಳ ಎರೆಡು** ಪ್ರಶ್ನೆಗಳು

ಬಳಕೆ ಕನ್ನಡ – 2 ಪಠ್ಯಕ್ರಮಗಳಿಗೆ

ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದ ಮಾರ್ಗಸೂಚಿಗಳು

ಆಡಿಟ್ ಕೋರ್ಸ್ ಸಿ – 21 ಪ್ರತಿ ಸೆಮೆಸ್ಟರ್‌ನಲ್ಲಿ ಬೋಧನಾವಧಿ: **32** ಗಂಟೆಗಳು

ಗರಿಷ್ಠಾಂಕ : 50 ತೇರ್ಗಡೆ ಅಂಕ : 20

3ನೇ ಸೆಮಿಸ್ಟರ್ (1) ಸಾಹಿತ್ಯ ಸಿಂಚನ–2 (ಕನ್ನಡ ಬಲ್ಲ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ)

(2) ಬಳಕೆ ಕನ್ನಡ –2 (ಕನ್ನಡ ಬಾರದ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ)

ಕನ್ನಡ ಭಾಷಾ ವಿಷಯಗಳ ಮೌಲ್ಯಾಂಕನ ವಿಧಾನ

ಅಱಇ ಮೌಲ್ಯಾಂಕನ ವಿಧಾನ (ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನ ಪರೀಕ್ಷೆಗಳು ಮತ್ತು ನಿಯೋಜಿತ ಚಟುವಟಿಕೆಗಳು(ಅಸೈನ್‌ಮೆಂಟ್)

ಕ್ರ.ಸಂ.	ಮೌಲ್ಯಾಂಕನ	ವಿಧಾನ	ವೇಳಾಪಟ್ಟಿ	ಸಮಯ	ಗರಿಷ್ಠಾಂಕ	ಸರಾಸರಿ ಅಂಕ	ತೇರ್ಗಡೆಗೆ ಅಗತ್ಯವಾದ ಕನಿಷ್ಠ ಅಂಕ
1	CIE- ಮೌಲ್ಯಾಂಕನ–1	ಲಿಖಿತ ಪರೀಕ್ಷೆ–1	3ನೇ ವಾರಾಂತ್ಯ	80 ನಿಮಿಷಗಳು	30	30	20
2	CIE-ಮೌಲ್ಯಾಂಕನ–2	ಲಿಖಿತ ಪರೀಕ್ಷೆ–2	7ನೇ ವಾರಾಂತ್ಯ	80 ನಿಮಿಷಗಳು	30		
3	CIE ಮೌಲ್ಯಾಂಕನ–3	ಲಿಖಿತ ಪರೀಕ್ಷೆ–3	15ನೇ ವಾರಾಂತ್ಯ	80 ನಿಮಿಷಗಳು	30		
4	CIE ಮೌಲ್ಯಾಂಕನ–4	ಬಹು ಆಯ್ಕೆ ಪ್ರಶ್ನೆ(ಎಂಸಿಕ್ಯೂ)	5ನೇ ವಾರಾಂತ್ಯ	60 ನಿಮಿಷಗಳು	20	20	
5	CIE ಮೌಲ್ಯಾಂಕನ–5	(ತೆರೆದ ಪುಸ್ತಕ)ಒಪನ್ ಬುಕ್ ಪರೀಕ್ಷೆ	9ನೇ ವಾರಾಂತ್ಯ	60 ನಿಮಿಷಗಳು	20		
6	CIE ಮೌಲ್ಯಾಂಕನ–6	ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕದ ಸಲ್ಲಿಕೆ	16ನೇ ವಾರಾಂತ್ಯ	–	20		
ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಾಂಕನಗಳ ಒಟ್ಟು ಅಂಕ						50	20
7	ಸೆಮೆಸ್ಟರ್ ಅಂತ್ಯದ ಪರೀಕ್ಷೆ	ಇಲ್ಲ	-------	----------	------	------	------
ಒಟ್ಟು ಅಂಕಗಳು						50	20

ತೃತೀಯ ಸೆಮಿಸ್ಟರ್

ಜೆಎಸ್ಎಸ್ ಮಹಾವಿದ್ಯಾಪೀಠ
ಜೆಎಸ್ಎಸ್ ವಿಶೇಷಚೇತನರ ಪಾಲಿಟೆಕ್ನಿಕ್ ಮೈಸೂರು
ಕನ್ನಡ ಬಾರದ / ಕನ್ನಡೇತರ ಡಿಪ್ಲೋಮಾ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ನಿಗದಿಪಡಿಸಿದ ಪಠ್ಯಪುಸ್ತಕ

Course Code	**21NK3T**	Semester : III	**Course Group – AU**
Course Title	**Balake Kannada – 2**	Category : Audit	**Lecture Course**
No. of Credits	**2**	Type of Course	**CIE Marks : 50**
Total Contact Hours	**02 Hrs Per Week** **32 Hrs Per Semester**	Teaching Scheme (L:T:P) = 2:0:0	**SEE Marks : Nil**

ಬಳಕೆ ಕನ್ನಡ – 2 (ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕ) KA – 21NK3T

ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕದ ಪರಿವಿಡಿ	**Teachiung Hours 32 Hours**
General Introduction of the Course with Activities	**02 Hours**
Lesson – 1 : Personal Pronouns, Possessive Forms, Interrogative words Permission, Commands, encouraging and Urging words (Imperative words and sentences) Comparitive, Relationship, Identification and Negation Words –	**06 Hours**
Lesson – 2 : Different types of Tense (Use and Usage of Tense in Kannada) Kannada Helping Verbs in Conversation (Use and Usage of Verbs)	**06 Hours**
Lesson – 3 : Formation of Past, Future and Present Tense Sentences with Changing Verb Forms	**06 Hours**
Lesson – 4 : Karnataka State and General Information about the State Kannada Language and Literature Do's and Don'ts in Learning a Language.	**06 ಗಂಟೆ**
Lesson – 5 : Karnataka Darshana : Concepts of Kannada, Kannadiga and Karnataka, Karnataka art and culture, Important Places of tourism, Famous personalities of Karnataka, Religious culture of Karnataka (Famous Mata's).	**06 ಗಂಟೆ**
Total Teaching Hours	**32 Hours**

ಬಳಕೆ ಕನ್ನಡ – 2 (ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕ) KA – 21NK3T

ಈ ಕಾರ್ಯಪಠ್ಯಪುಸ್ತಕದ ಬೋಧನೆ ಮತ್ತು ಅಳವಡಿಕೆಗೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಶಿಕ್ಷಕರು ಮತ್ತು ವಿದ್ಯಾರ್ಥಿಗಳು ಕಡ್ಡಾಯವಾಗಿ ಪಾಲಿಸಬೇಕಾದ ಸೂಚನೆಗಳು :

1. ಈ ಪಠ್ಯಪುಸ್ತಕವು ಪ್ರಧಾನವಾಗಿ ಕಾರ್ಯ ಪುಸ್ತಕವಾಗಿ ರೂಪಿಸಲ್ಪಟ್ಟಿದೆ ಆದುದರಿಂದ ಶಿಕ್ಷಕರು ಕನ್ನಡ ಸಾಹಿತ್ಯ ಮತ್ತು ಪರಂಪರೆ ಹಾಗೂ ಇತಿಹಾಸ ಈ ಮೊದಲಾದ ಎಲ್ಲ ವಿಷಯಗಳ ಬೋಧನೆಯನ್ನು ಚಟುವಟಿಕೆಗಳ ಆಧಾರದ ಮೇಲೆ ಮತ್ತು ಪರಂಪರೆ ಹಾಗೂ ಇತಿಹಾಸ ಈ ಮೊದಲಾದ ಎಲ್ಲ ವಿಷಯಗಳ ಬೋಧನೆಯನ್ನು ಚಟುವಟಿಕೆಗಳ ಆಧಾರದ ಮೇಲೆ ಮತ್ತು ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಸಂಭಾಷಣೆಗೆ ಮತ್ತು ಚರ್ಚೆಗೆ ಒಳಪಡಿಸುವುದರ ಮುಖಾಂತರ ಬೋಧಿಸಬೇಕು.

2. ಪ್ರತಿಯೊಬ್ಬ ವಿದ್ಯಾರ್ಥಿಯು **ಪೂರ್ಣ ಪ್ರಮಾಣದ (ಬೈಂಡಿಂಗ್ ಮಾಡಿಸಿದ) ಈ ಕಾರ್ಯಪಸ್ತಕವನ್ನು ಬೋಧನೆಯ ಸಮಯದಲ್ಲಿ ತರಗತಿಯಲ್ಲಿ ಕಡ್ಡಾಯವಾಗಿ ಇಟ್ಟುಕೊಂಡಿರಬೇಕು. ಪ್ರತಿ ಪಾಠದ ನಂತರದ ಚಟುವಟಿಕೆಗಳು ಮತ್ತು ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಗಳನ್ನು ತಪ್ಪದೆ ಹಾಲಿ ಬಿಟ್ಟಿರುವ ಜಾಗದಲ್ಲಿ ಬರೆದು ತರಗತಿ ಶಿಕ್ಷಕರಿಂದ ಮೌಲ್ಯಮಾಪನವನ್ನು ಮಾಡಿಸಿಕೊಳ್ಳಬೇಕು.**

3. ಕಾಲೇಜು ಹಂತದ ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನ ಪರೀಕ್ಷಾ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಈ ವಿಷಯದ ಮೌಲ್ಯಮಾಪನಕ್ಕೆ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿರುತ್ತದೆ. **ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದ ಪರೀಕ್ಷೆ ಇರುವುದಿಲ್ಲ.**

4. ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನ ಪರೀಕ್ಷಾ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಅಳವಡಿಸಿಕೊಂಡಿರುವುದರಿಂದ. ಬೋಧನೆಯನ್ನು ಶಿಕ್ಷಕರು. ಚಟುವಟಿಕೆಗಳ ಆಧಾರದ ಮೇಲೆ ಮತ್ತು ಕಾರ್ಯ ಪುಸ್ತಕದಲ್ಲಿ ನೀಡಿರುವ ಪ್ರತಿ ಪಾಠ ಮತ್ತು ವಿಷಯಗಳ ಬೋಧನೆಯ ನಂತರ ವಿದ್ಯಾರ್ಥಿಗಳ ಕಲಿಕೆಯನ್ನು ಮತ್ತು ಮೌಲ್ಯಮಾಪನವನ್ನು ಕಡ್ಡಾಯವಾಗಿ ಮಾಡಬೇಕು.

5. **ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯ ಬೋಧನೆಯ** ಈ ಕಾರ್ಯ ಪುಸ್ತಕವನ್ನು ಪ್ರಯೋಗಾಲಯದ ಕಾರ್ಯ ಪುಸ್ತಕದಂತೆ (ಲ್ಯಾಬ್ ರೆಕಾರ್ಡ್ ನಂತೆ) ಬಳಸಬೇಕು. ಬೋಧನೆಯ ನಂತರ ಪ್ರತಿಯೊಂದು ಪಾಠದ ಚಟುವಟಿಕೆಗಳು ಮತ್ತು ವಿದ್ಯಾರ್ಥಿ ಬರೆದ ಉತ್ತರಗಳನ್ನು ತರಗತಿಯ ಕನ್ನಡ ಶಿಕ್ಷಕರು ಕಡ್ಡಾಯವಾಗಿ ಮೌಲ್ಯಮಾಪನವನ್ನು ಮಾಡುವುದರ ಮುಖಾಂತರ ದೃಢೀಕರಿಸಬೇಕು.

6. **ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದ ನಂತರ ಈ ಕಾರ್ಯ ಪುಸ್ತಕವನ್ನು ಕಡ್ಡಾಯವಾಗಿ ಅಧ್ಯಯನ ದೃಢೀಕರಣ ಪತ್ರದ ಸಮೇತ ಕಾಲೇಜಿನ ಪ್ರಾಂಶುಪಾಲರು / ವಿಭಾಗಾಧಿಕಾರಿಗಳ ಮೇಲು ಸಹಿಯೊಂದಿಗೆ ಇಲಾಖೆಯ ಪರಿಶೀಲನೆಗೆ ಸಿದ್ಧವಾಗಿಸಿ ಇಟ್ಟಿರಬೇಕು.**

7. ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಬಲ್ಲ ಅಂದರೆ ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಓದಲು, ಬರೆಯಲು ಮತ್ತು ಮಾತನಾಡಲು ಹಾಗೂ ಕನ್ನಡ ಭಾಷೆಯನ್ನು ಒಂದು ವಿಷಯವನ್ನಾಗಿ 10ನೇ ತರಗತಿಯಲ್ಲಿ ಅಧ್ಯಯನ ಮಾಡಿರುವ ಎಲ್ಲ ವಿದ್ಯಾರ್ಥಿಗಳು **ಬಳಕೆ ಕನ್ನಡ – 2''**. ಈ ಕಾರ್ಯಪುಸ್ತಕವನ್ನು ಅಧ್ಯಯನ ಮಾಡಲು ಅರ್ಹರಾಗಿರುತ್ತಾರೆ.

8. ಈ ಮೇಲೆ ತಿಳಿಸಿದ ಎಲ್ಲಾ ಸೂಚನೆಗಳನ್ನು ಕಡ್ಡಾಯವಾಗಿ ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ಸಾಹಿತ್ಯದ ಅಧ್ಯಯನಕ್ಕೆಂದು ರೂಪಿತವಾಗಿರುವ **ಬಳಕೆ ಕನ್ನಡ – 2''**. ಈ ಕಾರ್ಯ ಪುಸ್ತಕದ ಬೋಧನೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳುವುದು.

9, ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದ ಪರೀಕ್ಷಾ ವಿಧಾನಕ್ಕೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಹೆಚ್ಚಿನ ಮಾಹಿತಿಗಾಗಿ ಇಲಾಖೆಯ ಈಗಾಗಲೇ ತನ್ನ ವೆಬ್‌ಸೈಟ್‌ನಲ್ಲಿ ಪ್ರಕಟಿಸಿರುವ ಅ – 20 ಪಠ್ಯಕ್ರಮದ ಪ್ರತಿಯನ್ನು ಗಮನಿಸುವುದು.

ಬಳಕೆ ಕನ್ನಡ – 2 :

ಕಿರು ಪರೀಕ್ಷೆಗಳನ್ನು ಮತ್ತು CIE – ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದಲ್ಲಿ ಕಡ್ಡಾಯವಾಗಿ ಅಳವಡಿಸಿಕೊಳ್ಳಬೇಕಾದ ಮಾನದಂಡಗಳು ಮತ್ತು ಇಲಾಖೆಯ ಸೂಚನೆಗಳು:

ಭಾಗ – 1: ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ 03 ಕಿರುಪರೀಕ್ಷೆಗಳನ್ನು ನಡೆಸಬೇಕು:

1. 3ನೇ ವಾರದ ಅಂತ್ಯದಲ್ಲಿ ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ ಮೊದಲ ಕಿರುಪರೀಕ್ಷೆ
2. 7ನೇ ವಾರದ ಅಂತ್ಯದಲ್ಲಿ ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ ಎರಡನೆ ಕಿರುಪರೀಕ್ಷೆ
3. 15ನೇ ವಾರದ ಅಂತ್ಯದಲ್ಲಿ ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ ಮೂರನೇ ಕಿರುಪರೀಕ್ಷೆ

ಭಾಗ – 2: ಗರಿಷ್ಠ 20 ಅಂಕಗಳಿಗೆ 03 ವಿಭಿನ್ನರೀತಿಯ ಆಂತರಿಕ ಪರೀಕ್ಷೆಗಳನ್ನು ನಡೆಸಬೇಕು:

1. **ಭಾಗ 2 ರ ಗರಿಷ್ಠ 20 ಅಂಕಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಬಳಕೆ ಕನ್ನಡ – 2 ಕ್ಕೆ** ಸಂಬಂಧಿಸಿದ ಪ್ರಶ್ನೆಗಳು ಹೆಜ್ಜಾಗಿ ಚಟುವಟಿಕೆಯ ಮಾದರಿಯಲ್ಲಿ ಇರುವದರಿಂದ 5ನೇ, 9ನೇ ಮತ್ತು 11ನೇ ವಾರದ ಮೂರೂ ಪರಿಕ್ಷೆಗಳಿಗೆ ಕಾರ್ಯಪಠ್ಯವನ್ನು ಆಧಾರವಾಗಿ ಪರಿಗಣಿಸುವುದು ಮತ್ತು ಈ ಪುಸ್ತಕವನ್ನು ವಿಭಾಗಾಧಿಕಾರಿಗಳ ಮೇಲುಸಹಿಯನ್ನು ತೆಗೆದುಕೊಳ್ಳುವುದರ ಮುಖಾಂತರ ಪುಸ್ತಕಕ್ಕೆ ಅಂಕಗಳನ್ನು ನೀಡಿ ಲ್ಯಾಬ್ ರೆಕಾರ್ಡ್ ನಂತೆ ವಿಭಾಗದಲ್ಲಿ ಸಂರಕ್ಷಿಸಿಡಬೇಕು.

ಭಾಗ – 3: ಗರಿಷ್ಠ 50 ಅಂಕಗಳಿಗೆ:

1. ಭಾಗ–1 ರಿಂದ ಗರಿಷ್ಠ 30 ಅಂಕಗಳಿಗೆ ಮೂರು ಕಿರುಪರೀಕ್ಷೆಗಳಿಂದ ಸರಾಸರಿ ಅಂಕಗಳ ಪರಿಗಣನೆ
2. ಭಾಗ–2 ರಿಂದ ಗರಿಷ್ಠ 20 ಅಂಕಗಳಿಗೆ ಮೂರು ಕಿರುಪರೀಕ್ಷೆಗಳಿಂದ ಸರಾಸರಿ ಅಂಕಗಳ ಪರಿಗಣನೆ
3. ಭಾಗ–1 ಮತ್ತು ಭಾಗ–2 ಅನ್ನು ಒಟ್ಟಿಗೆ ಸೇರಿಸುವುದರ ಮುಖಾಂತರ ಗರಿಷ್ಠ 50 ಅಂಕಗಳಿಗೆ CIE – ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನವನ್ನು ಸೆಮಿಸ್ಟರ್ ಪ್ರಾರಂಭದಿಂದ ಅಂತ್ಯದವರೆಗೆ ನಡೆದ ಎಲ್ಲಾ ಪರೀಕ್ಷೆಗಳನ್ನು ಪರಿಗಣಿಸಿ ಸರಾಸರಿ ಅಂಕಗಳನ್ನು ಪರಿಗಣಿಸಬೇಕು.

ವಿಶೇಷ ಸೂಚನೆಗಳು :

1. ಎಲ್ಲಾ ಕಿರುಪರೀಕ್ಷೆಗಳನ್ನು ಪ್ರತ್ಯೇಕ ಬ್ಲೂಬುಕ್ ನಲ್ಲಿ ಬರೆಸಬೇಕು.
2. ಪ್ರತಿಯೊಂದು 30 ಅಥವಾ 20 ಅಂಕಗಳ ಕಿರುಪರೀಕ್ಷೆಯಲ್ಲಿ ಸಮನಾಂತರವಾಗಿ (10 + 10 + 10) ಅಥವಾ (08 + 08 + 08) ಮೂರು ಹಂತದ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಬೇಕು. 2 ಅಥವಾ 5 ಅಂಕಗಳ ಪ್ರಶ್ನೆಗಳು ಹಾಗೂ ವಿದ್ಯಾರ್ಥಿಗಳ ಸೃಜನಶೀಲತೆ ಮತ್ತು ಕ್ರಿಯಾಶಕ್ತಿಯನ್ನು ಪರೀಕ್ಷಿಸುವಂತಹ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಬೇಕು.
3. ಕಿರು ಪರೀಕ್ಷೆಗಳ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆಗಳಲ್ಲಿ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಕಾರ್ಯ ಪುಸ್ತಕದ ಪ್ರತಿಯೊಂದು ಅಧ್ಯಾಯದ ಅಂತ್ಯದಲ್ಲಿ ನೀಡಿರುವ ಚಟುವಟಿಕೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಮರು ಬಳಸಿಕೊಳ್ಳಬಹುದು.
4. **ಬಳಕೆ ಕನ್ನಡ ಭಾಗ–2** ಕಾರ್ಯ ಪಠ್ಯಕ್ರಮದಲ್ಲಿನ ಎಲ್ಲಾ ಚಟುವಟಿಕೆಗಳನ್ನು ತರಗತಿ ಶಿಕ್ಷಕರು ಸರಾಸರಿ 20 ಅಂಕಗಳಿಗೆ ಮೌಲ್ಯಮಾಪನ ಮಾಡಿ ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕದಲ್ಲಿ (Portfolio Evaluation) 11ನೇ ವಾರಂತ್ಯಕ್ಕೆ CIE Assessment - 6 ಗೆ ಪರಿಗಣಿಸುವುದು.
5. ಈ ಅಧ್ಯಯನ ಪ್ರಮಾಣ ಪತ್ರದೊಂದಿಗೆ ಒಟ್ಟು ಅಂಕಗಳನ್ನು ನಮೂದಿಸುವ ಮುಖಾಂತರ ಕಾರ್ಯಪುಸ್ತಕವನ್ನು ಪ್ರಯೋಗಾಲಯದ ರೆಕಾರ್ಡ್ ಬುಕ್‌ನಂತೆ ವಿದ್ಯಾರ್ಥಿಗಳಿಂದ ಸೆಮಿಸ್ಟರ್ ಅಂತ್ಯದಲ್ಲಿ ತೆಗೆದುಕೊಂಡು ಇಲಾಖಾ ತಪಾಸಣೆಗೆ ಸಿದ್ಧವಿಟ್ಟಿರಬೇಕು.

20 ಅಂಕಗಳ ಕಿರುಪರೀಕ್ಷೆಗೆ ವಿವರಣೆ

ಗರಿಷ್ಠ 20 ಅಂಕಗಳ ಪರೀಕ್ಷೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಅಂಕಗಳನ್ನು ನೀಡಲು ಸೆಮಿಸ್ಟರ್ ಪ್ರಾರಂಭದಿಂದ ಅಂತ್ಯದವರೆಗೂ ವಿದ್ಯಾರ್ಥಿಗಳು ಬಳಸಿದ **ಬಳಕೆ ಕನ್ನಡ ಭಾಗ–2** ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕವನ್ನು ತರಗತಿಯ ಶಿಕ್ಷಕರು ಪ್ರತಿಯೊಂದು ಪಾಠವನ್ನು ದೃಢೀಕರಿಸುವುದು ಮತ್ತು ವಿಭಾಗಾಧಿಕಾರಿಗಳ ಮೇಲುಸಹಿಯನ್ನು ತೆಗೆದುಕೊಳ್ಳುವುದರ ಮುಖಾಂತರ ಪುಸ್ತಕಕ್ಕೆ ಅಂಕಗಳನ್ನು ನೀಡಿ ಲ್ಯಾಬ್ ರೆಕಾರ್ಡ್ ನಂತೆ ವಿಭಾಗದಲ್ಲಿ ಸಂರಕ್ಷಿಸಿಡಬೇಕು.

ಬಳಕೆ ಕನ್ನಡ ಭಾಗ – 2 ಈ ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕಗಳಲ್ಲಿಯೇ ಬಹುಆಯ್ಕೆ ಮಾದರಿಯ ಪ್ರಶ್ನೆಗಳು ಪ್ರತಿ ಪಾಠದ ಅಭ್ಯಾಸ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ಇರುತ್ತವೆ. ಮತ್ತು ಪ್ರತಿ ಪಾಠದ ಅಭ್ಯಾಸ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಯು ತೆರೆದ ಪುಸ್ತಕ ಮಾದರಿಯಲ್ಲಿ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಗಳನ್ನು ಬರೆಯಲು ಅವಕಾಶವಿರುತ್ತದೆ. ಮುಂದುವರೆದು ವಿದ್ಯಾರ್ಥಿಯ ಭಾಷೆಯ ಬಳಕೆ ಮತ್ತು ಸಂವಹನ ಕೌಶಲ್ಯದ ನಿರೂಪಣೆಗೆ ಪ್ರತಿ ಪಾಠದ ಅಭ್ಯಾಸ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ಅವಕಾಶವಿರುವುದರಿಂದ ಈ ಪುಸ್ತಕವನ್ನು ಲ್ಯಾಬ್ ರೆಕಾರ್ಡ್ ಬುಕ್ ನಂತೇ ವಿವಿಧ ರೀತಿಯ 20 ಅಂಕಗಳ ಮೂರು ಪರೀಕ್ಷೆಗಳಿಗೆ ಈ ಪುಸ್ತಕವನ್ನು ಕೇಂದ್ರವಾಗಿ ಪರಿಗಣಿಸುವುದು.

30 ಅಂಕಗಳ ಕಿರು ಪರೀಕ್ಷೆಯ ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ

ಭಾಗ – 1 : 10 ಅಂಕಗಳಿಗೆ ಒಂದು ಅಥವಾ ಎರಡು ಅಂಕಗಳ ಪ್ರಶ್ನೆಗಳು, ಬಹು ಆಯ್ಕೆ ಮಾದರಿಯ ಪ್ರಶ್ನೆಗಳು ಅಥವಾ ಬಿಟ್ಟಸ್ಥಳ ತುಂಬಿ ಮೊದಲಾದ ಪ್ರಶ್ನೆಗಳು

ಭಾಗ – 2 : 10 ಅಂಕಗಳಿಗೆ **ಎರೆಡು** ಅಂಕಗಳ **ಐದು** ಪ್ರಶ್ನೆಗಳು

ಭಾಗ – 3 : 10 ಅಂಕಗಳಿಗೆ **ಐದು ಅಂಕಗಳ ಎರೆಡು** ಪ್ರಶ್ನೆಗಳು

ಬಳಕೆ ಕನ್ನಡ – 2 ಪಠ್ಯಕ್ರಮಗಳಿಗೆ
ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನದ ಮಾರ್ಗಸೂಚಿಗಳು

ಆಡಿಟ್ ಕೋರ್ಸ್ ಸಿ – 21 ಪ್ರತಿ ಸೆಮೆಸ್ಟರ್‌ನಲ್ಲಿ ಬೋಧನಾವಧಿ: **32** ಗಂಟೆಗಳು

ಗರಿಷ್ಠಾಂಕ : 50 ತೇರ್ಗಡೆ ಅಂಕ : 20

3ನೇ ಸೆಮಿಸ್ಟರ್ (1) ಸಾಹಿತ್ಯ ಸಿಂಚನ–2 (ಕನ್ನಡ ಬಲ್ಲ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ)

(2) ಬಳಕೆ ಕನ್ನಡ –2 (ಕನ್ನಡ ಬಾರದ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ)

ಕನ್ನಡ ಭಾಷಾ ವಿಷಯಗಳ ಮೌಲ್ಯಾಂಕನ ವಿಧಾನ

ಅಜಿ ಮೌಲ್ಯಾಂಕನ ವಿಧಾನ (ಆಂತರಿಕ ಮೌಲ್ಯಮಾಪನ ಪರೀಕ್ಷೆಗಳು ಮತ್ತು ನಿಯೋಜಿತ ಚಟುವಟಿಕೆಗಳು(ಅಸೈನ್‌ಮೆಂಟ್)

ಕ್ರ.ಸಂ.	ಮೌಲ್ಯಾಂಕನ	ವಿಧಾನ	ವೇಳಾಪಟ್ಟಿ	ಸಮಯ	ಗರಿಷ್ಠಾಂಕ	ಸರಾಸರಿ ಅಂಕ	ತೇರ್ಗಡೆಗೆ ಅಗತ್ಯವಾದ ಕನಿಷ್ಠ ಅಂಕ
1	CIE-ಮೌಲ್ಯಾಂಕನ–1	ಲಿಖಿತ ಪರೀಕ್ಷೆ–1	3ನೇ ವಾರಾಂತ್ಯ	80 ನಿಮಿಷಗಳು	30	30	20
2	CIE-ಮೌಲ್ಯಾಂಕನ–2	ಲಿಖಿತ ಪರೀಕ್ಷೆ–2	7ನೇ ವಾರಾಂತ್ಯ	80 ನಿಮಿಷಗಳು	30		
3	CIE ಮೌಲ್ಯಾಂಕನ–3	ಲಿಖಿತ ಪರೀಕ್ಷೆ–3	15ನೇ ವಾರಾಂತ್ಯ	80 ನಿಮಿಷಗಳು	30		
4	CIE ಮೌಲ್ಯಾಂಕನ–4	ಬಹು ಆಯ್ಕೆ ಪ್ರಶ್ನೆ(ಎಂಸಿಕ್ಯೂ)	5ನೇ ವಾರಾಂತ್ಯ	60 ನಿಮಿಷಗಳು	20	20	
5	CIE ಮೌಲ್ಯಾಂಕನ–5	(ತೆರೆದ ಪುಸ್ತಕ)ಒಪನ್ ಬುಕ್ ಪರೀಕ್ಷೆ	9ನೇ ವಾರಾಂತ್ಯ	60 ನಿಮಿಷಗಳು	20		
6	CIE ಮೌಲ್ಯಾಂಕನ–6	ಕಾರ್ಯ ಪಠ್ಯಪುಸ್ತಕದ ಸಲ್ಲಿಕೆ	16ನೇ ವಾರಾಂತ್ಯ	–	20		
ನಿರಂತರ ಆಂತರಿಕ ಮೌಲ್ಯಾಂಕನಗಳ ಒಟ್ಟು ಅಂಕ						50	
7	ಸೆಮೆಸ್ಟರ್ ಅಂತ್ಯದ ಪರೀಕ್ಷೆ	ಇಲ್ಲ	-------	---=----	------	------	------
ಒಟ್ಟು ಅಂಕಗಳು						50	20