



Government of Karnataka

# Information and Communication Technology (ICT) Workbook

10<sup>th</sup>

Standard

Level-V



FREE SUPPLY



**Karnataka Residential Educational Institutions Society**  
No-8, M.S.B-1, 6th and 7th Floor, Cunningham Road,  
Bengaluru - 560052

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# ರಾಷ್ಟ್ರಗೀತೆ

ಜನಗಣ ಮನ ಅಧಿನಾಯಕ ಜಯ ಹೇ |  
ಭಾರತ ಭಾಗ್ಯ ವಿಧಾತಾ ||  
ಪಂಜಾಬ ಸಿಂಧು ಗುಜರಾತ ಮರಾಠಾ |  
ದ್ರಾವಿಡ ಉತ್ಕಲ ವಂಗಾ ||  
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ಭಾರತ ಭಾಗ್ಯ ವಿಧಾತಾ |  
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– ರವೀಂದ್ರನಾಥ ಠಾಗೂರ್

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GOVERNMENT OF KARNATAKA



# INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

*Workbook*

10

TENTH STANDARD

LEVEL V

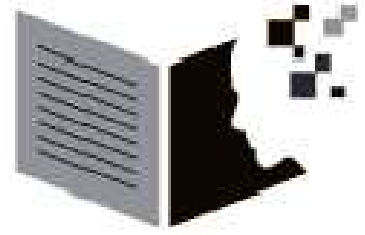
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Chapter **2**

# Advanced on Word Processor and Spreadsheet

## Worksheets



**I. Answer the following questions in one or two sentences each:**

1. What is Mail Merge?

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2. Write the steps to insert a comment.

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3. What is Macros?

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4. Why we use Vlookup function in spreadsheet?

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**II. Answer the following questions in three or four sentences each:**

1. Write the steps for choosing the type of mail merge.

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2. Write the steps to record a Macro.

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3. Write the syntax and arguments of Vlookup function.

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1. Invite your friends to your school’s annual day using mail merge.
2. Generate identity cards for all students in your class using mail merge.
3. **Group Activity:** Make five groups and generate admission tickets of annual examination for all students in each class using mail merge.
4. Create a shortcut keys using Marcos.
5. Create a list of elements with atomic numbers in a spreadsheet and fetch the element using vlookup function for a given atomic number.



## Introduction to programming

## Worksheets

**I. Fill up the blanks with suitable words:**

1. A computer understands only the binary digits \_\_\_\_\_ and \_\_\_\_\_.
2. \_\_\_\_\_ Language is the fundamental language of a computer.
3. Assembly Level Language uses the letters, words and symbols called \_\_\_\_\_.
4. The tool that performs the translation is called \_\_\_\_\_.
5. A compiler translates a program written in \_\_\_\_\_ into \_\_\_\_\_ language.

**II. Match the following:**

- |                           |                            |       |
|---------------------------|----------------------------|-------|
| 1. Program                | Programming Language       | _____ |
| 2. Assembler              | Only 0`s and 1`s           | _____ |
| 3. Machine Level Language | Set of Instructions        | _____ |
| 4. C                      | Language Translator        | _____ |
| 5. Short Code             | First programming language | _____ |

**III. Answer the following questions in one or two sentences each:**

1. Define Programming language.

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2. List the types of Programming languages.

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3. What is Machine Code?

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4. Give examples for High-Level Language.

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5. Define Translators.

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6. Classify the types of Translators.

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7. Define Assembler.

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**IV. Answer the following questions in three or four sentences each:**

1. Explain Machine Level Language.

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2. Compare compiler and interpreter.

Compiler	Interpreter



1. Collect the information about latest programming languages.
2. Play a game like translators between three or more persons.



# Problem Solving Methodology


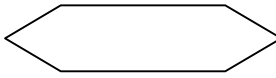
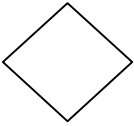


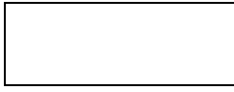
## Worksheets



### I. Fill up the blanks with suitable words:

1. The word algorithm is derived from the name of a Arab Mathematician called \_\_\_\_\_.
2. An Algorithm is a \_\_\_\_\_ procedure to solve a given problem.
3. The diagrammatic representation flow of algorithm is called \_\_\_\_\_.
4. \_\_\_\_\_ is the process of translating the algorithm or flowchart into program.
5. The process of finding and correcting errors in a program is called \_\_\_\_\_.

### II. Write the meaning of following symbols used in Flow Charts:

Symbols	Meaning	Symbols	Meaning
	Begin or End		
			
			

**III. Answer the following questions in one or two sentences each:**

1. Define Algorithm.

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2. What is Flowchart?

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3. Name the two types of Flowchart.

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4. What is testing?

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5. What is documentation?

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**IV. Answer the following questions in three or four sentences each:**

1. List the steps in problem solving process.

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2. What are the advantages and disadvantages of Algorithm?

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3. List the purpose of Flowchart.

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4. What is Debugging? Name the types of Errors.

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5. Write the algorithm for smaller of two number.

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6. Draw a Flowchart for the average of 4 numbers.





1. **Group Activity!!** Discuss and write the steps for school tour planning.
2. Collect the real time examples for the documentation and maintenance.
3. Discuss steps involved in daily life activities liking making Tea.
4. Game!! Blindfold one child and ask other children to give careful instructions to reach a particular object.



Chapter  
**5****Introduction to C  
Programming****Worksheets****I. Fill up the blanks with suitable words:**

1. C programming language was developed by \_\_\_\_\_.
2. BCPL stands for \_\_\_\_\_.
3. C language is \_\_\_\_\_ level language.
4. Pre-processors directives begin with \_\_\_\_\_ symbol.
5. Programmer uses \_\_\_\_\_ to write a program.

**II. Match the following:**

- |           |                         |       |
|-----------|-------------------------|-------|
| 1. COBOL  | Artificial Intelligence | _____ |
| 2. FORTAN | General Purpose         | _____ |
| 3. LISP   | Scientific program      | _____ |
| 4. C      | Business purpose        | _____ |

**III. Answer the following questions in one or two sentences each:**

1. What is C program?

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2. Write any two applications of C program.

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3. Define statements.

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4. Which symbol is used as statement terminator in C program?

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**IV. Answer the following questions in three or four sentences each:**

1. List the characteristics of C programming language.

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2. Write the basic structure of C program.

3. What is Character set? List the types of Character set.

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4. What are the steps for compiling and executing a C program?

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1. Learn how to open the Turbo C for writing C program.
2. Open an existing C Program and execute it and observe the output.
3. Prepare a Chart which shows the Basic structure of C program.
4. Collect the information about **Dennis Ritchie**.



Chapter



# C Tokens

## Worksheets



### I. Fill up the blanks with suitable words:

1. Pre defined words in C compiler is called \_\_\_\_\_.
2. “\n” is used for \_\_\_\_\_.
3. The quality whose values we can change during program execution is called \_\_\_\_\_.
4. \_\_\_\_\_ indicates the type of data.
5. \_\_\_\_\_ Operator is used for modulo division.
6. A=10, A++ = \_\_\_\_\_.
7. Conditional operator is also called as \_\_\_\_\_.
8. \_\_\_\_\_ Operator is used for finding the size of data type.
9. Operator which operates on only one operand is called \_\_\_\_\_.

### II. Match the following:

Operators	Meaning	
1. --	Bitwise OR	_____
2. &&	Assignment	_____
3. ==	Conditional	_____
4.	Decrement	_____
5. ?:	Logical AND	_____



**III. Answer the following questions in one or two sentences each:**

1. Classify the types of Constants.

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2. Define Variable.

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3. Write the syntax for declaring a variable.

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4. List the Data types.

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5. What is Operator?

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6. Write the syntax for conditional operator.

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7. Define Binary Operator? Give example.

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**IV. Answer the following questions in three or four sentences each:**

1. What do you mean by C Tokens? Write the types of C Tokens.

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2. Write the 6 reserved Keywords in C.

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3. Explain the scanf( ) and print( ) function.

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4. List the different types of Operator in C.

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5. What is Relational Operator? List some of relational operator.

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6. Difference between = and == operator.

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1. Write a program for the following:
  - a. To subtract two given numbers.
  - b. To perform all arithmetic operations.
  - c. To swap two numbers without using the third variable.  
( Hint!!!  $a=a+b$ ;  $b=a-b$ ;  $a=a-b$ ; )
  - d. To convert Celsius to Kelvin.  
(Hint!!! Kelvin = Celsius + 273)
  - e. To find the area of a circle.  
(Hint!!!  $A = \pi r^2$  , where  $\pi= 22.7$ )



Chapter



# Control Statements

## Worksheets



### I. Fill up the blanks with suitable words:

- Control statements are statements that alter the sequence of \_\_\_\_\_.
- A group of statements is executed repeatedly is called \_\_\_\_\_.
- do-while loop is also called as \_\_\_\_\_.
- In a loop it consists of two parts, \_\_\_\_\_ & \_\_\_\_\_.

### II. Match the following:

- |                      |   |                   |       |
|----------------------|---|-------------------|-------|
| 1. if-else statement | : | pre-tested loop   | _____ |
| 2. while loop        | : | post-tested loop  | _____ |
| 3. if statement      | : | two-way branching | _____ |
| 4. do-while          | : | one-way branching | _____ |

### III. Answer the following questions in one or two sentences each:

- What is if statement?

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- List the types of loops.

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3. Draw the flow chart for if-else statement.

4. Write the syntax for while loop.

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**IV. Answer the following questions in three or four sentences each:**

1. Write the syntax for if-else statement.

2. Why while loop is also called as entry control loop.

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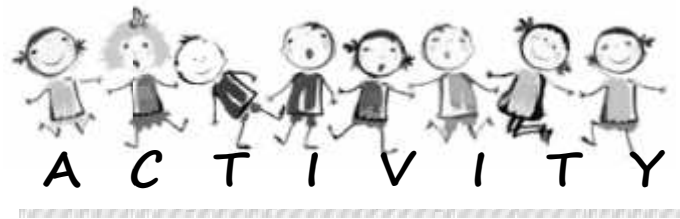
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3. Write the syntax of “for” statement. Give an example.



4. Differentiate between a while loop and do-while loop.

1. Write a program for the following:


- a. To find the largest of two numbers.
- b. To find the sum of digits in a given number using a while loop.  
(Hint!!! For 1234 Input  $1+2+3+4 = 10$ )
- c. To display all even from 1 to 50 using do-while loop
- d. To display the multiplication table of a given number using for Loop.



(Hint!!! For  $n = 2$   $2 * 1 = 2$   
 $2 * 2 = 4$   
 .....  
 $2 * 10 = 20$ )





Chapter  8

# System Maintenance

## Worksheets



**I. Fill up the blanks with suitable words:**

1. \_\_\_\_\_ draws heat away from the CPU.
2. \_\_\_\_\_ is the interface between a computer and a display monitor.
3. \_\_\_\_\_ is the first software that runs on the computer when the power is switched on.
4. “VIRUS” stands for \_\_\_\_\_.

**II. Expand the following:**

1. HDD \_\_\_\_\_
2. FDD \_\_\_\_\_
3. SMPS \_\_\_\_\_
4. RAM \_\_\_\_\_
5. USB \_\_\_\_\_
6. BIOS \_\_\_\_\_
7. NIC \_\_\_\_\_
8. PS2 \_\_\_\_\_
9. PDF \_\_\_\_\_
10. SATA \_\_\_\_\_

**III. Answer the following questions in three or four sentences each:**

1. What is Internal Drive?

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2. List the types of Computer Virus.

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3. What is Boot Disk? What are their uses?

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4. What is the function of data cable? List the types of data cables.

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5. List the essential software required for personal computer.

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6. How to save computer form virus.

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7. Write the steps for setting up a desktop computer.

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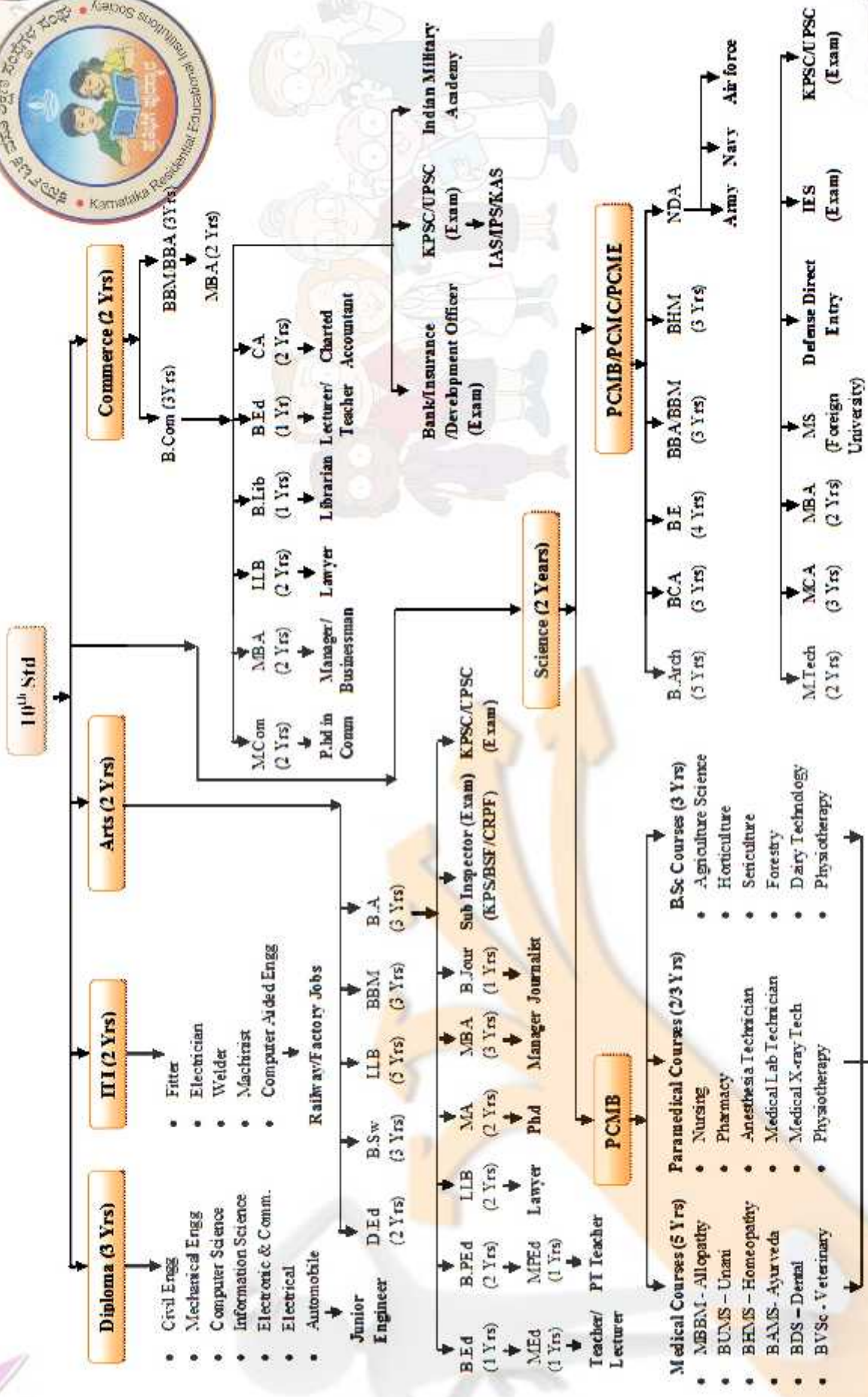


1. Prepare an invitation card for your sister's birthday and send it to all your friends using mail merge feature in a word processor.
2. Create a spreadsheet for student database; to calculate the Grand Total, Percentage, and Grade. And prepare a bar chart for that database.
3. Write a C program to print Fibonacci series.
4. Write a C program to swap two numbers without using the third variable.
5. Organize a Hardware exhibition in school.





# Carrier Path Finder





ಶ್ರೀ ಸಿದ್ದರಾಮಯ್ಯ  
ಸರ್ಕಾರದ ಮುಖ್ಯಮಂತ್ರಿಗಳು

ಕರ್ನಾಟಕ ಸರ್ಕಾರ



ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆ



ಶ್ರೀ ಹೆಚ್. ಅಂಜನೇಯ

ಮಾನ್ಯ ಸಮಾಜ ಕಲ್ಯಾಣ ಮತ್ತು ಹಿಂದುಳಿದ ವರ್ಗಗಳ ಕಲ್ಯಾಣ ಸಚಿವರು ಹಾಗೂ ಅಧ್ಯಕ್ಷರು, ಕ.ವ.ಶಿ.ಸಂ.ಸಂಘ

# ಪ್ರತಿಭೆಗೆ ಪುರಸ್ಕಾರ

ಸಾಮಾಜಿಕವಾಗಿ, ಶೈಕ್ಷಣಿಕವಾಗಿ, ಆರ್ಥಿಕವಾಗಿ ಹಿಂದುಳಿದ ಗ್ರಾಮೀಣ ಪ್ರದೇಶದ ಪರಿಶಿಷ್ಟ ಜಾತಿ, ಪರಿಶಿಷ್ಟ ವರ್ಗ ಮತ್ತು ಹಿಂದುಳಿದ ವರ್ಗಗಳ ಪ್ರತಿಭಾವಂತ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಉತ್ತಮ ಗುಣಮಟ್ಟದ ಶಿಕ್ಷಣ ನೀಡುವ ಉದ್ದೇಶದಿಂದ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಸರ್ಕಾರದ ವತಿಯಿಂದ 359 ಮೊರಾರ್ಜಿ ದೇಸಾಯಿ, 115 ಕಿತ್ತೂರು ರಾಣಿ ಚೆನ್ನಮ್ಮ ಮತ್ತು 05 ಅಟಲ್ ಬಿಹಾರಿ ವಾಜಪೇಯಿ ವಸತಿ ಶಾಲೆಗಳು ಸೇರಿದಂತೆ ಒಟ್ಟು 479 ವಸತಿ ಶಾಲೆಗಳನ್ನು ಸ್ಥಾಪಿಸಲಾಗಿದೆ. ಈ ವಸತಿ ಶಾಲೆಗಳಲ್ಲಿ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಉಚಿತವಾಗಿ ಊಟ, ವಸತಿ ಹಾಗೂ ಗುಣ ಮಟ್ಟದ ಶಿಕ್ಷಣವನ್ನು ನೀಡುವ ಕಾರ್ಯಚಟುವಟಿಕೆಗಳನ್ನು ನಿರ್ವಹಿಸಲಾಗುವುದು.



ವಸತಿ ಶಾಲೆಗಳನ್ನು ಕೇಂದ್ರ ಸರ್ಕಾರದ ಜವಾಹರ್ ನವೋದಯ ಕೇಂದ್ರೀಯ ವಸತಿ ಶಾಲೆಗಳ ಮಾದರಿಯಲ್ಲಿ ಸ್ಥಾಪಿಸಲಾಗಿದೆ, ಹಾಗೂ ಈ ವಸತಿ ಶಾಲೆಗಳು ಸಾಮಾಜಿಕ ಮತ್ತು ಶೈಕ್ಷಣಿಕ ಶೋಷಣೆಗೆ ಒಳಪಟ್ಟ ಜನಾಂಗದವರಿಗೆ ಗುಣಮಟ್ಟದ ಶಿಕ್ಷಣ ನೀಡಿ ಉನ್ನತ ವ್ಯಾಸಂಗಕ್ಕೆ ಅನುಕೂಲ ಮಾಡಿಕೊಟ್ಟು ಸಾಮಾಜಿಕ ಸಮಾನತೆ ಸಾಧಿಸುವ ಉದ್ದೇಶದಿಂದ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವುದು ಪರ್ಷನಾಲಿಯಕಣಾಗಿದೆ.

ಶ್ರೀ ಗಂಗಾಲಾಮ್ ಬಜೇರಿಯಾ, ಛಾಟನಿ,  
ಕಾರ್ಯದರ್ಶಿ, ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆ ಹಾಗೂ  
ಉಪಾಧ್ಯಕ್ಷರು, ಕ.ವ.ಶಿ.ಸಂ.ಸಂಘ

ಶ್ರೀ ನಿರಂಜನ್, ಹಿರೇಮಠ್, ಕಿಟನಿ,  
ಕಾರ್ಯನಿರ್ವಾಹಕ ನಿರ್ದೇಶಕರು  
ಕ.ವ.ಶಿ.ಸಂ.ಸಂಘ