



SPACES DEGREE COLLEGE

(Affiliated to Andhra University)

(Under the Management of SRI PRAKASH EDUCATIONAL SOCIETY)

Principal Approval letter

As per the resolution of Academic Staff Council meeting held on 01-06-2017, the following courses are approved as Add on / Certificate courses in various departments for the academic year 2017 - 2018. The course duration will be not less than 30 hours.

Year wise add on / certificate courses offered (2017- 2018)

S.No	Title of the Course	Organizing Department
1	Photoshop	Computer Science
2	Renewable Energy	Physics
3	Electronics & Information Technology	Electronics
4	Data Communication & Networking	Electronics
5	Skills in Basic Reasoning	Mathematics
6	Food Adulteration	Chemistry
7	Water Analysis	Chemistry
8	Mushroom Cultivation	Biochemistry
9	Personality Development	English
10	Basics of Stock Market	Commerce
11	Tally	Commerce

All the Add on/ Certificate course co-ordinators are requested to submit the schedule of the courses in Principal's office within a week.




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As per the resolution of Academic Staff Council meeting held on 05-06-2018 , the following courses are approved as Add on / Certificate courses in various departments for the academic year 2018 - 2019. The course duration will be not less than 30 hours.

Year wise add on / certificate courses offered (2018- 2019)

S.No	Title of the Course	Organizing Department
1	Programming with C++	Computer Science
2	Introduction to Cyber Security	Computer Science
3	Renewable Energy	Physics
4	Data Communication & Networking	Electronics
5	Industrial Electronics	Electronics
6	Functional English	English
7	Tally	Commerce
8	Digital Marketing	Commerce
9	Soaps and Detergents	Chemistry
10	Organic Farming	Botany
11	Fermented Foods	Biotechnology

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As per the resolution of Academic Staff Council meeting held on 01-06-2019 , the following courses are approved as Add on / Certificate courses in various departments for the academic year 2019 - 2020. The course duration will be not less than 30 hrs.

Year wise add on / certificate courses offered (2019- 2020)

S.No	Title of the Course	Organizing Department
1	Electrical Appliances	Physics
2	Renewable Energy	Physics
3	Fluency Development Course	English
4	Data Communication & Networking	Electronics
5	Industrial Electronics	Electronics
6	Web Designing using HTML	Computer Science
7	Python	Computer Science
8	Water Analysis	Chemistry
9	Organic Farming	Botany
10	Mushroom Cultivation	Biochemistry
11	Digital Marketing	Commerce
12	GST	Commerce

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As per the resolution of Academic Staff Council meeting held on 01-09-2021 , the following courses are approved as Add on / Certificate courses in various departments for the academic year 2021 - 2022. The course duration will be not less than 30 hrs.

Year wise add on / certificate courses offered (2021- 2022)

S.No	Title of the Course	Organizing Department
1	Micro Processor and Micro Controller	Physics
2	Fundamentals of C Programming	Computer Science
3	R - Programming	Computer Science
4	Web Designing using HTML	Computer Science
5	Hardware and Networking	Computer Science
6	Functional English	English
7	Fluency Development Course	English
8	Skills in Basic Reasoning	Mathematics
9	Fermented Foods	Biotechnology
10	Organic Farming	Biochemistry
11	Water Analysis	Chemistry
12	Entrepreneurship Development	Commerce
13	GST	Commerce

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Fundamentals of C Programming

Course material

Introduction to C: C is like many other modern languages derived from ALGOL. In 1967, Martin Richards developed a language called BCPL at CAMBRIDGE UNIVERSITY (in UK.) a powerful and basic language was developed called B-LANGUAGE. This was developed by Ken Thompson. The original name of B-LANGUAGE is BCPL (Here BCPL stands for Basic Combined Programming Language and it is a preliminary language of B. Afterwards the BCPL was renamed called BLANGUAGE from its first alphabet. This language has number of advance features than BCPL.

From 1972 (some research say 1970) at BELL-LABORATORIES (which is the part of AT & T) in U.S.A. by the scientist Dennis Ritchie developed powerful software tool which has a big facility (compilation and linkage facility in combined form) called C-LANGUAGE. C-LANGUAGE was renamed from the BCPL's second alphabet.

Structure of C program:

A C-program can be developed from a general structure. The general structure of C-program is as shown below (which is also called overview of a Cprogram):

```
a) Documentation Section.  
b) Link Section (Or) Header file section  
c) Global Declaration Section  
d) main()  
{  
    Declaration part;  
    Executable part;  
}  
e) User defined function section
```



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```
eg: #include<stdio.h>
    void main
    {
        printf("hello");
    }
```

1. Save the program(file) as filename.c, **Example : sample.c**
2. **Compile & Run** the program. In c-editor **COMPILE: Alt + f 9** and **RUN: ctrl + f 9**
3. To check the output: **alt + f 5**

Character Sets available in C:

Character set

1. Letter character
2. Digit
3. Special character
4. Empty Space

Constants: 1. Numeric constant 2. Non-numeric or Character Constant

Variables: Variables use the primary storage area. Variables are those quantities whose value changes during the execution of the program. Variables are basically memory locations, which are given names, and these locations are referred in the program by variable names to read and write data in it.

Keywords: C-language has some reserve words, which cannot be used as variables or identifiers. These reserve words are keywords of C-language. These are the part of the C-Tokens. There are mainly 40 keywords among which 32 are used by many C compilers

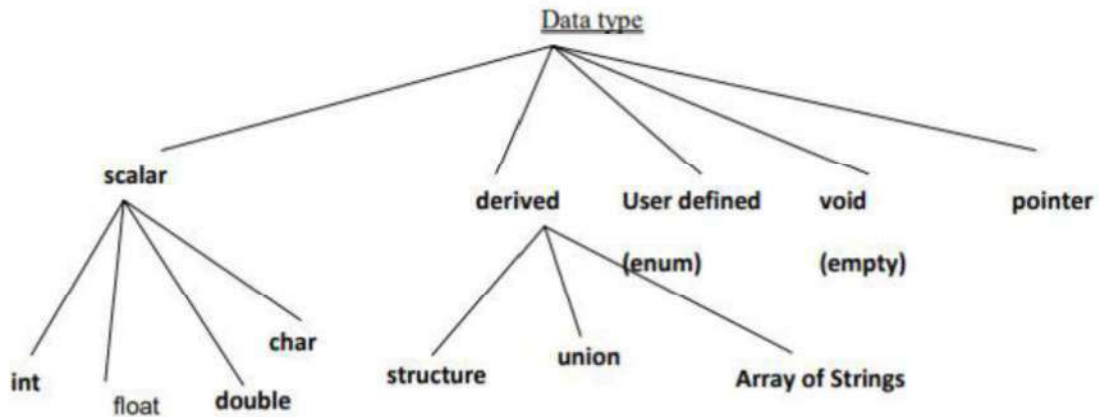
Identifiers: Identifiers are names given to program elements such as variables, constants, arrays and functions.

1. Integer Constants
2. Floating-point Constants
3. Character Constants
4. String Constants.



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Data types:



C -Operators:

There are mainly eight operators used in C-language. These are :

1. Arithmetic operators
2. Relational operators
3. Logical operators
4. Assignment operators
5. Increment/Decrement operators
6. Conditional operators or Ternary operator
7. Bit wise operators
8. Special operators

Input Statements: Input statements are used for reading integer, real, character, string and mixed type data. For this purpose some standard input functions are used, which are embedded in stdio.h (standard input output header file). These are of five types as below:

1. getchar()
2. scanf()
3. gets()
4. getch()
5. getche()

Output Statements: Output statements are used for writing, displaying or printing integer, real, character, string and mixed type data. For this purpose C-compiler has some standard output functions, which are embeded in stdio.h file. These are of three types as below:

1. putchar()
2. printf()
3. puts()



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if statement: The if statement is a powerful decision making statement which can handle a single condition or group of statements. These have either true or false action. There are mainly four Types of if statements used in the C programming as:

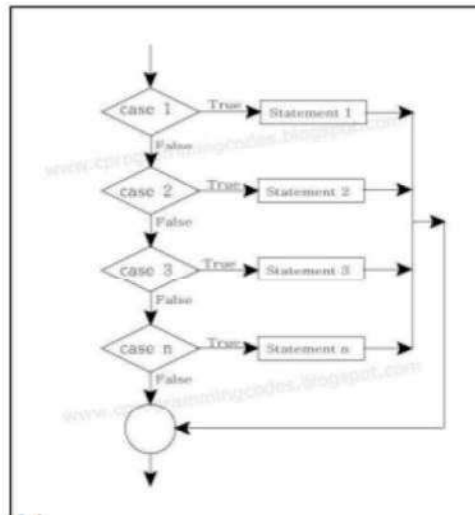
- (i) Simple if statement
- (ii) (ii) if-else statement
- (iii) (iii) nested if statement
- (iv) (iv) else-if or ladder if or multi-condition if statement

Switch Statement:

When number of conditions (multiple conditions) occurs in a problem and it is very difficult to solve such type of complex problem with the help of ladder if statement, then there is need of such type of statement which should have different alternatives or different cases to solve the problem in simple and easy way. For this purpose Switch statement is used. It is also called Case statement because it has different cases and different blocks. It is also called multi-decision statement having multiple blocks. V data type is not accept float data type

```

switch (e or v)
{
    case value1: block1;
                break ;
    case value2: block2;
                break;
    case value3: block3;
                break;
    case value n: block n;
                break;
    default: block n + 1;
            break;
}
statement-x;
    
```



Looping Statements:

Entry Control Loop:

while statement or while loop

While statement:

The general syntax is

```

while (test condition)
{
    block of statements;
}
statement-x;
    
```



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Do-While Statement:

It a-looping statement, which repeat again and again till it satisfies the defined condition. It is one step loop, which initialize, check the condition and increment decrement the step in the loop in a single statement.

The **general syntax** is as:

```
for (initialvalue; testcondition; increment/ decrement)
{
    body of the loop;
}
statement-x;
```

Jumping Statement:

- a). goto statement
- b). break statement
- c). continue statement

Break and Continue statement:

This statement is used within do-loop, while loop and for loop. The use of break statement within the while loop structure is as:

```
while (condition-1)
{
    .....
    if (condition-2)
        break;
    .....
}
statement-x;
```

continue; This statement will skip some part of iteration (loop) and comes to the next looping step i.e. it will increment / decrement the loop value, when continue occurs. The general structure of the continue statement is as:

```
while (condition-1)
{
    s1;
    s2;
    if (condition-2)
        continue;
    s3;
    s4;
}
```



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Array : Array is similar type of data collection referenced by unique name i.e. it is a collection of same data type elements.or An array is a group of related data items, which share common name. or It is the set of homogeneous data.

Types of Array: The types of the array depends upon the given problem. Array are mainly of two types:

- (i) Linear Array
- (ii) Non-Linear Array

Non-Linear Array: Array of having different dimensions or n subscript is in the form of Nonlinear array. Non-linear array are further of n different types as:

- (a) Two Dimensional Array
- (b) Three Dimensional Array

Two Dimensional Array: These arrays are also called double dimensional array. Another name of two-dimensional array is Tabular or Rectangular Array. These arrays are in row and column form, so these are also called Row-Column array or square Array. These arrays have two subscripts and also called double subscripted array. We can write the double dimensional array in the matrix form as below and so these are also known as matrix array. The syntax used for declaration of two dimensional array is as:

```
data-type array-name [row size] [column size];
```

For example, some of the valid double dimensional arrays are written as below: `int a[10][10];`

```
float b[50][50];  
char name[10][20];
```

Multi Dimensional Array: It is a collection of double dimension arrays. Each double dimension array is identified by with 'i' each array is identified by 'j' and each value is identified by with 'k'

Syntax: `Datatype variable[no_of_dd_arrays][row_size][col_size];`

String Handling Functions in C:

- (i) `strcat ()`
- (ii) `strcmp ()`
- (iii) `strcpy ()`
- (iv) `strlen ()`
- (v) `strrev ()`
- (vi) `strcat ()`



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Function: Subprogram is the independent and complete program. It is also called function program or function sub-program. In other words sub-programs are complete because, these are the programs, which have the global as well as local declaration statement, executable statement and function calling statement like main program. Subprograms in the C-language are called user-defined functions. A sub-program is independent because it can be called by the main program or other sub-program. As C has number of library function, which are in-built in the C-compiler (compiler's library cannot provide built-in library functions used in all the situations), but user defined functions are declared and defined by user according to his/her requirement and problem definition. So we can say functions are mainly of two types represented as:

1. Functions with no arguments and no return values.
2. Functions with arguments and no return values.
3. Functions with arguments and return values.

Call by value:

In call by value method, the value of the actual parameters is copied into the formal parameters. In other words, we can say that the value of the variable is used in the function call in the call by value method.

Call by reference: In call by reference, the address of the variable is passed into the function call as the actual parameter. The value of the actual parameters can be modified by changing the formal parameters since the address of the actual parameters is passed.



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DEPARTMENT OF MATHEMATICS

ADD ON COURSE MATERIAL

SKILLS IN BASIC REASONING



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UNIT-1

Topic 1 - Coded Inequality

Formulae:

<	+	≤	=	<
≤	+	≤	=	≤
≤	+	<	+	= = <
<	+	=	=	<
>	+	≥	=	>
≥	+	≥	=	≥
≥	+	>	+	= = >
>	+	=	=	>

Problems:

1. Statement : $S < A < I > N < T$

Conclusion-I: $S < N$

Conclusion-II: $A < T$

Solution:

Step-1: First we have to check relation between S and N

Step-2: $< + < + >$ / here one less than and greater than symbols both exists so S & N relation does not exists

Step-3: check $A < T$

Step-4: $< + > + <$ / here one less than and greater than symbol exists so relation does not exist.

Answer: Neither I nor II

2. Statement: $S > w > E = L < T$

Conclusion-I: $T > W$

Conclusion-II: $L < S$

Solution:

Step-1: Check relation between T and w

Step-2: $> + = + <$ one less than and greater than symbol exists so T and w relation does not exist

Step-3: Check relation between L and S

Step-4: from S we have $> + > + = = >$

$S > L$

$L < S$

Step-5: $L < S$ exists

Answer: only conclusion II




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Try these:

1. Statement: $Q \leq U = E \leq R \leq Y$

Conclusion-I: $Y > Q$

Conclusion-II: $Y = Q$

2. Statement: $C \leq R \leq O < W = N$

Conclusion-I: $J > G$

Conclusion-II: $N = C$

3. Statement: $G < H = I < J \leq K \geq L$

Conclusion-I: $J > G$

Conclusion-II: $I < L$

4. Statement: $A \geq B > C > D = E \leq F$

Conclusion-I: $B > F$

Conclusion-II: $D < A$

5. Statement: $P = Q \leq R < S; T \geq S < U \leq V$

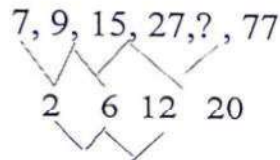
Conclusion-I: $P < U$

Conclusion-II: $Y > 0$

Topic 2 -Missing Numbers

Synopsis: In this concept we have to learn 1 to 30 squares and 1 to 20 cubes.

Problem-1: To solve these we have to take 3 differences only



Try these:

1. 134, 139, 147, 164, ?, 225

2. 0.5, 1, 2, ?, 8, 16

3. 8, 32, 64, 256, 512, ?

4. 4, 15, 56, 165, 328, ?

5. 7, 14, 22, 31, 41, ?



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UNIT-2

Topic-1 : Directions

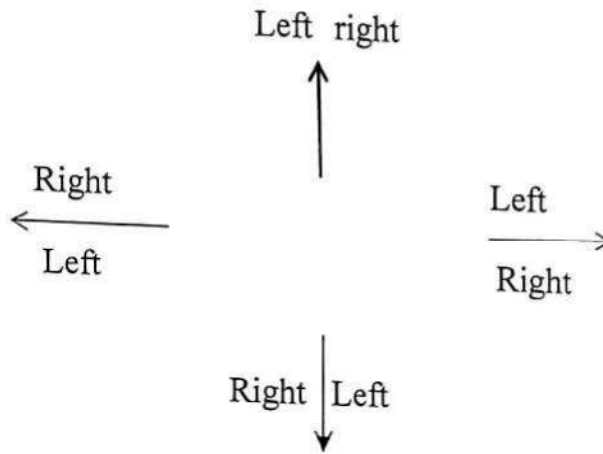
Synopsis:

In general we have for directions and divided into 8 directions. They are

1. North
2. South
3. East
4. West
5. North west
6. North east
7. South west
8. South east

In a clockwise direction total angle is 360° . So, divided with a then angle between one direction to another is 90° . i.e; angle between north and east is 90° But where as angle between north-east is 45°

Now consider arrows



Clockwise direction means



Anti-clockwise direction means

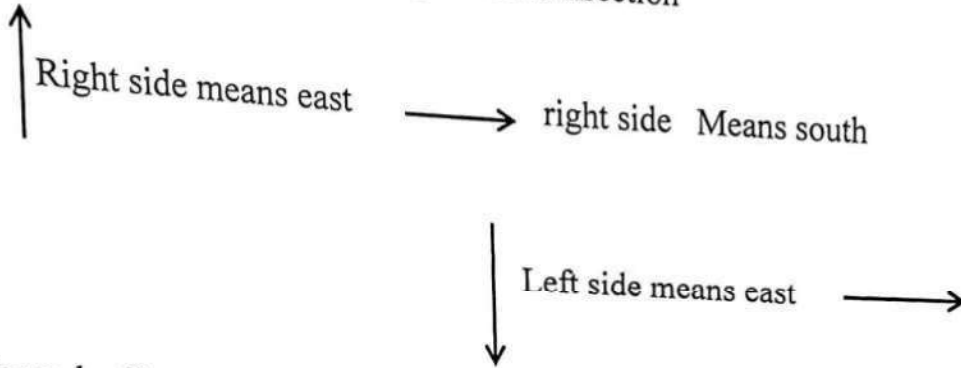



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Problem-1:

If a person facing north and rotates towards right and later again right and again left in which direction is right now?

Solution: first person is standing in north direction



Formula: Short cut:

R+R+L means one Right and one left can be cancelled.
So, right direction of north is east

Answer: He is in east direction

Topic - 2 Blood relations

Synopsis:

1. There are two genders mainly : 1. Male , 2. Female

We represent male with +

We represent female with -

+

X is brother of Y means $X - Y$. Here X is male we cannot determine gender of Y

X is mother of Y means \bar{X} . Here X is female we cannot determine gender of Y


Y

X is sister of Y means $\bar{X} - Y$. Here X is female we cannot determine gender of Y

+

X is wife of Y means $\bar{X} = Y$. Here X is female Y is male




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Problem-1: If X is the brother of Y. Y is the mother of S. 'S' is the only daughter of R. Then how is 'R' related to Y.

Step-1: X is brother of Y means $X - Y$

Step-2: Y is mother of S means $\bar{Y} \begin{array}{c} | \\ S \end{array}$

Step -3: 'S' is the only daughter of R means $R \begin{array}{c} | \\ \bar{S} \end{array}$

Join all these

$$\bar{X} - \bar{Y} = R \begin{array}{c} | \\ \bar{S} \end{array}$$

Answer: 'R' is husband to Y.

Try these:

Study the following information carefully and answer the given questions:

M, P, Q, R, S, T and W are seven persons of three generation living in the same house. There are two married couple in the house. M is the only daughter of P, who is the paternal grandfather of T. R is the son of Q. T is the daughter of S. R is the father of W. T is sister of W.

Q01: How is M related to S ?

- (a) Mother in-law
- (b) Sister in-law
- (c) Father in-law
- (d) Sister
- (e) Can't determined

Q02: How is W related to R?

- (a) Son
- (b) Father
- (c) Daughter
- (d) Can't determined
- (e) Mother



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Q03: Which of the following is the pair of "husband-wife"?

- (a) P,W
- (b) T,M
- (c) M,S
- (d) Q,M
- (e) R,S

Study the following information carefully and answer the questions given below:

There are seven members A, B, C, D, E, F and L in a family. There are two married couples and only three generations in the family. F is grandmother of B, who is niece of D. F has one daughter. C is brother in-law of D.L if grandfather of E.B has one sibling.

Q01: How is F related to mother of B ?

- (a) Sister
- (b) Grandfather
- (c) Daughter
- (d) Mother
- (e) Wife

Q02: How is C related to child of A ?

- (a) Grandfather
- (b) Father
- (c) Uncle
- (d) Brother
- (e) Cousin




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UNIT -3

Topic -1 Sitting arrangement

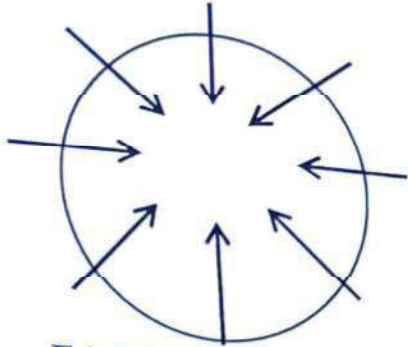
Synopsis:

We can arrange two or more persons in a line or circle or square

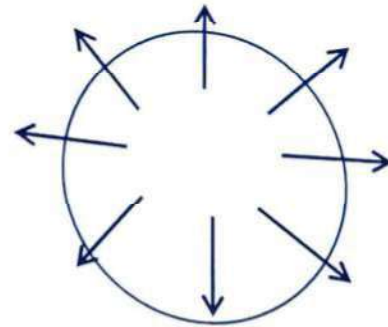
In a line a person can face north or south directions

In a circle a person can face towards the centre or outwards the centre

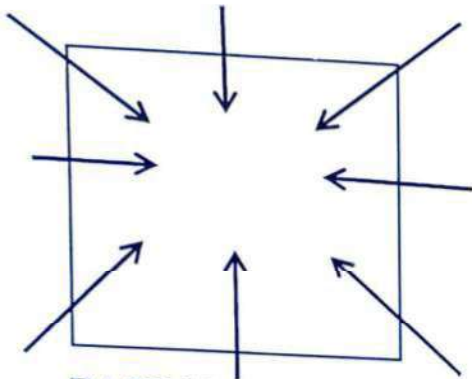
In a square a person can face same as a circle



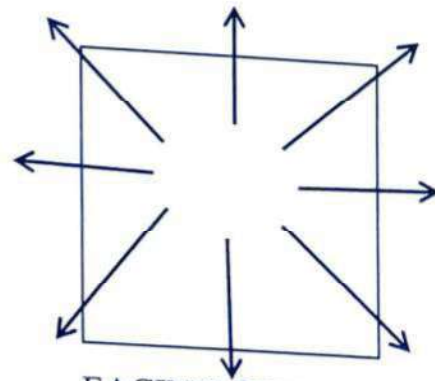
FACING CENTER



FACING OUTSIDE



FACING CENTER



FACING OUTSIDE



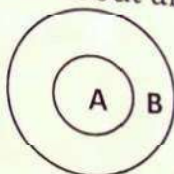
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Topic -2 Syllogism

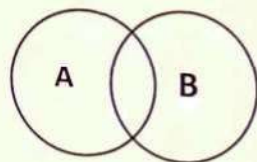
Synopsis:

In this topic we learn about all, some, no .

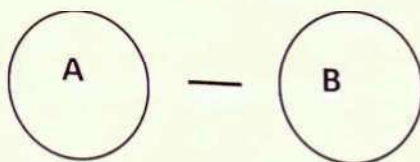
All 'A's are 'B's means



Some 'A's are 'B's means



No A is B means



Study the given information carefully and answer the questions:

There are eight friends A, B, C, D, E, F, G and H who are sitting in a row such that some are facing in the south direction and some are facing north direction . F and D face the same direction as B is facing .D sits third to the right of A.C and E are immediate neighbours but both face opposite directions with respect to each other . A sits at one of the corner .H sits fourth to the right of C. more than three persons sit between B and F. G sits third right of H. C is neither immediate of A nor D. E does not sit at any end .F sits immediate right of D. G is facing same directions as E who does not face south

Q01: Who among the following sits immediate right of H?

- (a) G
- (b) C
- (c) E
- (d) F
- (e) None of these

Q02: How many persons sit between D and E?

- (a) Four
- (b) One
- (c) Three
- (d) Two
- (e) None




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- Q03: Who among the following sit immediate left of the one who sits third right of G?
- (a) H
 - (b) F
 - (c) A
 - (d) E
 - (e) No one

- Q04: What is the position of A with respect of F?
- (a) Immediate right
 - (b) Third to the left
 - (c) Second to the right
 - (d) Immediate left
 - (e) None of these

- Q05: Who among the following sits second right of B?
- (a) G
 - (b) A
 - (c) F
 - (d) C
 - (e) None of these

Study the following information carefully and answer the questions:


Eight persons are seated around a circular table at an equal distance and some are facing to the center and rests are opposite top the center.

F sits immediate right of H.D and G face same direction but opposite to that of B.A sits second to the right of the one who sits immediate left of E. H is an immediate neighbour of E. both the immediate neighbour of A face same directions as A faces . B sits third to the left of C. both the immediate neighbours of E face same direction. G sits third to the right of A who is facing opposite direction of E. D is not facing away from the center

- Q01: Who among the following sits third to the left of G?
- (a) A
 - (b) B
 - (c) E
 - (d) H
 - (e) None of these

- Q02: How many persons are facing to the center?
- (a) One
 - (b) Two
 - (c) Three
 - (d) Four
 - (e) None of these




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Q03: If 'A' is related to 'H' and 'H' is related to 'C' in a certain way then 'G' is related to which of the following

- (a) E
- (b) H
- (c) F
- (d) B
- (e) C

Q04: Who among the following sits opposite to A ?

- (a) G
- (b) E
- (c) D
- (d) C
- (e) None of these

Q05: What is the position of B with respect to F ?

- (a) Third to the right
- (b) Second to the left
- (c) Second to the right
- (d) Immediate left
- (e) None of these



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PAYAKARAOPETA



SPACES DEGREE COLLEGE, PAYAKARAOPETA

(Affiliated to Andhra University, Visakhapatnam)

Add on Course

In

DATA COMMUNICATION & NETWORKING

Organized by the

Department of Electronics

2017 - 2018


PRINCIPAL
SPACES DEGREE COLLEGE,
PAYAKARAOPETA



REPORT

The Department of Electronics conducted a Certificate course on **DATA COMMUNICATION & NETWORKING** from 15/11/2017 to 22/12/2017. The resource person for this certificate course was Miss.S.Aswini. In this certificate course the student got the detail knowledge about Electronics & Information technology and its various applications in the field of academics, research & industry. Total 29 IIIMECS students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Electronics worked actively for the successful completion certificate course.

COURSE OBJECTIVES:


- Course will develop the ability to manage new technologies
- Course will provide awareness about data transmission

COURSE OUTCOMES:

CO 1: To give awareness about different networks

CO 2 : To understand analog and digital conversions




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COURSE SYLLABUS

UNIT -I (6 Hrs):

Data Communication and its Components – Introducing Networks, Types of Networks: Personal Area Network, Wide Area Network.

UNIT-II 6 hrs):

Network Topologies: Bus Topology, Star Topology, Ring Topology, Mesh Topology, Tree Topology, Hybrid, Topology.

UNIT-IV (8 Hrs):

Data Transmissions: Digital – To – Digital Conversion (line coding only), Analog – To – Digital Conversion (PCM only), Digital – To – Analog (ASK only) Analog – To – Analog Transmission (AM only) – Transmission Modes (Parallel and Serial).

Practicals:

1. TO STUDY LAN USING STAR TOPOLOGY
2. TO STUDY LAN USING BUS TOPOLOGY
3. TO STUDY LAN USING TREE TOPOLOGY
4. TO STUDY CONFIGURE MODEM OF COMPUTER
5. TO STUDY CONFIGURE HUB/SWITCH
6. Analog to Digital Conversion

Reference Book: 1) Data and Communication by Stallings Williams.


2) Computer Networks By Kurose James F

Methodology:

Theory: 20 Hrs

Practical: 10 Hrs




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COURSE STRUCTURE & FRAME WORK

Title of the Course: DATA COMMUNICATION & NETWORKING

Course Code: SDC- SE02

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Electronics as one of the optional subject

Scheme of the Course:

1. Lecture presentation.
2. Practicals.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practicals	25
	Total	75




PRINCIPAL
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Model Question Paper
DEPARTMENT OF ELECTRONICS
SPACES DEGREE COLLEGE, PAYAKARAOPETA
ADD ON COURSE IN
DATA COMMUNICATION & NETWORKING

Duration: 2hrs

Max Marks: 50

SECTION-A

Answer ALL questions
30M

3X10M =

1. (a) Explain about personal Area Network?
(Or)
(b) Explain about a wide Area Network?
2. (a) Explain about Bus Topology, Star Topology, Ring Topology?
(Or)
(b) Explain about Mesh Topology, Tree Topology, Hybrid, Topology?
3. Explain about analog-to-digital conversion?
(Or)
(b) Explain about digital-to-analog conversion?

SECTION-B

Answer any FOUR questions

4X5M = 20M

- 4 What is a network and different types of networks?
- 5 Difference between PAN and WAN
- 6 Explain about parallel transmission mode?
- 7 Write a short note on Digital-to-Digital conversion?
- 8 Explain about serial transmission mode?
- 9 Write a short note on Analog-to-Analog conversion?



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SPACES DEGREE COLLEGE, PAYAKARAOPETA

(Affiliated to Andhra University, Visakhapatnam)

17-18(2)

Add on Course

In

ELECTRONICS & INFORMATION TECHNOLOGY

Organized by the

Department of Electronics

2017 - 2018

by bi

REPORT

The Department of Electronics conducted a Certificate course on **ELECTRONICS & INFORMATION TECHNOLOGY** from 19/06/2017 to 31/07/2017. The resource person for this certificate course was Mr T.Srinivasa Rao. In this certificate course the student got the detail knowledge about Electronics & Information technology and its various applications in the field of academics, research & industry. Total 45 IIMECS students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Electronics worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

Course will develop the ability to manage new technologies

To understand IOT

COURSE OUTCOMES:

CO 1: To give awareness about different technologies

CO 2 : To understand the various types mobile communications

CO 3 : : To provide awareness about software protocols and blockchain technology




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COURSE SYLLABUS

UNIT-I (6 Lectures) Electronics Systems Technology
Introduction, Basic Components, Power Supplies, Set Top box, DTH, LCD, LED, OLED, CCTV Technologies, Projectors

UNIT-II (7 Lectures) Mobile Communication Technology: Concept of Cell, SIM number, IMEI number, block diagram of mobile communication network, idea of GSM, CDMA, TDMA and FDMA technologies., block diagram of mobile phone ,2G, 3G, 4G & 5G Technologies. Mobile Processors Wireless Technologies in Mobile Phone

UNIT-III (7 Lectures) Internet of Things: Overview, Hardware, Software, Protocols, Manufacturing Applications, Case Study.
Blockchain Technology: Introduction, Short History, Getting Started, The Block Structure, Forming a Chain, Proof of work, Transactions.

Practicals:

1. Power supply circuit
2. LED
3. Set Top Box working
4. Case study

Reference Book: 1) Mobile & Wireless Communication by Dr.Sanjay Sharma

2) Learning Internet Of Things by peter waher

Methodology:

Theory: 20 Hrs

Practical: 10 Hrs




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COURSE STRUCTURE & FRAME WORK

Title of the Course: ELECTRONICS & INFORMATION TECHNOLOGY

Course Code: SDC- SE01

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Electronics as one of the optional subject

Scheme of the Course:

1. Lecture presentation.
2. Practicals.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practicals	25
	Total	75




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Model Question Paper
DEPARTMENT OF ELECTRONICS
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Add On COURSE IN
ELECTRONICS & INFORMATION TECHNOLOGY

Max Marks: 50

Duration: 2hrs

SECTION-A

3X10M =

Answer ALL questions
30M

1. (a) Draw and Explain the cctv system?
(Or)
(b) Draw and Explain the block diagram of the DTH System?
2. (a) Explain the Architecture of Mobile Phone with Block diagram?
(Or)
(b) Explain the architecture of Cellular Mobile Communication Network.?
3. Explain the structure of the block chain and its formation?
(Or)
(b) Explain about power supply components?

SECTION-B

4X5M =

Answer any FOUR questions
20M

- 4 Explain briefly about Set-Top Box?
- 5 What is OLED Technology? What are the differences LED TV & OLED TV
- 6 Explain the differences between LCD & LED Displays?
- 7 Write a short note on your SIM Number?
- 8 Explain the Concept of Cellular systems?
- 9 Write a short note on IMEI Number?



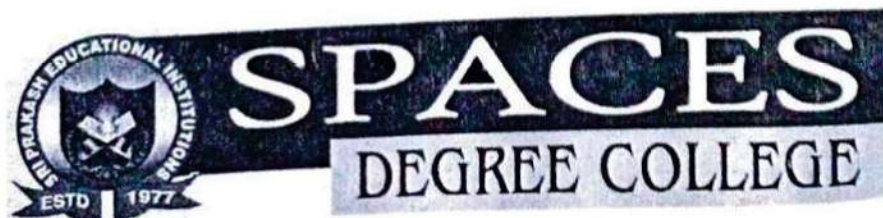
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DEPARTMENT OF CHEMISTRY

ADD ON COURSE

**TITLE : FOOD
ADULTERATION**

2017-18



www.spaces.sriprakash.org
Payakaraopeta-531126. Andhra Pradesh

Course Objectives:

- To understand the basic concept of food adulteration.
- To become familiar with which materials are adulterated in foods
- To develop awareness about consumer protection act in the public

COURSE SYLLABUS

Course Code : SDC-CHE001

Theory: 20 Hrs

Practical: 10 Hrs

UNIT-I – Common Foods and Adulteration:

8hrs

Define adulteration, what are common Foods subjected to Adulteration .Types of adulteration ,types of adulteries like waste matters , Cheap substitutes, Poisonous substances and Foreign matter.

UNIT-II –: Adulteration of Common Foods and Methods of Detection:

6 hrs

Intentional and incidental adulteration and Impact on Human Health
Detection Adulterants in the following Foods/food products Fruits, vegetables, Milk, Sugar, Oil, Grain, Processed food ,Spices and condiments by using simple and also laboratory methods.
Additives and Sweetening agents (artificial agents) for foods/food products and some chemical codes which are used in food products.

UNIT-III –: Present Laws on Adulteration:

6 hrs

Highlights of Food Safety and Standards Act 2006 (FSSA) –Food Safety and Standards Authority of India –Rules and Procedures of Local Authorities and also some foreign countries.
Consumer protection act and consumer education

Practicals:

10 hrs

1. Detection of some common foods/food materials in the laboratory by using some chemical reagents

Suggested Reading:

1. Wikipedia
2. <https://www.fssai.gov.in/>
3. <https://indianlegalsolution.com/laws-on-food-adulteration/>
4. <https://fssai.gov.in/dart/>
5. A first course in food analysis by- A.Y. Sathe , New Age International (P) Ltd, 1999

Methodology: Theory: 20 Hrs

Practical: 10 Hrs



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COURSE STRUCTURE & FRAME WORK

Title of the Course: Food Adulteration

Course Code: SDC- CHE002

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Chemistry (Or) Physics (Or) Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology as one of the optional subject

Scheme of the Course:

1. Lecture presentation
2. Practicals /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by inviting experts in the practical to provide complete information and process of water analysis.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practicals). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical / field work and assignment	25
	Total	75



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Model Question Paper
DEPARTMENT OF CHEMISTRY
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Add on /Certificate Course examination
Paper Title: Food Adulteration

Time: 2 Hrs

Max. Marks: 50

PART – A

Answer any Four questions

(4x5 = 20M)

1. Give examples for food additives and sweetening agents
2. Write a short notes on processed food
3. Define food adulteration? Give some examples
4. Explain the adulteration through Food Additives
5. Name few cheap substitutes used in food adulteration
6. Write short note on Consumer protection councils?

PART-B

Answer any three of the following questions

(3x10=30M)

1. Briefly explain the types poisonous substances added for food adulteration?
2. What are the highlights of Food Safety and Standards Act and Explain it?
3. Explain the food testing and standardized testing methods and also explain impact of food adulteration on Human Health?
4. Explain classification of Additives and Sweetening agents (artificial agents) and write their adverse effects?
5. How to determine adulteration in salt, spices and condiments by physical/chemical methods




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Course Outcomes:

CO 1: To know about how to detect food adulteration in various food materials

CO 2: To get basic knowledge on food adulteration

CO 3: To know the adverse effects and impacts on human health on adulteration
Of food.

CO 4 : *To know the procedures and basic laws about consumer protection act*

CO 5 : Be able to extend their knowledge to other kinds of adulteration, detection and remedies



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SPACES DEGREE COLLEGE, PAYAKARAOPETA

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Certificate Course

In

PHOTOSHOP

**Organized by the
Department of Computer Science**

2017 - 2018

COURSE SYLLABUS

Unit –I - Introduction to adobe photoshop:

Getting started with Photoshop, creating and saving a document in photoshop, Page layout and background, photoshop program window-title bar, menu bar, option bar, image window, image title bar, status bar, ruler, pallets, toolbox, screen modes, saving files, reverting files, closing files.

Unit –II - Images:

Working with images, image size and resolution, image editing, color modes and adjustments, Zooming and Panning an image, Rulers, Guides & Grids - Working with tool box: pen tool, working with erasers, working with text and brushes, patch tool, cropping.

Unit –III - Layers:

Working with layers, layer styles-opacity-adjustment layers. **Filters:** The filter menu, working with filters-Editing your photo shot, presentation - how to create ads, artistic filter, blur filter, brush store filter, distort filters, noise filters, pixelate filters, light effects, difference clouds, sharpen filters, printing.

Practical's:

1. Create your visiting card
2. Create cover page for any text book
3. Creating a paper ads for advertising of any commercial agency
4. Design a passport photo
5. Create a pamphlet for any program to be conducted by an organization.
6. Create custom shapes.
7. Convert color photo to black and white photo.
8. Create a brochure
9. Create a flex
10. Filter effects & eraser effects.

Suggested Reading:

1. Adobe creative Team, Adobe Photoshop Class Room in a Book Y
2. David Maxwell, Photoshop: Beginner's Guide for Photoshop - Digital Editing, Color Grading & Graphic.

Methodology:

Theory: 20 Hrs Practical: 10 Hrs




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REPORT

The Department of Computer Science conducted a Certificate course on **PHOTOSHOP** from 19/06/2017 to 31/07/2017. The resource person for this certificate course was Mr. A.R.V.L. NARAYANA. In this certificate course the student got the detail knowledge about photoshop and its various applications in the field of academics, research & industry. Total 36 IIMPChem students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Computer Science worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

- To learn about Adobe Photoshop interface and work with menus, tools and Panels
- To Learn how to open , crop, transform and edit existing images.
- To learn working with text and formatting tools and panels.
- To learn how to add multiple images to create a collage.

COURSE OUTCOMES:

- CO 1: up on completion of course, students will have the knowledge & ability to use photoshop confidently and effectively.
- CO 2 : students will have employed photoshop creatively to create four real world production challenges for print, photography, web and video.
- CO 3 : Students will gain the skills & abilities to use photoshop that are employable & Rewarding.




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COURSE STRUCTURE & FRAME WORK

Title of the Course: Photoshop.

Course Code: SDC-CS001

Duration of the Course: 30 Hours (includes both theory and practical's)

Eligibility of the course:

Candidates studying any U.G course

Scheme of the Course:

1. Lecture presentation.
2. Practicals.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practicals	25
	Total	75




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Model Question Paper
DEPARTMENT OF COMPUTER SCIENCE
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Certificate Course examination
Paper Title: Photoshop.

Time: 2 Hrs

Max. Marks: 50

PART – A

Answer any Five questions

(4x5 = 20M)

Question 1: Write about creating and saving document in photoshop?

Question 2: Write about page layout and background in photoshop?

Question 3: Write about image size and resolution?

Question 4: Explain about rulers, guides in photoshop?

Question 5: write shortnotes on opacity?

Question 6: Write about pixelate filter ?

PART-B

Answer any three of the following questions

(3x10=30M)

Question-1 Explain about photoshop program window.

Question- 2 Explain about Pen Tool.

Question-3 Write about working with Layers?

Question -4 Write about filters in Photoshop.




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Add on Course In **Basics of Stock Market**

Organized by

Department of Commerce

(2017 – 2018)



(Affiliated to Andhra University)

www.spaces.sriprakash.org

Payakaraopeta-531126, A.P

REPORT

The Department of Commerce conducted an Add on course on **Basics of Stock Market** from 19/06/2017 to 31/07/2017. The resource person for this certificate course was Mr. G.TATAYYA NAIDU. In this Add on course the student got the detailed knowledge about Stock Market and its various exchanges in the field of academics, research & industry. Total 38 II B.Com students of **SPACES Degree College** enrolled for this Add on course. All the faculty members from Department of Commerce worked actively for the successful completion of Add on course.

Course Objectives:

This course will help the students:

- To learn about Stock & Stock Market basics
- To have a clear understanding of Stock Exchanges, Financial Intermediaries and Stock Indices.
- To attain knowledge on Stock Trading Fundamentals.

Outcomes:

After successful completion of the course, the learners will be able to:

- Understand the role and importance of Indian Stock market Operations.
- Apply and analyze the Concepts relevant to Indian Stock markets.
- Understand and analyze the mechanism and regulation of financial instruments and determine how the value of stocks, bonds, and securities.
- Evaluate empirical evidence of the market performance and accordingly the role of regulatory authorities to develop the financial market.


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COURSE SYLLABUS

Unit -1

Introduction to Capital Market - Introduction to Different Market Platforms-Primary & Secondary Market - IPO, FPO, Bonus & Buy Back of Shares - Mutual Fund Investment-SIP, ETFs - BSE, NSE

Unit -2

Procedure of Opening De-mat Account - Depository Participant's- CDSL, NSDL - Part Time Brokers, Full Time Brokers - Meaning of De-mat Account & Trading Account - Procedure to open De-mat Account

Unit-3

Trading in Equity, Commodity & Forward Market - Trading & Investment in Equity Market - Trading in Future & Option - Trading in Commodities - Forward Market

Unit-4

Practical Approach to Stock Market - Intra Day Trading Strategy -Delivery & Settlement Procedure - Study Chart Plans - Candlestick Patterns

Suggested Reading:

Coursera

Investopedia

Indianmoney.Com

Methodology: Theory: 30 Hrs.




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COURSE STRUCTURE & FRAME WORK

Title of the Course:

Basics of Stock Market

Course Code:

SDC-COMM-002

Duration of the Course:

30 Hours (includes both theory and Field Visit)

Eligibility of the course:

Candidates studying B. Com or Equivalent in Commerce stream

Scheme of the Course:

1. Lecture presentation
2. Practical /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching as per the schedule.

Scheme of Examination:

Maximum marks for this course are 50 (theory). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours.

Methodology: Theory: 30 Hrs.




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

DEPARTMENT OF COMMERCE

Add on Course examination - Model Question Paper

Paper Title: BASICS OF STOCK MARKET

Time: 2Hrs

Max Marks: 50

SECTION – I

Answer any THREE questions from the following

3X10=30 M

1. Explain the different ways of making fresh issue of securities.
2. What do you mean by secondary market? Explain the factors which contribute in the growth of this market.
3. Explain the trading mechanism of BSE?
4. Explain the custodian of securities regulation, 1996.
5. What are the eligibility requirements of companies to be listed on BSE?

SECTION – II

Answer any FOUR questions from the following.

4X5=20 M

6. What is NSDL? Who are the promoters of NSDL?
7. Bear
8. Hedging
9. Currency swaps
10. ADR's
11. Foreign Direct Investment




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

(Affiliated to Andhra University, Visakhapatnam)

Add on Course

In

DATA COMMUNICATION & NETWORKING

Organized by the

Department of Electronics

2018 - 2019


PRINCIPAL
SPACES DEGREE COLLEGE,
PAYAKARAOPETA



REPORT

The Department of Electronics conducted a Certificate course on **DATA COMMUNICATION & NETWORKING** from 12/06/2018 to 21/07/2018. The resource person for this certificate course was Mr.T.Srinivasa rao. In this certificate course the student got the detail knowledge about Electronics & Information technology and its various applications in the field of academics, research & industry. Total 42 IIMECS students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Electronics worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

- Course will develop the ability to manage new technologies
- Course will provide awareness about data transmission

COURSE OUTCOMES:

CO 1: To give awareness about different networks

CO 2 : To understand analog and digital conversions




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SPACES DEGREE COLLEGE,
PAYAKARAOPETA

COURSE SYLLABUS

UNIT -I (6 Hrs):

Data Communication and its Components – Introducing Networks, Types of Networks: Personal Area Network, Wide Area Network.

UNIT-II 6 hrs):

Network Topologies: Bus Topology, Star Topology, Ring Topology, Mesh Topology, Tree Topology, Hybrid, Topology.

UNIT-IV (8 Hrs):

Data Transmissions: Digital – To – Digital Conversion (line coding only), Analog – To – Digital Conversion (PCM only), Digital – To – Analog (ASK only) Analog – To – Analog Transmission (AM only) – Transmission Modes (Parallel and Serial).

Practicals:

1. TO STUDY LAN USING STAR TOPOLOGY
2. TO STUDY LAN USING BUS TOPOLOGY
3. TO STUDY LAN USING TREE TOPOLOGY
4. TO STUDY CONFIGURE MODEM OF COMPUTER
5. TO STUDY CONFIGURE HUB/SWITCH
6. Analog to Digital Conversion

Reference Book: 1) Data and Communication by Stallings Williams.

2) Computer Networks By Kurose James F

Methodology:

Theory: 20 Hrs

Practical: 10 Hrs



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SPACES DEGREE COLLEGE
PAYAKARAOPETA

COURSE STRUCTURE & FRAME WORK

Title of the Course: DATA COMMUNICATION & NETWORKING

Course Code: SDC- SE02

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Electronics as one of the optional subject

Scheme of the Course:

1. Lecture presentation.
2. Practicals.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practicals	25
	Total	75




PRINCIPAL
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DAVAKARAOPETA

Model Question Paper
DEPARTMENT OF ELECTRONICS
SPACES DEGREE COLLEGE, PAYAKARAOPETA
ADD ON COURSE IN
DATA COMMUNICATION & NETWORKING

Duration: 2hrs

Max Marks: 50

SECTION-A

3X10M = 30M

Answer ALL questions

1. (a) Explain about personal Area Network?
(Or)
(b) Explain about a wide Area Network?
2. (a) Explain about Bus Topology, Star Topology, Ring Topology?
(Or)
(b) Explain about Mesh Topology, Tree Topology, Hybrid, Topology?
3. Explain about analog-to-digital conversion?
(Or)
(b) Explain about digital-to-analog conversion?

SECTION-B

4X5M = 20M

Answer any FOUR questions

- 4 What is a network and different types of networks?
- 5 Difference between PAN and WAN
- 6 Explain about parallel transmission mode?
- 7 Write a short note on Digital-to-Digital conversion?
- 8 Explain about serial transmission mode?
- 9 Write a short note on Analog-to-Analog conversion?




PRINCIPAL
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Add on Course In Digital Marketing

Organized by

Department of Commerce and Management

(2018 – 2019)



SPACES

Degree College

(Affiliated to Andhra University)

www.spaces.sriprakash.org

Payakaraopeta-531126, A.P

REPORT

The Department of Commerce conducted an Add on course on **DIGITAL MARKETING** from 12/06/2018 to 21/07/2018. The resource person for this certificate course is V.V.S.B. Bangar Raju. In this Add on course the student got the detailed knowledge about Digital Marketing and its various digital Medias in the field of academics, research & industry. Total 34 II B.Com students of **SPACES Degree College** enrolled for this Add on course. All the faculty members from Department of Commerce and Management worked actively for the successful completion Add on course.

Course Objectives: -

- Evaluate the relevance of digital platforms and digital media to marketing.
- Evaluate the advantages and challenges of digital media
- Identify the key differences between customer communications for digital marketing and traditional marketing.

Course Outcomes: -

Upon successful completion of the course students will be able to:

1. Difference between traditional & digital marketing.
2. Importance & basics of website creation
3. Importance & basics of Search Engine Optimization
4. Basics of Social Media Marketing




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COURSE SYLLABUS: -

Unit-I: - Introduction

Digital marketing: - Meaning – importance – traditional online marketing vs digital marketing – trends in digital marketing.

Unit- II: - Web site planning and creation

Website: - Meaning – objectives – components of website – website creation – incorporation of design and adding content

Unit-III: - Search Engine Optimization (SEO)

SEO: - Meaning – History and growth of SEO – Importance of Search Engine – Role of search Engine Operation – google Ad words – search Engine Marketing campaign Creation.

Units -IV: - Social Media Marketing

Meaning of Social Media marketing – strategy and planning – social media network – social Networking – video creation and sharing – use of different social media platforms.

Units- V: Email Marketing

Meaning – Evolution of email – importance of email marketing – Development and Advancements in email marketing – email marketing platforms – create opt in lists.

Reference Books: -

- Youtility by Jay Bear, Published by Gilda Medial LC Portfolio 2013.
- Epic content Marketing by Joe Pulizzi, McGraw -Hill Education. 2013.
- New Rules of Marketing and PR by David Meerman Scott, Wiley, 2017.
- Social Medial marketing All – in – one Dummies by Jan Zimmerman Deborah Ng, John Wiley & sons.
- Web sources suggested by the concerned and college librarian including reading material.




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Reference Books: -

- Digital Marketing of Dummies by Ryan Desis & Russ Hannebery, publisher John Wiley first edition 2020.
- Youtility by Jay Bear, Published by Gilda Medial LC Portfolio 2013.
- Epic content Marketing by Joe Pulizzi, McGraw -Hill Education. 2013.
- New Rules of Marketing and PR by David Meerman Scott, Wiley, 2017.
- Social Medial marketing All – in – one Dummies by Jan Zimmerman Deborah Ng, John Wiley & sons.
- Digital Marketing 2020 by Danny star, independently published 2019.
- Web sources suggested by the concerned and college librarian including reading material.




PRINCIPAL
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PAYAKARAOPETA

COURSE STRUCTURE & FRAME WORK

Title of the Course: - DIGITAL MARKETING

Course Code: SDC- COMM - 003

Duration of the Course: - 30 Hours

Eligibility of the course:

Candidates studying B. Com or Equivalent in Commerce stream

Scheme of the Course:

1. Lecture presentation
2. Practical /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching as per the schedule.

Scheme of Examination:

Maximum marks for this course are 50 marks (Theory) with minimum of 20 marks for passing and duration of examination is 2 Hours.

Methodology:

Theory: 30 HRS




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

DEPARTMENT OF COMMERCE AND MANAGEMENT

Add on Course examination - Model Question Paper

Paper Title: DIGITAL MARKTING

Time: 2 Hrs

MaxMarks:50

SECTION – I

Answer any Three questions from the following

3X10=30 M

1. Distinguish between Traditional and Digital Marketing?
2. Role of SEO.
3. Role of Social Media in Digital Marketing.
4. Explain the use of different social media platforms in digital Marketing?

SECTION – II

Answer any FIVE questions from the following.

5X4=20 M

5. Short notes on
 - a. E Mail Marketing
 - b. Website
 - c. WhatsApp Business Account
 - d. Role of ChatBot in digital Marketing
 - e. Few types of Digital Marketing
 - f. PPC – Pay per Click
 - g. Role of Keywords




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

(Affiliated to Andhra University, Visakhapatnam)

Certificate Course

In

Functional English

By

Department of English

2018-19

Course Outcomes and Objectives:

- Functional English is usage of the English language required to perform a specific function like academic study or career progression.
- Functional English provides the essential knowledge, skills and understanding that will enable the user to operate confidently, effectively and independently in life and at work.
- Individuals who possess these skills will be able to participate and progress in education, training and employment as well as develop and secure the broader range of aptitude, attitude and behaviour that will enable them to make a positive contribution to the communities in which they live and work.
- For some time employers and universities have been calling for young people to leave education with the skills needed to operate confidently, effectively and independently.
- It is more important than ever that young people of all academic abilities can manage the demands of the workplace, and of further and higher education.
- Functional skills are the essential elements of English that help people to develop higher levels of practical skill, which they can apply to real life contexts. Rather than being taught as separate curriculum subjects, functional skills are applied to the teaching and learning in embedded way.




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PAYAKARAOPETA

Duration: 30 Hours (Theory)

FUNCTIONAL ENGLISH(001)

Objectives:

To introduce corrective measures to eliminate grammatical errors in speaking and writing. Theoretical and conceptual understanding of the elements of grammar.

To enhance the learners' ability of communicating accurately and fluently.

Course content

Unit I: Introduction to grammar (what is grammar, its importance)

Unit II: Parts of speech

Unit III:

Verbs (transitive & intransitive, regular & irregular), tense & aspect, auxiliaries, negatives, questions, agreement & concord.

Unit IV:

Forms & functions of adjectives, adverbs, agreement & concord.




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Question Paper

Subject: Functional English

Marks:50

Code: Eng-001

Time: 2hrs.

.....
I. Answer any **Four** of the following questions:

(4x10=40)

1. What is grammar? What's it's important in life?
2. What is a pronoun? Define its kinds with examples.
3. What is a noun? Define its kinds with examples.
4. Define degrees of comparison.
5. What ai the difference between concrete nouns and abstract nouns?
6. What is parts of speech? Illustrate with examples.

II. Identify the **parts of speech** of the following sentences. (10x1=10)

1. Namitha is not coming today.
2. My mom will be leaving to Bangalore tomorrow.
3. The teacher asked the students to stand.
4. He is my brother.
5. There is a cat under the table.
6. The clothes did not dry as it was raining all night.
7. Sheena and her sister dance well.
8. I am wearing a green dress for the party.
9. Oh! That is really sad.
10. She is coming with me.




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

(Affiliated to Andhra University, Visakhapatnam)

Certificate Course

In

Functional English

By

Department of English

2018-19

Course Outcomes and Objectives:

- Functional English is usage of the English language required to perform a specific function like academic study or career progression.
- Functional English provides the essential knowledge, skills and understanding that will enable the user to operate confidently, effectively and independently in life and at work.
- Individuals who possess these skills will be able to participate and progress in education, training and employment as well as develop and secure the broader range of aptitude, attitude and behaviour that will enable them to make a positive contribution to the communities in which they live and work.
- For some time employers and universities have been calling for young people to leave education with the skills needed to operate confidently, effectively and independently.
- It is more important than ever that young people of all academic abilities can manage the demands of the workplace, and of further and higher education.
- Functional skills are the essential elements of English that help people to develop higher levels of practical skill, which they can apply to real life contexts. Rather than being taught as separate curriculum subjects, functional skills are applied to the teaching and learning in embedded way.




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PAYAKARAOPETA

Duration: 30 Hours(Theory)

FUNCTIONAL ENGLISH(001)

Objectives:

To introduce corrective measures to eliminate grammatical errors in speaking and writing. Theoretical and conceptual understanding of the elements of grammar.

To enhance the learners' ability of communicating accurately and fluently.

Course content

Unit I: Introduction to grammar (what is grammar, its importance)

Unit II: Parts of speech

Unit III:

Verbs (transitive & intransitive, regular & irregular), tense & aspect, auxiliaries, negatives, questions, agreement & concord.

Unit IV:

Forms & functions of adjectives, adverbs, agreement & concord.




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PAYAKARAOPETA

Question Paper

Subject: Functional English

Marks:50

Code: Eng-001

Time: 2hrs.

.....
I. Answer any **Four** of the following questions:

(4x10=40)

1. What is grammar? What's it's important in life?
2. What is a pronoun? Define its kinds with examples.
3. What is a noun? Define its kinds with examples.
4. Define degrees of comparison.
5. What ai the difference between concrete nouns and abstract nouns?
6. What is parts of speech? Illustrate with examples.

II. Identify the **parts of speech** of the following sentences. (10x1=10)

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4. He is my brother.
5. There is a cat under the table.
6. The clothes did not dry as it was raining all night.
7. Sheena and her sister dance well.
8. I am wearing a green dress for the party.
9. Oh! That is really sad.
10. She is coming with me.




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

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Add on Course


In

INDUSTRIAL ELECTRONICS

Organized by the
Department of Electronics

2018 - 2019




PRINCIPAL
SPACES DEGREE COLLEGE,
PAYAKARAOPETA

REPORT

The Department of Electronics conducted a Certificate course on **INDUSTRIAL ELECTRONICS** from 22/11/2018 to 29/12/2018. The resource person for this certificate course was Miss.S.Aswini. In this certificate course the student got the detail knowledge about Electronics & Information technology and its various applications in the field of academics, research & industry. Total 43 IIMECS students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Electronics worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

- To acquire a critical knowledge of various Electrical Instruments used in the Laboratory
- To Identify various facilities required to set up a basic Instrumentation Laboratory

COURSE OUTCOMES:

CO 1: To give awareness about different power supplies

CO 2 : To understand different voltage multiplier circuit




PRINCIPAL
SPACES DEGREE COLLEGE,
PETA

COURSE SYLLABUS

UNIT-I (10 hours) Rectifiers and filters: Rectifiers– Half wave, full-wave and bridge rectifiers- Efficiency- Ripple factor Regulation – Harmonic components in rectified output

Types of filters- Choke input (inductor) filter, Shunt capacitor filter- L section and pi section filters.

Voltage Regulators: Transistor Series voltage regulator - Transistor Shunt voltage regulator – Three terminal regulators (78XX and 79XX).

UNIT-II (5 hours) Power Supplies: Block diagram of regulated power supply – A simple regulated transistorized power supply (circuit and working) – Principle and working of switch mode power supply (SMPS).

UNIT-III (5 hours) Voltage Multipliers: Half wave voltage doubler, Full wave voltage doubler, Voltage Tripler circuit diagram and working mentioning of applications of voltage multipliers.

Practicals:

1. D.C Power supply and filters
2. Voltage regulator using IC-7805 and IC-7905
3. Voltage doubler using diodes
4. Voltage Tripler using diodes

Reference Book: 1. Industrial Electronics, S.B. Biswas, Dhanapur Rai & Sons.
2. Industrial Electronics, G.K. Mithal, Khanna Publishers.

Methodology:

Theory: 20 Hrs

Practical: 10 Hrs



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COURSE STRUCTURE & FRAME WORK

Title of the Course: INDUSTRIAL ELECTRONICS

Course Code: SDC- SE03

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Electronics as one of the optional subject

Scheme of the Course:

1. Lecture presentation.
2. Practicals.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practicals	25
	Total	75




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PAYAKANNUR, KERALA

Model Question Paper
DEPARTMENT OF ELECTRONICS
SPACES DEGREE COLLEGE, PAYAKARAOPETA
ADD ON COURSE IN
INDUSTRIAL ELECTRONICS

Duration: 2hrs

Max Marks: 50

SECTION-A

Answer ALL questions

3X10M = 30M

1. (a) Explain Full wave rectifier circuit with parameters?
(Or)
(b) Explain Bridge rectifier circuit with parameters?
2. (a) Explain the block diagram of SMPS?
(Or)
(b) Explain i) L-section filter
ii) PI-section filter
3. Explain about a full wave voltage doubler circuit?
(Or)
(b) Explain about a full wave voltage tripler circuit?

SECTION-B

Answer any FOUR questions

4X5M = 20M

- 4 Write about IC 7805 & 7812?
- 5 Explain about transistor series voltage regulator
- 6 Explain about choke input filters?
- 7 Explain about RPS?
- 8 Explain about the transistor shunt voltage regulator?
- 9 Write a short note on the shunt capacitor filter?



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SPACES DEGREE COLLEGE, PAYAKARAOPETA

(Affiliated to Andhra University, Visakhapatnam)

Certificate Course

In

PHOTOSHOP

**Organized by the
Department of Computer Science**

2017 - 2018

COURSE SYLLABUS

Unit –I - Introduction to adobe photoshop:

Getting started with Photoshop, creating and saving a document in photoshop, Page layout and background, photoshop program window-title bar, menu bar, option bar, image window, image title bar, status bar, ruler, pallets, toolbox, screen modes, saving files, reverting files, closing files.

Unit –II - Images:

Working with images, image size and resolution, image editing, color modes and adjustments, Zooming and Panning an image, Rulers, Guides & Grids - Working with tool box: pen tool, working with erasers, working with text and brushes, patch tool, cropping.

Unit –III - Layers:

Working with layers, layer styles-opacity-adjustment layers. **Filters:** The filter menu, working with filters-Editing your photo shot, presentation - how to create ads, artistic filter, blur filter, brush store filter, distort filters, noise filters, pixelate filters, light effects, difference clouds, sharpen filters, printing.

Practical's:

1. Create your visiting card
2. Create cover page for any text book
3. Creating a paper ads for advertising of any commercial agency
4. Design a passport photo
5. Create a pamphlet for any program to be conducted by an organization.
6. Create custom shapes.
7. Convert color photo to black and white photo.
8. Create a brochure
9. Create a flex
10. Filter effects & eraser effects.

Suggested Reading:

1. Adobe creative Team, Adobe Photoshop Class Room in a Book Y
2. David Maxwell, Photoshop: Beginner's Guide for Photoshop - Digital Editing, Color Grading & Graphic.

Methodology:

Theory: 20 Hrs Practical: 10 Hrs




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PAYAKARAOPETA

REPORT

The Department of Computer Science conducted a Certificate course on **PHOTOSHOP** from 19/06/2017 to 31/07/2017. The resource person for this certificate course was Mr. A.R.V.L. NARAYANA. In this certificate course the student got the detail knowledge about photoshop and its various applications in the field of academics, research & industry. Total 36 IIMPCEM students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Computer Science worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

- To learn about Adobe Photoshop interface and work with menus, tools and Panels
- To Learn how to open , crop, transform and edit existing images.
- To learn working with text and formatting tools and panels.
- To learn how to add multiple images to create a collage.

COURSE OUTCOMES:

- CO 1: up on completion of course, students will have the knowledge & ability to use photoshop confidently and effectively.
- CO 2 : students will have employed photoshop creatively to create four real world production challenges for print, photography, web and video.
- CO 3 : Students will gain the skills & abilities to use photoshop that are employable & Rewarding.




PRINCIPAL
SPACES DEGREE COLLEGE,
PAVAKARAOPETA

COURSE STRUCTURE & FRAME WORK

Title of the Course: Photoshop.

Course Code: SDC-CS001

Duration of the Course: 30 Hours (includes both theory and practical's)

Eligibility of the course:

Candidates studying any U.G course

Scheme of the Course:

1. Lecture presentation.
2. Practicals.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practicals	25
	Total	75




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PAYAKARAOPETA

Model Question Paper
DEPARTMENT OF COMPUTER SCIENCE
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Certificate Course examination
Paper Title: Photoshop.

Time: 2 Hrs

Max. Marks: 50

PART – A

Answer any Five questions

(4x5 = 20M)

Question 1: Write about creating and saving document in photoshop?

Question 2: Write about page layout and background in photoshop?

Question 3: Write about image size and resolution?

Question 4: Explain about rulers, guides in photoshop?

Question 5: write shortnotes on opacity?

Question 6: Write about pixelate filter ?

PART-B

Answer any three of the following questions

(3x10=30M)

Question-1 Explain about photoshop program window.

Question- 2 Explain about Pen Tool.

Question-3 Write about working with Layers?

Question -4 Write about filters in Photoshop.



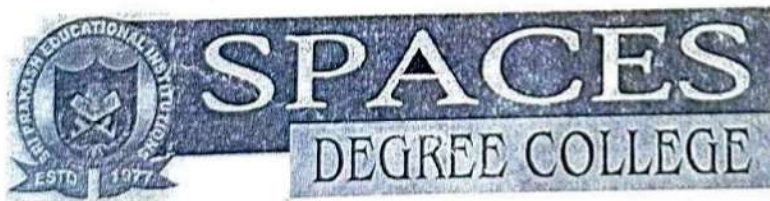

PRINCIPAL
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PAYAKARAOPETA

DEPARTMENT OF PHYSICS

ADD ON COURSE

TITLE : RENEWABLE ENERGY

2018-2019



www.spaces.sriprakash.org
Payakaraopeta-531126. Andhra Pradesh

- PRINCIPAL
SPACES DEGREE COLLEGE,
PAYAKARAOPETA

Course Objectives:

1. Classify various type of fuel.
2. Lay the groundwork for subsequent studies in such fields as coal, petroleum and to prepare the students to effectively use fuel in the practice of engineering.
3. Develop an intuitive understanding of fuel technology by emphasizing the physics and physical arguments

COURSE SYLLABUS

UNIT-I – Solar Radiation:

(6 hrs)

Sun as a source of energy, Solar radiation, Solar radiation at the Earth's surface, Measurement of Solar radiation-Pyroheliometer, Pyranometer, Sunshine recorder, Prediction of available solar radiation, Solar energy-Importance

UNIT-II – Solar Thermal Systems:

(7 hrs)

Principle of conversion of solar radiation into heat, Collectors used for solar thermal conversion: Flat plate collectors and Concentrating collectors, Solar Thermal Power Plant, Solar cookers, Solar hot water systems, Solar dryers

UNIT-III – Solar Photovoltaic Systems:

(7 hrs)

Conversion of Solar energy into Electricity - Photovoltaic Effect, Solar photovoltaic cell and its working principle, Different types of Solar cells, Series and parallel connections,

Practicals:

(10 Hrs)

1. Plot sun chart and locate the sun at your location for a given time of the day.
2. Analyse shadow effect on incident solar radiation and find out contributors.
3. Connect solar panels in series & parallel and measure voltage and current

Suggested Reading:

1. Solar energy-S.chand publications
2. <https://www.energy.gov>
3. <https://www.seia.org>

Methodology: Theory:-20 Hours

Practical:-10 Hours



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PAYAKARAOPETA

COURSE STRUCTURE & FRAME WORK

Title of the Course: **RENEWABLE ENERGY**

Course Code: SDC-PHY001

Duration of the Course: 30 Hours (includes both theory and practical)

Eligibility of the course:

Candidates studying B.Sc. with Chemistry (Or) Physics (Or) Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology as one of the optional subject.

Scheme of the Course:

1. Lecture presentation
2. Practical /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by inviting experts in the practical to provide complete information and process of water analysis.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical / field work and assignment	25
	Total	75

Course Outcomes:

CO 1: To give awareness about to the public for which Sun is a source of life.

CO 2 : To understand the various types solar Radiating emerging bodies.




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Model Question Paper
DEPARTMENT OF PHYSICS
SPACES DEGREE COLLEGE, PAYAKAROPETA

Add on Course examination

Paper Title: **RENEWABLE ENERGY**

Time: 90 MIN

Max. Marks:50

Part A

I Answer any **FOUR** questions:

4x5=20 M

1. What is solar energy?
2. What are the types of solar energy?
3. List the uses of solar energy.
4. What are the applications of solar energy?
5. Define photo-voltaic cells.

Part B

II Answer the any **Three** of following questions:

3 x 10 = 30 M

6. What is solar energy and why is it important to life on the earth?
7. What are three ways buildings can be cooled naturally?
8. Why does the Sun shine? The Sun shines because of a nuclear reaction at the core, Can you identify it?

A) The release of energy through nuclear fission. B) Nuclear fusion



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PRINCIPAL
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DEPARTMENT OF CHEMISTRY

ADD ON COURSE

**TITLE : SOAPS
AND DETERGENTS**

2018-19



SPACES

DEGREE COLLEGE

www.spaces.sriprakash.org
Payakaraopeta-531126, Andhra Pradesh

Course Objectives:

- To identify which materials are required to make different types of soap products.
- To make various types of soap products like bathing soap, dishwashing powder, washing soap, detergent powder, and soap oil.
- To take necessary safety precautions for making soap.

COURSE SYLLABUS

Unit –I

What is Soap?, Soap history, History of making of soap, Different types of brands of soaps in India.

Unit - II

Preparation of soap base, making of natural soaps and ingredients used in bathing soap. Bathing Soap-Cold Process. Rebatching and trouble shooting of soap.

Unit- III:

Description of various products- Detergent powder, Washing soap, Dish washing powder and making of soap oil.

Practicals:

1. Preparation of natural soap
2. Different types of brands of soaps (field visit)

Suggested Reading:

1. Modern Technology of Soaps, Detergents & Toiletries (with Formulae & Project Profiles)
4th Revised Edition
2. Handbook on Soaps, Detergents & Acid Slurry (3rd Revised Edition) by **NIIR board**
3. Herbal Soaps & Detergents Handbook by H.Panda



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PAVAKARAOPETA

Methodology: Theory: 20 Hrs
Practical: 10 Hrs

COURSE STRUCTURE & FRAME WORK

Title of the Course: Soaps and Detergents making

Course Code: SDC- CHE003

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Chemistry (Or) Physics (Or) Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology as one of the optional subject

Scheme of the Course:

1. Lecture presentation
2. Practicals /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by inviting experts in the practical to provide complete information and process of water analysis.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practicals). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical / field work and assignment	25
	Total	75




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PAYAKARAOPETA

Model Question Paper
DEPARTMENT OF CHEMISTRY
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Add on /Certificate Course examination
Paper Title: Soaps and Detergents

Time: 2 Hrs

Max. Marks: 50

PART – A

Answer any Four questions

(4x5 = 20M)

Question 1: What is soap and ingredients in soap?

Question 2: Different types of brands of soaps in India?

Question 3: Saponification process?

Question 4: Difference in between soaps and detergents?

Question 5: Explain cold process ?

Question 6: Explain Hot process ?

PART-B

Answer any three of the following questions

(3x10= 30M)

Question-1 Explain the making of soap base and natural soaps

Question- 2 Explain history of soap briefly?

Question-3 How to prepare detergents and Explain making of detergents ?

Question -4 Write short note on Dish washing powder and making of soap oil.

Question- 5 Explain trouble shooting of soap?



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PAYAKARAOPETA

Course Outcomes:

- CO 1: To give awareness about to the public for which soaps are used in bathing purpose.
- CO 2 : To understand the various types Oils used for making of bathing soap
- CO 3 : To Learning the production ,packaging of various soaps like bathing soap, detergent bar & Dishwashing powder.




PRINCIPAL
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PAYAKARAOPETA

Add on Course In Tally ERP 9

Organized by
Department of Commerce and Management
(2018 -- 2019)



SPACES

Degree College

(Affiliated to Andhra University)

www.spaces.sriprakash.org

Payakaraopeta-531126, A.P

REPORT

The Department of Commerce conducted an Add on course on Tally from 22/11/2018 to 29/12/2018. The resource person for this certificate course was Mr. P. BHASKARARAO. In this Add on course the student got the detailed knowledge about Tally and its various Accounting packages in the field of academics, research & industry. Total 38 III B.Com students of **SPACES Degree College** enrolled for this Add on course. All the faculty members from Department of Commerce and Management worked actively for the successful completion Add on course.

Course Objectives:

- To impart knowledge regarding the concepts of financial accounting
- To enable students to understand and work with an accounting software
- To increase the employability of students in the area of accounting and finance

Course Out comes:

- After successful completion of the course, the learners will be able to:
- Classify accounting records relating to inventory, banking, vouchers and orders.
- Synthesize company accounts into Tally software
- Evaluate the accounting software
- Create a career as accounting professional




PRINCIPAL
SPACES DEGREE COLLEGE,
BHANAPUR, ODISHA

COURSE SYLLABUS

Unit I: -Computerized Accounting: Meaning and Features – Advantages and Disadvantages of Computerized Accounting – Difference between Manual Accounting and Computerized Accounting packages – Tally. ERP 9 – features and Advantages.

Unit II: -Tally Various Features: Creation of Company – Gateway of Tally –Accounting Information in Tally – Groups – Formation of Groups – Pre-defined Groups – Creation of New Groups – Creation of Sub Group – Ledgers in Tally – Displaying and Altering Ledgers – Single and Multiple Ledgers – Display and Alter options in Multiple Ledgers – Getting more options through Configuration –Valuation of stock in Ledgers – Different types of Ledgers and their Group Allocation – Vouchers – Types of Vouchers – Recording of vouchers –Editing and deleting of Vouchers – Voucher numbering –Customization of Vouchers – Practical Exercises in Tally.

Unit III: -Maintenance of Accounts on Inventory Basis and reports generating: Creation of Masters for inventory – Creation of Stock Groups – Creation of stock Items – Inventory Vouchers – Customization of profit & loss Account – Customization of Balance Sheet – Trail Balance – Account Books – statement of Accounts – List of Accounts – Printing of Reports, Documents and Vouchers

Suggested readings:

- | | |
|------------------------------|---|
| 1. Financial accounting-I | S.P. Jain&K.L.Narang Kalyani publishers |
| 2. Financial accounting-I | Dr.V.K.Goyal Excel Books |
| 3. Tally. ERP 9 | Dr.K.Kiran Kumar Sri Laasya Publications |
| 4. Tally. ERP Training Guide | Nadhani BPB Publication |




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PAYAKARAOPETA

COURSE STRUCTURE & FRAME WORK

Title of the Course:

Tally

Course Code:

SDC-COMM-001

Duration of the Course:

30 Hours (includes both theory and practical's)

Eligibility of the course:

Candidates studying B. Com or Equivalent in Commerce stream

Scheme of the Course:

1. Lecture presentation
2. Computer lab work

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by faculty of commerce as per the schedule

Scheme of Examination:

Maximum marks for this course are 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 1 hour's duration for a maximum 25 marks with minimum of 10 marks for passing.

Methodology:

Theory: 20 HRS

Practicals : 10 HRS




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

DEPARTMENT OF COMMERCE

Add on Course examination - Model Question Paper

Paper Title: Tally

Time: 2 Hrs.

MAX: 50M

SECTION - A

Answer any **THREE** of the following Questions.

3X10=30M

1. Explain various Types of Vouchers?

2. Journalize the following Transactions

Rs

2020 June 1 Krishna Started Business with cash	100000
4 purchased goods for cash	50000
5 Cash Deposited into Bank	20000
10 Goods Sold for Cash	10000
15 Purchased goods from Sai	20000
20 Sold goods to rani	10000
25 Goods returned to Sai	1000
30 Goods returned by Rani	500

3. Explain the Procedure to Create Ledger in Tally?

4. Explain the Features and Advantages of Tally?

5. Explain the Steps to Create Stock Groups in Inventory Using Tally?

SECTION - B

Answer any **FOUR** of the following Questions

4X5=20 M

6. How to Create Company in Tally?

7. Explain Stock General in Tally?

8. What Is the Use of Print Preview Option in Tally?

9. How Can We Display Trial Balance in Tally?

10. Explain Debit Note & Credit Note?

11. Explain About Preparation of Balance Sheet in Tally?



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Add on Course In **Tally**

Organized by
Department of Commerce
(2017 – 2018)



SPACES

Degree College

(Affiliated to Andhra University)

www.spaces.sriprakash.org

Payakaraopeta-531126, A.P

REPORT

The Department of Commerce conducted an Add on course on Tally from 15/11/2017 to 22/12/2017. The resource person for this certificate course was Mr. P. BHASKARARAO. In this Add on course the student got the detailed knowledge about Tally and its various Accounting Packages in the field of academics, research & industry. Total 33 III B.Com students of SPACES Degree College enrolled for in this Add on course. All the faculty members from Department of Commerce worked actively for the successful completion of Add on course.

Course Objectives:

- To impart knowledge regarding the concepts of financial accounting
- To enable students to understand and work with an accounting software
- To increase the employability of students in the area of accounting and finance

Out comes:

After successful completion of the course, the learners will be able to:

- Classify accounting records relating to inventory, banking, vouchers and orders.
- Synthesize company accounts into Tally software
- Evaluate the accounting software
- Create a career as accounting professional




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COURSE SYLLABUS

Unit I: -Computerized Accounting: Meaning and Features – Advantages and Disadvantages of Computerized Accounting – Difference between Manual Accounting and Computerized Accounting packages – Tally – features and Advantages.

Unit II: -Tally Various Features: Creation of Company – Gateway of Tally –Accounting Information in Tally – Groups – Formation of Groups – Pre-defined Groups – Creation of New Groups – Creation of Sub Group – Ledgers in Tally – Displaying and Altering Ledgers – Single and Multiple Ledgers – Display and Alter options in Multiple Ledgers – Getting more options through Configuration –Valuation of stock in Ledgers – Different types of Ledgers and their Group Allocation – Vouchers –Types of Vouchers – Recording of vouchers –Editing and deleting of Vouchers – Voucher numbering –Customization of Vouchers – Practical Exercises in Tally.

Unit III: -Maintenance of Accounts on Inventory Basis and reports generating: Creation of Masters for inventory – Creation of Stock Groups – Creation of stock Items – Inventory Vouchers – Customization of profit & loss Account – Customization of Balance Sheet – Trail Balance – Account Books – statement of Accounts – List of Accounts – Printing of Reports, Documents and Vouchers.

Suggested readings:

- | | | |
|------------------------------|----------------------|-------------------------|
| 1. Financial accounting-I | S.P. Jain&K.L.Narang | Kalyani publishers |
| 2. Financial accounting-I | Dr.V.K.Goyal | Excel Books |
| 3. Tally. ERP 9 | Dr.K.Kiran Kumar | Sri Laasya Publications |
| 4. Tally. ERP Training Guide | Nadhani | BPB Publications |




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COURSE STRUCTURE & FRAME WORK

Title of the Course:

Tally

Course Code:

SDC-COMM-001

Duration of the Course:

30 Hours (includes both theory and practical's)

Eligibility of the course:

Candidates studying B. Com or Equivalent in Commerce stream

Scheme of the Course:

1. Lecture presentation
2. Computer lab work

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes will be conducted by the faculty of computers as per the schedule.

Scheme of Examination:

Maximum marks for this course are 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 1 hour's duration for a maximum 25 marks with minimum of 10 marks for passing.

Methodology: Theory: 20 Hrs.

Practical: 10 Hrs.




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

DEPARTMENT OF COMMERCE

Add on Course examination - Model Question Paper

Paper Title: Tally

Time: 2 Hrs.

MAX: 50M

SECTION - A

Answer any **THREE** of the following Questions.

3X10=30M

1. Explain various Types of Vouchers?

2. Journalize the following Transactions

	Rs
2020 June 1 Krishna Started Business with cash	100000
4 purchased goods for cash	50000
5 Cash Deposited into Bank	20000
10 Goods Sold for Cash	10000
15 Purchased goods from Sai	20000
20 Sold goods to rani	10000
25 Goods returned to Sai	1000
30 Goods returned by Rani	500

3. Explain the Procedure to Create Ledger in Tally?

4. Explain the Features and Advantages of Tally?

5. Explain the Steps to Create Stock Groups in Inventory Using Tally?

SECTION - B

Answer any **FOUR** of the following Questions

4X5=20 M

6. How to Create Company in Tally?


7. Explain Stock General in Tally?

8. What Is the Use of Print Preview Option in Tally?

9. How Can We Display Trial Balance in Tally?

10. Explain Debit Note & Credit Note?

11. Explain About Preparation of Balance Sheet?


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SPACES DEGREE COLLEGE, PAYAKARAOPETA

(Affiliated to Andhra University, Visakhapatnam)

Add on Course

In

DATA COMMUNICATION & NETWORKING

Organized by the
Department of Electronics

2019 - 2020



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PAYAKARAOPETA

REPORT

The Department of Electronics conducted a Certificate course on **DATA COMMUNICATION & NETWORKING** from 06/06/2019 to 11/07/2019. The resource person for this certificate course was Mr.T.Srinivasa rao. In this certificate course the student got the detail knowledge about Electronics & Information technology and its various applications in the field of academics, research & industry. Total 42 IIMECS students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Electronics worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

- Course will develop the ability to manage new technologies
- Course will provide awareness about data transmission

COURSE OUTCOMES:

CO 1: To give awareness about different networks

CO 2 : To understand analog and digital conversions




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COURSE SYLLABUS

UNIT -I (6 Hrs):

Data Communication and its Components –
Introducing Networks, Types of Networks: Personal Area Network,
Wide Area Network.

UNIT-II 6 hrs):

Network Topologies: Bus Topology, Star Topology, Ring Topology,
Mesh Topology, Tree Topology, Hybrid, Topology.

UNIT-IV (8 Hrs):

Data Transmissions: Digital – To – Digital Conversion (line coding
only), Analog – To – Digital Conversion (PCM only), Digital – To –
Analog (ASK only) Analog – To – Analog Transmission (AM only) –
Transmission Modes (Parallel and Serial).

Practicals:

1. TO STUDY LAN USING STAR TOPOLOGY
2. TO STUDY LAN USING BUS TOPOLOGY
3. TO STUDY LAN USING TREE TOPOLOGY
4. TO STUDY CONFIGURE MODEM OF COMPUTER
5. TO STUDY CONFIGURE HUB/SWITCH
6. Analog to Digital Conversion

Reference Book: 1)Data and Communication by Stallings Williams.
2)Computer Networks By Kurose James F

Methodology:

Theory: 20 Hrs

Practical: 10 Hrs



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COURSE STRUCTURE & FRAME WORK

Title of the Course: DATA COMMUNICATION & NETWORKING

Course Code: SDC- SE02

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Electronics as one of the optional subject

Scheme of the Course:

1. Lecture presentation.
2. Practicals.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practicals	25
	Total	75



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Model Question Paper
DEPARTMENT OF ELECTRONICS
SPACES DEGREE COLLEGE, PAYAKARAOPETA
ADD ON COURSE IN
DATA COMMUNICATION & NETWORKING

Duration: 2hrs

Max Marks: 50

SECTION-A

Answer ALL questions

3X10M = 30M

1. (a) Explain about personal Area Network?
(Or)
(b) Explain about a wide Area Network?
2. (a) Explain about Bus Topology, Star Topology, Ring Topology?
(Or)
(b) Explain about Mesh Topology, Tree Topology, Hybrid, Topology?
3. Explain about analog-to-digital conversion?
(Or)
(b) Explain about digital-to-analog conversion?


SECTION-B

Answer any FOUR questions

4X5M = 20M

- 4 What is a network and different types of networks?
- 5 Difference between PAN and WAN
- 6 Explain about parallel transmission mode?
- 7 Write a short note on Digital-to-Digital conversion?
- 8 Explain about serial transmission mode?
- 9 Write a short note on Analog-to-Analog conversion?




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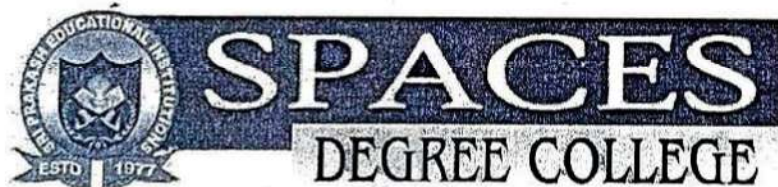
DEPARTMENT OF PHYSICS

ADD ON COURSE

TITLE

ELECTRICAL APPLIANCES

2019 - 2020



www.spaces.sriprakash.org

Payakaraopeta-531126. Andhra Pradesh

REPORT

The Department of Physics conducted an add on course **ELECTRICAL APPLIANCES** from 13-11-2019 to 17-12-2019. The resource person for this add on course was Mrs.K.K.S.R.Deepthi . In this add on course the student gained detailed knowledge about basic electronic appliances like motor fan,iron box , water heater,using basic electronic parameters like resistor,capacitor and inductor in the field of electronics 40 II MPComputers students of SPACES Degree College enrolled in this add on course. All the faculty members from Department of Physics worked actively for the successful completion of the course.


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Course Objectives:

- Design, develop and test AC-AC, AC-DC and DC-DC converters, variable DC power supply by using power electronics components to fulfil electrical engineering requirements.
- Design and develop LT distribution and PLC control panel using suitable switchgears, sensors, Push buttons, Selector switches as per IEC standards and integrate it in smart automation.
- Design and compute PV cell/PV array performance parameters, simulate/analyze the PV system performance, estimate the cost and payback period of the solar PV system to experiment and build a solar PV system.

COURSE SYLLABUS

UNIT-I :

(6 hrs)

Voltage, Current, Resistance, Capacitance, Inductance, Electrical conductors and Insulators, Ohm's law, Series and parallel combinations of resistors, Galvanometer, Ammeter, Voltmeter, Multimeter, Transformers, Electrical energy, Power, Kilowatt hour (kWh), consumption of electrical power

UNIT-II :

(7 hrs)

Direct current and alternating current, RMS and peak values, Power factor, Single phase and three phase connections, Basics of House wiring, Star and delta connection, Electric shock, First aid for electric shock, Overloading, Earthing and its necessity, Short circuiting, Fuses, MCB, ELCB, Insulation, Inverter,

UNIT-III:

(7 hrs)

Principles of working, parts and servicing of Electric fan, Electric Iron box, Water heater; Induction heater, Microwave oven; Refrigerator, Concept of illumination, Electric bulbs, CFL, LED lights, Energy efficiency in electrical appliances

Practicals:

(10 Hrs)

1. Observing the working of transformer under no-load and full load conditions.
2. Observing the response of inductor and capacitor with DC and AC source
3. Studying electrical circuit protection using MCBs, ELCB

Suggested Reading Books:

1. A Text book on Electrical Technology, B.L. Theraja, S.Chand & Co.,
2. A Text book on Electrical Technology, A.K. Theraja.
3. Performance and design of AC machines, M.G. Say, ELBSEdn.,




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Methodology: Theory:- 20 Hours

Practical:- 10 Hours

COURSE STRUCTURE & FRAME WORK

Title of the Course: ELECTRICAL APPLIANCES

Course Code: SDC- PHY002

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Chemistry (Or) Physics as one of the optional subject

Scheme of the Course:

1. Lecture presentation
2. Practicals /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by inviting experts in the practical to provide complete information and process of water analysis.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practicals). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical / field work and assignment	25
	Total	75



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WARANGAL, A.P.

Model Question Paper

DEPARTMENT OF PHYSICS

SPACES DEGREE COLLEGE, PAYAKAROPETA

Certificate Course examination

Paper Title: ELECTRICAL APPLIANCES

Time: 90 MIN

Max. Marks:50

Part A

Answer any FOUR questions. each question carry 5 marks. 4 x 5 = 20Marks

1. Explain the terms (i) Voltage and (ii) Current.
2. Write a short notes on short circuiting?
3. Write about Galvanometer
4. What is the difference between Inverter and UPS
5. What is the variation of Electrical energy and Power
6. Define IS codes and IE codes
7. What is the principle of Microwave oven
8. Explain the parts and servicing of Electric fan

PART – B

Answer any THREE questions . each question carry 10marks 3x10M = 30Marks

9. Explain about the series and parallel combinations of resistors
(OR)
10. Distinguish between Electrical conductors and Insulators
11. Discuss about single phase and three phase connections
(OR)
12. What is electric shock and discuss necessary steps for first aid for electric shock
13. Write the concept of illumination and discuss about LED light
(OR)
14. Distinguish between Water heater and Induction heater.




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Course Outcomes:

Students are expected to know and be able ,

- **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **Design / development of solutions :**Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **Conduct investigations of complex problems:** Use research – based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions




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Certificate Course

In

Fluency Development Course

By

Department of English

2019-2020

Fluency Development Outcomes & Objectives

- It gives confidence in articulating expressions
- It is the ability to read "like you speak."
- fluency acquires vocabulary, basic grammar and also comprehension.
- fluency development is directly related to comprehension.
- fluency correlates highly with reading comprehension.
- Fluency identifies key vocabulary, concept words, and other academic words students will need to know in order to talk, read, and write about the topic of the lesson. Identify grammar or language structures common to the content area.
- It enables the students to participate in any language activities with sound confidence.



bys
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Duration: 30 Hours(Theory)

Course Objectives:

- Students will improve their speaking ability in English both in terms of fluency and comprehensibility.
- To improve reading fluency:
- To enhance vocabulary power

Course Syllabus:

Chapter 1: How to Speak English Fluently

Chapter 2: Ways to Leverage Your English Listening Habits

Chapter 3: Easy Methods for Improving English Reading Skills

Chapter 4: Some Quick Steps to Learn English Grammar

Chapter 5: Most Used English Vocabulary Imperative to Learn




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QUESTION PAPER

ENGLISH FLUENCY DEVELOPMENT COURSE (002)

TIME: 2Hrs

MARKS: 50

-
- I. Answer any **THREE** of the following questions. (3x10=30)
1. Elaborate the four components of learning English.
 2. What are the things one has to focus in developing fluency?
 3. How to strengthen English listening habits?
 4. What are the easy methods to improve English reading skills?
 5. Explain the simple techniques for memorizing vocabulary.
- II. Give Oral presentation on **ONE** of the following topics. (10M)
1. Describe your native place.
 2. Tell a moral story.
 3. Describe your college Annual day celebrations.
- III. Viva Vorce (10M)




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Add on Course In

GST

Organized by

Department of Commerce and Management

(2019 – 2020)



Degree College

(Affiliated to Andhra University)

www.spaces.sriprakash.org

Payakaraopeta-531126, A.P

REPORT

The Department of Commerce conducted an Add on course on GST from 13/11/2019 to 17/12/2019. The resource person for this Add on course is Mr. P. BHASKARARAO. In this Add on course the student got the detailed knowledge about Goods and Service Tax (GST) and types of GSTs in the field of academics, research & industry. Total 34 III B.Com students of SPACES Degree College enrolled for this Add on course. All the faculty members from Department of Commerce and Management worked actively for the successful completion Add on course.

Course Objectives:

- To enable students to explain the basic concepts, definitions and terms related to GST.
- To enable students to discuss the concept of supply along with the rules related to time, place and value of supply.
- To enable students, discuss the compliance related to documentation under the new indirect tax regime.
- To enable the students to compute the Goods and Service Tax (GST) payable by a supplier after considering the eligible input tax credit.

Out comes:

After successful completion of the course, the learners will be able to:

- To build a strong foundation in accounting, GST and business subjects.
- To understand the application of GST knowledge in both theoretical and practical aspects.
- Students would discuss the time, place and value of supply.
- Students would compute the amount of CGST, SGST and IGST payable after considering the eligible input tax credit.




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COURSE SYLLABUS: -

Unit- I: -

GST- Introduction: - Overview of GST-Concepts – Limitations of VAT- Need for Tax Reforms – Justification for Introduction of GST-Constitutional Amendments.

Unit -II: -

Taxes and Suites; - Subsumed under GST-Taxes and Duties outside the purview of GST-Tax on items containing Alcohol – Tax on petroleum produces – Tax on Tabaco products – Taxation of services.

Unit- III: -

Inter – State Goods and services Tax: - Major advantages of IGST model – Interstate Goods and service Tax. Transaction within a state under GST-Interstate Trams under GST-Illustrations.

Unit -IV: -

Time of supply of Goods and services: - Value of supply – Input Tax Credits – Distribution of credit – Inching of Input Tax credit – Availability of credit in special circumstances – cross utilization of ITC between and central GST and the state GST.

Suggested readings: -

1. Business Taxation (Goods and Services Taxes) T. S. Reddy and Dr. Y. Hari Prasad Reddy, Margham Publications
2. Taxmann's Basics of GST
3. Theory & Practice of GST, Srivathsala, Himalaya Publishing House.
4. Theory & Practice of GST: Dr. Ravi M.N, BPB Publications.
5. The Central Goods and Services Tax Act, 2017, No. 12 of 2017 Published by Authority.



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COURSE STRUCTURE & FRAME WORK

Title of the Course: -

GOOD AND SERVICE TAX (GST)

Course Code: -

SDC-COMM-004

Duration of the Course: -

30 Hours (Theory)

Eligibility of the course: -

Candidates studying B. Com or Equivalent in Commerce stream

Scheme of the Course: -

1. Lecture presentation

Classes are conducted by PowerPoint presentation and blackboard teaching.

Scheme of Examination: -

Maximum marks for this course is 50 with minimum of 20 marks for passing and duration of exam is 2 Hours.

Methodology: - Theory: 30 Hrs.




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

DEPARTMENT OF COMMERCE AND MANAGEMENT

Add on Course examination - Model Question Paper

Paper Title: - GOODS AND SERVICE TAX(GST)

Time: 2 Hrs.

MAX: 50M

SECTION – A

Answer any Three of the following Questions

3X10=30M

1. What are the major features of GST Act?
2. Analyse the Taxes subsumed under GST.
3. What are the major advantages of Integrated Goods and Service Tax (IGST) Model?
4. Illustrate how Inter – State and Intra- State Transactions are levied with an example.
5. Write a brief note on how to determine Time of supply of Goods and Services.

SECTION – B

Answer any FOUR of the following Questions

4x5=20M

6. Write advantages of Goods and Service Tax.
7. What is the comprehensive structure of GST in Indian?
8. Give the brief note on Principles of GST.
9. What is input tax credit and explain it with suitable examples.
10. Illustrate the Inter State transactions under GST.
11. Explain the taxes and duties outside the purview of GST.




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

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Certificate Course

In

Web Designing using HTML

Organized by the

Department of Computer Science

2019 - 2020

REPORT

The Department of Computer Science conducted a Certificate course on **Web Designing using HTML**. from 06/06/2019 to 11/07/2019. The resource person for this certificate course was Mr. **K V APPARAO**. In this certificate course the student got the detail knowledge about HTML Programming Language and its various applications in designing websites. Total **46** IIMPCEM students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Computer Science worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

- To provide knowledge on web architecture, web services, client-side scripting technologies
- To focus on the development of web-based information systems and web services.
- To provide skills to design interactive web sites.

COURSE OUTCOMES:

CO 1: Gain knowledge on various components of a website

CO 2 :. To understand the web architecture and web services

CO 3 :. To practice latest web technologies and tools by conducting experiments.

CO 4 : To design interactive web pages using HTML and Style sheets.




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COURSE SYLLABUS

Unit -I -HTML: Introduction to web designing, difference between web applications and desktop applications, introduction to HTML, HTML structure, elements, attributes, headings, paragraphs, styles, colors, HTML formatting, Quotations, Comments, images, tables, lists, blocks and classes, HTML CSS, HTML frames.

Unit -II - HTML forms: HTML form elements, input types, input attributes.

Unit -III - CSS: CSS home, introduction, syntax, colors, back ground, borders, margins, padding, height/width, text, fonts, icons, tables, lists.

Practical's:

1. Create an HTML document with the following options.
 - a). Bold b). Italic c). Underline d). Headings (using h1 to h5 heading styles)
2. Create an HTML document with the following options.
 - a). Font b). background c). Paragraph d). Line break
3. Create an HTML document which consists of Ordered list
4. Create an HTML code for text alignment?
5. Create an HTML document which consists of Un-ordered list
6. Create a Table with four rows and five columns
7. Create a menu form using html
8. Style the menu buttons using CSS
9. Write a HTML program including style sheets
10. Create a form using HTML which has the following types of Controls
 - a) Text Box
 - b) Option/radio buttons
 - c) Check boxes
 - d) Reset and submit buttons




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Suggested Reading:

1. Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley (2007)
2. Head First HTML and CSS, Elisabeth Robson, Eric Freeman, O'Reilly Media Inc.
3. Schaum's Easy Outline HTML, David Mercer, Mcgraw Hill Professional.

Methodology: Theory: 20 Hrs
Practical: 10 Hrs



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PRINCIPAL
SPACES DEGREE COLLEGE,
RAYAKARAOPETA

COURSE STRUCTURE & FRAME WORK

Title of the Course: Web Designing using HTML.

Course Code: SDC-CS004

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Chemistry (Or) Physics (Or) Computers (Or) Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology as one of the optional subject

Scheme of the Course:

1. Lecture presentation.
2. Practical's.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical's	25
	Total	75




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Model Question Paper
DEPARTMENT OF COMPUTER SCIENCE
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Certificate Course examination
Paper Title: Web Designing using HTML.

Time: 2 Hrs

Max. Marks: 50

PART - A

Answer any Five questions:

(4x5 = 20M)

- 1: What is HTML?
- 2: Differentiate between HTML tag and HTML element
- 3: What are the attributes?
- 4: How to create a link in HTML?
- 5: Explain structure of HTML document.?
- 6: Explain about table properties in HTML ?

PART-B

Answer any three of the following questions

(3x10=30M)

- 1 Explain about different types of Lists in HTML with examples.
- 2 Explain HTML frames with example.?
- 3 Write the differences between web applications and desktop applications?
- 4 Explain about CSS ?




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PAYAKARAOPETA



SPACES DEGREE COLLEGE, PAYAKARAOPETA

(Affiliated to Andhra University, Visakhapatnam)

Add on Course

In

INDUSTRIAL ELECTRONICS

Organized by the

Department of Electronics

2019 - 2020




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REPORT

The Department of Electronics conducted a Certificate course on **INDUSTRIAL ELECTRONICS** from 13/11/2019 to 17/12/2019. The resource person for this certificate course was Miss.S.Aswini. In this certificate course the student got the detail knowledge about Electronics & Information technology and its various applications in the field of academics, research & industry. Total 42 IIIMECS students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Electronics worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

- To acquire a critical knowledge of various Electrical Instruments used in the Laboratory
- To Identify various facilities required to set up a basic Instrumentation Laboratory

COURSE OUTCOMES:

CO 1: To give awareness about different power supplies

CO 2 : To understand different voltage multiplier circuit



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COURSE SYLLABUS

UNIT-I (10 hours) Rectifiers and filters: Rectifiers– Half wave, full-wave and bridge rectifiers- Efficiency- Ripple factor Regulation – Harmonic components in rectified output

Types of filters- Choke input (inductor) filter, Shunt capacitor filter- L section and pi section filters.

Voltage Regulators: Transistor Series voltage regulator - Transistor Shunt voltage regulator – Three terminal regulators (78XX and 79XX).

UNIT-II (5 hours) Power Supplies: Block diagram of regulated power supply – A simple regulated transistorized power supply (circuit and working) – Principle and working of switch mode power supply (SMPS).

UNIT-III (5 hours) Voltage Multipliers: Half wave voltage doubler, Full wave voltage doubler, Voltage Tripler circuit diagram and working mentioning of applications of voltage multipliers.

Practicals:

1. D.C Power supply and filters
2. Voltage regulator using IC-7805 and IC-7905
3. Voltage doubler using diodes
4. Voltage Tripler using diodes

Reference Book: 1. Industrial Electronics, S.B. Biswas, Dhanapur Rai & Sons.
2. Industrial Electronics, G.K. Mithal, Khanna Publishers.

Methodology:

Theory: 20 Hrs

Practical: 10 Hrs



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COURSE STRUCTURE & FRAME WORK

Title of the Course: INDUSTRIAL ELECTRONICS

Course Code: SDC- SE03

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Electronics as one of the optional subject

Scheme of the Course:

1. Lecture presentation.
2. Practicals.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practicals	25
	Total	75




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Model Question Paper
DEPARTMENT OF ELECTRONICS
SPACES DEGREE COLLEGE, PAYAKARAOPETA
ADD ON COURSE IN
INDUSTRIAL ELECTRONICS

Duration: 2hrs

Max Marks: 50

SECTION-A

Answer ALL questions

3X10M = 30M

1. (a) Explain Full wave rectifier circuit with parameters?
(Or)
(b) Explain Bridge rectifier circuit with parameters?
2. (a) Explain the block diagram of SMPS?
(Or)
(b) Explain i) L-section filter
ii) PI-section filter
3. Explain about a full wave voltage doubler circuit?
(Or)
(b) Explain about a full wave voltage tripler circuit?

SECTION-B

Answer any FOUR questions

4X5M = 20M

- 4 Write about IC 7805 & 7812?
- 5 Explain about transistor series voltage regulator
- 6 Explain about choke input filters?
- 7 Explain about RPS?
- 8 Explain about the transistor shunt voltage regulator?
- 9 Write a short note on the shunt capacitor filter?



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Add on Course In **Digital Marketing**

Organized by
Department of Commerce and Management
(2019 – 2020)



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Payakaraopeta-531126, A.P

REPORT

The Department of Commerce conducted an Add on course on **DIGITAL MARKETING** from 06/06/2019 to 11/07/2019. The resource person for this Add on course is Dr. V.V.S.B. Bangar Raju. In this Add on course the student got the detailed knowledge about Digital Marketing and its various digital Medias in the field of academics, research & industry. Total 32 II B.Com students of **SPACES Degree College** enrolled for this Add on course. All the faculty members from Department of Commerce and Management worked actively for the successful completion Add on course.

Course Objectives: -

- Evaluate the relevance of digital platforms and digital media to marketing.
- Evaluate the advantages and challenges of digital media
- Identify the key differences between customer communications for digital marketing and traditional marketing.

Course Outcomes: -

Upon successful completion of the course students will be able to:

1. Difference between traditional & digital marketing.
2. Importance & basics of website creation
3. Importance & basics of Search Engine Optimization
4. Basics of Social Media Marketing




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COURSE SYLLABUS: -

Unit-I: - Introduction

Digital marketing: - Meaning – importance – traditional online marketing vs digital marketing – trends in digital marketing.

Unit- II: - Web site planning and creation

Website: - Meaning – objectives – components of website – website creation – incorporation of design and adding content

Unit-III: - Search Engine Optimization (SEO)

SEO: - Meaning – History and growth of SEO – Importance of Search Engine – Role of search Engine Operation – google Ad words – search Engine Marketing campaign Creation.

Units -IV: - Social Media Marketing

Meaning of Social Media marketing – strategy and planning – social media network – social Networking – video creation and sharing – use of different social media platforms.

Units- V: Email Marketing

Meaning – Evolution of email – importance of email marketing – Development and Advancements in email marketing – email marketing platforms – create opt in lists.


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Reference Books: -

- Digital Marketing of Dummies by Ryan Desis & Russ Hannebery, publisher John Wiley first edition 2020.
- Youtility by Jay Bear, Published by Gilda Medial LC Portfolio 2013.
- Epic content Marketing by Joe Pulizzi, McGraw -Hill Education. 2013.
- New Rules of Marketing and PR by David Meerman Scott, Wiley, 2017.
- Social Medial marketing All – in – one Dummies by Jan Zimmerman Deborah Ng, John Wiley & sons.
- Web sources suggested by the concerned and college librarian including reading material.




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COURSE STRUCTURE & FRAME WORK

Title of the Course: - DIGITAL MARKETING

Course Code: SDC- COMM - 003

Duration of the Course: - 30 Hours

Eligibility of the course:

Candidates studying B. Com or Equivalent in Commerce stream

Scheme of the Course:

1. Lecture presentation
2. Practical /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching as per the schedule.

Scheme of Examination:

Maximum marks for this course are 50 marks (Theory) with minimum of 20 marks for passing and duration of examination is 2 Hours.

Methodology:

Theory: 30 HRS


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DEPARTMENT OF COMMERCE AND MANAGEMENT

Add on Course examination - Model Question Paper

Paper Title: DIGITAL MARKTING

Time: 2 Hrs

MaxMarks:50

SECTION – I

Answer any Three questions from the following

3X10=30 M

1. Distinguish between Traditional and Digital Marketing?
2. Role of SEO.
3. Role of Social Media in Digital Marketing.
4. Explain the use of different social media platforms in digital Marketing?

SECTION – II

Answer any FIVE questions from the following.

5X4=20 M

5. Short notes on
 - a. E Mail Marketing
 - b. Website
 - c. WhatsApp Business Account
 - d. Role of ChatBot in digital Marketing
 - e. Few types of Digital Marketing
 - f. PPC – Pay per Click
 - g. Role of Keywords



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Certificate Course

In

PYTHON

Organized by the

Department of Computer Science

2019 - 2020

REPORT

The Department of Computer Science conducted a Certificate course on **PYTHON**, from 13/11/2019 to 17/12/2019. The resource person for this certificate course was Mrs. M R M Harshitha . In this certificate course the student got the detail knowledge about Python Language and its various applications in the field of academics, research & industry. Total 30 IIMCCS students of **SPACES Degree College** participated in this certificate course. All the faculty members from Department of Computer Science worked actively for the successful completion certificate course.

COURSE OBJECTIVES:

- To acquire programming skills in course Python
- To acquire Object Oriented Skills in Python.
- To develop the skills of designing Graphical user Interfaces in Python

COURSE OUTCOMES:

- CO 1: Interpret the fundamental Python syntax and semantics and be fluent in the use of python control flow statements.
- CO 2: Express the proficiency in the handling of strings and functions.
- CO 3: Determine the methods to create and manipulate python programs by utilizing the data structures like lists, tuples and sets.
- CO 4: Identify the commonly used operations involving file systems.




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COURSE SYLLABUS

Unit -I - Introduction to Python:

What is python, features of python, history of python, writing and executing the python, basic syntax, variables, keywords, data types, operators, Conditional statements-if, if-else, nested if-else, looping statements - for, while, break, continue.

Unit -II - Control Structure and Strings:

Strings - definition, accessing, slicing and basic operations.
Lists - Introduction, accessing list, operations, functions and methods.
Tuples - Introduction, accessing tuple.
Dictionaries - Introduction, accessing values in dictionaries.

Unit -III - Functions and modules, Classes & objects

Functions - defining a function, calling a function, types of functions, function arguments, local and global variables, lambda and recursive functions, modules - math and random. Classes and Objects, Class method and self-argument, class variables and object variables, public and private data members, private methods, built-in class attributes, static and methods.

Practical's:

1. Python Program to find the square root.
2. Python Program to Swap Two Variables
3. Python Program to generate a Random number.
4. Python Program to check if a number is Odd or Even
5. Python Program to find the largest among three numbers
6. Python Program to check prime number.
7. Python Program to display the multiplication table
8. Python Program to print the Fibonacci sequence
9. Python Program to find factorial of number using recursion
10. Python Program to create class and objects.




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Suggested Reading:

1. Python Programming using problem solving approach, Oxford publications - By Reemathareja
2. Core Python Programming, Wesley J. Chun, Second Edition, Pearson.
3. Python Programming: A Modern Approach, Vamsi Kurama, Pearson.

Methodology: Theory: 20 Hrs
Practical: 10 Hrs



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COURSE STRUCTURE & FRAME WORK

Title of the Course: Python.

Course Code: SDC-CS005

Duration of the Course: 30 Hours (includes both theory and practical)

Eligibility of the course:

Candidates studying B.Sc. with Computers Science.

Scheme of the Course:

1. Lecture presentation.
2. Practical's.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes are conducted in the computer lab under the supervision of Computer Department Faculty.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practicals). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical's	25
	Total	75




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Model Question Paper
DEPARTMENT OF COMPUTER SCIENCE
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Certificate Course examination
Paper Title: Python.

Time: 2 Hrs

Max. Marks: 50

PART – A

Answer any Five questions

(4x5 = 20M)

- 1: Write about Python Objects?
- 2: Write about Numbers in Python.?
- 3: Write about command-line arguments?
- 4: Explain how to Import Modules?
- 5: Write about Special Symbols and Characters.?
- 6: Write about Related modules of GUIs?

PART-B

Answer any three of the following questions

(3x10=30M)

- 1). Explain about standard type operators.?
- 2). Explain about Persistent Storage Modules?
- 3). Explain about Detecting and Handling Exceptions?
- 4). Explain about Building CGI Application?




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DEPARTMENT OF PHYSICS

ADD ON COURSE

TITLE : RENEWABLE ENERGY

2019-2020



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Course Objectives:

1. Classify various type of fuel.
2. Lay the groundwork for subsequent studies in such fields as coal, petroleum and to prepare the students to effectively use fuel in the practice of engineering.
3. Develop an intuitive understanding of fuel technology by emphasizing the physics and physical arguments

COURSE SYLLABUS

UNIT-I – Solar Radiation:

(6 hrs)

Sun as a source of energy, Solar radiation, Solar radiation at the Earth's surface, Measurement of Solar radiation-Pyroheliometer, Pyranometer, Sunshine recorder, Prediction of available solar radiation, Solar energy-Importance

UNIT-II – Solar Thermal Systems:

(7 hrs)

Principle of conversion of solar radiation into heat, Collectors used for solar thermal conversion: Flat plate collectors and Concentrating collectors, Solar Thermal Power Plant, Solar cookers, Solar hot water systems, Solar dryers

UNIT-III – Solar Photovoltaic Systems:

(7 hrs)

Conversion of Solar energy into Electricity - Photovoltaic Effect, Solar photovoltaic cell and its working principle, Different types of Solar cells, Series and parallel connections,

Practicals:

(10 Hrs)

1. Plot sun chart and locate the sun at your location for a given time of the day.
2. Analyse shadow effect on incident solar radiation and find out contributors.
3. Connect solar panels in series & parallel and measure voltage and current

Suggested Reading:

1. Solar energy-S.chand publications
2. <https://www.energy.gov>
3. <https://www.seia.org>

Methodology: Theory:-20 Hours

Practical:-10 Hours



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COURSE STRUCTURE & FRAME WORK

Title of the Course: **RENEWABLE ENERGY**

Course Code: SDC-PHY001

Duration of the Course: 30 Hours (includes both theory and practical)

Eligibility of the course:

Candidates studying B.Sc. with Chemistry (Or) Physics (Or) Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology as one of the optional subject.

Scheme of the Course:

1. Lecture presentation
2. Practical /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by inviting experts in the practical to provide complete information and process of water analysis.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practical's). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical / field work and assignment	25
	Total	75

Course Outcomes:

CO 1: To give awareness about to the public for which Sun is a source of life.

CO 2 : To understand the various types solar Radiating emerging bodies.


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**DEPARTMENT OF PHYSICS
SPACES DEGREE COLLEGE, PAYAKARAOPETA
ADD ON COURSE: RENEWABLE ENERGY**

TIME: 90 MIN

MAX. MARKS: 50

Part A

I Answer any FOUR question?

4x5 = 20M

1. Explain sun as a source of energy?
2. Explain solar energy importance?
3. Explain about flat plate collectors?
4. Explain solar hot water system?
5. Define photo voltaic effect.

Part B

II answer the following questions?

3x10=30M

6. Explain about pyroheliometer, pyranometer, sunshine recorder.
7. Explain about concentrating collectors
8. Why does the sun shine? The sun shines because of a nuclear Reaction at the core can you identify it?
 - A) The reaction of energy through nuclear fission.
 - B) Nuclear fusion.




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DEPARTMENT OF CHEMISTRY

ADD ON COURSE

TITLE : WATER ANALYSIS

2019-20



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Course Objectives:

1. To check the quality of water regularly and build up good relation with public.
2. The students are understand the principles and the practical approaches and techniques required for the analysis of water samples and quality
3. To ensure the hardness of water to be used for industrial applications

COURSE SYLLABUS

Course Code : SDC-CHE002

Theory: 20 Hrs

Practical: 10 Hrs

Unit –I

Chemistry of Water :

- a. Hydrosphere- Water resources.
- b. Properties of water- color, odor, turbidity, total salt content, total suspended water .

Unit II:

Water Quality Parameters and Standards- Quality of drinking water, Quality of irrigation water, COD, BOD.

Unit- III:

Purification of water- Treatment of domestic and industrial water by various methods like ion exchange process, permutated and Reverse osmosis etc..

Practicals:

1. Collection of water samples (Field work)
2. Determination of total hardness of water
3. Determination of BOD of water

Suggested Reading:

1. Laboratory Manual of Water and Wastewater Analysis, D.R. Khanna, R. Bhutiani, Daya Publishing House, Delhi, 2008
2. Chemical and Biological Methods for Water Pollution Studies, R.K. Trivedy, P.K.Goel, Oriental Printing Press, Aligarh, 1986
3. Laboratory Manual of Water and Wastewater Analysis, D.R. Khanna, R. Bhutiani, Daya Publishing House, Delhi, 2008
4. Chemical and Biological Methods for Water Pollution Studies, R.K. Trivedy, P.K.Goel, Oriental Printing Press, Aligarh, 1986
5. Garg S.K., Environmental Engineering Vol. I Water Supply Engineering, Khanna Publishers



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Methodology: Theory: 20 Hrs

Practical: 10 Hrs

COURSE STRUCTURE & FRAME WORK

Title of the Course: Water Analysis

Course Code: SDC- CHE002

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Chemistry (Or) Physics (Or) Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology as one of the optional subject

Scheme of the Course:

1. Lecture presentation
2. Practicals /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by inviting experts in the practical to provide complete information and process of water analysis.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practicals). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical / field work and assignment	25
	Total	75



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Model Question Paper
DEPARTMENT OF CHEMISTRY
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Add on /Certificate Course examination
Paper Title: Water Analysis

Time: 2 Hrs

Max. Marks: 50

PART – A

Answer any Four questions

(4x5 = 20M)

1. What are the micronutrients present in water
2. Explain which type of minerals are present in water
3. Explain PH of water
4. Write short note on total salt content.
5. Explain Calgon process
6. Explain quality parameters of drinking water?

PART-B

Answer any three of the following questions

(3x10= 30M)

1. How to determine total dissolved salts in water
2. How to purify well water and domestic water and explain briefly
3. Explain experimental determination of Turbidity of water samples
4. How to remove hardness of water and explain briefly?
5. Explain Reverse osmosis process?



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COURSE OUTCOMES:

- CO 1: To enables the students to understand different types of sources of water and different spheres in atmosphere..
- CO 2: Students will be understand different parameters of different water samples.
- CO 3: Students will learn about different laboratory procedures for the determination of analysis of water.
- CO 4 : To determine turbidity and alkalinity of water




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Add on Course In Entrepreneurship Development

Organized by

Department of Commerce and Management

(2021 – 2022)



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Payakaraopeta-531126, A.P

REPORT

The Department of Commerce conducted an Add on course on **Entrepreneurship Development** from 24/01/2022 to 04/03/2022. The resource person for this Add on course is Mr. G.TATAYYA NAIDU. In this Add on course the student got the detailed knowledge about Entrepreneurship Development and its various Qualities required for Entrepreneurship in the field of academics, research & industry. Total 35 II B.Com students of **SPACES Degree College** enrolled for this Add on course. All the faculty members from Department of Commerce and Management work ' actively for the successful completion Add on course.

Course Objectives:

The objectives of the course are to

- Introduce various qualities required for entrepreneurship
- Explain various entrepreneurship models
- Organize interaction with successful entrepreneurs
- Introduce to various tools as Six hat techniques, Five S

Outcomes:

After completing the course students will able to-

- Identify qualities of entrepreneurs
- Use various entrepreneurship models
- Understand various schemes supporting entrepreneurship
- Think creative and innovative




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Course Syllabus

Unit-I: - Entrepreneurship: Definition and Concept of entrepreneurship - Entrepreneur Characteristics
– Classification of Entrepreneurs –Role of Entrepreneurship in Economic Development –Start-ups.

Unit-II: - Idea Generation and Project Formulation: Ideas in Entrepreneurships – Sources of New Ideas
– Techniques for Generating Ideas – Preparation of Project Report –Contents; Guidelines for Report preparation – Project Appraisal Techniques –Economic Analysis-Financial Analysis-Market Analysis.

Unit-III: -Institutions Supporting and Taxation Benefits: Central level Institutions: NABARD; SIDBI, –
State Level Institutions –DICs – SFC - Government Policy for MSMEs - Tax Incentives and Concessions.

Reference Books:

1. Arya Kumar, Entrepreneurship, Pearson, Delhi
2. Poornima MCH, Entrepreneurship Development –Small Business Enterprises, Pearson, Delhi
3. Sangeetha Sharma, Entrepreneurship Development, PHI Learning
4. KanishkaBhedi, Management and Entrepreneurship, Oxford University Press, Delhi
5. Anil Kumar, S., ET.al., Entrepreneurship Development, New Age International Publishers, New Delhi
6. Khanka, SS, Entrepreneurship Development, S. Chand, New Delhi
7. Peter F. Drucker, Innovation and Entrepreneurship.
8. A. Sahay, M. S. Chhikara, New Vistas of Entrepreneurship: Challenges & Opportunities.
9. Dr B E V L Naidu, Entrepreneurship. Seven Hills Publishers




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COURSE STRUCTURE & FRAME WORK

Title of the Course: -

Entrepreneurship Development

Course Code:-

SDC-COMM-005

Duration of the Course: -

30 Hours (Theory)

Eligibility of the course: -

Candidates studying B. Com or Equivalent in Commerce stream

Scheme of the Course: -

1. Lecture presentation


Classes are conducted by PowerPoint presentation and blackboard teaching.

Scheme of Examination: -

Maximum marks for this course is 50 with minimum of 20 mark for passing and duration of exam is 2 Hours.

Methodology: Theory: 30 Hrs.




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DEPARTMENT OF COMMERCE AND MANAGEMENT

Add on Course examination - Model Question Paper

Paper Title: **Entrepreneurship Development**

Time: 2Hrs

Max Marks: 50

SECTION – I

Answer any THREE questions from the following

3X10=30 M

1. What are the methods and sources of Idea Planning?
2. Briefly explain the role of Entrepreneurship in Economic Development.
3. Define Entrepreneurship. Explain the classification of Entrepreneurs.
4. Define NABARD. Explain its role in the development of Entrepreneurship.
5. Explain how financial Institutions help in Entrepreneurial Development.

SECTION – II

Answer any FOUR questions from the following.

4X5=20 M

6. Write about the Financial Analysis.
7. Explain about Start-ups.
8. Write about the Tax Incentives.
9. Explain the Entrepreneur Characteristics.
10. Explain about the DICs.
11. Write about SFC.
12. Explain about Idea Generation.
13. What is Project Formulation.



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ADD-ON COURSE

In

**Fermented Foods and determination of Microbial quality of food
products**

By

Department of Biotechnology

2021-2022

SPACES DEGREE COLLEGE, PAYAKARAOPETA
DEPARTMENT OF BIOTECHNOLOGY
ADD- ON COURSE
FERMENTED FOODS AND DETERMINATION OF MICROBIAL QUALITY OF FOOD
PRODUCTS

Course Objectives:


- To help to create new employment opportunities for rural youth
- To empower youth with entrepreneurial skills through the production of fermented food products.
- To exploit possibilities and assist in building up a bakery industry that will make a significant contribution to the general economy

Course Out comes:

CO 1: enables the students to understand different types of fermented foods and importance of probiotics.

CO 2: Students will be aware of process involved in the making of bread and other fermented products.

CO 3: Students will learn about different laboratory procedures for the determination of quality of food products.


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COURSE STRUCTURE & FRAME WORK

Title of the Course:

Fermented foods and determination of Microbial quality of food products

Course Code:

SBTCC001

Duration of the Course:

30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology as one of the optional subject

Scheme of the Course:

1. Lecture presentation
2. Practicals

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by inviting experts in the practical to provide complete information and process of fermented food preparation.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practicals). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2:00 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 15 marks for passing.




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COURSE SYLLABUS

Theory: 20 Hrs

Practical: 10 Hrs

Unit I:

Definition of fermented foods, health benefits of fermented foods, probiotics and their use.

Unit II:

Preparation process of different fermented food products like bread, cookies, cake, curd—etc.
Nature of microorganisms involved in fermentation process.

Unit III:

Methods for microbial analysis of food products: MPN, MBRT, SPC. Use of selective media and enrichment media

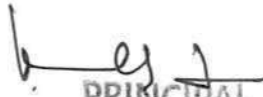
Practicals:

1. Preparation of fermented food
2. Determination of coli forms by MPN test
3. Determination of Milk quality by MBRT

Suggested Reading:

1. Food Microbiology – Frazer
2. Introduction to Food Microbiology – Karl Mathews




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Model Question Paper
DEPARTMENT OF BIOTECHNOLOGY
SPACES DEGREE COLLEGE, PAYAKARAOPETA
ADD-ON Course examination

Paper Title: Fermented foods and determination of Microbial quality of food products.

Time: 2 Hrs

Max. Marks: 25

Question 1: Use of microbial cells in fermentation process

10M

Question 2: Determine the quality of milk By MBRT

15M




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SPACES DEGREE COLLEGE, PAYAKARAOPETA
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DEPARTMENT OF BIOTECHNOLOGY

-CERTIFICATE-

Reg. No: -----

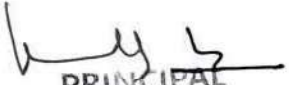
This is to certify that Mr./Ms ----- of ---
----- semester has successfully completed the institutional
Add -On course for 30 hours on Fermented foods and determination of Microbial quality
of food products conducted by the Department of biotechnology. He obtained the -----
grade during the academic year-----.

Course Co-coordinator

Principal

Grade	Score
O	Above 90%
A	Above 80% below 90%
B	Above 70% below 80%
C	Above 60% below 70%
D	Below 60%




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(Affiliated to Andhra University, Visakhapatnam)

Certificate Course

In

Fluency Development Course

By


Department of English

2021-2022

Fluency Development Outcomes & Objectives

- It gives confidence in articulating expressions
- It is the ability to read "like you speak."
- fluency acquires vocabulary, basic grammar and also comprehension.
- fluency development is directly related to comprehension.
- fluency correlates highly with reading comprehension.
- Fluency identifies key vocabulary, concept words, and other academic words students will need to know in order to talk, read, and write about the topic of the lesson. Identify grammar or language structures common to the content area.
- It enables the students to participate in any language activities with sound confidence.




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Duration 30 Hours (Theory)

Course Syllabus

Chapter 1: How to Speak English Fluently


Chapter 2: Ways to Leverage Your English Listening Habits

Chapter 3: Easy Methods for Improving English Reading Skills

Chapter 4: Some Quick Steps to Learn English Grammar

Chapter 5: Most Used English Vocabulary Imperative to Learn




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QUESTION PAPER

ENGLISH FLUENCY DEVELOPMENT COURSE (002)

TIME: 2Hrs

MARKS: 50

- I. Answer any **THREE** of the following questions. (3x10=30)
1. Elaborate the four components of learning English.
 2. What are the things one has to focus in developing fluency?
 3. How to strengthen English listening habits?
 4. What are the easy methods to improve English reading skills?
 5. Explain the simple techniques for memorizing vocabulary.
- II. Give Oral presentation on **ONE** of the following topics. (10M)
1. Describe your native place.
 2. Tell a moral story.
 3. Describe your college Annual day celebrations.
- III. Viva Vorce (10M)




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SPACES DEGREE COLLEGE, PAYAKARAOPETA

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Certificate Course

In

Functional English

By

Department of English

2021-2022

Course Outcomes and Objectives

- Functional English is usage of the English language required to perform a specific function like academic study or career progression.
- Functional English provides the essential knowledge, skills and understanding that will enable the user to operate confidently, effectively and independently in life and at work.
- Individuals who possess these skills will be able to participate and progress in education, training and employment as well as develop and secure the broader range of aptitude, attitude and behaviour that will enable them to make a positive contribution to the communities in which they live and work.
- For some time employers and universities have been calling for young people to leave education with the skills needed to operate confidently, effectively and independently.
- It is more important than ever that young people of all academic abilities can manage the demands of the workplace, and of further and higher education.
- Functional skills are the essential elements of English that help people to develop higher levels of practical skill, which they can apply to real life contexts. Rather than being taught as separate curriculum subjects, functional skills are applied to the teaching and learning in embedded way.




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Duration 30 Hours (Theory)

Course Content

Unit I: Introduction to grammar (what is grammar, its importance)

Unit II: Parts of speech

Unit III: Verbs (transitive & intransitive, regular & irregular), tense & aspect, auxiliaries, negatives, questions, agreement & concord.

Unit IV: Forms & functions of adjectives, adverbs, agreement & concord.




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Question Paper

Subject: Functional English

Marks:50

Code: Eng-001

Time: 2hrs.

.....
I. Answer any **Four** of the following questions:

(4x10=40)

1. What is grammar? What's it's important in life?
2. What is a pronoun? Define its kinds with examples.
3. What is a noun? Define its kinds with examples.
4. Define degrees of comparison.
5. What ai the difference between concrete nouns and abstract nouns?
6. What is parts of speech? Illustrate with examples.

II. Identify the **parts of speech** of the following sentences. (10x1=10)

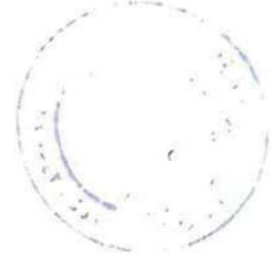
1. Namitha is not coming today.
2. My mom will be leaving to Bangalore tomorrow.
3. The teacher asked the students to stand.
4. He is my brother.
5. There is a cat under the table.
6. The clothes did not dry as it was raining all night.
7. Sheena and her sister dance well.
8. I am wearing a green dress for the party.
9. Oh! That is really sad.
10. She is coming with me.




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Add on Course In

GST



Organized by

Department of Commerce and Management

(2021 – 2022)



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(Affiliated to Andhra University)

www.spaces.sriprakash.org

Payakaraopeta-531126, A.P

REPORT

The Department of Commerce conducted an Add on course on GST from 15/09/2021 to 10/11/2021. The resource person for this Add on course is Mr. P. BHASKARARAO. In this Add on course the student got the detailed knowledge about Goods and Service Tax (GST) and types of GSTs in the field of academics, research & industry. Total 15 III B.Com students of **SPACES Degree College** enrolled for this Add on course. All the faculty members from Department of Commerce and Management worked actively for the successful completion Add on course.

Course Objectives:

- To enable students to explain the basic concepts, definitions and terms related to GST.
- To enable students to discuss the concept of supply along with the rules related to time, place and value of supply.
- To enable students, discuss the compliance related to documentation under the new indirect tax regime.
- To enable the students to compute the Goods and Service Tax (GST) payable by a supplier after considering the eligible input tax credit.

Out comes:

After successful completion of the course, the learners will be able to:

- To build a strong foundation in accounting, GST and business subjects.
- To understand the application of GST knowledge in both theoretical and practical aspects.
- Students would discuss the time, place and value of supply.
- Students would compute the amount of CGST, SGST and IGST payable after considering the eligible input tax credit.



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COURSE SYLLABUS: -

Unit- I: -

GST- Introduction: - Overview of GST-Concepts – Limitations of VAT- Need for Tax Reforms – Justification for Introduction of GST-Constitutional Amendments.

Unit -II: -

Taxes and Suites; - Subsumed under GST-Taxes and Duties outside the purview of GST-Tax on items containing Alcohol – Tax on petroleum produces – Tax on Tabaco products – Taxation of services.

Unit- III: -

Inter – State Goods and services Tax: - Major advantages of IGST model – Interstate Goods and service Tax. Transaction within a state under GST-Interstate Trams under GST-Illustrations.

Unit -IV: -

Time of supply of Goods and services: - Value of supply – Input Tax Credits – Distribution of credit – Inching of Input Tax credit – Availability of credit in special circumstances – cross utilization of ITC between and central GST and the state GST.

Suggested readings: -

1. Business Taxation (Goods and Services Taxes) T. S. Reddy and Dr. Y. Hari Prasad Reddy, Margham Publications
2. Taxmann's Basics of GST
3. Theory & Practice of GST, Srivathsala, Himalaya Publishing House.
4. Theory & Prasctice of GST: Dr. Ravi M.N, BPB Publications.
5. The Central Goods and Services Tax Act, 2017, No. 12 of 2017 Published by Authority.




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COURSE STRUCTURE & FRAME WORK

Title of the Course: -

GOOD AND SERVICE TAX (GST)

Course Code:-

SDC-COMM-004

Duration of the Course: -

30 Hours (Theory)

Eligibility of the course: -

Candidates studying B. Com or Equivalent in Commerce stream

Scheme of the Course: -

1. Lecture presentation


Classes are conducted by PowerPoint presentation and blackboard teaching.

Scheme of Examination: -

Maximum marks for this course is 50 with minimum of 20 mark for passing and duration of exam is 2 Hours.

Methodology: - Theory: 30 Hrs.




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DEPARTMENT OF COMMERCE AND MANAGEMENT

Add on Course examination - Model Question Paper

Paper Title: - GOODS AND SERVICE TAX(GST)

Time: 2 Hrs.

MAX: 50M

SECTION – A

Answer any Three of the following Questions

3X10=30M

1. What are the major features of GST Act?
2. Analyse the Taxes subsumed under GST.
3. What are the major advantages of Integrated Goods and Service Tax (IGST) Model.
4. Illustrate how Inter – State and Intra- State Transactions are levied with an example.
5. Write a brief note on how to determine Time of supply of Goods and Services.

SECTION – B

Answer any FOUR of the following Questions

5x4=20M

6. Write advantages of Goods and Service Tax.
7. What is the comprehensive structure of GST in Indian.
8. Give the brief note on Principles of GST.
9. What is input tax credit and explain it with suitable examples.
10. Illustrate the Inter State transactions under GST.
11. Explain the taxes and duties outside the purview of GST.



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DEPARTMENT OF MATHEMATICS

ADD ON COURSE

BATCH : 2021-22

SKILLS IN BASIC REASONING



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Course Objectives:

- To make the students learn the logics of mathematics without formulas.
- To know the shortcuts of various topics like Alphabets, Numbers, Directions....
- To prepare students for appearing competitive exams as well as campus drives.

COURSE SYLLABUS

- Unit –I:** Coded Inequality, Missing Numbers
- Unit – II:** Directions, Blood Relations
- Unit- III:** Sitting Arrangement, Syllogisms

Suggested Reading:

1. R.S.Agarwal (New Edition)
2. Arihant publications

Methodology: Theory: 30 Hrs



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COURSE STRUCTURE & FRAME WORK

Title of the Course: SKILLS IN BASIC REASONING

Course Code: SDC- MAT001

Duration of the Course: 30 Hours

Eligibility of the course:

Candidates studying B.Sc with Maths (or) Chemistry (Or) Physics (Or) Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology (or) Electronics as one of the optional subject and B.Com

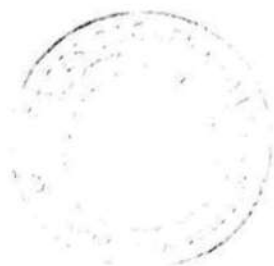
Scheme of the Course:

1. Lecture presentation

Classes are conducted through blackboard teaching.

Scheme of Examination:

Maximum marks for this course is 50 with minimum of 20 marks for passing and duration of examination is one and half Hour.




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Model Question Paper
DEPARTMENT OF MATHEMATICS
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Add on Course Examination
Paper Title: Skills in Basic Reasoning

Time: $1\frac{1}{2}$ Hrs

Max. Marks: 50

I Answer All the Questions

(8 x 1 = 8)

1.	7	9	15	27	?	77
2.	134	139	147	164	?	225
3.	0.5	1	2	?	8	16
4.	8	32	64	256	512	?
5.	8	13	23	40	60	?
6.	4	9	16	25	?	49
7.	640	1280	1280	640	160	?
8.	6	6	9	18	45	?

II Answer the following

(8 x 1 = 8)

Which of the following conclusions are true?

9. Statement : $G \leq H = 1 \leq J \leq K \geq L$

Conclusion I: $J > G$

Conclusion II: $1 < L$

10. Statement : $A \geq B > C > D = E \leq F$

Conclusion I: $B > F$

Conclusion II: $D < A$

11. Statement : $P = Q \leq R < S; T \geq S < U \leq V$

Conclusion I: $P < U$

Conclusion II: $T > 0$

12. Statement : $U \geq V = W > X; A \leq V \geq B = C$

Conclusion I: $C \leq U$

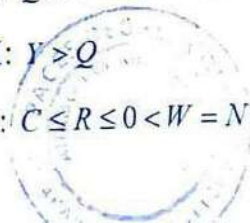
Conclusion II: $A \leq X$

13. Statement : $Q \leq U = E \leq R \leq Y$

Conclusion I: $Y > Q$

Conclusion II: $Y = Q$

14. Statement : $C \leq R \leq 0 < W = N$



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Conclusion I: $N > C$

Conclusion II: $N = C$

15. Statement : $S < A < 1 > N < T$

Conclusion I: $S < N$

Conclusion II: $A < T$

16. Statement : $S > W > E = L < T$

Conclusion I: $T > W$

Conclusion II: $L < S$

III Answer all the questions

(5 x 2 = 10)

Study the given information carefully to answer the given questions:

Six people viz. A, B, C, D, E and F were born on either 1st or 10th of January, May and October of the same year. Only one person was born on each date. No other person was born in given year.

B was born on an even numbered date immediately before F. Only two people were born between F and C. As many people were born before C as after E, A was born on an odd numbered date.

17. On which of the following dates was E born?

- a) 1st October b) 10th October c) 1st May d) 10th January
e) 1st January

18. As many people were born between E and F as between C and _____

- a) F b) E c) A d) B e) D

19. Which of the following pairs represents the people born in the same month?

- a) EB b) CF c) DB d) DA e) CE

20. How many people were born between A and B?

- a) Two b) Three c) None d) One e) Four

21. Who among the following was born immediately after D?

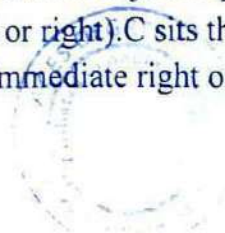
- a) A b) None of those given as option c) B d) C e) F

IV Answer all the questions

(5 x 2 = 10)

Read the given information to answer the given questions:

Seven people are sitting around a circular table facing the centre with equal distance between adjacent persons. Only one person sits between A and B (either from left or right). C sits third to the right of B. D sits third to the right of C. E sits to the immediate right of F. G sits second to the right of E.



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22. How many people sit between C and F when counted from the left of C?
 a) There b) None c) One d) More than three e) Two
23. What is the position of B with respect to F?
 a) Immediate left b) Fourth to the left c) Immediate right
 d) Second to the left e) Second to the right
24. Which of the following is true with respect to the given information?
 i) E sits second to the left of D ii) D is an immediate neighbour of B
 iii) A sits an third to the left of F
- a) None (i),(ii) and (iii) b) Both (i) & (ii) c) Only (ii) d) Both (ii) & (iii)
 e) Only (iii)
25. Who among the following are immediate neighbour of G?
 a) A , C b) F , C c) D , G d) B , A e) C ,D
26. Four of the following five are alike a certain way as per the given arrangement and thus form a group. Which one of the following does not belong to that group?
 a) GD b) DF c) EG d) FA e) FC

V. Answer all the questions

(5 x 2 =10)

Read the given information to answer the given questions:

Seven classes are held on seven different days of the same week starting from Monday and ending on Sunday. Each class is held on different subjects like history, Geography, Mathematics, Physics, Chemistry, Biology and English. It is assumed that no other class is held in the given week.

Biology is held on days Friday. More than three classes are held between English and Chemistry. English is held on one of the days before Chemistry. Chemistry is not held on Saturday. Mathematics is held on one of the days before English. Geography is held immediately after Physics.

27. On which of the following days is the class on history held?
 a) Saturday b) Tuesday c) Sunday d) Monday e) Friday
28. As many classes are held after Mathematics class as before _____ class
 a) Physics b) Biology c) Chemistry d) History e) English
29. Which of the following classes is held immediately after geography?
 a) Chemistry b) History c) English d) Mathematics e) Biology



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30. Four of the following five are alike in a certain way, based on the given arrangement and thus form a group. Which one of the following does not belong to that group?

- a) History- Physics b) Biology - English c) Mathematics – Geography
d) History – Mathematics e) Chemistry - Biology

31. How many classes are held after the Geography class?

- a) Four b) One c) Two d) Three e) None

VI Answer the following questions

(4 x 1 = 4)

Read the given information to answer the given questions:

B is the son of D. D is the mother-in-law of N. D does not have any daughter in law. H is the father of N and K.T is the only sister in law of K. J is the daughter of K.

32. If Y is the brother of J then how is Y related to H?

- a) Father b) Brother-in-law c) Grandson d) Son-in-law e) Son

33. How is N related to I?

- a) Brother b) Father in-law c) Son d) Grand father e) Father

34. How is B related to T?

- a) Father b) Brother in-law c) Son d) Husband e) Father

35. If all the digits in the number in the number '2857049' are arranged in descending order, within the number, the position/s of the how many digit/s will remain unchanged ?



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Course Outcomes:

- ❖ By learning the Shortcuts they will get confidence to attend for competitive exams.
- ❖ Learns logics, speed and accuracy.




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DEPARTMENT OF CHEMISTRY

ADD ON COURSE

TITLE : WATER ANALYSIS

2021-22



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Course Objectives:

1. To check the quality of water regularly and build up good relation with public.
2. The students are understand the principles and the practical approaches and techniques required for the analysis of water samples and quality
3. To ensure the hardness of water to be used for industrial applications

COURSE SYLLABUS

Course Code : SDC-CHE002

Theory: 20 Hrs

Practical: 10 Hrs

Unit –I

Chemistry of Water :

- a. Hydrosphere- Water resources.
- b. Properties of water- color, odor, turbidity, total salt content, total suspended water .

Unit II:

Water Quality Parameters and Standards- Quality of drinking water, Quality of irrigation water, COD, BOD.

Unit- III:

Purification of water- Treatment of domestic and industrial water by various methods like ion exchange process, permutated and Reverse osmosis etc..

Practicals:

1. Collection of water samples (Field work)
2. Determination of total hardness of water
3. Determination of BOD of water

Suggested Reading:

1. Laboratory Manual of Water and Wastewater Analysis, D.R. Khanna, R. Bhutiani, Daya Publishing House, Delhi, 2008
2. Chemical and Biological Methods for Water Pollution Studies, R.K. Trivedy, P.K.Goel, Oriental Printing Press, Aligarh, 1986
3. Laboratory Manual of Water and Wastewater Analysis, D.R. Khanna, R. Bhutiani, Daya Publishing House, Delhi, 2008
4. Chemical and Biological Methods for Water Pollution Studies, R.K. Trivedy, P.K.Goel, Oriental Printing Press, Aligarh, 1986
5. Garg S.K., Environmental Engineering Vol. I Water Supply Engineering, Khanna Publishers.



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Methodology: Theory: 20 Hrs

Practical: 10 Hrs

COURSE STRUCTURE & FRAME WORK

Title of the Course: Water Analysis

Course Code: SDC- CHE002

Duration of the Course: 30 Hours (includes both theory and practicals)

Eligibility of the course:

Candidates studying B.Sc with Chemistry (Or) Physics (Or) Biotechnology (Or) Biochemistry (Or) Botany (Or) Zoology as one of the optional subject

Scheme of the Course:

1. Lecture presentation
2. Practicals /Field Visit.

Classes are conducted by PowerPoint presentation and blackboard teaching. Practical classes may be conducted by inviting experts in the practical to provide complete information and process of water analysis.

Scheme of Examination:

Maximum marks for this course is 75 (includes both theory and practicals). Theory paper for maximum of 50 marks with minimum of 20 marks for passing and duration of examination is 2 Hours. Practical examination of 2 hours duration for a maximum 25 marks with minimum of 10 marks for passing.

S.No	Paper	Marks
1	Theory	50
2	Practical / field work and assignment	25
	Total	75



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Model Question Paper
DEPARTMENT OF CHEMISTRY
SPACES DEGREE COLLEGE, PAYAKARAOPETA
Add on /Certificate Course examination
Paper Title: Water Analysis

Time: 2 Hrs

Max. Marks: 50

PART – A

Answer any Four questions

(4x5 = 20M)

1. Explain hydro sphere
2. How to determine total dissolved salts in water
3. Explain quality parameters of drinking water
4. Write short notes on BOD & COD.
5. Explain resources of water
6. Explain Ion exchange process

PART-B

Answer any three of the following questions

(3x10= 30M)

1. what are the physical properties of water
2. Explain removing of hardness of water by various methods
3. Explain purification methods of industrial and sewage water
4. Explain determination of Turbidity of water samples
5. Explain desalination process ?



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COURSE OUTCOMES:

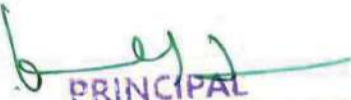
CO 1: To enables the students to understand different types of sources of water and different spheres in atmosphere..

CO 2: Students will be understand different parameters of different water samples.

CO 3: Students will learn about different laboratory procedures for the determination of analysis of water.

CO 4 : To determine turbidity and alkalinity of water




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