ASSIGNMENT

1. Write a program to demonstrate use of string library functions.
    a. strlen()
    b. strcpy()
    c. strcat()
    d. strcmp()
    e. stricmp()
    f. strrev()
    g. strchr()
    h. strstr()
    i. strncpy()
    j. strncat()
    k. strncmp()

2. Write a program to simulate the following library functions.
    a. size_t strlen(const char *str);
    b. char* strrev(char* str);
    c. char* strcpy(char *dest, const char *src);

1. #include<stdio.h>
int main(void)
{
	char *courses[]={ "PG-DAC","PG-DESD","PG-DMC",
	"PreCAT","PG-DBDA"};
	char *temp=NULL;
	int i;
	temp = courses[3];
	courses[3] = courses[4];
	courses[4] = temp;
	for(i=0; i<=4; i++)
		printf("%s,", courses[i]);
	return 0;
}

A. PG-DAC,PG-DESD,PG-DMC,PreCAT,PG-DBDA,
B. PG-DAC,PG-DESD,PG-DBDA,PreCAT,PG-DMC,
C. PG-DAC,PG-DESD,PG-DMC,PG-DBDA,PreCAT,
D. Compile time error.

Answer: C

2. #include <stdio.h>

```
int main(void)
{
        int a[5] = {5, 1, 15, 20, 25};
        int i, j, m;
        i = ++a[1];
        j = a[1]++;
        m = a[i++];
        printf("%d, %d, %d", i, j, m);
        return 0;
}
```

A. 3,2,15
B. 2,3,20
C. 2,1,15
D. 1,2,5

Answer: A

3. #include<stdio.h>
int main(void)
{
	static char *s[] ={ "PG-DAC" , "PG-DMC","PG-DBDA",
	"PG-DESD"};
	char **ptr[] = {s+3, s+2, s+1, s};
	char ***p=NULL;
	p = ptr;
	p++;
	++p;
	printf("%s", **p+3);
	return 0;
}

A. PG-DMC
B. PG-DBDA
C. PG-DESD
D. DMC

Answer: D

4. If following program having name cmdline is run from the command line as –

./cmdline.out PG-DBDA PG-DESD PG-DMC PG-DAC
then what would be the output?

```
#include<stdio.h>
int main(int argc, char *argv[])
{
        int i=0, len=argc;
        while(argv[i])
        {
                printf("%c", argv[i++][argc-len]);
        }
        return 0;
}
```

A. .PPPP
B. /DSCC
C. .DSCC
D. /PPPP
E. h-DMC

Answer: A