**LAB:05 PROCESS SCHEDULING ALGORITHMS   
STD-ID:10187**

**Question 1:**

**code:**

**#include<stdio.h>**

**#include<conio.h>**

**#include<iostream>**

**using namespace std;**

**int main() {**

**int p[20],bt[20],pri[20], wt[20],tat[20],i, k, n, temp;**

**float wtavg, tatavg;**

**printf("Enter the number of processes --- ");**

**scanf("%d",&n);**

**for(i=0;i<n;i++) {**

**p[i] = i;**

**printf("Enter the Burst Time & Priority of Process %d- ",i);**

**scanf("%d %d",&bt[i], &pri[i]); }**

**for(i=0;i<n;i++)**

**for(k=i+1;k<n;k++)**

**if(pri[i] > pri[k]) {**

**temp=p[i];**

**p[i]=p[k];**

**p[k]=temp;**

**temp=bt[i];**

**bt[i]=bt[k];**

**bt[k]=temp;**

**temp=pri[i];**

**pri[i]=pri[k];**

**pri[k]=temp;**

**}**

**wtavg = wt[0] = 0;**

**tatavg = tat[0] = bt[0];**

**for(i=1;i<n;i++) {**

**wt[i] = wt[i-1]+ bt[i-1];**

**tat[i] = tat[i-1] + bt[i];**

**wtavg = wtavg + wt[i];**

**tatavg = tatavg + tat[i];**

**}**

**printf("\nPROCESS\t\tPRIORITY\tBURSTTIME\tWAITINGTIME\tTURNAROUND TIME");**

**for(i=0;i<n;i++)**

**printf("\n%d %d %d %d %d ",p[i],pri[i],bt[i],wt[i],tat[i]);**

**printf("\nAverage Waiting Time is --- %f",wtavg/n);**

**printf("\nAverage Turnaround Time is --- %f",tatavg/n); }**

**Output:**





**Question 2:**

**Answer: (C) Shortest job next may lead to process starvation for processes which will require a long time to complete if short processes are continually added.**