إمتحان التخــــلــف

Model Answer

Question 1 [10 points]:

1.1   **F ;**   Basic language is an example of **Application** software

1.2   **F;**   the **Compiler** is a translator system program used to translate a High-level language program into a Machine language program.

1.3   **T**

1.4   **F;** A **computer** is an electronic device capable of executing instructions based on algorithms stored in its memory.

1.5   **F; Machine language** is a program written using binary digits only

Question 2 [12 points]:

2.1 $Z = (X^2 + 1)/Y + 4 * SQR(X^4 + 1)$

2.2   **IF TAN(X-Y) = 0 THEN X = Y**

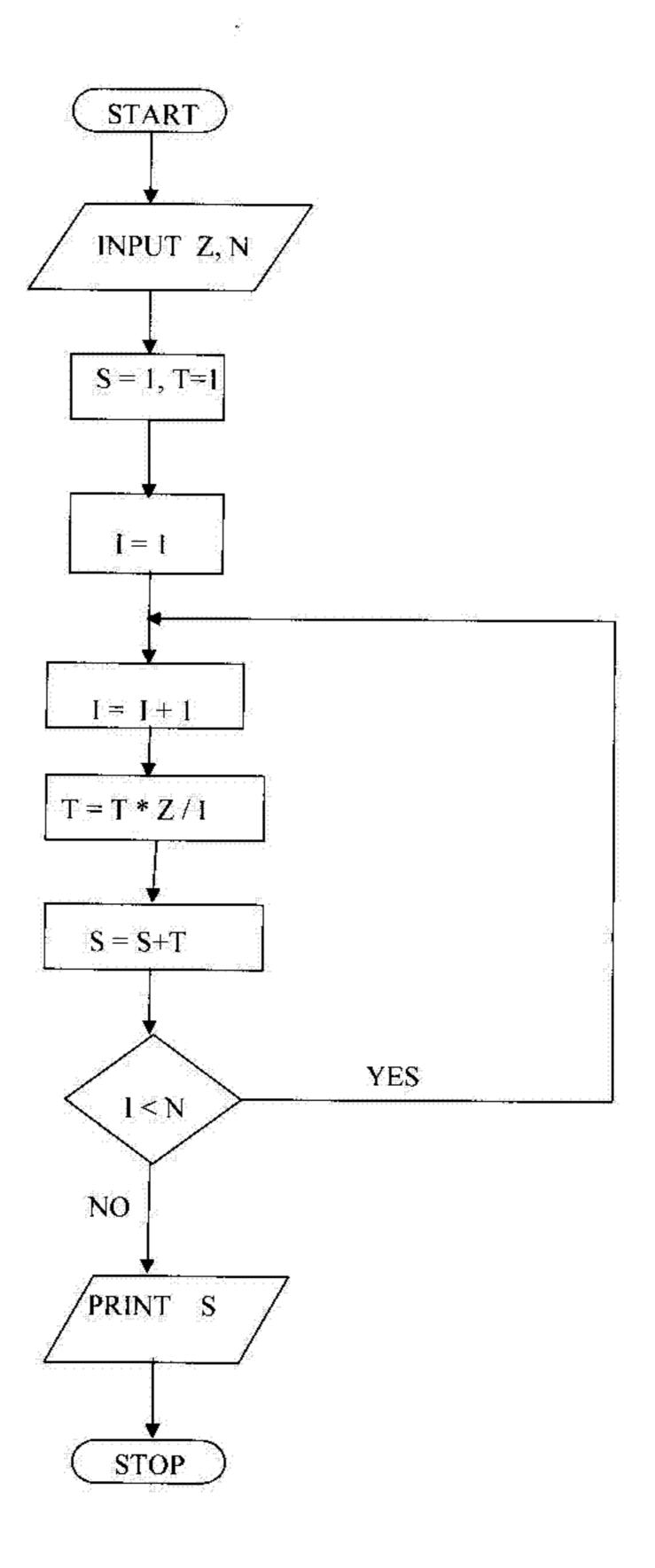2.3   **FOR K = 10 TO 1000 STEP 5**

       $Z(K) = (K + 1) \wedge (1/7)$

       NEXT K

2.4   **SP= AX * BX + AY * BY**

Question 3 [12 points]:

3.1

(A = 5)	OR	(B <> 1)	OR	NOT	Y
↓	↓	↓	↓	↓	
①	④	②	⑤	③	

3.2

(A	−	B * C	<=	2)	AND	Y	AND	Z
↓		↓	↓		↓		↓	
②		①	③		④		⑤	

3.3

(A	+	B) / C	−	EXP(A	/	(C	+	A)	/	B)
↓		↓	↓	↓		↓		↓		
①		⑥	⑦	⑤		③		②		④

Question 4 [16 points]:

```
                    ( START )
                        |
                        v
                 / INPUT  Z, N /
                        |
                        v
                  [ S = 1, T=1 ]
                        |
                        v
                    [ I = 1 ]
                        |
                        v  <--------------------+
                  [ I = I + 1 ]                 |
                        |                       |
                        v                       |
                 [ T = T * Z / I ]              |
                        |                       |
                        v                       |
                  [ S = S+T ]                   |
                        |                       |
                        v             YES       |
                   < I < N > --------------------+
                        |
                      NO |
                        v
                  / PRINT   S /
                        |
                        v
                    ( STOP )
```

```
10      REM This program is used to compute expansion of EXP(Z) for first N terms.
20      INPUT " Enter values of  Z,  N  " ; Z ; N
30      S = 1
40      T = 1
50      FOR I = 2 TO N-1
60      T= T * Z / I
70      S = S + T
80      NEXT  I
90      PRINT " EXP( " ;  Z ; ")=" ,  S
100     END
```

Question 5 [10 points]:

     5.1   Search for the location of Number 2 in the given array.

     5.2   The output of the program is 4.

     5.3   Number 2 not included in the given array.

(Good Luck)

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مع دعواتي بالتفوق .... د . م / كــارم مـحـمـــود