

MID TERM EXAMINATION
Spring 2020

Course No:	CSE 101 (Sec: 11)
Course Title:	Introduction to Computer Studies

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Date of examination:	23.03.2020
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Obtained	24
Total	25



**Signature of the
Examiner**

Answer No. 1

(a) $(1100000)_2 - (1011111)_2$

$$\Rightarrow \begin{array}{r} 1100000 \\ 1011111 \\ \hline (0000001)_2 \quad A. \end{array}$$

(b) $(10111)_2 \div (10)_2$

$$\Rightarrow \begin{array}{r|l} 10 & 10111 \\ \hline & 10 \\ \hline & 0011 \\ & 10 \\ \hline & 11 \\ & 10 \\ \hline & 1 \end{array}$$

Quotient 1011

Remainder 1

Answer No.2

Algorithm:

- Step - 1 : start
- Step - 2 : Input n
- Step - 3 : $S=0, i=1$
- Step - 4 : for $i \leq n$ repeat step 5
- Step - 5 : $S = S + i*i, i = i+1$
- Step - 6 : Print S
- Step - 7 : End

Pseudocode:

1. get n
2. $S=0, i=1$
3. for $i \leq n$ repeat step 5
4. $S = S + i*i, i = i+1$
5. display S

Answer No.3

Various entities of "ULAB Moodle"

1. Software = google
2. Hardware = computer, mobile phone
3. User = All ULAB students and teachers.

Answer No.4

(a) If n is 9, then $(9 \% 2 == 0)$ is false. Because 9 can't be divided by 2. So the value of i should be increased to 3. Now $(9 \% 3 == 0)$ true.

So, Print "no"

(b) If n is 11, then $(11 \% 2 == 0)$ is false. Because 11 can't be divided by 2. So the value of i should be increased to 3, still $(11 \% 3 == 0)$ is false. If $i=4$ then $(11 \% 4 == 0)$ is false. Because But if $i=11$ then $(11 \% 11 == 0)$ true. So, Print "no"