

B.SC. (I. T.) SEM. - II (2011 COURSE) : SUMMER - 2018
SUBJECT : STRUCTURE AND INTERPRETATION OF PROGRAMS

Day : **Saturday**
Date : **26/05/2018**

S-2018-0976

Time : **10.00 am to 12.00 Noon**
Max. Marks : **40**

N. B. :

- 1) **Question No. 1 is COMPULSORY.**
 - 2) Attempt **Any SIX** questions out of the remaining.
 - 3) Figures to the right indicate **FULL** marks.
 - 4) Draw neat diagram **WHEREVER** necessary.
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- Q.1** Explain the following functions with **TWO** examples each : **(10)**
- a) floor
 - b) tail
 - c) even
 - d) filter
 - e) head
- Q.2** Explain the differences between Compiler and Interpreter with suitable examples. **(05)**
- Q.3** Explain the concept of structure of a program. What is the basic structure of Haskell? **(05)**
- Q.4** Explain a function: double, that takes a number X as its argument and produces the result X + X. explain, how nested double function works. **(05)**
- Q.5** Define functional programming in detail with meaning of purely functional and non strict semantics. **(05)**
- Q.6** Write a function to check, if the number is prime number or not. **(05)**
- Q.7** What is the significance of colon (:) in Haskell? Explain with the help of three different examples. **(05)**
- Q.8** Explain the working of function: ceiling. Compare it with function: floor, using suitable examples. **(05)**

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