

**JAYPEE UNIVERSITY-2007**  
**B. TECH DEGREE EXAMINATION**  
**UNICS**  
**(INFORMATION TECHNOLOGY)**

JUNE-2007

TIME-3HOUR  
MARK-90

1. A script that receives any year from the keyboard and determines whether it is leap year or not.
2. That automatically gets executed on logging in. It displays the present working directory, and reports whether your friend has logged in or not. If he has logged in, it should send him a message that you are there to chat with him.
3. That receives arguments 'bold', 'reverse' or 'blink'. If the argument supplied is 'bold', it should display it in bold, if it is 'reverse', it should be displayed in reverse video, and if it is 'blink' the program should blink it on the screen. Wrong argument should be reported properly.
4. That wishes the user for the moment. eg. It displays Good Morning, Good afternoon etc. depending upon the time the user has logged in.
5. That stores the roll no., name, place etc. of n students and stores them, in a file. \*\*\*Try to sort the information on the basis of a) roll no. b) place and c) name.
6. To count and report the number of entries present in each sub-directory mentioned in the path supplied as a command line argument.
7. That calculates factorial of any integer.
8. To calculate the Gross salary on the basis of basic. Make suitable assumptions(eg. Basic=Rs.10000 DA=55%, HRA, MA etc.)
9. Write a shell program that stores the roll no., name and total marks obtained of n students and stores them, in a file. It then reports the roll no. and name of the student who scores the maximum marks.
10. Write a shell program that prompts the user to enter any character and reports the type of char (eg. Small case alphabet , capital letter , digit etc.).