4. Write the general form of **while** loop in Linux shell programming. Explain whether these **while** loops will run :

   i) **While** [5],

   ii) **While** (x" $1" ! = x]. 2+4=6

BACHELOR OF SCIENCE EXAMINATION, 2019

(2nd Year, 2nd Semester)

MATHEMATICS

SEC-2 : OPERATING SYETEM (LINUX)

Time : One hours Full Marks :20

Symbols have usual meaning, if not mentioned otherwise

Attempt Q.1 and any two from the rest.

1. (a) Distinguish between program and process.

   (b) How do you change the permission of a file ? Explain with example.

   (c) If x has the value 10, what is the value of i) xx ii) xx?

   (d) What is the exit status of a command and where is it stored ? 2+2+2+2=8

2. What is the significance of PID and PPID ? Which process do you think may have the maximum number of children ? How do you display all processes running on your system ? How will you kill the last background job without knowing the PID? 2+1+2+1=6

3. Write shell code to accept a string from the terminal, and echo a suitable message if it does not have at least 10 characters using i) **case,** ii) **expr** 6