

Surname, Name:

Section:

Student No:

**Closed Book, closed note exam. Show your work! we must follow your reasoning.**

**You are required to write down commands with necessary arguments and options. Give the best result that you can give!unless otherwise stated. There are 10 questions totaling 116 points Over 100 points is bonus.**

**NOTICE TO THE STUDENTS**

small Read the instructions carefully listed below and sign the box:

- 1. Textbooks, lecture notes, calculators with extensive memories, and any kind of computers are not permitted in the classrooms: if you have any, leave them on the instructor's desk.
- 2. Cell phones should be totally switched off (not in silent or flight modes) and do not keep them with you: either put them in your bags or leave them on the instructor's desk.
- 3. Permitted material to be kept on your desks are; pencils, sharpeners, erasers (and in case you may need: water and tissues). Pencil boxes are strictly forbidden.
- 4. Check your desk for any graffiti; the graffiti related to the course will be treated as an attempt to cheat.
- 5. You are not allowed to talk to other students during the exam whatever the reason may be.
- 6. Disobeying the above rules will be severely penalized and a disciplinary action will be conducted.
- 7. Please prepare your ID (with photos) on your desk for identity check.

SIGNATURE	.....	Time of Submission:
-----------	-------	---------------------

- 1. Write down a shell script that *takes three arguments* as command line input ; first two are integers and third one is a single letter +, m, e , indicating sum, product, exponentiation (always first operand second). Use *one case statement* and write as output as two integers, operator and result (sum of 3 and 5 is 8) You do not need to check the input. Call script as 1.sh 20 pts



6. Assume you have students.txt for course SITC100 with grade info

```
Ayse Gul A
Arif Ali B
Fatma Can C
Ali Veli D
Ayse Nur F
Elif Tas A
.....
```

(that is Name Surname Grade). write an Awk script Awk.1 such that `awk -f Awk.1 students.txt` will yield

i) print name of the students who got A

ii) course grade average

iii) Total number students, number of students with A, F and number of students which passed this course

with the above input , the output should be **20 pts**

```
=== Students who got A =====
Ayse Gul
Elif Tas
=====
Class Grade Average: 2.333
Total number of students: 6
# Students with A : 2
# Students with F : 1
# Students passed: 5
```





9. We want to find all \*.mp3 files under /home, put them in a tar file, compress with bzip2, and the resulting file will be /tmp/Mympg3.tar.bz2 ? Give the necessary commands to achieve this **10 pts**

10. ftp.linux.org.tr rsync archive has a module named Pardus. This module has Kurumsal and Bireysel directories. Kurumsal directory has version1 and version2 sub directories. We want to download "Kurumsal-2-1.iso" under version2 directory , How would you do it? Write the necessary commands to download! **5 pts**