1. Create the following vectors:

a. Create a Vector called “evenNo” with all even value between 1 to 50. Assign names to each element as “a1, a2, a3, ... and find 5th value from it.

b. Create a Vector with first 20 multiple of 3. Find the 5th value from it. Also find total, average, maximum and minimum among them.

c. Create an ordered Factor with name heart\_rate for the following

heart rate data:

Patient 1: F

Patient 2: F

Patient 3: S

Patient 4: S

Patient 5: M

Patient 6: F

Here levels are S, M, F and labels applied are Slow, Medium, Fast. Compare the heart rate of patient 2 with patient 5.

d. Write four different method of indexing (accessing) a list. And how list is different from vector.

2. Create the variable Dilwale\_list. The list contains the following components:

a. moviename: “Dilwale”

b. actors: a vector with the main actors' names as follows:

“Shah Rukh Khan”, “Kajol”, “Varun Dhawan”, “Boman Irani”, “Kirti Sanon”, “Johny Lever”

c. ratings: a matrix that contains reviews as follows:

STARS

IMDB 3.00

TOI 4.00

HT 2.50

NDTV 2.50

REDIFF 2.00

Use the above created Dilwale\_list and do the following:

a. Select second actor and assign the result to second\_actor.

b. Select all information regarding the third rating. Store the result in third\_ratings

c. Add the year as 2015. Store the result to Dilwale\_list \_full

3. Do the following:

a. Create a Barplot for below given Students Marks

A B C D E

40 50 30 50 60

b. V1<- c(10,20,30,40,50,60)

V2<-c(4,5)

V3<-V1+V2

What values are stored in vector V3, do not execute in R.

4. Do the following:

a. Create a function to HRA given to employees based on their Employee level. Use below data to calculate

Level HRA

L1 5000

L2 7500

L3 1000

L4 12500

b. Create R user defined function to find how many days it will take to accumulate 20 lacs, if I am depositing 20000/- every month in my saving account. Rate of interest for saving account is 4% per annum.

5. Create the following matrix with name hobbit\_movie:

US Non-US

An Unexpected Journey 460.99 314.40

The Desolation of Smaug 290.47 NA

The Battle of the Five Armies 309.31 165.80

The Fellowship of the Ring NA 552.57

The Two Towers 310.76 338.72

The Return of the King 380.33 468.51

A. Find Total revenue for US and Non-US.

B. Find Average revenue for each movie.