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Subject - scripting language and R
Date - 15-03-22

Course - MCA - 1st C
Subject code - PMC-103
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(1)

Ans 4-

Descriptive statistics :

Summary : Gives us the descriptive state like..

In case of numerical data :

Gives mean, mode, median, Range.

Measure of central tendency :

1) mean (titanic $ Fare)
32.20421
[On Average person spent $32 to-board the titanic]

2) mode (titanic $ Age)
24
[board common Age on titanic]

3) median (train $ fare)
14.542

Measure of spread :

1) range (titanic $ fare)
0.000 512.3292
[It shows lowest and higest value of fare]

2) var (titanic $ fare)
2469.437

3) sqrt (var (titanic $ fare))
49.69343

Inferential Statistics :

- Hypothesis Testing :

```
new_data ← subset (titanic , titanic $ Pclass = -1)

z.test2 = function (a, b, n) {
        sample.mean = mean (a)
        pop_mean = mean (b)
        c = nrow(n)
        var_b = var(b)
zeta = (sample_mean - pop_mean)/sqrt(var_b/c))
        return zeta
```

call function

```
z.test2 (new_data $ survived, titanic $survived, new_data)
```

7.423828