

0.62 to 0.68

Sub-Section Number :	7
Sub-Section Id :	64065384938
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 69 Question Id : 640653588570 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Short Answer Question

The dataset consists of three distinct observations, say  $x$ ,  $y$  and  $z$ , and the sum of their frequencies is 100. Relative frequencies corresponding to  $x$  and  $z$  are 35% and 45% respectively. Find the cumulative frequency(in %)of  $y$  and  $z$ .

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

65

## System Commands

Section Id :	64065339797
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	14
Number of Questions to be attempted :	14
Section Marks :	100

Display Number Panel :	Yes
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065384939
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 70 Question Id : 640653588572 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "DIPLOMA LEVEL : SYSTEM COMMANDS (COMPUTER BASED EXAM) "

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?  
CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE TOP FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406531963223. ✓ YES

6406531963224. ✗ NO

Sub-Section Number :	2
Sub-Section Id :	64065384940
Question Shuffling Allowed :	Yes
Is Section Default? :	null

**Question Number : 71 Question Id : 640653588573 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 7**

Question Label : Short Answer Question

```
$ pwd
/home/pinky
$ cd /var
$ pwd
/var
$ for i in {1..10}; do cd -; done
```

What is the output to the command `pwd` at the end of the execution of the given script?

**Hint:** `cd -` will change the current working directory to the previous current working directory.

**Response Type :** Alphanumeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Answers Case Sensitive :** Yes

**Text Areas :** PlainText

**Possible Answers :**

`/var`

**Sub-Section Number :** 3

**Sub-Section Id :** 64065384941

**Question Shuffling Allowed :** No

**Is Section Default? :** null

**Question Id : 640653588574 Question Type : COMPREHENSION Sub Question Shuffling**

**Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix**

**Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (72 to 76)**

Question Label : Comprehension

```
echo 1 > file1
mkdir dir1 dir2

ln file1 file1_h1
ln -s file1 file1_s1
ln -s file1 dir1/file1_s2

cd dir1
cp ../file1 .
echo 2 > file1
ln -s ../file1 file1_s3
ln -s file1 file1_s4
cd ..

cp file1 dir2/file1
cp file1_s1 dir2/file1_s5
```

Based on the above data, answer the given subquestions.

### Sub questions

**Question Number : 72 Question Id : 640653588575 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Short Answer Question

What will be the output of  
`cat ./dir1/file1` after the  
execution of the given script?

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

2

**Question Number : 73 Question Id : 640653588576 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Short Answer Question

What will be the output of

```
echo 3 > file1_h1; cat ./file1
```

after the execution of the given script?

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

3

**Question Number : 74 Question Id : 640653588577 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Short Answer Question

What will be the output of

```
echo 4 > ./dir1/file1_s1; cat ./file1
```

after the execution of the given script?

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

1

**Question Number : 75 Question Id : 640653588578 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Short Answer Question

What will be the output of

```
echo 5 > ./dir1/file1_s3; cat ./dir1/file1
```

after the execution of the given script?

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

2

**Question Number : 76 Question Id : 640653588579 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3**

Question Label : Short Answer Question

What will be the output of

```
echo 6 > ./dir1/file1_s3; cat ./file1
```

after the execution of the given script?

**Response Type : Numeric**

**Evaluation Required For SA : Yes**

**Show Word Count : Yes**

**Answers Type : Equal**

**Text Areas : PlainText**

**Possible Answers :**

6

**Sub-Section Number :**

**Sub-Section Id :** 64065384942  
**Question Shuffling Allowed :** Yes  
**Is Section Default? :** null

**Question Number : 77 Question Id : 640653588580 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 6**

Question Label : Multiple Choice Question

Which of the following commands will print the environmental variable HOME .

**Options :**

6406531963231. ✖ `awk 'BEGIN{print $HOME}'`

6406531963232. ✖ `awk 'BEGIN{print ENVIRON['HOME']}'`

6406531963233. ✔ `awk 'BEGIN{print ENVIRON["HOME"]}'`

6406531963234. ✖ `awk 'BEGIN{print ENVIRON[${HOME}]}'`

**Question Number : 78 Question Id : 640653588583 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 6**

Question Label : Multiple Choice Question

```
[ a = a ] && [ 1 -ne 2 ]  
v1=$?  
[[ a = a && 2 -ne 2 ]]  
v2=$?  
echo $((v2 - v1))
```

What will be the output from the given script?

**Options :**

6406531963240. ✖ 0

6406531963241. ✔ 1

6406531963242. ✖ 2

6406531963243. ✖ 3

**Question Number : 79 Question Id : 640653588589 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 6**

Question Label : Multiple Choice Question

What will be the result of the keystrokes `$jddk0dw` on vi editor or `<C-e><C-k><C-k><C-a><M-d><C-d>` on emacs editor from first line first character on the text given below. `<C-x>` and `<M-x>` refers to Control + x and Meta/Alt + x respectively ?

```
abcd efgh ijkl
mnopqrst uvw
xyz
```

Hint:

Emacs: - `<C-k>` delete the entire line (from the cursor to the end) - `<M-d>` delete word - `<C-d>` delete character

Vi: - `dd` delete the entire line - `dw` delete word

**Options :**

```
abcd efgh
xyz
```

6406531963264. ✖

```
mnopqrst uvw
xyz
```

6406531963265. ✖

6406531963266. ✔



```
efgh ijkl  
xyz
```

```
efgh ijkl  
mnop  
xyz
```

6406531963267. ✖

**Sub-Section Number :** 5  
**Sub-Section Id :** 64065384943  
**Question Shuffling Allowed :** Yes  
**Is Section Default? :** null

**Question Number : 80 Question Id : 640653588581 Question Type : SA Calculator : None**  
**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**  
**Correct Marks : 8**

Question Label : Short Answer Question

What will be the output of the given command?

```
seq 50 | sed 's/\([[:digit:]]\)\1/\1/g' | sort -n | uniq | wc -l
```

Hint:

1. `seq 100` will generate 1 to 100 in each line
2. `-n` option in `sort` command sorts numerically
3. `uniq` command will remove the adjacent duplicate lines

**Response Type :** Numeric  
**Evaluation Required For SA :** Yes  
**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

46

**Sub-Section Number :** 6

**Sub-Section Id :** 64065384944

**Question Shuffling Allowed :** Yes

**Is Section Default? :** null

**Question Number : 81 Question Id : 640653588582 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 8 Max. Selectable Options : 0**

**Question Label : Multiple Select Question**

```
awk '
/^[0-9].*[0-9]*$/ {
    arr[FILENAME]++
}
END {
    for (i in arr) {
        print i, arr[i]
    }
}
' *
```

What does the given AWK command print?

Hint: FILENAME is a default variable that has the value of filename

**Options :**

6406531963236. ✔ The filename and count that includes the lines in the file that starts with numbers

6406531963237. ✖ The filename and count that includes the lines in the file that ends with numbers

6406531963238. ✔ The filename and count that includes the lines in the file that starts and ends with numbers

6406531963239. ✖ The filename and count that includes the lines that have a number in it

**Question Number : 82 Question Id : 640653588588 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**

**Time : 0**

**Correct Marks : 8 Max. Selectable Options : 0**

Question Label : Multiple Select Question

A html file index.html has the following general format. Identify the correct command which will extract content from `<PRE>` tags (that is, the content between `<PRE>` and `</PRE>`) which includes lines with tags.

```
<HTML>
<HEAD>
  <TITLE>Some Title</TITLE>
</HEAD>
<BODY>
  <H2>Some Heading</H2>
  <SMALL><STRONG>
SomeText<BR>
SomeInfo<BR>
</STRONG></SMALL>
  <CENTER>
  <FONT SIZE="-1"></CENTER><PRE>
Data interested In
Can be Multiline
The context between PRE tags needs to be Extracted
</PRE></FONT>
</CENTER>
  <SMALL>SomeCreator</A>
</SMALL>
</TD>
</TR>
</TABLE>
</BODY>
</HTML>
```

**Options :**

6406531963260. ✓ `sed -n "/<PRE>/,/<\</PRE>/p" index.html`

6406531963261. ✗ `sed -n "/<PRE>/,/<\</PRE>/{/<PRE>/! {/<\</PRE>/! p}}" index.html`

6406531963262. ✗ `sed -n "/<PRE>/,/<\</PRE>/{/<PRE>/!,<\</PRE>/! p}" index.html`

6406531963263. ✓ awk '/<PRE>/,/<\/PRE>/' index.html

Sub-Section Number : 7  
Sub-Section Id : 64065384945  
Question Shuffling Allowed : Yes  
Is Section Default? : null

Question Number : 83 Question Id : 640653588584 Question Type : MCQ Is Question  
Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction  
Time : 0  
Correct Marks : 8  
Question Label : Multiple Choice Question

Assume a large file with more than a million lines of numbers having size of more than 4 gigabytes is processed using AWK. But the system we have only 1 gigabyte of RAM. Here we have two AWK scripts written; choose the most appropriate statement.

### Script 1

```
{
    seq[NR]=$1
}
END {
    prev=""
    for (i in seq) {
        if (seq[i] == seq[i-1]) {
            count++
        }
    }
    print count
}
```

### Script 2

```
prev == $1 {
    count++
}
{
    prev=$1
}
END {
    print count
}
```

### Options :

6406531963244. ✖ The Script 1 is more optimal than Script 2 in terms of memory

6406531963245. ✔ The Script 2 is more optimal than Script 1 in terms of memory

6406531963246. ✖ The Script 1 and Script 2 do not have difference in terms of memory

6406531963247. ✖ The Script 2 is less efficient than Script 1, because it has three blocks

**Sub-Section Number :**

8

**Sub-Section Id :**

64065384946

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 84 Question Id : 640653588585 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 9 Max. Selectable Options : 0

Question Label : Multiple Select Question

A MAC address is typically represented in the format "XX:XX:XX:XX:XX:XX", where X can be a hexadecimal digit (0-9, A-F, or a-f).

Identify the correct extended or basic regular expression from the following which will match a MAC address.

Note: All the regular expressions are either BRE or ERE

Options :

6406531963248. ✓ 

\([0-9A-Fa-f]{2}\:)\{5\}[0-9A-Fa-f]{2}\}
6406531963249. ✓ 

[0-9A-Fa-f]{2}\: [0-9A-Fa-f]{2}\: [0-9A-Fa-f]{2}\: [0-9A-Fa-f]{2}\: [0-9A-Fa-f]{2}\: [0-9A-Fa-f]{2}\}
6406531963250. ✖ 

..\(\:..\)\{5\}
6406531963251. ✖ 

([[:digit:]]{2}\:){5}([[:digit:]]{2})

Sub-Section Number :

9

Sub-Section Id :

64065384947

Question Shuffling Allowed :

Yes

Is Section Default? :

null

Question Number : 85 Question Id : 640653588586 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

**Correct Marks : 6 Max. Selectable Options : 0**

Question Label : Multiple Select Question

Which of the following sed commands will remove lines starting with # and empty lines from index.txt file.

**Options :**

6406531963252. ✖ `sed '/^#|^$/d' index.txt`

6406531963253. ✔ `sed '/^#\|^$/d' index.txt`

6406531963254. ✔ `sed '/^#/ d; /^$/d' index.txt`

6406531963255. ✖ None of these

**Sub-Section Number :** 10

**Sub-Section Id :** 64065384948

**Question Shuffling Allowed :** Yes

**Is Section Default? :** null

**Question Number : 86 Question Id : 640653588587 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 7 Max. Selectable Options : 0**

Question Label : Multiple Select Question

Which of the following commands can delete leading and trailing white spaces from each line of the file sample.txt.

**Options :**

6406531963256. ✔ `sed -e 's/^[\t]*//' -e 's/ *$//' sample.txt`

6406531963257. ✔ `sed -e 's/^[:,space:]*//' -e 's/[:,space:]*$//' sample.txt`



6406531963258. ✓ `awk '{gsub(/^ +| +$/, "")} {print $0}' sample.txt`

6406531963259. ✖ `cat sample.txt|xargs`

**Sub-Section Number :** 11  
**Sub-Section Id :** 64065384949  
**Question Shuffling Allowed :** Yes  
**Is Section Default? :** null

**Question Number : 87 Question Id : 640653588590 Question Type : SA Calculator : None**  
**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**  
**Correct Marks : 6**

Question Label : Short Answer Question

How many background processes will still be running after 5 seconds of the execution of the script?

```
sleep 1 &  
echo two &  
echo three && echo four || echo five  
sleep 6 &  
sleep 2 &  
sleep 12 &
```

**Response Type :** Numeric  
**Evaluation Required For SA :** Yes  
**Show Word Count :** Yes  
**Answers Type :** Equal  
**Text Areas :** PlainText  
**Possible Answers :**

2



## Sem2 Maths2

Section Id :	64065339798
Section Number :	5
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	9
Number of Questions to be attempted :	9
Section Marks :	25
Display Number Panel :	Yes
Group All Questions :	No
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	64065384950
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 88 Question Id : 640653588591 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0

Question Label : Multiple Choice Question

**THIS IS QUESTION PAPER FOR THE SUBJECT "FOUNDATION LEVEL : SEMESTER 2: MATHEMATICS FOR DATA SCIENCE II (COMPUTER BASED EXAM)"**

**ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?**

**CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.**

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