matrimonial services. Then which matrimonial service would you suspect “X” to have enrolled in?

Options :

6406532240207. ✖ A

6406532240208. ✖ B

6406532240209. ✔ C

6406532240210. ✖ Cannot say, require more information.

System Commands

Section Id :	64065344908
Section Number :	14
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	16
Number of Questions to be attempted :	16
Section Marks :	100
Display Number Panel :	Yes
Section Negative Marks :	0
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 :	64065395212
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 222 Question Id : 640653668669 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 :

6406532240211. ✔ YES

6406532240212. ✖ NO

Sub-Section Number :	2
Sub-Section Id :	64065395213
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 223 Question Id : 640653668670 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

By using the information provided below, select a command/script from the options which prints a line with the process ID (PID) for the command `daily-backup`. The command is **only** (exclusively) started by the current user.

A sample output from `ps` command.

```
$ ps x
    PID TTY      STAT   TIME COMMAND
   1168 ?        Ss     0:00 /bin/sh -c cd /home/vidya/quicklinks; python3 -
m http.server 7777
   2331 ?        S      0:00 /usr/bin/bash
/home/vidya/server/deployment_script.sh
   2381 ?        S      0:00 /usr/bin/bash
/home/vidya/server/deployment_script.sh
   5293 ?        S      0:00 (sd-pam)
   8293 ?        S      0:00 /usr/bin/bash
   1381 ?        S      0:00 /home/vidya/.local/bin/daily-backup
   1361 ?        S      0:00 /home/vidya/.local/bin/daily-backuper.sh

$ ps
    PID TTY          TIME COMMAND
   8293 pts/32   0:00 /usr/bin/bash
   8973 pts/32   0:00 ps

$ ps aux
USER         PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root       96641  0.0  0.0      0     0 ?        I<   16:04   0:00
[kworker/u17:1-i915_flip]
root       96656  0.0  0.0      0     0 ?        I    16:04   0:00
[kworker/3:1-events]
root       96827  0.0  0.0      0     0 ?        I    16:04   0:00
[kworker/1:1-events]
vidya   96844  0.3  1.1 1188997100 90548 ?    Sl   16:05   0:00
/opt/google/chrome/chrome
vidya   96919  0.0  0.1  21608  8216 pts/21   S    16:05   0:00 /usr/bin/zsh
vidya   96920  0.0  0.1  21640  8224 pts/21   S    16:05   0:00 /usr/bin/zsh
vidya   96921  0.0  0.0  13716  3328 pts/21   R+   16:05   0:00 ps aux
```

Options :

6406532240213. ✔ `ps x | grep '\b/home/vidya/.local/bin/daily-backup\b'`

6406532240214. ✖ `ps | grep daily-backup`

6406532240215.

✖ `ps aux | grep daily-backup`

6406532240216. ✖ `ps x | grep daily-backup`

Question Number : 224 Question Id : 640653668672 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

Select a command from the given options which will find and print **a number** hidden in the text comprising of [a-zA-Z,.]. Note that there is only one numeric character while rest of the characters are either alphabets or punctuation. Command which prints only the number and not text.

```
$ cat hidden_number.txt
Loremipsumdolorsitame
t,consecteturadipisci
ngelit,seddoeiusmodte
mporincididuntutlabor
eetdoloremagnaaliqua.
Condimentumlaciniaqui
sveleros.Sitametmauri
scommodoquisimperdiet
massatinciduntnunc.Le
ctusurnaduisconvallis
convallistellusidinte
rdumvelitlaoreet.Ferm
entumetsollici1udinac
orci.Aarcucursusvitae
conguemaurisrhoncusae
neanvel.Acfeugiatsedl
ectusvestibulummattis
ullamcorper.Sedadipis
cingdiamdonecadipisci
ngtristiquerisus.Volu
$ grep --help
Usage: grep [OPTION]... PATTERNS [FILE]...
Search for PATTERNS in each FILE.
Example: grep -i 'hello world' menu.h main.c
PATTERNS can contain multiple patterns separated by newlines.

...
  -o, --only-matching       show only non-empty parts of lines that match
...
```

Options :

6406532240222. ✖ `grep -v '[a-zA-Z,.]' hidden_number.txt`

6406532240223. ✖ `grep '[a-zA-Z,.]' hidden_number.txt`

6406532240224.

✖ `grep '[0-9]' hidden_number.txt`

6406532240225. ✔ `grep '[0-9]' -o hidden_number.txt`

Question Number : 225 Question Id : 640653668681 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

ISO 8601 date-time formats in UTC are shown below. From the options select the correct extended regular expression that will match with all of the given formats.

```
# UTC date-time formats

2022-05-06T13:00:56+00:00
2022-05-06T13:00:56Z
20220506T130056Z
```

Options :

6406532240243. ✖ `^[0-9]{4}-*[0-9]{2}-*[0-9]{2}T[0-9]{2}:*[0-9]{2}:*[0-9]{2}(Z|\+00:00)$`

6406532240244. ✖ `^[0-9]{4}-+[0-9]{2}-+[0-9]{2}T[0-9]{2}:+[0-9]{2}:+[0-9]{2}(Z|\+00:00)$`

6406532240245. ✔ `^[0-9]{4}-?[0-9]{2}-?[0-9]{2}T[0-9]{2}:?[0-9]{2}:?[0-9]{2}(Z|\+00:00)$`

6406532240246. ✖ `^[0-9]{4}-[0-9]{2}-[0-9]{2}T[0-9]{2}:[0-9]{2}:[0-9]{2}(Z|\+00:00)$`

Question Number : 226 Question Id : 640653668682 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

Following code block shows the commands ran in terminal. What will be the output of the last command?

```
$ ps
    PID TTY          TIME CMD
  64754 pts/3    00:00:00 bash
  65657 pts/3    00:00:00 sleep
  65671 pts/3    00:00:00 sleep
  65718 pts/3    00:00:00 python3
  65774 pts/3    00:00:00 ps

$ ps | grep "$$"
```

Options :

6406532240247. ✖ `PID TTY TIME CMD`

6406532240248. ✔ `64754 pts/3 00:00:00 bash`

6406532240249. ✖ `65718 pts/3 00:00:00 python3`

6406532240250. ✖ `65774 pts/3 00:00:00 ps`

Question Number : 227 Question Id : 640653668684 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 the following `for` loop will print at the end of the execution?

```
for file in `find . -maxdepth 1 -name '*.txt'`; do
  echo $(basename $file)
done
```

Options :

6406532240257. ✔ Prints the file names of all the '.txt' files in the current directory non recursively.

6406532240258. ✖ Prints the file names of all the '.txt' files in the current directory recursively.

6406532240259. ✖ Prints the file names of all the '.txt' files in the current directory and in immediate subdirectories of current working directory non-recursively.

Sub-Section Number :	3
Sub-Section Id :	64065395214
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 228 Question Id : 640653668674 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 are **TRUE** statements for hardlinks and softlinks?

Options :

6406532240227. ✔ Hardlink of a file has same inode number

6406532240228. ✖ Softlink of a file has same inode number

6406532240229. ✖ Softlink of a file occupies the same space (i.e. same size) as the original file

6406532240230. ✔ Hardinks cannot be moved to a different File system

6406532240231. ✖ Softlink of a file unconditionally requires full path

6406532240232. ✔ Changes done in the original file is reflected in its hardlink

Sub-Section Number : 4

Sub-Section Id : 64065395215

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 229 Question Id : 640653668683 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

For the following `while` loop, select the standard input(s) from the following options that breaks the loop.

```
while read line; do
    $pat = '[0-3][a-g][123][xyz]'
    [[ $line =~ $pat ]] && break
done
```

Options :

6406532240251. ✖ 8iadaz

6406532240252. ✔ 3g2z

6406532240253. ✖ jkjkjkjk2j2yjkjk

6406532240254. ✖ .a.a.a.2.2.1.

6406532240255. ✔ 00210132a1z01231

6406532240256. ✖ 1a2w01231

Sub-Section Number : 5

Sub-Section Id : 64065395216

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 230 Question Id : 640653668677 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

Which of the following options contains command(s) which will output calendar for October and November of 2023.

Options :

6406532240235. ✖ `echo cal\ {10,11}\ 2023\;`

6406532240236. ✖ `$(echo cal\ {10,11}\ 2023\;)`

6406532240237. ✔ `echo cal\ {10,11}\ 2023\;|bash`

6406532240238. ✖ `$($(echo cal\ {10,11}\ 2023\;))`

6406532240239. ✔ `eval "$(echo cal\ {10,11}\ 2023\;)"`

Sub-Section Number :	6
Sub-Section Id :	64065395217
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 231 Question Id : 640653668671 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

Select command(s)/script(s) from the options which will extract the inner rectangle made of 'x' from the pattern shown below which is stored in file `bounded_rectangle.txt`.

Note: Boundary spaces are not considered but the proportionality, scale, and number of characters of inner rectangle should be the same.

Sample Input: bounded_rectangle.txt

```
**************************
*                        *
*                        *
* xxxxxxxxxxxxxxxxxxxxxx *
* x                    x *
* x                    x *
* x                    x *
* x                    x *
* xxxxxxxxxxxxxxxxxxxxxx *
*                        *
*                        *
**************************
```

Sample Output

```
xxxxxxxxxxxxxxxxxxxxxx
x                    x
x                    x
x                    x
x                    x
xxxxxxxxxxxxxxxxxxxxxx
```

Hint:

```
$ echo -e '123\n12'
123
12

$ echo -e '123\n12' | rev
321
21
```

Options :

6406532240217. ✔ `cat bounded_rectangle.txt | grep x | cut -d'*' -f2`

6406532240218. ✔ `cat bounded_rectangle.txt | cut -d' ' -f2- | rev | cut -d' ' -f2- | grep x`

6406532240219. ✖ `cat bounded_rectangle.txt | grep x`

6406532240220. ✖ `cat bounded_rectangle.txt | grep -v x`

6406532240221. ✔ `cat bounded_rectangle.txt | egrep '[^*]+' -o`

Sub-Section Number :	7
Sub-Section Id :	64065395218
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 232 Question Id : 640653668673 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

At the end of the execution of the following script what will be the last value of `val1`.

```
$ cat .myscript.sh
#!/bin/bash

echo "Using \$*:"
for arg in "$*"; do
  val1=$arg
  echo $val1
done

echo "Using \$@:"
for arg in $@; do
  val2=$arg
  echo $val2
done

$ ./myscript.sh 11 22 33
```

Response Type : Alphanumeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Answers Case Sensitive : No

Text Areas : PlainText

Possible Answers :

11 22 33

Question Number : 233 Question Id : 640653668675 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

The following commands are executed in the given order. Enter the duration (in number of seconds) after which the echo command will be executed.

```
$ sleep 1
$ $(sleep 10)
$ sleep 100 &
$ echo "Done"
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

11

Question Number : 234 Question Id : 640653668676 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

What is the output of the following command?

```
$ echo $(( 10 * 10 - 5 * 4 ))
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

80

Sub-Section Number :	8
Sub-Section Id :	64065395219
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 235 Question Id : 640653668678 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

The following is an output of the 'ls -li' command. Based on the information present in the output; how many hardlinks are present for the parent directory (`testdir`).

Hint: Each directory has two hardlinks, one for `.` and another for `..` and in addition to it, each subdirectory increments the count of hardlinks to the parent directory by one.

```
$ cd testdir
$ ls -li
total 68
122703 drwxr-xr-x 2 systemcommands systemcommands  4096 Sep 25 11:28 2021Aug
116829 drwxr-xr-x 2 systemcommands systemcommands  4096 Sep 25 06:49 folder1
116830 drwxr-xr-x 2 systemcommands systemcommands  4096 Sep 25 06:49 folder2
116831 drwxr-xr-x 2 systemcommands systemcommands  4096 Sep 25 07:10 folder3
122704 -rw-r--r-- 1 systemcommands systemcommands  8228 Sep 25 09:37
html.txt
122705 -rw-r--r-- 1 systemcommands systemcommands   605 Sep 25 09:53
onecolor.txt
122706 -rw-r--r-- 1 systemcommands systemcommands   440 Sep 25 10:38
onecolor1.txt
 82472 drwxr-xr-x 2 systemcommands systemcommands 12288 Sep 25 08:49
test_directory
116840 -rwxr-xr-x 1 systemcommands systemcommands   225 Sep 25 08:42
testdata.sh
116857 -rwxr-xr-x 1 systemcommands systemcommands   351 Sep 25 08:48
testdata2.sh
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

7

Question Number : 236 Question Id : 640653668680 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

Below is the file hierarchy structure provided to answer the question.

```
.
├── classA
│   └── attendance
│       ├── feb.csv
│       ├── jan.csv
│       └── mar.csv
├── classB
│   └── attendance
│       ├── feb.csv
│       ├── jan.csv
│       └── mar.csv
├── classC
│   └── attendance
│       ├── feb.csv
│       ├── jan.csv
│       └── mar.csv
└── script.sh

6 directories, 10 files
```

Following script is executed on the directory `classA` (`dir` variable). For what value (`num` variable) will the script output `true` upon execution of the script.

```
#!/bin/bash
dir=$1
num=$2
[[ $num -eq `ls $dir | wc -l` ]] && echo true || echo false
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Sub-Section Number : 9

Sub-Section Id : 64065395220

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 237 Question Id : 640653668679 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 following command?

```
cat /etc/passwd |tr ':' ','|head -30|tail -10|sort -k4,4|cut -d, -f3|head -1
```

Following is the relevant part of `/etc/passwd` file on which the command is run (i.e. output of the `cat /etc/passwd |tr ':' ','|head -30|tail -10` command).

```
syslog:x:102:106::/home/syslog:/usr/sbin/nologin
messagebus:x:103:107::/nonexistent:/usr/sbin/nologin
_apt:x:104:65534::/nonexistent:/usr/sbin/nologin
lxd:x:105:65534::/var/lib/lxd/:/bin/false
uuidd:x:106:110::/run/uuidd:/usr/sbin/nologin
dnsmasq:x:107:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
landscape:x:108:112::/var/lib/landscape:/usr/sbin/nologin
sshd:x:109:65534::/run/sshd:/usr/sbin/nologin
pollinate:x:110:1::/var/cache/pollinate:/bin/false
systemcommands:x:1000:1000:,,,:/home/systemcommands:/bin/bash
```

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :