# Narsee Monjee Institute of Management Studies

#### **Notations:**

Auto Save on Console? :

Options shown in green color and with vicon are correct.

2.Options shown in red color and with \* icon are incorrect.

Question Paper Name : NPAT Common 2020 QP1 NPAT 2020 Subject Name: Creation Date: 2020-06-25 12:01:43 **Duration:** 106 Number of Questions: 98 122 **Total Marks:** Display Marks: Yes Calculator: Normal Magnifying Glass Required? : No Ruler Required?: No Eraser Required?: Yes Scratch Pad Required?: Yes Rough Sketch/Notepad Required?: Yes Protractor Required?: No Show Watermark on Console?: Yes Highlighter: No

# **Display Notepad Pre Exam**

Yes

Group Number:

Group Id:

Group Maximum Duration:

Group Minimum Duration:

Show Attended Group?:

No

Edit Attended Group?:

No

Break time:

Group Marks:

Is this Group for Examiner?:

No

# **Display Notepad Pre Exam**

9046841517 Section Id: Section Number: Offline Section type: Mandatory or Optional: Mandatory Number of Questions: Number of Questions to be attempted : Section Marks: Mark As Answered Required?: Sub-Section Number : Sub-Section Id: 9046842272 Question Shuffling Allowed: No

Question Number: 1 Question Id: 90468410675 Question Type: SUBJECTIVE

Correct Marks: 1

Kindly display your Notepad (Rough Sheet) for 3 minutes before the webcam. Also show both pages both sides numbered 1,2,3 and 4. Kindly showcase as it is mandatory.

# Proficiency in English Language

Group Number:

Group Id:

Group Maximum Duration:

Group Minimum Duration:

Show Attended Group?:

2
9046841453

0
0
No

116

```
Edit Attended Group?:

Break time:

Group Marks:

40

Is this Group for Examiner?:

No
```

# Proficiency in English Language

9046841518 Section Id: Section Number: Online Section type: Mandatory or Optional: Mandatory Number of Questions : 28 28 Number of Questions to be attempted : 40 Section Marks: Mark As Answered Required?: Yes Sub-Section Number : 9046842273 Sub-Section Id: Question Shuffling Allowed: Yes

# $Question\ Number: 2\ Question\ Id: 9046846993\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Is\ Question\ Mandatory: None of the property of$

Correct Marks: 1 Wrong Marks: 0

In the sentence given below, four words/phrases have been underlined and the underlined words/phrases are given as options. Select the option that contains grammatical error(s).

Culture refers to the group's way of life, including the shared system of social meanings, values and relations.

#### Options:

```
90468423228. Culture refers to
90468423229. ✓ the group's way of life
90468423230. including the shared system of
90468423231. social meanings, values and relations.
```

# Question Number: 3 Question Id: 9046846994 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In the sentence given below, four words/phrases have been underlined and the underlined words/phrases are given as options. Select the option that contains grammatical error(s).

Raghav has been trying stopping smoking for many years now, but he has been unsuccessful.

# Options:

```
90468423232. ■ Raghav has been 90468423233. ✓ trying stopping smoking 90468423234. ■ for many years 90468423235. ■ has been unsuccessful.
```

# Question Number: 4 Question Id: 9046846995 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

In the sentence given below, four words/phrases have been underlined and the underlined words/phrases are given as options. Select the option that contains grammatical error(s).

In 2015, most countries agreed on sustainable development goals, though very few have achieved them.

# Options:

```
90468423236. ■ most countries agreed on 90468423237. ■ sustainable development goals 90468423238. ✔ though very few 90468423239. ■ have achieved them.
```

# Question Number: 5 Question Id: 9046846996 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

In the sentence given below, four words/phrases have been underlined and the underlined words/phrases are given as options. Select the option that contains grammatical error(s).

The early years of civilian space travel has been marked by many triumphs and tragedies.

# Options :

```
90468423240. * The early years
```

```
90468423241. * of civilian space travel
90468423242.  has been marked
90468423243. * by many triumphs and tragedies.
Question Number: 6 Question Id: 9046846997 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
In the sentence given below, four words/phrases have been underlined and the underlined words/phrases are given as options. Select the
 option that contains grammatical error(s).
These days, students pursuing higher studies do not pay any attention to the feedbacks provided by their tutors.
Options:
90468423244. * students pursuing higher studies
90468423245. * do not pay any attention
90468423246. ✓ to the feedbacks
90468423247. * provided by their tutors.
Question Number: 7 Question Id: 9046846998 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the option that best fills in the blank and completes the sentence given below.
Built high above the Tiber River, Rome began its phenomenal ascent _____ power when it won independence from the Etruscans.
Options:
90468423248. ** into
90468423249. * of
90468423250. * on
90468423251. V to
Question Number: 8 Question Id: 9046846999 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the option that best fills in the blank and completes the sentence given below.
Less than an inch of soil may form a century in a desert, whereas almost half an inch of soil can form annually in the humid tropics.
Options:
90468423252. ** on
90468423253. * between
90468423254. * since
90468423255. during
Question Number: 9 Question Id: 9046847000 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the option that best fills in the blank and completes the sentence given below.
The soil
             of rock material, minerals and organic matter.
Options:
90468423256. V is composed
90468423257. ** was composed
90468423258. * has been composed
90468423259. * should be composed
Question Number: 10 Question Id: 9046847001 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the option that best fills in the blank and completes the sentence given below.
The managers have promised to hire the boys once they
                                                       their degree.
Options:
```

Question Number: 11 Question Id: 9046847002 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

90468423260. \* will complete 90468423261. V complete 90468423262. \* has complete 90468423263. \* completed

```
Select the option that best fills in the blank and completes the sentence given below.
```

```
we'd watched the film once before, we didn't mind watching it a second time.
```

```
Options:
```

```
90468423264. Since
90468423265. Although
90468423266. Whereas
90468423267. While
```

# Question Number: 12 Question Id: 9046847003 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Select the option that best fills in the blank and completes the sentence given below.

The accommodation provided was excellent, the food was awful.

### Options:

```
90468423268. ✓ whereas
90468423269. スロール however
90468423270. despite
90468423271. in contrast
```

# Question Number: 13 Question Id: 9046847004 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Select the option that best fills in the blank and completes the sentence given below.

The department met yesterday to decide whether they should accept project or not.

#### Options:

```
90468423272. ** some 90468423273. ** the 90468423274. ** that 90468423275. ** an
```

# Question Number: 14 Question Id: 9046847005 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Select the option that best fills in the blank and completes the sentence given below.

Stringent laws have made \_\_\_\_\_ difference in preventing the poaching of endangered animals.

# Options:

```
90468423276. ≈ a few 90468423277. ≈ many 90468423278. ⋄ little 90468423279. ≈ much
```

# Question Number: 15 Question Id: 9046847006 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Select the option that gives the best meaning of the word/phrase in bold.

The work of artists and scientists is **ultimately** the pursuit of truth.

# Options:

```
90468423280. * lastly
90468423281. * decisively
90468423282. * eventually
90468423283. * firstly
```

# Question Number: 16 Question Id: 9046847007 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Select the option that gives the best meaning of the word/phrase in bold.

The people found his objection puzzling and inexplicable.

# Options:

```
90468423284. ✓ incomprehensible
90468423285. ズ curious
90468423286. ズ unaccountable
90468423287. ズ bizarre
```

90468423309. \* gripping 90468423310. \* forceful 90468423311. ✓ compelling

```
Correct Marks: 1 Wrong Marks: 0
Select the option that gives the best meaning of the word/phrase in bold.
Arnav and his friends decided to go dutch when they went out to the restaurant.
Options:
90468423288. * one person paying for everyone
90468423289. * each person paying for the other
90468423290. ✓ sharing the costs equally
90468423291. * borrowing from someone else to pay
Question Number: 18 Question Id: 9046847009 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the option that gives the best meaning of the word/phrase in bold.
He was ready to throw in the towel, but his friends convinced him to complete the course.
Options:
90468423292.  give up
90468423293. * renounce
90468423294. * sacrifice
90468423295. * abandon
Question Number: 19 Question Id: 9046847010 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the most appropriate option that completes the given sentence.
                 billions of dollars into the economy after it was hit by the coronavirus.
Beijing has
Options:
90468423296. * added
90468423297. * invested
90468423298. Vinjected
90468423299. * introduced
Question Number: 20 Question Id: 9046847011 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the option that best completes the given sentence.
The outbreak ____ just as China was preparing to celebrate the Lunar New Year.
Options :
90468423300. * struck
90468423301. V hit
90468423302. * battered
90468423303. * knocked
Question Number: 21 Question Id: 9046847012 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the option that best completes the given sentence.
Penguins are known for a number of traits shared with humans.
Options:
90468423304. ** revealing
90468423305.  exhibiting
90468423306. * showing
90468423307. ** presenting
Question Number: 22 Question Id: 9046847013 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Select the option that best completes the given sentence.
Experts believe they have found the 'first evidence' for conformity to linguistic laws in non-primate species.
Options:
90468423308. * undeniable
```

# Question Number: 23 Question Id: 9046847014 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

Given below are five sentences, labelled A, B, C, D and E. They are NOT in a meaningful order. Select the option that arranges the sentences in the correct order to form a meaningful paragraph.

- A. Scientists from the Nekton Mission will survey wildlife and gauge the effects of climate change in the unexplored area.
- B. It can withstand immense pressures and also carries up to 96 hours' worth of emergency oxygen in case of disaster.
- C. A team of British scientists will soon dive into the darkest depths of the Indian Ocean, the 'Midnight Zone' where life thrives despite scarce light.
- D. Previously, it had descended 36,000 ft when it reached the bottom of the Mariana trench.
- E. A submarine called 'Limiting Factor' will carry two scientists at a time 3,280 ft below the surface into the marine world.

### Options:

```
90468423312. * A, E, D, B, C
90468423313. * C, E, A, B, D
90468423314. * E, A, C, B, D
90468423315. C C, A, E, B, D
```

#### Question Number: 24 Question Id: 9046847015 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

Given below are five sentences, labelled A, B, C, D and E. They are NOT in a meaningful order. Select the option that arranges the sentences in the correct order to form a meaningful paragraph.

- A. Prior research had shown that African penguins used types of sounds that are similar to syllables in human languages.
- B. Some researchers have described them as similar to a braying ass, leading to the nickname "jackass penguins."
- C. The endangered African penguin is known for its distinctive calls.
- D. It appears that the bird calls conform to the linguistic laws developed to explain how human languages work.
- E. Interested in learning more about the calls these birds make, researchers collected and analysed vocalisations from adult males living in Italian zoos.

# Options:

```
90468423316. 3 C, A, D, B, E
90468423317. 3 A, B, D, E, C
90468423318. 3 C, B, E, A, D
90468423319. 3 A, D, E, B, C
```

# Question Number: 25 Question Id: 9046847016 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

Given below are five sentences, labelled A, B, C, D and E. They are NOT in a meaningful order. Select the option that arranges the sentences in the correct order to form a meaningful paragraph.

- A. This would have given us time to reduce carbon emissions to stop the permafrost thaw, ice melt and global warming.
- B. Both methane and carbon dioxide that could add to global warming have been stored for millennia in frozen permafrost.
- C. Experts have long feared that climate change will unleash long-trapped greenhouse gases.
- D. It had been assumed that the release of these gases would be gradual.
- E. However, projections of carbon release now suggest that certain icy terrains will rapidly disintegrate in as little as days.

# Options :

```
90468423320. B, D, A, C, E
90468423321. C, E, B, D, A
90468423322. B, D, E, A, C
90468423323. C, B, D, A, E
```

# Question Number: 26 Question Id: 9046847017 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

Given below are five sentences, labelled A, B, C, D and E. They are NOT in a meaningful order. Select the option that arranges the sentences in the correct order to form a meaningful paragraph.

- A. Cells called fibroblasts from an animal are used to make sheets of skin.
- B. According to a study, yarn grown from human skin cells could be woven or knitted into 'human textiles' for tissue grafts or organ repair.
- C. Since it is made from animal cells and is not synthetic, scientists believe that it will not be rejected by the immune system of the recipient.
- D. These sheets are cut into ribbons and twisted to form various forms of yarn.
- E. The threads can then be used in surgery to help treat animals and humans.

# Options:

```
90468423324. 3 A, D, B, C, E
90468423325. 3 B, A, D, E, C
90468423326. 3 D, E, C, A, B
90468423327. 3 A, D, E, B, C
```

Sub-Section Number:

Sub-Section Id:

Question Shuffling Allowed :

0460422

9046842274 Yes

Question Id: 9046847018 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers: (27 to 31)

Read the below passage and answer the questions that follow.

In a world still churning out trendy throw-away fashion pieces at breakneck speed, the idea of upcycled or refashioned apparel can be an anomaly. But it is a continuously growing trend and is one of the most sustainable things people can do in fashion. As upcycling makes use of already existing pieces, it often uses few resources in its creation and actually keeps 'unwanted' items out of the waste stream.

There are more textiles produced in the world today than can be used. And once these clothes have fulfilled their 'useful' lives they are sent to the landfill or are donated to thrift stores. This is not as beneficial as people think as only about 20 to 30 percent of donated clothing is actually re-sold. Massive amounts of donated clothing that are not deemed as 're-sellable' in the U.S. are shipped to developing countries, inundating them with unnecessary goods that stifle any emerging economic development in textiles. While many people may have the idea that they are helping clothe the poor in these countries, access to the Internet and cell phones has made many of these countries more fashion-forward recently, and they may have no interest in our American cast-offs. Since this model relies on a waste economy, what happens when exportation is no longer an option?

This is where upcycling offers an answer. Upcycling is a way of processing an item to make it better than the original. It can be done using either pre-consumer or post-consumer waste or a combination of the two. Pre-consumer waste is produced while items are being manufactured and post-consumer waste results from the finished product reaching the end of its useful life for the consumer. Upcycling stops adding stuff to a world that is already overwhelmed with material things and reuses materials in creative and innovative ways - producing original often one-of-a-kind items from what many consider to be waste. It is a way for companies and designers to be more efficient with leftover materials such as upholstery scraps or vintage textiles and to give new life to worn-out jeans and tattered T-shirts. Whether as everyday apparel or runway exhibition pieces, upcycling can challenge cultural codes - questioning what we consider to be trash versus fashion or beautiful versus ugly. For some it can also be a connection to our heritage - incorporating vintage clothing or using a family heirloom to create an original piece preserving a bit of history.

**Sub questions** 

```
Question Number: 27 Question Id: 9046847019 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
The word 'anomaly' in paragraph 1 means:
Options:
90468423328. * unsuitable
90468423329.  abnormality
90468423330. * difference
90468423331. * absurdity
Question Number: 28 Question Id: 9046847020 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
"Since this model relies on a waste economy..." — The writer calls it a waste economy because it is based on the system of:
Options:
90468423332. * keeping unwanted pieces of clothing out of thrift stores by reusing them
90468423333. * dumping poorer countries with materials that Americans find unnecessary
90468423334. * reselling used items via the internet and other social media platforms
90468423335. buying and disposing large amounts of goods that are unnecessary
Question Number: 29 Question Id: 9046847021 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Which of the following sentences is NOT TRUE?
Options:
90468423336. The end product of upcycling is very often better than the original item.
90468423337. ** Upcycling contributes to a waste-reduced, greener environment.
90468423338. Upcycling stifles creativity and innovation in fashion designers.
90468423339. ** Upcycling challenges accepted norms of waste, beauty and usefulness.
Question Number: 30 Question Id: 9046847022 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Which of the following sentences best captures the main idea of this text?
90468423340. 	✓ Upcycling promotes reusing materials in new ways, thereby reducing waste.
90468423341. Wupcycling is a new trend that has taken the fashion world by storm.
90468423342. Upcycling is a trend that is unlikely to survive in the fickle world of fashion.
90468423343. Upcycling is possible only in the textile industry where wastage is massive.
Question Number: 31 Question Id: 9046847023 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
This extract is most likely from:
Options:
90468423344. * a journal article on recycling and reuse
90468423345. * a talk on trends in environment protection
90468423346. * a blog on sustainability and environment
90468423347. ✓ a magazine article on sustainable fashion
Sub-Section Number:
                                                                                   3
```

Sub-Section Id: 9046842275
Question Shuffling Allowed: Yes

# Question Id: 9046847024 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers: (32 to 36)

Read the below passage and answer the questions that follow.

Most of us think astrology was a fanciful misconception about the world that flourished in times of widespread superstition and ignorance, and did not, could not, survive advances in mathematics and science. Alexander Boxer is out to show how wrong that picture is, and (his book) A Scheme of Heaven will make you fall in love with astrology, even as it extinguishes any niggling suspicion that it might actually work.

Boxer, a physicist and historian, kindles our admiration for the earliest astronomers. My favourite among his many jaw-dropping stories is the discovery of the precession of the equinoxes. This is the process by which the sun, each mid-spring and mid-autumn, rises at a fractionally different spot in the sky every year. It takes 26,000 years to make a full revolution of the zodiac — a tiny motion first detected by Hipparchus around 130 BC. And of course, Hipparchus, to make this observation at all, 'had to rely on the accuracy of star-gazers who would have seemed ancient even to him'.... Boxer goes much further, dubbing it 'the ancient world's most ambitious applied mathematics problem'.

For as long as lives depend on the growth cycles of plants, the stars will, in a very general sense, dictate the destiny of our species. How far can we push this idea before it tips into absurdity? The answer is not immediately obvious, since pretty much any scheme we dream up will fit some conjunction or arrangement of the skies. As civilisations become richer and more various, the number and variety of historical events increases, as does the chance that some event will coincide with some planetary conjunction. Around the year 1400, the French Catholic cardinal Pierre d'Ailly concluded his astrological history of the world with a warning that the Antichrist could be expected to arrive in the year 1789, which of course turned out to be the year of the French Revolution.

But with every spooky correlation comes an even larger horde of absurdities and fatuities. Today, using a machine-learning algorithm, Boxer shows that 'it's possible to devise a model that perfectly mimics Bitcoin's price history and that takes, as its input data, nothing more than the zodiac signs of the planets on any given day'.

... Boxer writes: "Today there's no need to root and rummage for incidental correlations. Modern machine-learning algorithms are correlation monsters. They can make pretty much any signal correlate with any other."

We are bewitched by big data, and imagine it is something new. We are ever-indulgent towards economists who cannot even spot a global crash. We docilely conform to every algorithmically justified norm. Are we as credulous, then, as those who once took astrological advice as seriously as a medical diagnosis? Oh, for sure. At least our forebears could say they were having to feel their way in the dark. The statistical tools you need to sort real correlations from pretty patterns weren't developed until the late 19th century. What's our excuse? According to Boxer: "Those of us who are enthusiastic about the promise of numerical data to unlock the secrets of ourselves and our world would do well simply to acknowledge that others have come this way before."

#### Sub questions

# Question Number: 32 Question Id: 9046847025 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The overall message of the passage can best be summed up as:

# Options:

90468423348. \* ancient astronomy was more accurate than today's forecasting techniques

90468423349. \* the use of big data for forecasting is a vast improvement on astrological predictions

90468423350. w much of forecasting is not scientific and can be ascribed to coincidences

90468423351. \*\* we are credulous of modern forecasting methods which are as flawed as ancient ones

# Question Number: 33 Question Id: 9046847026 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

"...with every spooky correlation comes an even larger horde of absurdities and fatuities." This line is illustrated by the description of:

# Options :

90468423352. \*\* the discovery of the precession of the equinoxes

90468423353. cardinal Pierre d'Ailly's warning about the year 1789

90468423354. \* economists' inability to predict a global crash

90468423355. \* Hipparchus' detection of the time taken for a full revolution of the zodiac

# Question Number: 34 Question Id: 9046847027 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

The example of the Bitcoin (paragraph 4) is used to illustrate which of the following?

# Options:

90468423356. \* Users of big data are far more unethical than astronomers of the past .

90468423357. \* The past repeats itself over centuries and is doing so even today.

90468423358.  $\checkmark$  Big data can be manipulated like ancient astrology to yield the desired results .

90468423359. \* Astronomy and the zodiac are still useful in predicting future trends .

# Question Number: 35 Question Id: 9046847028 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

The author's attitude towards the accuracy of modern economic forecasting is one of:

# Options :

90468423360. Scepticism

90468423361. \* Emulation

90468423362. \* Adulation

90468423363. \* Antipathy

```
Question Number: 36 Question Id: 9046847029 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
The author uses the phrase "feel their way in the dark" (last paragraph) to show that:
Options:
90468423364. ** we will always be in the dark about the secrets of the world and ourselves
90468423365. ancient forecasters were hampered by their lack of statistical knowledge
90468423366. statistics has enabled people to link patterns with correlations more accurately
90468423367. * medical diagnoses have become more accurate with the development of statistical tools
Sub-Section Number:
Sub-Section Id:
                                                                                       9046842276
Question Shuffling Allowed:
Question Id: 9046847030 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No
Question Numbers: (37 to 41)
Read the below passage and answer the questions that follow.
After almost 10 minutes of standing in line at a coffee shop, Ritchie Torres realised he only had cash in his pocket — a form of payment no longer accepted by this
store. "It was a humiliating experience," he said. "I remember wondering aloud, how could a business refuse to accept cash, which is legal tender?" Torres is a City
Council member in New York. He says his constituents, especially seniors, have also complained about a spurt of cashless stores. So, Torres led the charge on a bill
to ban businesses from rejecting cash.
"A cashless economy is not an inclusive economy," said Tazra Mitchell, Policy Director at the research and advocacy group DC Fiscal Policy Institute. Excluding
people from paying with cash means, "essentially discriminating against people who are low-income, people who are homeless, also undocumented," she said.
Getting a credit or debit card often requires a form of ID, a utility or another bill, money to deposit and a financial history. Mitchell said that in Washington, D.C.,
nearly a third of residents rely on cash every day because they don't have a card or even a bank account. In fact, as cities have cracked down on the cashless economy
and spurred new conversations about whom it leaves out, some of the biggest names that tried going cashless... have reversed their policies in favour of accepting
Credit card companies, which get a cut every time a card is swiped, have rewarded the cashless trend. For example, in 2018, Visa paid $10,000 each to 50 businesses
that stopped accepting cash. And some store owners have argued, cash is inefficient. For example, it slows down the line, requires armoured cars, and attracts break-
ins or skimming by workers.
And indeed, cash is becoming less popular among U.S. shoppers. The Federal Reserve found in 2018 that cash had stopped being the No. 1 payment choice —
overtaken by debit cards. But cash is still the most common way people pay amounts under $10 or $25 — especially among those older than 55 and younger than 25.
And some people prefer cash for privacy reasons — to protect their purchase history from being tracked by advertisers or banks.
Cash also might carry potential psychological and financial benefits for consumers. Cash is, "going to feel much more painful to give up because we can see it
outflow from our hand," said Avni Shah, Assistant Professor of Marketing at the University of Toronto. Her research found that when people pay in cash, they are
more mindful of their spending — willing to spend less to begin with — but they also value their purchases more and feel more loyal to the seller.
Shah acknowledged that different businesses may have priorities other than loyalty, such as convenience and speed of getting the customer in and out of the store.
Opponents of the bans on cashless establishments have argued that businesses should be able to make these decisions for themselves.
Sub questions
Question Number: 37 Question Id: 9046847031 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
The move towards a cashless society has been propelled by all of the following, EXCEPT:
Options:
90468423368. * convenience and speed of transactions
90468423369. * the prevention of theft by workers and break-ins
90468423370. * incentives by credit card companies to move to a cashless pay system
90468423371. ** the problems associated with acquiring a debit or credit card
Question Number: 38 Question Id: 9046847032 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
"Torres led the charge" (paragraph 1) means that he:
Options :
90468423372. Segot consumers to boycott
90468423373. ✓ initiated a move
90468423374. * accused cashless businesses
90468423375. * approached the authorities
Question Number: 39 Question Id: 9046847033 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
The passage presents all of the following arguments against cashless societies, EXCEPT that they:
Options:
90468423376. violate the privacy of consumers by recording their transactions
```

90468423377. \* discriminate against consumers who are unable to acquire a credit card

6.16

```
90468423378. ** promote the interests of credit card companies above those of consumers
```

90468423379. Pencourage large banks and advertisers to track consumer data

Question Number: 40 Question Id: 9046847034 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Studies show that one advantage for store owners who accept cash from buyers is that:

Options:

90468423380. ✓ they earn the loyalty of their customers
90468423381. \*\* customers tend to spend more in their stores
90468423382. \*\* they incur lower transaction fees than other stores
90468423383. \*\* they can tap into the market for the young and very old

Question Number: 41 Question Id: 9046847035 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The attitude of the writer of the passage towards those who cannot get a credit card can be best described as:

Options:

90468423384. Apathy
90468423385. Compassion
90468423386. Empathy
90468423387. Pity

# Reasoning and General Intelligence

Group Number:

Group Id:

Group Maximum Duration:

Group Minimum Duration:

Show Attended Group?:

No

Edit Attended Group?:

No

Break time:

Group Marks:

Is this Group for Examiner?:

No

# Reasoning and General Intelligence

9046841519 Section Id: Section Number: Online Section type: Mandatory or Optional: Mandatory Number of Questions: 28 Number of Questions to be attempted : 28 40 Section Marks: Mark As Answered Required? : Yes Sub-Section Number: Sub-Section Id: 9046842277 Question Shuffling Allowed: Yes

Question Id: 9046847076 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers: (42 to 46)

For the recruitment process of an organisation, following are the criteria for selecting a marketing officer:

The candidate must:

- 1) be a graduate with more than 60% marks.
- 2) be more than 25 years and less than 30 years as on January 01 2020.
- 3) have secured at least 50% in the written test and more than 55% in the interview.

However, if a candidate fulfills all the above criteria, EXCEPT:

- 4) at (1) and/or (2) above but has obtained more than 60% in the written test, the case is to be referred to the HR manager.
- 5) at (2) and/or (3) above but is an ST candidate securing more than 70% in the graduate examination, the case is to be referred to the Director.

Based on the criteria given above and without assuming any additional information, you have to take a decision for the candidates whose profiles have been given in the five questions. Mark your answer by choosing the appropriate option in each case.

Sub questions

Question Number: 42 Question Id: 9046847077 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Rohit was born into an ST family in October 1994 and secured 63% in the graduate examination. He scored 58% in the interview and 53% in the written test. What

```
decision would be taken in his case?

Options:

90468423548. He is to be selected

90468423549. He is not to be selected

90468423550. His case is to be referred to the HR manager

90468423551. His case is to be referred to the Director
```

#### Question Number: 43 Question Id: 9046847078 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

Shabnam, who passed her graduate examination with 60% marks, also scored 60% in the written test but 57% in the interview. She became a graduate in December 2017 at the age of 23 years and 6 months. What decision would be taken for her?

#### Options:

```
90468423552. ♣ She is to be selected
90468423553. ✔ She is not to be selected
90468423554. ♣ Her case is to be referred to the HR manager
90468423555. ♣ Her case is to be referred to the Director
```

### Question Number: 44 Question Id: 9046847079 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

Manjit, who became a graduate in 2018 at the age of 24 years and 6 months securing 60% in the graduate examination, scored 58% in the interview. In the written test, he scored 4% more than what he obtained in the interview. He is an ST candidate. What decision would be taken for him?

#### Options:

```
90468423556. He is to be selected
90468423557. He is not to be selected
90468423558. His case is to be referred to the HR manager
90468423559. His case is to be referred to the Director
```

# Question Number: 45 Question Id: 9046847080 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

Gopal, an ST candidate, passed the graduate examination with 72% marks in December 2018 at the age of 22 years. He scored 60% in the interview as well as in the written test. What decision would be taken for him?

#### Options:

```
90468423560. He is to be selected
90468423561. He is not to be selected
90468423562. His case is to be referred to the HR manager
90468423563. His case is to be referred to the Director
```

# Question Number: 46 Question Id: 9046847081 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

Jenny is a graduate with 65% marks which she completed in December 2015 at the age of 27 years 6 months. She scored 60% in the written test as well as in the interview. She belongs to the scheduled tribe community. What decision would be taken in her case?

# Options:

```
90468423564. She is to be selected
90468423565. She is not to be selected
90468423566. Her case is to be referred to the HR manager
90468423567. Her case is to be referred to the Director
```

Sub-Section Number: 2
Sub-Section Id: 9046842278
Question Shuffling Allowed: Yes

# Question Number: 47 Question Id: 9046847082 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

A team of four with equal number of boys and girls is to be formed from among four girls, P, Q, R and S and four boys K, L, M and N with the following conditions.

```
i. R cannot be put with M. ii. Q will be put with N.
```

iii. If P is selected, L will not be selected.

iv. K and R must be put together.

Which of the following teams can be formed?

# Options:

```
90468423568. ≈ RPMK
90468423569. ≈ PRSK
90468423570. < ~ QSNM
90468423571. ≈ KQRL
```

# Question Number: 48 Question Id: 9046847086 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

If 'P + Q' means 'P is the brother of Q'; 'P  $\times$  Q' means 'P is the son of Q' and 'P  $\div$  Q' means 'P is the father of Q', then which of the following means 'D is the wife of A'?

#### Options:

```
90468423584. ¾ A × B + C ÷ D
90468423585. ¾ A ÷ B × C + D
90468423586. ¾ D ÷ C + B × A
90468423587. √ A ÷ C + B × D
```

# Question Number: 49 Question Id: 9046847087 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

### Correct Marks: 1 Wrong Marks: 0

Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

#### Statements:

- 1. All herbs are trees.
- 2. Some trees are shrubs.

#### Conclusions:

- I. Some herbs are shrubs.
- II. Some shrubs are herbs.

#### Options:

```
90468423588. Sonly conclusion I follows
90468423589. Only conclusion II follows
90468423590. Both conclusions I and II follow
90468423591. Neither conclusion I nor II follows
```

# Question Number: 50 Question Id: 9046847088 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

### Statements:

- 1. Some hats are caps.
- 2. All caps are headgears.

# Conclusions:

- I. No hat is a headgear.
- II. Some headgears are hats.
- III. All headgears are caps.

# Options:

```
90468423592. ♣ Only conclusion I follows
90468423593. ✔ Only conclusion II follows
90468423594. ♣ All conclusions I, II and III follow
90468423595. ♣ None of the conclusions follow
```

# Question Number: 51 Question Id: 9046847089 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

# Statements:

- 1. All instruments are equipment.
- 2. Some instruments are machines.
- 3. Some machines are motors.

# Conclusions:

- I. Some motors are instruments.
- II. Some machines are equipment.
- III. No motor is an instrument.

# Options:

```
90468423596. Solve Only conclusion II follows
90468423597. Both conclusions II and III follow
90468423598. Only conclusion II and either conclusion I or III follow
90468423599. None of the conclusions follow
```

# Question Number: 52 Question Id: 9046847091 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Consider the given statement and decide which of the given assumptions is/are implicit in the statement.

#### Statement:

The new literacy mission launched by a country will require changes in the mindset of people to be successful.

#### Assumptions:

I. The literacy mission hopes to bring changes in the life of people.

II. The current literacy rate is not up to the mark.

# Options:

90468423604. ♣ Only assumption I is implicit
90468423605. ♣ Only assumption II is implicit
90468423606. ✔ Both assumptions I and II are implicit
90468423607. ♣ Neither assumption I nor II is implicit

# Question Number: 53 Question Id: 9046847093 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

You are given a question and two statements. Identify which of the statements is/are sufficient to answer the question.

#### Question:

Six friends A, B, C, D, E and F are sitting in a row. D is at one of the extreme ends. Who is exactly at the other end?

#### Statements:

I. B is sitting to the immediate left of D and F is to the immediate right of C. There are two persons between F and E. II. C is to the right of D and there are two persons between C and B. B is to the immediate left of A.

# Options:

90468423612. Statement I alone is sufficient
90468423613. Statement II alone is sufficient
90468423614. Either statement I alone or statement II alone is sufficient
90468423615. Both the statements I and II together are not sufficient.

# Question Number: 54 Question Id: 9046847096 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

You are given a question and two statements. Identify which of the statements is/are sufficient to answer the question.

#### Ouestion

If the breadth of a rectangle is 10 cm, then what is its length?

# Statements

I. If the length of the rectangle is increased by 25% and its breadth by 20%, its area increases by 70 cm<sup>2</sup>.

II. The length remaining the same, if its breadth is increased by 20%, the ratio of the new area to the original area becomes 6:5.

# Options:

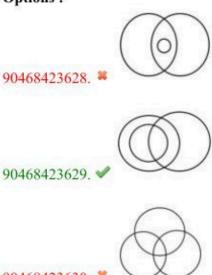
90468423624. ✓ Statement I alone is sufficient
90468423625. ★ Statement II alone is sufficient
90468423626. ★ Either statement I alone or statement II alone is sufficient
90468423627. ★ Both the statements I and II together are not sufficient.

# Question Number: 55 Question Id: 9046847097 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Select the Venn diagram that best represents the relationship between the following classes.

Teacher, Women, Mother

# Options:



1010



```
Question Number: 56 Question Id: 9046847101 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Study the given symbols.
A @ B means A is not smaller than B.
A # B means A is not greater than B.
A & B means A is neither smaller than nor equal to B.
A % B means A is neither greater than nor equal to B.
A $ B means A is neither smaller than nor greater than B.
Based on the symbols, read the given statements and conclusions carefully and decide which of the conclusions is/are true.
Statements:
A) R & P
B) S # Q
C) P $ S
Conclusions:
I. S % R
II.Q&R
III. Q @ P
Options:
90468423640. Sonly conclusion I is true
90468423641. We Only conclusion II is true
90468423642. Sonly conclusion III is true
90468423643. 	✓ Both conclusions I and III are true
Question Number: 57 Question Id: 9046847102 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
Study the given symbols.
A @ B means A is not smaller than B.
A # B means A is not greater than B.
A & B means A is neither smaller than nor equal to B.
A % B means A is neither greater than nor equal to B.
A $ B means A is neither smaller than nor greater than B.
Based on the symbols, read the given statements and conclusions carefully and decide which of the conclusions are true.
Statements:
A) L $ K
B) N & K
C) M @ L
Conclusions:
I. N @ M
II. K # M
III. N & L
Options:
90468423644. Both conclusions I and II are true
90468423645. Both conclusions II and III are true
90468423646. Both conclusions I and III are true
90468423647. All conclusions I, II and III are true
```

Question Number: 58 Question Id: 9046847103 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

If the signs '÷' and '+' are interchanged in each of the equations given as options, which equation would be correct?

Options:

```
90468423648. \$9 + 3 \times 4 \div 8 = 15 + 5

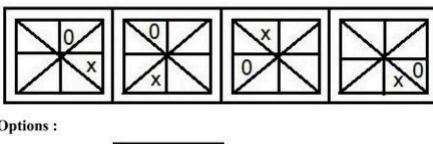
90468423649. \$4 - 6 \div 8 + 2 = 4 \div 2

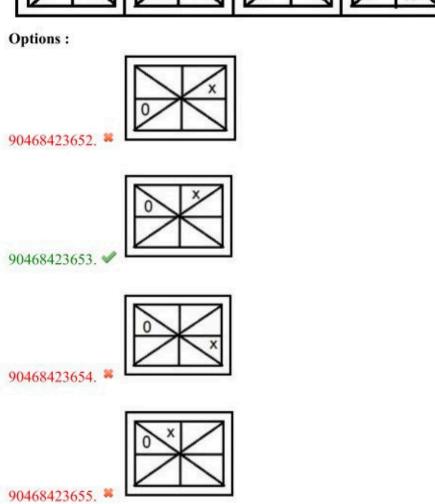
90468423650. \$8 \div 4 \times 6 + 2 = 10 \div 5

90468423651. \checkmark6 + 4 \times 2 \div 3 = 3 \times 2
```

Question Number: 59 Question Id: 9046847104 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

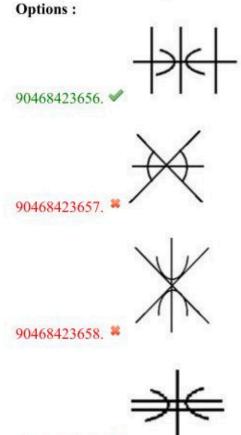
Select the figure that will come next in the following series.





Question Number: 60 Question Id: 9046847105 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Four figures have been given out of which three are alike in some manner and one is different. Select the odd one.

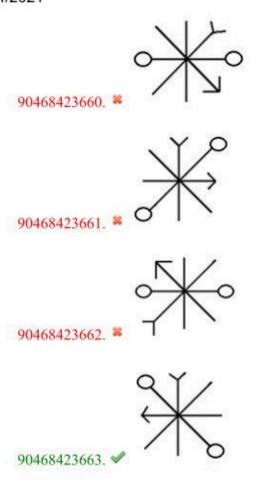


90468423659.

 $Question\ Number: 61\ Question\ Id: 9046847106\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Is\ Question\ Mandatory: No\ Correct\ Marks: 1\ Wrong\ Marks: 0$ 

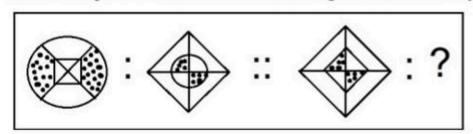
Four figures have been given out of which three are alike in some manner and one is different. Select the one that is different. **Options:** 

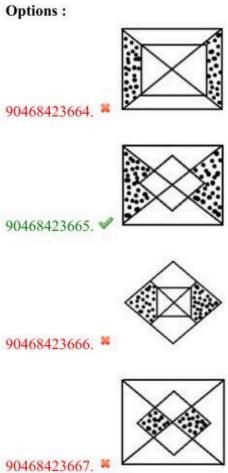
1 1 1 1 1 1



Question Number: 62 Question Id: 9046847107 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Select the option that is related to the third figure in the same way as the second figure is related to the first figure.





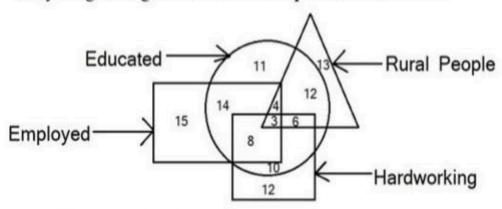
Sub-Section Number: Sub-Section Id:

Question Shuffling Allowed:

9046842279 Yes

Question Id: 9046847098 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers : (63 to 64)

Study the given figure and answer the questions that follow:



In the figure, the triangle stands for 'rural people'; the circle stands for

- 'educated'; the rectangle stands for 'employed' and the square stands for
- 'hard working'. The numbers in different segments show the number of persons.

#### **Sub questions**

Question Number: 63 Question Id: 9046847099 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

How many educated rural people are employed but NOT hardworking?

#### Options:

90468423632. \* 12

90468423633. \* 6

90468423634. 🗸 4

90468423635. 3

Question Number: 64 Question Id: 9046847100 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

How many hardworking educated persons are either employed or from the rural area but NOT both?

#### Options:

90468423636. \* 9

90468423637. \* 11

90468423638. \* 13

90468423639. 14

Sub-Section Number:

4

Sub-Section Id:

9046842280 Yes

Question Shuffling Allowed:

Question Number: 65 Question Id: 9046847083 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

A team of four with at least two boys is to be formed from among four boys P, Q, R and S and four girls A, B, C and D with the following conditions.

- i. C and Q must go together.
- ii. If B is selected, R will not be selected and vice-versa.
- iii. Q and D cannot be put together.
- iv. P and B must go together.

Which of the following teams can be formed?

# Options :

90468423572. \* CQBD

90468423573. \* RCSQ

90468423574. \* RSBA

90468423575. ✔ PSBD

Question Number: 66 Question Id: 9046847084 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

In a row of boys sitting in a straight line, A is 11<sup>th</sup> from the left, B is 9<sup>th</sup> from the right and C is exactly in the middle of A and B. If B would change his position with that of A, B would become 23<sup>rd</sup> from the right. What is the position of C from the left?

# Options :

90468423576. # 17th

90468423577. V 18<sup>th</sup>

90468423578. \* 19<sup>th</sup>

90468423579. \* 20<sup>th</sup>

# Question Number: 67 Question Id: 9046847085 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Among five objects, B is heavier than E which is lighter than A. D is lighter than C which is heavier than B. A is lighter than B. Which object is the heaviest of all?

#### Options:

90468423580. **※** A 90468423581. **※** B 90468423582. **✔** C 90468423583. **※** D

# Question Number: 68 Question Id: 9046847090 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A question is given followed by two arguments. Decide which of the arguments is/are strong with respect to the question.

#### Question

Should the Agricultural Research Center advise farmers regarding the choice of crops in their land on the basis of soil quality and crop production?

#### Arguments:

I. Yes. This would help farmers reap a good harvest.

II. No. The farmers, through long experience, know the crops suitable for their land.

#### Options:

90468423600. ✓ Only argument I is strong 90468423601. スロール Only argument II is strong 90468423602. Both arguments I and II are strong 90468423603. Neither argument I nor II is strong

#### Question Number: 69 Question Id: 9046847092 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

You are given a question and two statements. Identify which of the statements is/are sufficient to answer the question.

#### Question:

How is R exactly related to P?

#### Statements:

I. R is the brother of Q, who is the mother of P's only son.

II. R is the son of P's grandfather Q, who has two children.

# Options :

90468423608. ✓ Statement I alone is sufficient
90468423609. ★ Statement II alone is sufficient
90468423610. ★ Either statement I alone or statement II alone is sufficient
90468423611. ★ Both the statements I and II together are not sufficient.

# Question Number: 70 Question Id: 9046847094 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

You are given a question and two statements. Identify which of the statements is/are sufficient/necessary to answer the question.

# Question:

Which is the heaviest of the four objects X, Y, Z and M?

# Statements

I. X and Z together weigh as much as Y and M together. X is twice as heavy as M and half as heavy as Z.

II. X is twice as heavy as M and half as heavy as Y, while Z is one and a half times as heavy as X.

# Options :

90468423616. Statement I alone is sufficient
90468423617. Statement II alone is sufficient
90468423618. Either statement I alone or statement II alone is sufficient
90468423619. Both the statements I and II together are necessary

# Question Number: 71 Question Id: 9046847095 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

You are given a question and two statements. Identify which of the statements is/are sufficient to answer the question.

# Ouestion

How many persons are standing in the line?

# Statements:

I. Ankur is exactly in the middle of Prakash and Hiten, who is 9<sup>th</sup> from the right and there are 5 persons between Ankur and Hiten. II. Vijay is 9<sup>th</sup> from the left and becomes 15<sup>th</sup> from the left if he interchanges his position with Sheela, who is 5<sup>th</sup> from the right.

# Options:

```
90468423620. Statement I alone is sufficient
```

```
90468423621. ✓ Statement II alone is sufficient
90468423622. ♣ Either statement I alone or statement II alone is sufficient
90468423623. ♣ Both the statements I and II together are not sufficient.

Sub-Section Number:

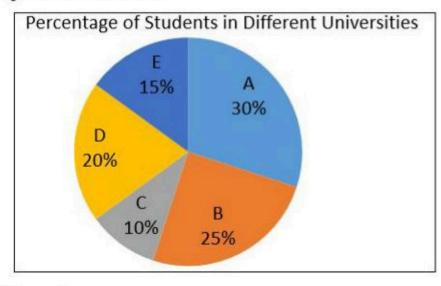
Sub-Section Id:

Question Shuffling Allowed:

Yes
```

# Question Id: 9046847108 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers: (72 to 75)

The given pie diagram given shows the percentage of students in five different universities in an academic year. The table shows the ratio of male to female students and the percentage of foreign students in each university. Study the information and answer the questions that follow.



University	Ratio of male to female students	% of foreign students	
A	3:2	10%	
В	3:7	12%	
С	2:3	15%	
D	3:5	10%	
E	5:7	5%	

#### **Sub questions**

# Question Number: 72 Question Id: 9046847109 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If the total number of students is 12,000, then what is the approximate percentage of foreign students in all the universities taken together?

#### Options:

90468423668. **\*** 7.50% 90468423669. **\*** 9.75% 90468423670. **\*** 10.25% 90468423671. **\*** 12.50%

# Question Number: 73 Question Id: 9046847110 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If there are 132 foreign students in University B, then the difference between the total number of male and female students in University D is:

# Options:

90468423672. 220 90468423673. 330 90468423674. 110 90468423675. 280

# Question Number: 74 Question Id: 9046847111 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

If the total number of students in all the universities is 8,000, then what is the approximate percentage of foreign students in University C to the total number of male students in B and D?

# Options:

90468423676. **8**% 90468423677. **10%** 90468423678. **12%** 90468423679. **15%** 

# Question Number: 75 Question Id: 9046847112 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

If the difference between the number of male and female students in University E is 80, then the total number of foreign students in Universities A and D is:

# Options:

90468423680. **\***90468423681. **\***90468423682. **\***90468423683. **\*** Sub-Section Id:

9046842282

Question Shuffling Allowed:

Yes

# Question Id: 9046847113 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers: (76 to 79)

The following table shows the number of berths reserved in different classes in a train on five different days. The capacity of each class is given in the brackets. Study the table and answer the questions that follow.

Day	AC-II Tier Sleeper (200)	AC-III Tier Sleeper (400)	AC Chair Car (400)	1st Class (Non-AC) (200)	2 <sup>nd</sup> Class Sleeper (non-AC) (800)
Monday	180	280	250	120	550
Tuesday	160	320	300	180	640
Wednesday	150	340	280	150	600
Thursday	170	300	320	170	720
Friday	180	330	260	160	680

#### Sub questions

Question Number: 76 Question Id: 9046847114 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

What is the difference between the percentages of reservations in AC-II Tier Sleeper and Non-AC 2nd Class Sleeper on all the 5 days?

#### Options:

90468423684. \* 3.75%

90468423685. 4.25%

90468423686. \* 5.25%

90468423687. \* 5.75%

Question Number: 77 Question Id: 9046847115 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Considering all the days and all the classes, how many times was the number of berths reserved 90% or more of the capacities of the different classes?

# Options:

90468423688. \* 6

90468423689. \* 5

90468423690. 🗸 4

90468423691. \* 3

Question Number: 78 Question Id: 9046847116 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Of the 5 days, on which of the following days, was the percentage of reservations the least?

# Options:

90468423692. Monday

90468423693. \* Tuesday

90468423694. \* Wednesday

90468423695. \* Friday

Question Number: 79 Question Id: 9046847117 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Considering all the days and all the classes, how many times was the number of berths reserved more than 70% but less than 80% of the capacity of the different classes?

# Options :

90468423696. \* 7

90468423697. \* 6

90468423698. 🗸 5

90468423699. \* 4

Sub-Section Number:

7

Sub-Section Id:

9046842283

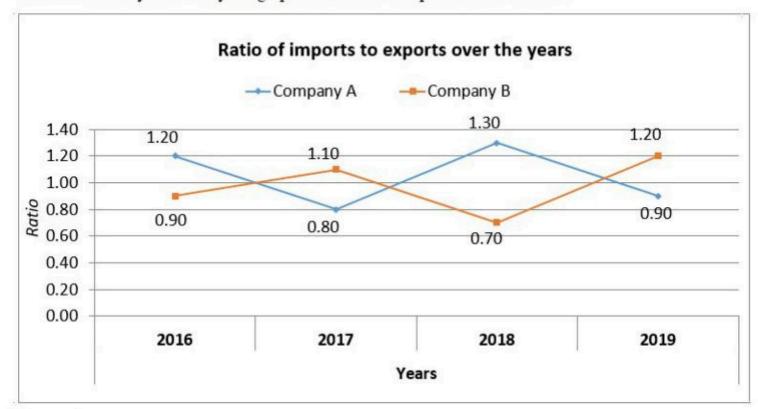
Question Shuffling Allowed:

Yes

Question Id: 9046847118 Question Type: COMPREHENSION Sub Question Shuffling Allowed: Yes Group Comprehension Questions: No Question Numbers: (80 to 81)

00/00

The graph below shows the ratio of imports to exports of two companies – A and B over four years. Study the graph and answer the questions that follow.



#### **Sub questions**

Question Number: 80 Question Id: 9046847119 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If the imports of Company B in each of the years 2017 and 2019 were 264 crores, then how much was its average exports in these two years?

# Options:

90468423700. **3** 303.6 crores 90468423701. **270** crores 90468423702. **230** crores

90468423703. **210** crores

Question Number: 81 Question Id: 9046847120 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

If the combined imports of Companies A and B in 2016 were 178.5 crores and the exports of A in the same year was 85 crores, then how much was B's exports in 2016?

# Options:

90468423704. **≈** 75 crores 90468423705. **ᢦ** 85 crores 90468423706. **≈** 102 crores 90468423707. **≈** 105 crores

# Quantitative and Numerical Ability

Group Number :	4
Group Id:	9046841455
Group Maximum Duration:	0
Group Minimum Duration :	0
Show Attended Group?:	No
Edit Attended Group? :	No
Break time :	0
Group Marks:	40
Is this Group for Examiner?:	No

# **Quantitative and Numerical Ability**

Section Id:	9046841520
Section Number :	1
Section type:	Online
Mandatory or Optional:	Mandatory
Number of Questions :	40
Number of Questions to be attempted :	40
Section Marks :	40
Mark As Answered Required? :	Yes

Sub-Section Number:

Sub-Section Id:

Question Shuffling Allowed:

1

9046842284

Yes

Question Number: 82 Question Id: 9046847036 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Let  $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$ ,  $A = \{1, 2, 3, 4\}$ ,  $B = \{2, 4, 6, 8\}$  and  $C = \{3, 4, 5, 6\}$ . The number of elements in  $(A \cap C)' - (B - C)'$ , where  $(A \cap C)'$  are the complements of  $(A \cap C)$  and (B - C), respectively is:

Options:

90468423388. **3** 0 90468423389. **3** 1 90468423390. **2** 2 90468423391. **3** 4

Question Number: 83 Question Id: 9046847037 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Let U be the universal set. A, B and C are the sets such that C is a subset of A and B $\Omega$ C =  $\emptyset$ . If n(U) = 105, n(A) = 58, n(B) = 50,  $n(A \Omega B)$  = 20 and  $n(A \Omega C)$  = 32, then n(A UB) –  $n(B'\Omega C')$  =

Options:

90468423392. **\***90468423393. **\***90468423394. **\***90468423395. **\***

Question Number: 84 Question Id: 9046847038 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Let  $A = \{1,2,5,6\}$ ,  $B = \{1,2,3\}$  and  $C = (A X B) \Omega (B X A)$ . Which of the following is INCORRECT?

Options:

90468423396. **\*** (1,2) ∈ C 90468423397. **\*** (2,1) ∈ C 90468423398. **\*** (2,2) ∈ C 90468423399. **√** (2,3) ∈ C

Question Number: 85 Question Id: 9046847039 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

If  $f(2x) = \frac{2}{2+x}$  for all x > 0, and 5 f(x) = 8, then what is the value of x?

Options :

 $\begin{array}{c}
 -\frac{3}{2} \\
 90468423400. \checkmark -\frac{5}{2} \\
 90468423401. \checkmark \frac{5}{2}
\end{array}$ 90468423402.  $\checkmark \frac{5}{2}$ 

Question Number: 86 Question Id: 9046847040 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Let  $f(x) = \frac{3x-5}{2x+1}$ . If  $f^{-1}(x) = \frac{x+a}{bx+c}$ , then what is the value of (a-b+c)?

Options :

90468423404. **3** 90468423405. **4** 90468423406. **7** 90468423407. **1**0

Question Number: 87 Question Id: 9046847041 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Given 
$$f(x) = \frac{4x+1}{4}$$
 and  $g(x) = \sqrt{x^3}$ , then  $(g_0 f^{-1})(\frac{3}{8}) =$ 

# Options:

$$90468423408. * \frac{\sqrt{3}}{8}$$

$$90468423409. \approx \frac{\sqrt{3}}{16}$$

$$90468423410. * \frac{\sqrt{2}}{16}$$

$$90468423411.$$
  $\checkmark$   $\frac{\sqrt{2}}{32}$ 

# Question Number: 88 Question Id: 9046847042 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

In a class of 100 students, 55 students passed in Mathematics and 65 passed in English. Five students failed in both the subjects. Let n be the number of students who passed in exactly one of the two subjects and m be the number of students who failed in at least one subject, then what is the value of (m - n)?

# Options :

Question Number: 89 Question Id: 9046847043 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

Correct Marks : 1 Wrong Marks : 0  
The value of 
$$5\frac{2}{5} \times 1\frac{1}{4} - \left(\frac{5}{32} + \frac{3}{5} \times 1\frac{7}{8} \div 1\frac{1}{3} of \frac{3}{16}\right)$$
 is:

# Options:

Question Number: 90 Question Id: 9046847044 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

If the numerator of a fraction (in lowest form) is increased by  $\frac{1}{4}$  of itself and the denominator is decreased

by  $\frac{1}{3}$  of itself, the fraction so obtained is  $\frac{21}{64}$ . What is the difference between the denominator and the numerator of the original fraction?

# Options :

Correct Marks: 1 Wrong Marks: 0

a, b and c are three fractions such that a < b < c. If the smallest fraction is divided by the middle fraction, the result is  $\frac{15}{16}$ , which exceeds the largest fraction by  $\frac{3}{16}$ . If  $a + b + c = \frac{49}{24}$ , then what is the difference between c and b?

Options:

$$\frac{1}{12}$$
 90468423424.

$$\frac{1}{1}$$

Question Number: 92 Question Id: 9046847046 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The value of the expression  $\frac{0.18 \times 11 \times 0.83}{2.4 \times 0.6 \times 3 \times 0.16}$  is:

# Options:

Question Number: 93 Question Id: 9046847047 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

What is the value of 
$$\frac{(4.8)^4 + (3.5)^4 + 282.24}{(4.8)^2 + (3.5)^2 - 16.8}$$
?

# Options:

Question Number: 94 Question Id: 9046847048 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The sum of the first 15 terms of the series  $\frac{1}{24} + \frac{1}{104} + \frac{1}{234} + \dots$  is  $\frac{a}{b}$ , where HCF(a,b) = 1. What is the difference

between a and b?

Options:

90468423436. \* 59

90468423437. \* 67

90468423438. 🗸 73

90468423439. \* 78

 $Question\ Number: 95\ Question\ Id: 9046847049\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Is\ Question\ Mandatory: No\ Correct\ Marks: 1\ Wrong\ Marks: 0$ 

If 
$$\frac{\sqrt{11-\sqrt{120}}}{\sqrt{11+6\sqrt{2}}} = A\sqrt{6} + B\sqrt{5} + C\sqrt{3} + D\sqrt{10}$$
, then the value of  $(A+B+C+D)$  is:

Options :

0.1100

$$90468423440. = -\frac{2}{7}$$

$$90468423441. = -\frac{1}{7}$$

$$90468423442. = -\frac{1}{11}$$

$$90468423443. = \frac{3}{11}$$

# Question Number: 96 Question Id: 9046847050 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

In a school, the number of boys is 40% more than the number of girls. If 60% of the number of boys and 54% of the number of girls are scholarship holders, then the percentage of students in the school who are NOT scholarship holders is:

#### Options:

90468423444. **46%** 90468423445. **45%** 90468423446. **43.8%** 90468423447. **42.5%** 

# Question Number: 97 Question Id: 9046847051 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

Anu earns a profit of 18% by selling an article at a certain price. If she were to sell it for ₹10.50 more, she would have gained 25%. The original cost price of 12 such articles is (in ₹):

# Options:

90468423448. **1**,620 90468423449. **1**,740 90468423450. **1**,800 90468423451. **1**,920

# Question Number: 98 Question Id: 9046847052 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

A dealer allows 32% discount on the marked price of an article and still gains 28%. If the cost price of the article is reduced by 10%, how much discount percent should the dealer allow now to get the same percentage of profit as before?

# Options:

90468423452. **38.2%** 90468423453. **38.8%** 90468423454. **40.4%** 90468423455. **40.6%** 

# Question Number: 99 Question Id: 9046847053 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

Last year, the ratio of the prices of two articles A and B was 3 : 5. This year, the price of A is increased by 25% and that of B is decreased by ₹210. If the ratio of the present prices of A and B is 15 : 14, then the price of A last year was:

# Options:

90468423456. **₹**420 90468423457. **₹**435 90468423458. **₹**450 90468423459. **₹**600

# Question Number: 100 Question Id: 9046847054 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

A person borrowed a certain sum on compound interest and agreed to return it in two years in two equal annual instalments. If the rate of interest is 10% p.a. and each annual instalment is ₹4,840, then the interest paid by him was:

# Options:

90468423460. **₹**1,260 90468423461. **₹**1,280 90468423462. **₹**1,320 90468423463. **₹**1,340

```
Question Number: 101 Question Id: 9046847055 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0
```

A boat can go  $1\frac{3}{5}$  km upstream and  $4\frac{4}{5}$  km downstream in 48 minutes, while it can go 2 km upstream and 600 m downstream in 33 minutes. How much time (in hours) will it take to go 28.8 km downstream?

### Options:

```
90468423464. 1.8 1.92 90468423466. 2.4 2.4 90468423467. 3.2
```

# Question Number: 102 Question Id: 9046847056 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Water flows at the rate of 20 metre/minute through a cylindrical pipe whose radius is 1.5 cm. Using this pipe, how long (in hours) would it take to fill a conical vessel whose radius is 120 cm and depth is 72 cm?

#### Options:

```
90468423468. ≈ 1.24
90468423469. √ 1.28
90468423470. ≈ 1.4
90468423471. ≈ 1.6
```

# Question Number: 103 Question Id: 9046847057 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

If  $a_1$ ,  $a_2$ ,  $a_3$ , ... is an arithmetic progression with the common difference of 1 and  $a_2 + a_4 + a_6 + \dots + a_{98} = 93$ , then  $\sum_{i=1}^{98} a_i$  is equal to k. The sum of the digits of k is:

# Options:

```
90468423472. ≈ 9
90468423473. √ 11
90468423474. ≈ 12
90468423475. ≈ 13
```

# Question Number: 104 Question Id: 9046847058 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The ratio of the sum of the first r terms to the sum of the first s terms of an arithmetic progression is  $r^2$ :  $s^2$ . What is the ratio of its  $8^{th}$  term to the  $23^{rd}$  term of this same progression?

# Options :

```
90468423476. 1:3
90468423477. 2:5
90468423478. 1:9
90468423479. 3:10
```

# Question Number: 105 Question Id: 9046847059 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

```
If a + b + c = 2, a^2 + b^2 + c^2 = 36, then the value of a^3 + b^3 + c^3 - 3abc is:
```

# Options:

```
90468423480. 3 94 90468423481. 4 104 90468423482. 3 116 90468423483. 3 136
```

# Question Number: 106 Question Id: 9046847060 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The sum of the first k terms of a geometric progression is 255, the k<sup>th</sup> term is 128, and the common ratio is 2. The value of k satisfies the equation: **Options:** 

```
90468423484. \checkmark k^2 - 7k = 8

90468423485. \checkmark k^2 + 7k = 1

90468423486. \checkmark 2k^2 - 17k = 7

90468423487. \checkmark 2k^2 - 15k = 9
```

Question Number: 107 Question Id: 9046847061 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The graphs of the equations 2x+3y = a and x+2y = b intersect at a point P  $(\alpha, \beta)$ . What is the value of  $(3\alpha + 2\beta)$ ?

Options:

90468423488. \* 5a - 8b90468423489. \* 5a + 8b90468423490. \* 4a + 5b90468423491. \* 4a - 5bQuestion Number: 108 Question Id: 9046847062 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

If the equations  $x^2 + px + 12 = 0$ ,  $x^2 + qx + 15 = 0$  and  $x^2 + (p+q)x + 36 = 0$  have a common positive root, then what is

Options :

90468423492. **\*** −6 90468423493. **\*** −5 90468423494. **\*** 5 90468423495. **\*** 7

the value of (2p - q)?

Question Number: 109 Question Id: 9046847063 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The sum of the roots of the equation  $|x-7|^2 + 2|x-7| = 24$  is:

# Options:

90468423496. \* 10 90468423497. \* 12 90468423498. \* 14 90468423499. \* 15

Question Number: 110 Question Id: 9046847064 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

When 5 is subtracted from each of given 'n' numbers, the sum of numbers so obtained is 210. When 8 is subtracted from each of the given 'n' numbers, then the sum of numbers so obtained is 156. What is the mean of the given 'n' numbers?

Options:

90468423500. 
$$\checkmark$$
 15 $\frac{1}{3}$ 
90468423501.  $\checkmark$  16 $\frac{2}{3}$ 
90468423502.  $\checkmark$  15
90468423503.  $\checkmark$  17

Question Number: 111 Question Id: 9046847065 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Calculate the variance of: 2, 4, 5, 6, 8, 17.

Options:

 $20\frac{1}{3}$ 90468423504. \*  $21\frac{2}{3}$ 90468423505. \*  $21\frac{2}{3}$ 90468423506. \*  $22\frac{2}{3}$ 

### Correct Marks: 1 Wrong Marks: 0

The scores of a batsman in 10 different test matches were 42, 38, 48, 70, 46, 63, 55, 34, 54, and 44. What is the mean deviation about the median of these scores?

### Options:

90468423508. \* 6.5

90468423509. \* 6.8

90468423510. 8.6

90468423511. \* 9.4

# Question Number: 113 Question Id: 9046847067 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

### Correct Marks: 1 Wrong Marks: 0

The mean of the following distribution is 23.8.

Class	0-10	10-20	20 - 30	30 - 40	40 - 50
Frequency	7	5	3	4	k

# What is the value of k?

#### Options:

90468423512. \* 5

90468423513. 🗸 6

90468423514. \* 7

90468423515. \* 8

# Question Number: 114 Question Id: 9046847068 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

#### Correct Marks: 1 Wrong Marks: 0

Let x be the median of the data: 23, 17, 19, 11, 7, 3, 13, 2, 5, 29. Let y be the median of the same data set obtained by replacing 2 by 21 and 13 by 31. What is the value of |x-y|?

# Options:

90468423516. 4 6

90468423517. \* 6.5

90468423518. \* 7

90468423519. \* 7.5

# Question Number: 115 Question Id: 9046847069 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No

# Correct Marks: 1 Wrong Marks: 0

A die is constructed so that when it is thrown, each of the three even numbers 2, 4 and 6 is twice as likely to come up as each of the odd outcomes 1, 3 and 5. What is the probability that 4 comes up when the die is thrown once?

# Options:

# Question Number: 116 Question Id: 9046847070 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

If the standard deviation of the series 
$$x_1, x_2, ..., x_n$$
 is  $\sigma$ , then the standard deviation of the series  $\frac{6x_1-7}{3}, \frac{6x_2-7}{3}, \frac{6x_3-7}{3}, ..., \frac{6x_n-7}{3}$  is:

# Options :

90468423524. **\*** 
$$2 \sigma - \frac{7}{3}$$

```
90468423527. ₩ σ
```

Question Number: 117 Question Id: 9046847071 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

X and Y are the two points that are 135 m apart on the ground on either side of a pole and in the same line. The angles of elevation of a bird sitting on the top of the pole from X and Y are 30° and 60° respectively. The distance of Y from the foot of the pole (in m) is:

# Options:

```
90468423528. 3 50.63 90468423529. 3 33.75 90468423530. 6 67.5
```

90468423531. \* 101.25

Question Number: 118 Question Id: 9046847072 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The value of 
$$\frac{(1+\cot\theta-\csc\theta)(1+\tan\theta+\sec\theta)}{\tan^2\theta+\cot^2\theta-\sec^2\theta.\csc^2\theta}$$
 is:

# Options:

90468423532. **\*** −2 90468423533. **\*** −1

90468423534. **\*** 1 90468423535. **\*** 2

 $Question\ Number: 119\ Question\ Id: 9046847073\ Question\ Type: MCQ\ Option\ Shuffling: Yes\ Is\ Question\ Mandatory: No\ Correct\ Marks: 1\ Wrong\ Marks: 0$ 

If  $3\sin^2 x + 10\cos x - 6 = 0$ ,  $0^0 < \theta < 90^0$ , then the value of  $\sec x + \csc x + \cot x$  is:

# Options:

 $90468423536. * 4 - \sqrt{3}$ 

 $90468423537. \approx 2 + \sqrt{3}$ 

90468423538. **\***  $3-\sqrt{2}$ 

90468423539.  $\checkmark$  3 +  $\sqrt{2}$ 

Question Number: 120 Question Id: 9046847074 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

If  $\sec \theta = a + \frac{1}{4a}$ ,  $0^0 < \theta < 90^0$ , then  $\csc \theta + \cot \theta =$ 

# Options:

90468423540. \* 
$$\frac{2a}{2a+1}$$

$$90468423541. * 2a - 1$$

$$\frac{2a+1}{2a-1}$$

$$\frac{4a-1}{2a+1}$$

Question Number: 121 Question Id: 9046847075 Question Type: MCQ Option Shuffling: Yes Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

$$\frac{sin\theta(1+\tan\theta)+cos\theta(1+\cot\theta)}{(cosec\theta-\sin\theta)(\sec\theta-\cos\theta)(\tan\theta+\cot\theta)} =$$

#### Options :

90468423544. **≈** sinθ cosθ 90468423545. **≈** cosecθ secθ 90468423546. **⋄** cosecθ + secθ 90468423547. **≈** sinθ + cosθ

# **Display Notepad Post Exam**

Group Number: 9046841456 Group Id: **Group Maximum Duration:** 3 3 **Group Minimum Duration:** No Show Attended Group?: **Edit Attended Group?:** No 0 Break time: Group Marks: Is this Group for Examiner?: No

# **Display Notepad Post Exam**

Section Id: 9046841521 Section Number: Offline Section type: Mandatory or Optional: Mandatory Number of Questions: Number of Questions to be attempted : Section Marks: Mark As Answered Required? : Yes **Sub-Section Number:** Sub-Section Id: 9046842285 Question Shuffling Allowed: No

Question Number: 122 Question Id: 90468410804 Question Type: SUBJECTIVE

Correct Marks: 1

Kindly display your Notepad (Rough Sheet) for 3 minutes before the webcam. Also show both pages both sides numbered 1,2,3 and 4. Kindly showcase as it is mandatory.