## Narsee Monjee Institute of Management Studies

## Notations :

1.Options shown in green color and with icon are correct
2.Options shown in red color and with $\approx$ icon are incorrect.

| Question Paper Name : | NPAT Common 2020 QP2 |
| :--- | :--- |
| Subject Name : | NPAT 2020 |
| Creation Date : | $2020-06-2520: 13: 10$ |
| Duration : | 106 |
| Number of Questions : | 98 |
| Total Marks : | 122 |
| 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 |
| Auto Save on Console? : | Yes |

## Display Notepad Pre Exam

## Group Number :

Group Id :
Group Maximum Duration :
Group Minimum Duration :
Show Attended Group? :
Edit Attended Group? :
Break time :
Group Marks :
Is this Group for Examiner? :

1
9046841457
3
3
No
No
0
1
No

## Display Notepad Pre Exam

9046841522
1
Offline
Mandatory
1
1
1
Yes
1
9046842286
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
9046841458
0
0
No

| Edit Attended Group? : | No |
| :--- | :--- |
| Break time : | 0 |
| Group Marks : | 40 |
| Is this Group for Examiner? : | No |

# Proficiency in English Language 

## Section Id

## Section Number :

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

9046841523
1
Online
Mandatory
28
28
40
Yes
1
9046842287
Yes

Question Number : 2 Question Id : 9046847798 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).

To understand what multiculturalism is, it is indispensable that the meaning of the culture is clarified.

Options :
90468426348. To understand

90468426349 . what multiculturalism is
90468426350 . it is indispensable that
90468426351. the meaning of the culture is clarified.

## Question Number : 3 Question Id : 9046847799 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).
Language is, at least primarily, a result of individuals to interact with their own cultural community.
Options :
90468426352 . * Language is, at least primarily,
$90468426353 . \approx$ a result of
90468426354. individuals to interact with
90468426355. their own cultural community.

Question Number : 4 Question Id : 9046847800 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).

We all sneeze for the same reason and all sneezes are not the same.
Options :
90468426356. ※ We all sneeze
90468426357. ${ }^{\approx}$ for the same reason
90468426358. and all sneezes

90468426359 . $\approx$ are not the same.

Question Number : 5 Question Id : 9046847801 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).

Sneezing occur when irritants aren't caught by nasal hair.

Options :
90468426360. Sneezing occur
90468426361. * when irritants

90468426362 . * aren't caught
90468426363. * by nasal hair.

Question Number : 6 Question Id : 9046847802 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).
You have been given a lot of advices but it has had no effect on your behaviour.
Options :
90468426364. ${ }^{\text {® }}$ You have been given
90468426365. a lot of advices
90468426366. * but it has had no effect
90468426367. on your behaviour.

Question Number : 7 Question Id : 9046847803 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.
Though you're angry $\qquad$ her now, you'll soon become friends again, Maria told Sheila.
Options :
90468426368. with
90468426369. ※ at

90468426370 . ${ }^{*}$ on
90468426371. * upon

Question Number : 8 Question Id : 9046847804 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 two families have known each other $\qquad$ a decade now.
Options :

```
90468426372. for
90468426373.* before
90468426374. % since
90468426375. % of
```

Question Number : 9 Question Id : 9046847805 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.
We $\qquad$ study so much in the past.
Options :
90468426376. * didn't used to
90468426377. didn't

90468426378 . * didn't use to
90468426379. ※ don't

Question Number : 10 Question Id : 9046847806 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 baroque style $\qquad$ in the early $17^{\text {th }}$ century in Rome.
Options :
$90468426380 .{ }^{*}$ has been evolved
90468426381. ※ was evolved
90468426382. is evolved
90468426383. evolved

Correct Marks : 1 Wrong Marks : 0
Select the option that best fills in the blank and completes the sentence given below.
$\qquad$ our heads are basically similar, differences in size, shape and colour of features produce a variety of appearances.
Options :
90468426384. ※ In spite of
90468426385. Although
90468426386. © Despite
90468426387. * As

Question Number : 12 Question Id : 9046847808 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 fact that it was difficult, Dhananjay managed to solve the physics paper.

Options :
90468426388. * Although
90468426389. * Even though
90468426390. * Because
90468426391. Despite

Question Number : 13 Question Id : 9046847809 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 boys were bored because they had $\qquad$ to do in the art class.
Options :
90468426392. * a little
90468426393.
90468426394.
little
90468426395.

Question Number : 14 Question Id : 9046847810 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.
$\qquad$ of the actors was paid a hefty amount to perform at the awards function.

## Options :

90468426396. * All
90468426397. * Some
90468426398. * Every
90468426399. Each

Question Number : 15 Question Id : 9046847811 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Select the option that best gives the meaning of the word/phrase in bold.
Watercolours can be applied undiluted to create a broken-colour effect.
Options :
90468426400. used
90468426401. * put
90468426402. * drawn
90468426403. * given

Question Number : 16 Question Id : 9046847812 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.
It is common to break bread with people you are close to.
Options :
90468426404 . * break into small pieces
90468426405. * take small bites of
90468426406. share a meal with
90468426407. * eat in a group

Question Number : 17 Question Id : 9046847813 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.
She bent over backwards to help the new boss.
Options :
90468426408. bent with difficulty
90468426409. worked very hard
90468426410. ${ }^{\approx}$ did the impossible
90468426411. made no effort

Question Number : 18 Question Id : 9046847814 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Select the option that best gives the meaning of the word/phrase in bold.
On the day before her wedding, Suhana developed cold feet
Options :

```
90468426412. felt very cold
90468426413.* felt no emotion
90468426414. * felt unfriendly
90468426415. felt very nervous
```

Question Number : 19 Question Id : 9046847815 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.
Many people who love music $\qquad$ to know nothing about it.
Options :
90468426416. * deny
90468426417. * assert
90468426418. ※ allege
90468426419. profess

Question Number : 20 Question Id : 9046847816 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.

In multicellular organisms, groups of cells $\qquad$ to take on specialised functions.
Options :

```
90468426420. differentiate
90468426421. * distinguish
90468426422 . detract
\(90468426423 . \approx\) discriminate
```

Question Number : 21 Question Id : 9046847817 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.

Parents must try to $\qquad$ the right balance between lively ambition and self-discipline.
Options :
90468426424. manage
90468426425. ※ hit
90468426426. strike

90468426427 . ※ reach

Question Number : 22 Question Id : 9046847818 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.
In a democracy, public $\qquad$ , constructive or otherwise, is a force that shouldn't be ignored.
Options :
90468426428. © feeling
90468426429. opinion
90468426430. * passion
90468426431. * sentiment

## Question Number : 23 Question Id : 9046847819 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. They believe that amid big declines in wildlife, action can help to reverse the trend for some species.
B. Freshwater insects, mosses and lichens are bucking the trend of wildlife losses and have expanded their ranges since 1970.
C. This finding does not conflict with other reports of serious declines in insect populations, they said.
D. According to scientists, reductions in air and water pollution are the most likely reason.
E. Their research also found that the average range of insects had increased over that time.

Options :
90468426432. B, D, A, E, C
90468426433. * D, A, E, C, B
90468426434. * B, C, A, E, D
90468426435. * D, E, C, B, A

Question Number : 24 Question Id : 9046847820 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. Nearly $85 \%$ of the land has at least some level of permafrost and even in the southern regions, winter months receive minimal daylight.
B. In such places, the use of solar power seems improbable, if not impossible.
C. Take for instance, northerly regions like Alaska, where daylight hours are minimal for a good portion of the year.
D. But a solar farm in Willow is one of those proving that solar can work even in the most unexpected cold and northerly climates.
E. Solar energy has become so accessible that new farms are being switched on in the most unexpected places.

Options :
90468426436. C, B, D, E, A
90468426437. * C, D, A, B, E
90468426438. E, C, B, A, D
90468426439. © D, C, A, B, E

Question Number : 25 Question Id : 9046847821 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. If progress on a task can take many forms, procrastination is the absence of progress.
B. Some even argue that people can dawdle to their advantage so that they're always accomplishing something of value.
C. Sympathizers of procrastination often say it doesn't matter when a task gets done, so long as it's eventually finished.
D. Others believe that it conflates beneficial, proactive behaviors like pondering with the detrimental, self-defeating habit of genuine procrastination.
E. A major misperception about procrastination is that it's an innocuous habit at worst, and perhaps a helpful one at best.

Options :
90468426440. * A, E, B, D, C
90468426441. * C, A, D, E, B
90468426442. E, C, B, D, A
90468426443. A, B, D, C, E

Question Number : 26 Question Id : 9046847822 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. Helicopter parenting has a few advantages, but mostly results in negative consequences for kids.
B. The term "helicopter parenting" comes from the notion that such parents "hover" over their children and rescue them when needed.
C. As these kids grow older, they lack the skills they need to navigate difficult situations solo.
D. Unlike other parenting styles, helicopter parenting is not a philosophy that parents aspire to or join on purpose.
E. It is just that they are obsessed with a desire to create a perfect world for their kids.

## Options :

90468426444. * B , C, D, E, A
90468426445. B, D, E, A, C
90468426446. * A, D, B, C, E
90468426447. * D, A, E, B, C

## Sub-Section Number :

Question Numbers : (27 to 31)
Read the passage and answer the questions that follow.
If we look around us at the things we have purchased at some point in our lives, we would no doubt notice that not everything we own is being put to good use: the thick woolen coat that we thought looked trendy despite the fact that we live in a tropical country, the smartphone that got put away when we bought ourselves the newest model, the car that only gets used at the weekends, or even the guest room in our house that somehow got turned into a storeroom.

Those underutilised items may seem useless to some, but could be an asset to others. With the advent of the internet, online communities have figured out a way to generate profit from the sharing of those underused assets. Using websites and social media groups that facilitate the buying and selling of second-hand goods, it is now easier than ever for peer-to-peer sharing activities to take place. And this is known as the sharing economy.

These democratised online platforms are providing a chance for people to make a quick buck or two. To give an example, busy parents previously might not have bothered with setting up a stall at the local market or car boot sale to sell their children's old equipment, but with online marketplaces, parents are now able to sell on those hardly worn baby clothes that their children have outgrown and the expensive pushchairs and baby equipment they have invested in, so as to put some cash back into their pockets.

Businesses have also caught on to the profitability of the sharing economy and are seeking to gain from making use of those underutilised resources. A business model that has rapidly risen in popularity sees companies providing an online platform that puts customers in contact with those who can provide a particular product or service. Companies such as Airbnb act as a middleman for people to cash in on their unused rooms and houses and let them out as lucrative accommodation. Another example is Uber, which encourages people to use their own personal cars as taxis to make some extra cash in their free time.

This move towards a sharing economy is not without criticisms. Unlike businesses, unregulated individuals do not have to follow certain regulations and this can lead to poorer and inconsistent quality of goods and services and a higher risk of fraud. Nevertheless, in the consumerist society we live in today, the increased opportunities to sell on our unwanted and underused goods can lead to a lesser impact on our environment.

## Sub questions

Question Number : 27 Question Id : 9046847824 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The word 'advent' in paragraph 2 means:
Options :
90468426448. * incidence
90468426449. emergence
$90468426450 . \approx_{\text {admittance }}$
$90468426451 .{ }^{*}$ resurgence

Question Number : 28 Question Id : 9046847825 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The author uses the examples of Airbnb and Uber to highlight:
Options :
90468426452. ${ }^{*}$ the manner in which people can use online platforms to make quick and easy money
90468426453. the ways in which underutilised resources can be put to good use for mutual benefit
90468426454. * the risk that people run of being provided with poor quality and fraudulent services
90468426455. *the democratic processes available online for the sharing of goods for quick profits

Question Number : 29 Question Id : 9046847826 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Which of the following sentences is NOT stated in the passage?
Options :
90468426456 . There is a huge online market for second-hand goods
90468426457. Airbnb is an example of how underutilised accommodation can be put to profitable use
90468426458. A sharing economy provides users with hassle-free, reliable and high quality service
90468426459. A sharing economy has a positive impact on the environment

Question Number : 30 Question Id : 9046847827 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Which of the following options best captures the main idea of this text?
The sharing economy allows people to:
Options :
90468426460. utilise resources that haven't been fully exploited for mutual benefit
90468426461. * get rid of things they have bought but hardly used
90468426462. * create online platforms that encourage entrepreneurship
90468426463. * make money by selling goods and services online

Question Number : 31 Question Id : 9046847828 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
This extract is most likely from:
Options :
90468426464. $\approx$ a journal article on economics

## Sub-Section Id :

Question Id : 9046847829 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (32 to 36)
Read the passage and answer the questions that follow.
Under capitalism, the argument goes, it's every man for himself. Through the relentless pursuit of self-interest, everyone benefits, as if an invisible hand were guiding each of us toward the common good. Everyone should accordingly try to get as much as they can, not only for their goods but also for their labour. Whatever the market price is, in turn, what the buyer should pay. Just like the idea that there should be a minimum wage, the idea that there should be a maximum wage seems to undermine the very freedom that the free market is supposed to guarantee.

This view, however, has some dramatic consequences. One is the explosion in economic inequality that almost all liberal capitalist democracies have experienced over the past 30-40 years. The difference between the top and the bottom of the income distribution now lies about where it did in the Gilded Age and the roaring 1920s, up until the Great Depression. Unlike these earlier periods, however, this rise in economic inequality has not been driven by returns on capital assets. This time, one of the most important contributors to the rise has been the payment of extraordinarily high levels of compensation to corporate executives... More troubling still, while the compensation for corporate executives has been almost continually rising during this period, real (inflation-adjusted) wages for almost everybody else have been stagnating.

Many people find this upsetting but, even so, they tend to treat it as something capitalism requires us to tolerate. Others think it is something that capitalism requires us to applaud. But nothing in capitalism actually says that such sky-high levels of compensation are permissible. What capitalism says instead is that people need incentives to be maximally productive. But will someone who makes $\$ 100$ million a year really work harder than someone who makes $\$ 10$ million? Compensation, like everything else, has what economists call 'diminishing marginal utility'. More of it has less and less of an incentivising effect, until eventually it has no incentivising effect at all - people are already working as hard as they can. At which point capitalism suggests that we should not pay someone even more money, for we are going to get nothing in return.

But wait - aren't CEOs just getting paid the market rate for their labour? Their compensation is calculated according to a formula set when they were hired and, as long as this formula represents the going wage, then this is what they should receive. The market rate for CEO labour, however, is not set in a competitive manner. The formula is set by a special group of the company's directors, called 'the compensation committee'....

Next time someone hires a CEO and another compensation committee conducts a survey, the average will be higher. The market is not bidding up the price; the price is going up simply because everyone always wants to beat the current average. We have what economists call a market failure. Setting a maximum wage would therefore not interfere with market freedom because, in this instance, the market is not working.

## Sub questions

Question Number : 32 Question Id : 9046847830 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

## Correct Marks : 1 Wrong Marks : 0

In the first paragraph the author puts forth the view that:

## Options :

90468426468. fixing a maximum wage goes against the tenets of a free market system

90468426469 . * the common good is best served by market forces guiding the economy
90468426470 . * people benefit most when they are paid the maximum amount possible for their work
90468426471. individual self-interest determines salaries and wages for each worker

Question Number : 33 Question Id : 9046847831 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The author ascribes the increasing gap in economic levels in recent times to:

## Options :

90468426472 . diminishing marginal utility in liberal capitalist democracies
90468426473. high compensation levels for top executives
$90468426474 . *$ incentivising top executives to increase their productivity
90468426475 . ${ }^{*}$ decline in the return on capital assets compared to human assets

Question Number : 34 Question Id : 9046847832 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The writer argues that while salaries tend to be capped as people cannot work any harder,:

## Options :

90468426476. longer work hours always increases the compensation
90468426477. competition for the top executives bids up salaries
90468426478. ${ }^{*}$ marginal utility increases as people tend to work more
90468426479. * differences will always emerge among different ability levels

Question Number : 35 Question Id : 9046847833 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
We can infer from the sentence on the Gilded Age and the Great Depression (in the 1920s) that:
Options:
90468426480. wide gaps in income distribution have always existed through the centuries
$90468426481 . \approx$ productivity increased in most capitalist liberal economies from the twentieth century
90468426482. ※ incomes had become more equal in the latter part of the twentieth century

90468426483 . * these were times of greater equality of opportunity than the present day

Question Number : 36 Question Id : 9046847834 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0
The author concludes there is "a market failure" in the remunerations of top executives (last paragraph) as:
Options :
90468426484. * they are paid high salaries to compensate for the failures of the market
90468426485. competition trumps the rules of the market in their compensations
90468426486. ${ }^{\approx}$ a result of the constraints on their compensations

90468426487 . ${ }^{\approx}$ market failures have resulted from the high compensations they receive

```
Sub-Section Number : 4
```

Sub-Section Id : 9046842290
Question Shuffling Allowed : Yes

Question Id : 9046847835 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : ( $\mathbf{3 7}$ to 41)
Read the passage and answer the questions that follow.
China initiated its economic miracle by opening to the outside world, but now it is nurturing domestic tech giants by barring outside competition. Foreign visitors cannot open Google or Facebook, a weirdly isolating experience... But unlike the Soviet Union, which failed in a similar strategy, China is effectively creating a new consumer culture behind protectionist walls as a tool of political control and an engine of economic growth....Anchored by internet giants such as Alibaba and Tencent, the tech sector (was) not only counterbalancing the decline in older industries such as steel and aluminium but was also largely debt free. So, the bigger the digital economy, the greater is China's capacity to manage mounting debts in the old economy and keep growth alive...

By 2017, tech already accounted for as large a share of output in China as in Germany... Yet on balance, tech is probably creating more professions than it destroys. A recent International Monetary Fund (IMF) paper estimates that after subtracting the jobs it eliminates, digitalisation accounts for up to half of all job growth. Alibaba platforms alone host millions of small companies, which over the past decade have added 30 million jobs - more than China has lost in heavy industry.

China's tech revolution was made possible by two of the forces that were expected to slow the economy. The population may be aging, but it still provides a vast market in which tech start-ups can blossom. And though growth normally slows when countries attain a middle-class income, in China the new middle class provides the main customers for new mobile internet services. No other country has this combination. India has the population, not the income. Brazil has the income, not the population. And these democratic societies are also far more suspicious of government surveillance than China is. Witness the widespread controversy over the rollout of biometric IDs in India.

In China, at least outside Xinjiang, the relatively mild concern about personal data has helped fuel the boom in digital payments and e-commerce. China is the world's largest e-commerce market by far, and fleets of motorbikes painted in the colours of online delivery companies park five to six rows deep outside malls and office towers.

To offset the shrinking of its work force, China needed to increase the productivity of the workers who remain. And as the tech boom took off around 2015 , productivity growth began to recover after flat lining for nearly a decade. The IMF paper argues that the economy is bound to slow in coming years, but will slow much more sharply if digitalisation stalls than if it continues at the current rapid pace.

No economy can rise in an unbroken line forever, and mounting debts and a declining labour force still weigh on China. By making online loans so readily available to Chinese households, tech may compound the risk of financial crisis.

## Sub questions

Question Number : 37 Question Id : 9046847836 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

## Correct Marks : 1 Wrong Marks : 0

The overall message in the passage is:

## Options :

90468426488. * by banning foreign tech companies, China has successfully nurtured its domestic IT firms
90468426489. © China is not as concerned about data privacy as other democratic countries
90468426490. while the tech revolution is reducing employment globally, in China it is creating jobs
$90468426491 .^{*}$ China's experience shows how important it is to shift from steel and aluminium to tech-based firms

Question Number : 38 Question Id : 9046847837 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Brazil and India have not been able to emulate China's successful expansion in e-commerce for all of the following reasons, EXCEPT:
Options :
90468426492. * their consumers are more concerned about protecting their privacy
90468426493. they have not been able to ban foreign tech competitors from their markets

90468426494 . *surveillance of digital payments by their governments is not as good as China's
90468426495. they don't have a large wealthy middle-class market that fuels tech demand

Question Number : 39 Question Id : 9046847838 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The author mentions the 'fleets of motorbikes' (paragraph 4) to indicate the:

Options :
90468426496. $\approx$ boom in the demand for motorbikes and other vehicles
90468426497. expansion in the demand for on-line delivery services
90468426498. * rapid growth in the youthful workforce in e-commerce
90468426499. explosion in business that has resulted in a shortage of parking in malls

Question Number : 40 Question Id : 9046847839 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0
All of the following can be deduced about the Chinese economy, EXCEPT that:
Options :
$90468426500 .^{*}$ it is moving away from older industries towards technology based services
90468426501. its youthful population has fuelled the demand for on-line delivery services
90468426502. * productivity growth had remained stagnant till 2015
90468426503. * its population is aging and its workforce is shrinking

Question Number : 41 Question Id : 9046847840 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Contrary to the experience in other countries, digitisation in China has:
Options :
90468426504. boosted the demand for industrial goods such as steel and aluminium
90468426505. led to an increase in employment and productivity
90468426506. * tackled the effects of a declining and ageing labour force

90468426507 . been possible only with the exclusion of foreign IT giants such as Google and Facebook

## Reasoning and General Intelligence

| Group Number : | 3 |
| :--- | :--- |
| Group Id : | 9046841459 |
| 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 |

## Reasoning and General Intelligence

## Section Id :

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

9046841524
1
Online
Mandatory
28
28
40
Yes
1
9046842291
Yes

Question Id : 9046847881 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (42 to 46)
The following are the criteria for admitting students to an engineering college:
The student candidate must:

1) have passed 12th standard science examination having secured more than $65 \%$ in Mathematics and at least $60 \%$ in the aggregate.
2) be of 20 years age or more as on January 01, 2020
3) have obtained at least $65 \%$ in the interview and more than $60 \%$ in the entrance test.

However, if a student fulfills all the above criteria, EXCEPT:
4) at (1) and/or (2) above but has obtained at least $75 \%$ in the interview and more than $65 \%$ in the entrance test, the case should be referred to the Principal. 5) at (2) and/or (3) above but is an SC candidate securing more than $70 \%$ in the aggregate as well as in Mathematics in 12th standard science examination, the case should 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 given in the five questions. Mark your answer by choosing the appropriate option in each case.

## Sub questions

## Question Number : 42 Question Id : 9046847882 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

 Correct Marks : 1 Wrong Marks : 0Priya was born in an SC family in 1998 and passed her $12^{\text {th }}$ standard science examination securing $82 \%$ in the aggregate and $66 \%$ in Mathematics. She obtained $65 \%$ in the interview as well as in the entrance test. What decision would be taken for her?

## Options :

90468426668. She would be admitted
90468426669. * She would not be admitted
90468426670. ${ }^{\approx}$ Her case is to be referred to the Principal

90468426671 . Her case is to be referred to the Director

Question Number : 43 Question Id : 9046847883 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : $\mathbf{1}$ Wrong Marks : 0
Aditya, an SC candidate, was born in 1997 and passed the $12^{\text {th }}$ standard examination in science securing $65 \%$ in the aggregate as well as in Mathematics. He obtained $65 \%$ in the entrance test and $68 \%$ in the interview. What decision would be taken for him?

## Options :

90468426672. \% He would be admitted
90468426673. He would not be admitted
90468426674. * His case is to be referred to the Principal
90468426675. * His case is to be referred to the Director

Question Number : 44 Question Id : 9046847884 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No
Correct Marks : $\mathbf{1}$ Wrong Marks : 0
Ashok is an SC candidate, who secured $65 \%$ in the interview and $60 \%$ in the entrance test. He passed the $12^{\text {th }}$ standard science examination in 2018 at the age of 19 securing $80 \%$ aggregate marks and $70 \%$ in Mathematics. What decision would be taken for him?

## Options :

90468426676. He would be admitted
90468426677. He would not be admitted

90468426678 . His case is to be referred to the Principal
90468426679 . His case is to be referred to the Director

Question Number : 45 Question Id : 9046847885 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Manju Tripathi passed the $12^{\text {th }}$ standard science examination securing $65 \%$ in the aggregate as well as in Mathematics at the age of 18 in 2017 . She secured $75 \%$ in the interview and $68 \%$ in the entrance test. What decision would be taken in her case?
Options :
90468426680 . * She would be admitted
90468426681. * She would not be admitted
90468426682. Her case is to be referred to the Principal

90468426683 . Her case is to be referred to the Director

## Question Number : 46 Question Id : 9046847886 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No <br> Correct Marks : 1 Wrong Marks : 0

Nitesh, who belongs to the SC community, passed the $12^{\text {th }}$ standard science examination in July 2019 at the age of 19 years securing $72 \%$ in Mathematics as well as in the aggregate. He obtained $65 \%$ in the entrance test and $76 \%$ in the interview. What decision would be taken for him?

## Options :

90468426684. * He would be admitted
90468426685. He would not be admitted
$90468426686 .^{*}$ His case is to be referred to the Principal
90468426687. His case is to be referred to the Director

Sub-Section Number : 2
Sub-Section Id : 9046842292
Question Shuffling Allowed : Yes

## Question Number : 47 Question Id : 9046847889 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No <br> Correct Marks : 1 Wrong Marks : 0

Six persons A, B, C, D, E and F are sitting in a row on a bench. F is sitting to the immediate left of E. There are two persons sitting between B and C. A is sitting next to $B$ and is to the immediate right of $D$. If $E$ is sitting at one end of the row, then who is sitting at the other end?
Options :
90468426696. A
90468426697. © B

```
90468426698. C
90468426699.* D
```

Question Number : 48 Question Id : 9046847891 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : $\mathbf{1}$ Wrong Marks : 0
If ' $P+Q$ ' means ' $P$ is the son of $Q$ '; ' $P \times Q$ ' means ' $P$ is the brother of $Q$ ' and ' $P-Q$ ' means ' $P$ is the sister of $Q$ ', then which of the following means ' $A$ is the nephew of D '?
Options :
90468426704. * $\mathrm{A}-\mathrm{B} \times \mathrm{D}-\mathrm{C}$
90468426705. * $\mathrm{A} \times \mathrm{B}-\mathrm{C}+\mathrm{D}$
90468426706. $\approx \mathrm{A}-\mathrm{C}+\mathrm{B} \times \mathrm{D}$
90468426707. $\mathrm{A} \times \mathrm{C}+\mathrm{B}-\mathrm{D}$

Question Number : 49 Question Id : 9046847892 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 cars are vehicles.
2. Some four-wheelers are cars.

Conclusions:
I. Some four-wheelers are vehicles.
II. Some four-wheelers are not vehicles.

Options :
90468426708. Only conclusion I follows
90468426709. Only conclusion II follows

90468426710 . * Both conclusions I and II follow
90468426711. Neither conclusion I nor II follows

## Question Number : 50 Question Id : 9046847893 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 leaves are vegetables.
2. Some vegetables are costly products.

Conclusions:
I. Some leaves are costly products.
II. All costly products are vegetables.
III. All vegetables that are not costly products are leaves.

Options :
90468426712. * Only conclusion I follows
90468426713. ※ Both conclusions I and III follow
90468426714. Both conclusions II and III follow
90468426715. None of the conclusions follow

Question Number : 51 Question Id : 9046847894 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. No mansion is a hut.
2. Some houses are buildings.
3. Some buildings are mansions.

Conclusions:
I. Some houses are mansions.
II. No house is a hut.
III. Some buildings are not huts.

Options :
90468426716 . $^{*}$ Only conclusion I follows
90468426717. © Only conclusions I and II follow
90468426718. Only conclusion III follows
90468426719. \% None of the conclusions follow

## Question Number : 52 Question Id : 9046847895 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 student union elections be banned in universities?
Arguments:
I. Yes. The universities are sacred institutions and the elections would compel all the students to sacrifice their moral values.
II. No. Students should learn to participate in choosing their leaders, as they will later take leadership roles in the country.

Options :
90468426720. Only argument I is strong
90468426721. Only argument II is strong
90468426722. Both arguments I and II are strong
90468426723. Neither argument I nor II is strong

Question Number : 53 Question Id : 9046847897 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : $\mathbf{1}$ 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 Q exactly related to P ?
Statements:
I. P's father is the son of Q's mother.
II. P's sister R is the daughter of Q's husband.

Options :
90468426728. Statement I alone is sufficient
90468426729. Statement II alone is sufficient
90468426730. Either statement I alone or statement II alone is sufficient
90468426731. Both the statements I and II together are not sufficient

Question Number : 54 Question Id : 9046847898 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:
Four boys $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D and four girls $\mathrm{M}, \mathrm{N}, \mathrm{P}$ and Q are sitting around a round table facing the centre such that no two girls are adjacent to one another. Who is sitting between P and Q ?

Statements:
I. A is sitting between M and P , who is facing N sitting to the immediate left of C .
II. M is third to the left of C, who is to the immediate left of Q.

Options :
90468426732. * Statement I alone is sufficient

90468426733 . * Statement II alone is sufficient
90468426734. * Both the statements I and II together are necessary
90468426735. Both the statements I and II together are not sufficient

Question Number : 55 Question Id : 9046847899 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:
Five friends A, B, C, D and E are standing in a line according to height from the shortest to the tallest. If A is the shortest, then who is the tallest of them all?
Statements:
I. B is between E and C and D is between A and E.
II. There are two persons between A and B and C is taller than B .

Options :
90468426736. * Statement I alone is sufficient

90468426737 . * Statement II alone is sufficient
90468426738. Either statement I alone or statement II alone is sufficient
90468426739. * Both the statements I and II together are necessary

Question Number : 56 Question Id : 9046847900 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:
In a class of 60 students, the ratio of boys to girls is $2: 3$. What is the rank of Neha, a girl student in the class?
Statements:
I. 15 boys have scored more than Neha and 15 girls have scored less than her.
II. Neha's rank is 10 th among girls and the number of boys scoring less than Neha is twice the number of boys scoring more than her.

## Options :

90468426740. Statement I alone is sufficient
90468426741. * Statement II alone is sufficient
90468426742. Either statement I alone or statement II alone is sufficient
90468426743. © Both the statements I and II together are necessary

Question Number : 57 Question Id : 9046847901 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:
$\mathrm{a}, \mathrm{b}$ and c are three numbers. Which is the largest number?

Statements:
I. The sum of the squares of $\mathrm{a}, \mathrm{b}$ and c is 371 and the difference between the largest and the smallest number is 10 .
II. The square of the largest number exceeds the sum of the squares of the other two numbers by 79.

## Options :

90468426744. * Statement I alone is sufficient
90468426745. * Statement II alone is sufficient
90468426746. Both the statements I and II together are necessary
90468426747. © Both the statements I and II together are not sufficient

Question Number : 58 Question Id : 9046847902 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.
Wolves, Goats, Mammals
Options :
90468426748.

90468426749.


90468426750 .

90468426751.

Question Number : 59 Question Id : 9046847906 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 $B$.
$\mathrm{A} \% \mathrm{~B}$ means A is neither greater than nor equal to B .
$A \$ B$ means $A$ is neither smaller than nor greater than $B$.

Statements:
A) S \& W
B) T \$ Z
C) W@ T

Conclusions:
I. Z \# W
II. T \% S
III. S \& Z

Options :
$90468426760 . *$ Both conclusions I and II are true
90468426761 . * Both conclusions II and III are true
90468426762. * Both conclusions I and III are true
90468426763. All the conclusions I, II and III are true

Question Number : 60 Question Id : 9046847907 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.
$\mathrm{A} \& \mathrm{~B}$ 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) K \& F
B) B @ G
C) B \$ K

Conclusions:
I. B \& F
II. G \# K
III. G \% F

Options :
90468426764. Both conclusions I and II are true
90468426765. * Both conclusions II and III are true
90468426766. Both conclusions I and III are true
90468426767. All the conclusions I, II and III are true

Question Number : 61 Question Id : 9046847908 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
If the signs ' $x$ ' and ' + ' are interchanged in each of the given equations, then which one equation would be correct?
Options :
90468426768. $8 \times 2-3+2=3 \times 2$

90468426769 . $8-2+6 \times 8=8-6$
$90468426770.6+4-8 \times 4=5+4$
90468426771 . $4 \times 6 \div 3+2=4 \times 2$

Question Number : 62 Question Id : 9046847910 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.


Options :



Sub-Section Number :
Sub-Section Id :

9046842293
Yes

Question Id : 9046847903 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (63 to 64)

Study the given figure and answer the question that follows:


In the figure, the triangle stands for 'tennis players'; the circle stands for 'football fans'; the rectangle stands for 'students' and the square stands for 'hardworking'. The numbers in different segments show the number of persons.
Sub questions

Question Number : 63 Question Id : 9046847904 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
How many hardworking students are tennis players but NOT football fans?
Options :
90468426752.
90468426753.
90468426754.
9
90468426755.

Question Number : 64 Question Id : 9046847905 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
How many hardworking football fans are either students or tennis players but NOT both?
Options :
90468426756. 10
90468426757. ※ 14
90468426758. 15
90468426759. 16

Sub-Section Number :
4
Sub-Section Id :
Question Shuffling Allowed :

Question Number : 65 Question Id : 9046847887 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
A team is to be formed from among four girls $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D and four boys $\mathrm{P}, \mathrm{Q}, \mathrm{R}$ and S with the following conditions.
i. B and S have to be together.
ii. Q and C cannot go together.
iii. A cannot be teamed with R.
iv. P has to go with D.

Which of the following teams can be formed?
Options :
90468426688. ASPC
90468426689. * RASB
90468426690. BASQ
90468426691. ${ }^{\text {® }}$ PCDQ

Question Number : 66 Question Id : 9046847888 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
A team of four with at least two females is to be selected from among five male players $P, Q, R, S$ and $T$ and three female players $K, L$ and $M$ under the following conditions.
i. R cannot be put with K.
ii. $P$ and $M$ have to be together.
iii. K will always be with T.
iv. S cannot go with N .

Which of the following teams can be formed?
Options :
90468426692. * PQTM
90468426693. * KMLR
90468426694. ॠ PSMN
90468426695. QKLT

Question Number : 67 Question Id : 9046847890 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Among five friends, Naresh is taller than Virat and Prakash. Hiten is shorter than Prakash but taller than Arun. If Arun is taller than Virat, then who will be in the middle, if all of them stand in the ascending order of their heights?
Options :
90468426700. ※ Arun
90468426701. Hiten
90468426702. Naresh
90468426703. ※ Prakash

Question Number : 68 Question Id : 9046847896 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:
This year the state will not import onions from other states.
Assumptions:
I. The onion production in the state would meet the consumer needs.
II. The quality of onions grown in other states is poor.

Options :
90468426724. Only assumption I is implicit
90468426725. * Only assumption II is implicit
90468426726. * Both assumptions I and II are implicit
90468426727. Neither assumption I nor II is implicit

Question Number : 69 Question Id : 9046847909 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.

| $\mathrm{M} \quad$ - | (C) H | M 米 | @ H |
| :---: | :---: | :---: | :---: |
| (C) H | M 米 | @ H | $\mathrm{M}=$ |

Options :

$$
\begin{array}{ll}
\mathrm{M} & = \\
@ & \#
\end{array}
$$

90468426772 .

| $M$ | $=$ |
| :--- | :--- |
| $\#$ | $H$ |



90468426774

| $=$ | $M$ |
| :--- | :--- |
| $\#$ | $H$ |

Question Number : 70 Question Id : 9046847911 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Four cubes have been given, three of which are rotated versions of the same cube and one is different. Select the cube that is different. Options :
90468426780. ๕

90468426781. ※

90468426782.

90468426783.


Question Number : 71 Question Id : 9046847912 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.


Options :

90468426786.


Sub-Section Number :
5 9046842295
Sub-Section Id :
Question Shuffling Allowed :

Question Id : 9046847913 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (72 to 75)
The given pie charts show the percentage distribution of the total employees (executives and non-executives) and that of the executives in different departments of a company. Study the charts and answer the questions that follow.


## Sub questions

Question Number : 72 Question Id : 9046847914 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
What percent (approximately) of the employees in the Marketing and HR departments are non-executives?

## Options :

90468426788. * $63.9 \%$
90468426789. 73.6\%
90468426790.* $73.9 \%$
90468426791. * 75.2\%

Question Number : 73 Question Id : 9046847915 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
If the ratio of the male to female non-executives in the HR department is $4: 5$, then how many female HR non-executives are working in the company? Options :

| 90468426792. 80 |
| :---: |
| 90468426793. \% 90 |
| 90468426794. 100 |
| 90468426795. 120 |

Question Number : 74 Question Id : 9046847916 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Which of the following departments has the highest number of non-executives?
Options :
90468426796. Production
90468426797. * IT
90468426798. ※ Accounts
90468426799. * Marketing

Question Number : 75 Question Id : 9046847917 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Among the females in the Production department, the ratio of executives to non-executives is $2: 7$, and among the males in the same department, the said ratio is 3 : 25. How many male non-executives are working in the Production department?

Options :
90468426800. ※ 250
90468426801. * 280
90468426802. * 330
90468426803. 375

Sub-Section Number : 6
Sub-Section Id :
Question Shuffling Allowed : Yes

Question Id : 9046847918 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (76 to 79)

Study the given table and answer the questions that follow.
(B and G refer to boys and girls, respectively.)

| Average marks obtained by $\mathbf{2 0}$ boys and $\mathbf{2 0}$ girls in three subjects from four schools |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject | Maximum Marks | J |  | K |  | L |  | M |  |
|  |  | B | G | B | G | B | G | B | G |
| English | 100 | 65 | 60 | 60 | 70 | 65 | 75 | 70 | 80 |
| Mathematics | 200 | 120 | 135 | 140 | 160 | 110 | 130 | 150 | 140 |
| Science | 100 | 70 | 65 | 70 | 80 | 80 | 75 | 65 | 75 |

Sub questions

Question Number : 76 Question Id : 9046847919 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
In which of the following schools, did girls have the highest average percentage of marks in all the three subjects?
Options :
90468426804. * J
90468426805. K
90468426806. \& L
90468426807. ※ M

Question Number : 77 Question Id : 9046847920 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
In how many schools, did boys score higher average percentage of marks in Mathematics compared to English?
Options :
90468426808. * 4

```
90468426809.* 3
90468426810. 2
90468426811.% 1
```

Question Number : 78 Question Id : 9046847921 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0
In which of the following schools, was the difference between the average percentage of marks of boys and that of girls in all three subjects the maximum?
Options :
90468426812. \% J
90468426813. K
90468426814. \% L
90468426815. ※ M

Question Number : 79 Question Id : 9046847922 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

## Correct Marks : 1 Wrong Marks : 0

In English and Science, the average marks of the girls exceed that of the boys by approximately:
Options :
90468426816. * 8.6\%
90468426817. $5.8 \%$
90468426818. ※ 7.4\%
90468426819. 6.4\%

Sub-Section Number :
7
Sub-Section Id :
9046842297
Question Shuffling Allowed :
Yes

Question Id : 9046847923 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Numbers : (80 to 81)

The graph below shows the percentage of enrolled students in five different schools appearing for the examination and the percentage of students who have appeared and passed the examination. Study the graph and answer the questions that follow.


Sub questions

Question Number : 80 Question Id : 9046847924 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
If 576 students passed the examination in school R, then how many students were enrolled in school R?
Options :

```
90468426820. * 720
90468426821. 800
90468426822.* 960
90468426823.* 1080
```

Question Number : 81 Question Id : 9046847925 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
If a total of 1500 students were enrolled in schools P and T and 700 of them passed, then how many students were enrolled in school T ?
Options :
90468426824. ※ 1250
90468426825. \& 1000
90468426826. ※ 750
90468426827.
500

# Quantitative and Numerical Ability 

## Group Number :

Group Id :
Group Maximum Duration :
Group Minimum Duration :
Show Attended Group? :
Edit Attended Group? :
Break time :
Group Marks :
Is this Group for Examiner? :

9046841460
0
0
No
No
0
40
No

## Quantitative and Numerical Ability

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

## 9046841525

1
Online
Mandatory
40
40
40
Yes
1
9046842298
Yes

Question Number : 82 Question Id : 9046847841 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
If $U=\{x \mid x \in N, x \leq 10\}$ is the universal set, and $A=\{1,3,5,7,9\}, B=\{2,4,6,8,10\}$ and $C=\{1,2,3,4\}$. The number of elements in $[A-(B \cap C)]-\left(B^{\prime} \cap C^{\prime}\right)$, where $B^{\prime}$ and $C^{\prime}$ are the complements of $B$ and $C$, respectively is:
Options :
90468426508. * 1
90468426509. 2
90468426510. * 3
90468426511. \% 5

Question Number : 83 Question Id : 9046847842 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
$A$ and $B$ are two sets such that $n(A)=12, n(B)=15$ and $n(A \cup B)=20$. Then, $n\left(B \cap A^{\prime}\right)-n\left(A \cap B^{\prime}\right)=$
Options :
90468426512. * 5
90468426513. ॠ 4
90468426514. 3
90468426515. * 2

Question Number : 84 Question Id : 9046847843 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Let $\mathrm{A}=\{1,2,5\}, \mathrm{B}=\{1,2,3,4\}$ and $\mathrm{C}=\{2,5,6\}$ be the three sets. If $\mathrm{D}=[\mathrm{A} \times(\mathrm{B} \cap \mathrm{C})] \cap[(\mathrm{A}-\mathrm{B}) \times \mathrm{C}]$, then which of the following is true? Options :
$90468426516 . *(1,2) \in \mathrm{D}$
90468426517. * $(5,5) \in \mathrm{D}$
90468426518. ※ $(5,6) \in \mathrm{D}$
90468426519. (5,2) $\in \mathrm{D}$

If $\mathrm{f}(\mathrm{x})=\frac{x-1}{x+1}$, then for $\mathrm{k}>0, f^{-1}\left(\frac{1}{2 k}+3\right)=$
Options :
90468426520. $\frac{-(1+8 k)}{1+4 k}$
90468426521. $\frac{1+8 k}{1+4 k}$
90468426522. * $\frac{1+4 k}{1+8 k}$
$90468426523 . \% \frac{-(1+4 k)}{1+8 k}$

Question Number : 86 Question Id : 9046847845 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Which of the following functions satisfies these two criteria: $f(0)=0$ and $f(x+1)=2 f(x)+1$ ?
Options :

```
90468426524. \(\approx f(x)=1-2^{X}\)
90468426525. \(f(x)=2^{X}-1\)
90468426526. * \(f(x)=-\left(2^{X}+1\right)\)
90468426527. * \(f(x)=2^{X}+1\)
```

Question Number : 87 Question Id : 9046847846 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
If $\mathrm{f}(\mathrm{x})=\frac{1}{x^{2}+1}, 0<x<1$, then $f^{-1}\left(\frac{1}{4}\right)+f^{-1}\left(\frac{3}{4}\right)=$
Options :
90468426528. * 1
90468426529. * 3
$90468426530 . \frac{4 \sqrt{3}}{3}$
$90468426531 . \approx \frac{\sqrt{3}}{2}$

Question Number : 88 Question Id : 9046847847 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
In an examination, $82 \%$ of students passed in Mathematics, $70 \%$ passed in Science and $13 \%$ failed in both the subjects. If 299 students passed in both the subjects, then the total number of students who appeared in the examination is:
Options :
90468426532. * 440
90468426533. 460
$90468426534 . \approx 500$
$90468426535 . \approx 520$

Question Number : 89 Question Id : 9046847848 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The value of $\left(\frac{5}{13}\right.$ of $1 \frac{14}{25}+2 \frac{3}{10}-\frac{7}{18}$ of $\left.1 \frac{1}{35}\right) \times\left(3 \frac{1}{5} \div 4 \frac{1}{2}\right.$ of $\left.5 \frac{1}{3}\right)$ lies between:

Options :
90468426536. 0.1 and 0.2
90468426537. 0.2 and 0.3
90468426538. 0.3 and 0.4
90468426539. 0.4 and 0.5

Question Number : 90 Question Id : 9046847849 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The income of $A$ is $\frac{3}{4}$ of $B^{\prime}$ 's income, and the expenditure of $A$ is $\frac{4}{5}$ of $B^{\prime} s$ expenditure. If $A^{\prime} s$ income is $\frac{9}{10}$ of $B^{\prime} s$ expenditure, then the ratio of savings of $A$ and $B$ is:

Options :
90468426540. 1:2
90468426541. 3:5
90468426542. $1: 3$
90468426543. ※ $2: 3$

Question Number : 91 Question Id : 9046847850 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If $\frac{46}{159}=\frac{1}{x+\frac{1}{y+\frac{1}{z+\frac{1}{4}}}}$, where $x, y$ and $z$ are positive integers, then the value of $(2 x+3 y-4 z)$ is:
Options :
90468426544. -8
90468426545. ※ -6
90468426546. ※ 6
90468426547. * 8

Question Number : 92 Question Id : 9046847851 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The value of $\frac{0 . \overline{0.9} \times 0 . \overline{7}}{0 . \overline{63} \times 3 . \overline{6}}+0 . \overline{27}(0.8 \overline{3} \div 0.1 \overline{6})$ is:
Options :
90468426548. ะ $\frac{15}{11}$
$90468426549 . \backsim \frac{46}{33}$
90468426550 . $\frac{16}{33}$
90468426551. ะ $\frac{4}{3}$

Question Number : 93 Question Id : 9046847852 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
What is the value of $\frac{4 \times(2.83)^{2}-3 \times 2.96 \times 2.22}{(2-0.78) \times(5.05)}=$ ?
Options :
90468426552. ※ $\frac{1}{2}$
90468426553. \& 1
90468426554. ※ $\frac{3}{2}$

Question Number : 94 Question Id : 9046847853 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The sum of the first 10 terms of the series $\frac{7}{3}+\frac{7}{15}+\frac{1}{5}+\frac{1}{9}+\cdots$ is $\frac{a}{b}$, where $\operatorname{HCF}(a, b)=1$.
What is the value of $|a-b|$ ?
Options :
90468426556. \% 5
90468426557. * 6
90468426558. 7
90468426559. ※ 9

Question Number : 95 Question Id : 9046847854 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Let $x=\sqrt{-4 \sqrt{2}+\sqrt{17(-\sqrt{2})^{2}+2}}$. If $\frac{1}{x}=a+b \sqrt{2}$, then what is the value of $(a-b)$ ?
Options :
90468426560. ※ 0
90468426561. $\frac{1}{2}$
90468426562. ※ 1
90468426563. * $\frac{3}{2}$

Question Number : 96 Question Id : 9046847855 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
In a year, out of 160 games to be played, a cricket team wants to win $80 \%$ of them. Out of 90 games already played, the success rate is $66 \frac{2}{3} \%$. What should be the success rate for the remaining games in order to reach the target?

Options :
90468426564. \%
$84 \frac{5}{7} \%$
90468426565. ※ $85 \frac{1}{3} \%$

90468426566 . * $93 \frac{2}{3} \%$
90468426567. $97 \frac{1}{7} \%$

Question Number : 97 Question Id : 9046847856 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
A shopkeeper has two varieties of rice $A$ and $B$. By selling $A$ at $₹ 75$ per kg , he loses $20 \%$; and by selling $B$ at ₹ 90 per kg , he gains $25 \%$. If he mixes $A$ and $B$ in the ratio $4: 5$ and sells the mixture at $₹ 110.25$ per kg , then his profit percentage is:

Options :
90468426568. ※ 30\%
90468426569. * 32\%
90468426571. * 40\%

Question Number : 98 Question Id : 9046847857 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Shikha sells an article for ₹ 253 , after giving $12 \%$ discount on its marked price. Had she not given any discount, she would have earned a profit of $25 \%$ on the cost price. What is the cost price of the article?
Options :
90468426572. * ₹ 220
90468426573. ₹ ₹ 225
90468426574. ₹ 230
90468426575. ₹ ₹ 235

Question Number : 99 Question Id : 9046847858 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The ratio of the number of boys and the girls in a group is $5: 8$. If 4 more girls join the group and 5 boys leave the group, then the ratio of the number of boys to the number of girls becomes $1: 2$. Originally, what was the difference between the number of boys and girls in the group?
Options :
90468426576. 21
90468426577. \& 24
90468426578. 27
90468426579. ※ 30

Question Number : 100 Question Id : 9046847859 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
A person borrows a sum of ₹ 10,920 at $10 \%$ p.a. compound interest and promises to pay it back in two equal annual instalments. The interest to be paid by him under this instalment scheme is:

Options :
90468426580. ※₹ 1,646
90468426581. ₹ 1,664
90468426582. ₹ ₹ 1,676
90468426583. ※ ₹ 1,684

Question Number : 101 Question Id : 9046847860 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Two persons $A$ and $B$ start moving at the same time towards each other from points $x$ and $y$, respectively. After crossing each other, $A$ and $B$ now take $4 \frac{1}{6}$ hours and 6 hours, respectively, to reach their respective destinations. If the speed of $A$ is $72 \mathrm{~km} / \mathrm{h}$, then the speed (in km/h) of B is:
Options :
90468426584. ※ 54
90468426585. * 56
90468426586. 60
90468426587. ※ 64

Question Number : 102 Question Id : 9046847861 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Water is flowing at the rate of $4 \mathrm{~km} / \mathrm{h}$ through a pipe of radius 7 cm into a rectangular tank with length and breadth as 25 m and 22 m , respectively. The time (in hours) in which the level of water in the tank will rise by 28 cm is
(take $\pi=\frac{22}{7}$ ):
Options :
90468426588. $\approx 2 \frac{1}{3}$
90468426589. $2 \frac{1}{2}$
$90468426590 . \approx 3 \frac{1}{2}$
$3 \frac{1}{3}$

Question Number : 103 Question Id : 9046847862 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
In an arithmetic progression, the $4^{\text {th }}$ term equals three times the first term and the $7^{\text {th }}$ term exceeds two times the third term by one. The sum of its first ten terms is:
Options :

```
90468426592.% 100
90468426593.* 108
90468426594. 120
90468426595.* 124
```

Question Number : 104 Question Id : 9046847863 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The ratio of the sum of the first $m$ terms to the sum of the first $n$ terms of an arithmetic progression is $m^{2}: n^{2}$. What is the ratio of its $17^{\text {th }}$ term to the $29^{\text {th }}$ term?

Options :

```
90468426596. % 29:41
90468426597.* 9:17
90468426598. * 13:21
90468426599. 11:19
```

Question Number : 105 Question Id : 9046847864 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The sum of the first three terms of an infinite geometric progression, with common ratio less than one, is 56. If 1,7 and 21 are subtracted from its first, second and third term, respectively, then these three terms are in the arithmetic progression. The common ratio of the progression is:
Options :
90468426600. $\frac{1}{2}$
90468426601. ※ $\frac{1}{4}$
90468426602. * $\frac{1}{3}$
90468426603. ※ $\frac{2}{3}$

If $a^{2}+c^{2}+17=2\left(a-2 b^{2}-8 b\right)$, then the value of $(a+b+c)\left[(a-b)^{2}+(b-c)^{2}+(c-a)^{2}\right]$ is:
Options :
90468426604. * -10
90468426605. ๕ -1
90468426606. 9
90468426607. ॠ 10

Question Number : 107 Question Id : 9046847866 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0
The graphs of $2 x-y=1$ and $3 x-2 y=-1$ intersect at a point $P$, which lies on the graph of the equation:
Options :
90468426608. ※ $y=2 x+1$
90468426609. * $y=\frac{3}{2} x-1$
90468426610. $\approx 5 x-3 y=1$
90468426611. $3 x-5 y=-16$

Question Number : 108 Question Id : 9046847867 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
If the roots of the equation $x^{2}-2(1+3 k) x+7(3+2 k)=0$ are equal, where $k<0$, then which of the following is true ?
Options :
90468426612. * $9 \mathrm{k}^{2}-\mathrm{k}+2=0$
90468426613. ※ $\mathrm{k}^{2}-4=0$
90468426614. * $\mathrm{k}^{2}+\mathrm{k}-8=0$
90468426615. $\quad 9 \mathrm{k}^{2}+\mathrm{k}-10=0$

Question Number : 109 Question Id : 9046847868 Question Type : MCQ Option Shuffling: Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
Which of the following statements is true about the solutions of the equation $\left|x^{2}-5 x\right|=6$ ?
Options :
90468426616. ॠ The equation has three solutions whose sum is 12 .
90468426617. The equation has four solutions whose sum is 10 .
90468426618. * The equation has only two solutions, one positive and one negative.
90468426619. The equation has only two solutions, which are greater than 5 .

Question Number : 110 Question Id : 9046847869 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0
When 8 is added to each of the given ' $n$ ' numbers, the sum of the resulting numbers is 207 . When 5 is subtracted from each of the given ' $n$ ' numbers, the sum of the resulting numbers is 77 . What is the mean of the given ' $n$ ' numbers?
Options :

| 90468426620. * | 10.6 |
| :--- | :--- | :--- |
| 90468426621. | 11.8 |
| 90468426622. | 12.7 |
| 90468426623. | 13.4 |

Question Number : 111 Question Id : 9046847870 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The variance of the ten integers $11,12,13, \ldots, 20$ is:
Options :
$90468426624 . \approx 7.64$
$90468426625 . \approx 7.82$
$90468426626 . \approx 8.16$

Question Number : 112 Question Id : 9046847871 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The marks obtained by seven students in a test are: $36,46,70,60,20,18,30$.
What is the mean deviation of the data from the mean?
Options :

```
90468426628.% 15.4
90468426629. 16
90468426630. % 18
90468426631. 18.6
```

Question Number : 113 Question Id : 9046847872 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The mean of the following distribution is 25 .

| Class | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 14 | p | 27 | 21 | 15 |

What is the value of $p$ ?
Options :

```
90468426632.% 18
90468426633. 20
90468426634. ※ 21
90468426635. 23
```

Question Number : 114 Question Id : 9046847873 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
What is the median of the following distribution?

| $x_{i}$ | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{f}_{\mathrm{i}}$ | 4 | 6 | 2 | 3 | 7 | 6 | 4 |

Options :
90468426636. ※ 13
90468426637. 12
90468426638. 11
90468426639. * 10

Question Number : 115 Question Id : 9046847874 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
A coin is biased so that the probability of obtaining a head is 0.25 . Another coin is biased so that the probability of obtaining a tail is 0.4 . If both the coins are tossed together, the probability of obtaining at least one head is:
Options :
$90468426640 . \approx \frac{3}{10}$
90468426641. * $\frac{1}{5}$
90468426642. $\frac{7}{10}$
90468426643. ะ $\frac{4}{5}$

Question Number : 116 Question Id : 9046847875 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No

## Correct Marks : 1 Wrong Marks : 0

The heights (in cm) of 8 students are recorded as $162,163,160,164,160,170,161,164$. The standard deviation of the data is closest to:
Options :
90468426644. 3.04

```
90468426645. 3.14
90468426646. % 3.22
90468426647. ๕ 3.32
```

Question Number : 117 Question Id : 9046847876 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
From a point on a bridge across a river, the angles of depressions of the banks on opposite sides of the river are $30^{\circ}$ and $60^{\circ}$, respectively. If the height of the bridge from the banks is $h$ metre and the width of the river is $k$ metre, then $h$ : $k$ is equal to:
Options :
90468426648. ※ $1: 2 \sqrt{3}$
90468426649. $4: 3 \sqrt{3}$
90468426650. ※ $\sqrt{3}: 2$
90468426651. $\sqrt{3}: 4$

Question Number : 118 Question Id : 9046847877 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The expression $\frac{(1+\tan \theta) \cos \theta}{\sin \theta \tan \theta(1-\tan \theta)+\sin \theta \sec ^{2} \theta}$ is equal to:
Options :
90468426652. « $\sec \theta$
90468426653. \& $\operatorname{cosec} \theta$
90468426654. $\cot \theta$
90468426655. * $\tan \theta$

Question Number : 119 Question Id : 9046847878 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0
$\frac{\sec ^{6} \theta-\tan ^{6} \theta-3 \sec ^{2} \theta \tan ^{2} \theta}{1+2 \sin ^{2} \theta-\sin ^{4} \theta+\cos ^{4} \theta}=$
Options :
90468426656. ※ 1
90468426657. $\frac{1}{2}$
90468426658. * 2
90468426659. * $\frac{1}{4}$

Question Number : 120 Question Id : 9046847879 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
The value of $\frac{\sin ^{2} \theta\left(2+\cot ^{2} \theta\right)-\sin ^{2} \theta+2}{\tan ^{2} \theta+\cot ^{2} \theta-\sec ^{2} \theta \operatorname{cosec}^{2} \theta}$ is:
Options :
90468426660. \& 1
90468426661. * -2

$$
\begin{aligned}
& \text { 90468426662.: }: \frac{3}{2} \\
& 90468426663 .: \frac{-3}{2}
\end{aligned}
$$

Question Number : 121 Question Id : 9046847880 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0
If $\sec \theta+\tan \theta=p$, then $\frac{\sin \theta-1}{\sin \theta+1}$ is equal to:
Options :
90468426664. $\frac{-1}{p^{2}}$
90468426665. * $\frac{2}{p^{2}}$
90468426666. $\approx \frac{1}{2 p}$
90468426667. $\approx-p^{2}$

## Display Notepad Post Exam

Group Number :
Group Id :
Group Maximum Duration :
Group Minimum Duration :
Show Attended Group? :
Edit Attended Group? :
Break time :
Group Marks :
Is this Group for Examiner? :

5
9046841461
3
3
No
No
0
1
No

## Display Notepad Post Exam

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

9046841526
1
Offline
Mandatory
1
1
1
Yes
1
9046842299
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.

