

PGDBA-SAMPLE QUESTIONS

1. There will be questions on Verbal Ability, Logical Reasoning, Data Interpretation & Data Visualization and Quantitative Aptitude.
2. Books, Charts, Graph Sheets, Tables, Calculators, Mobile Phones, Digital Diaries and Electronic Communication Gadgets/ Computing Devices etc. are NOT allowed in the Examination Hall.

Verbal Ability

Q.1 The four sentences (labelled A, B, C and D) below, when properly sequenced would yield a coherent paragraph. Choose the option that would result in the most coherent paragraph:

1. Mr. Hernandez is not the first Latin American head of state to be accused of drug trafficking.
2. On 15th February, 2022, Mr. Juan Orlando Hernandez, the outgoing President of Honduras, was arrested and taken away in handcuffs.
3. But the rot goes particularly deep in Honduras.
4. The arrest was in response to an extradition request from the US relating to a drug trafficking case.

- A. 2,1,3,4
- B. 2,4,1,3
- C. 2,3,4,1
- D. 2,4,3,1

Q.2 Fill in the blank with the correct word:

The adjective for metal is metallic. But not for iron, which is -----.

- A. strange
- B. unlikely
- C. ironic
- D. ferrous

Q.3. The passage below is accompanied by a question. Choose the BEST answer

Doomsayers of the past two centuries have blamed, among other things, novels, the radio, jazz, rock ‘n roll, television, horror films, Dungeons & Dragons, video games, the internet, smartphones and social media for the sad decline of the young. John Protzko, a psychologist...wondered whether things might not be quite so gloomy as they seemed. To try to bring some rigour to the question, he went hunting for examples of a cognitive experiment called the marshmallow test. This test, first performed at Stanford University in the 1960s, measures how good young children are at self-control - specifically, whether or not they can defer a small but immediate reward, such as a marshmallow, in favour of a bigger one later. It was one of the first examples of a standardised psychological test, so it gave him plenty of historical data to work with.

The set-up is simple. A child is taken into a room and presented with a choice of sugary snacks. A researcher explains that the child can choose his favourite treat and eat it whenever he likes - but, if he waits 15 minutes, he can have two instead. The researcher then leaves the room. Age is the strongest predictor of successfully resisting the temptation [to take the treat immediately]. Among children of the same age, however, doing well on the test is associated with plenty of good things later in life, from healthy weight to longer school attendance and better exam results.

Dr Protzko...polled 260 experts in child cognitive development, inviting them to predict what he might find. Just over half thought that children would have become worse at delaying gratification - perhaps thinking about a plethora of recent studies into the supposedly deleterious effects of modern technology. Another third predicted no change.

Only 16% of the experts made the correct prediction. This is, that children have become steadily and significantly better at the test over the past half century. In 1967, the average waiting time before succumbing to temptation was around three minutes. By 2017, that had risen to eight minutes - an increase of about a minute a decade. And that increase seems to be happening at all levels of ability. The most impulsive children are improving at the same rate as the most prudent.

The rate of increase caught Dr Protzko’s eye as well. That rate, a fifth of a standard deviation every decade, is about the same improvement as has been seen in IQ tests over the past 80 years.... The cause of this increase in IQ, which is dubbed the Flynn effect after the psychologist who brought it to the world’s attention, remains mysterious - as does whether Dr Protzko’s results are related to it. IQ is associated with the ability to delay gratification, but the correlation is far from perfect.

In the context of the passage, what do doomsayers intend to convey when they talk of ‘the sad decline of the young’?

- A. The young are lazy and that affects their studies
- B. The young waste a lot of time on social media
- C. The young are failing the ‘Marshmallow Test’.
- D. The young don’t live up to their full potential.

Logical Reasoning

Q.4. There are four different teams in a tournament, each having exactly two players. These eight players {A, B, C, D, E, F, G and H} are sitting around a circular table, wearing dresses that are Red or Blue or Green in colour. No two players wearing dresses of same colour sit either adjacent or opposite to each other. Further, no two teammates wear dresses of same colour, and no two teammates sit either adjacent or opposite to each other.

It is also known that:

- 1) A, D, E and F belong to four different teams.
- 2) H and F belong to the same team.
- 3) A is wearing a Green dress and sitting opposite to C.
- 4) E is wearing a Blue dress and sitting opposite to G.
- 5) D is not wearing a Red dress and is not a teammate of G.
- 6) Wearing a Green dress, B is sitting to the immediate left of C and to the immediate right of teammate of C.

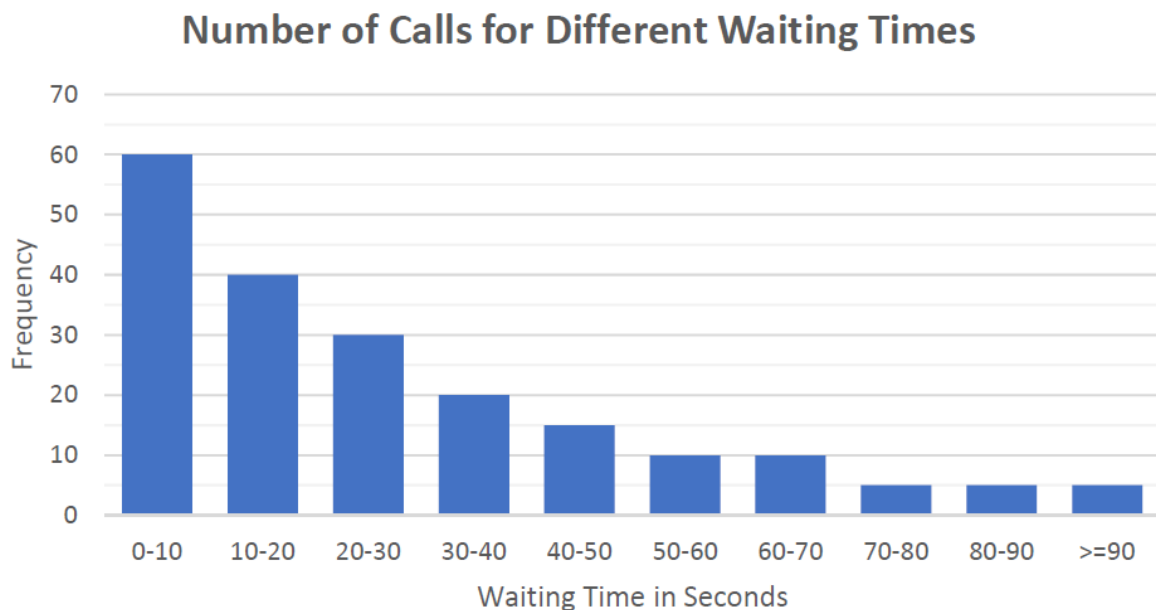
Based on the above information, choose the correct answer for the below question:

Who is definitely sitting adjacent to F?

- A. A
- B. G
- C. B
- D. E

Data Interpretation and Data Visualization

Q.5. Customers calling up a call center often need to wait before being attended to. In order to study the waiting time of customers, data were collected on waiting times of 200 calls. The following is a graphical representation of the observed waiting times. Note that the bar marked $a - b$ includes all waiting times t such that $a \leq t < b$. A call is said to have waiting time 0 in case it is answered as soon as it is connected to the call center.



The lowest possible value of the average of the observed waiting times is closest to

- A. 21.00
- B. 22.75
- C. 20.00
- D. 20.50

Quantitative Aptitude

Q.6. An airplane is observed to be approaching a point that is at a distance of 20 km from the point of observation such that the angle of elevation is 60° . Then the height of the airplane above the ground is

- A. $40\sqrt{3} \text{ km}$
- B. $\sqrt{30} \text{ km}$
- C. $10\sqrt{3} \text{ km}$
- D. 20 km

Q.7. If P and Q are two matrices such that $PQ = Q$ and $QP = P$, then $P^3 + Q^3$ is equal to

- A. $3PQ$
- B. $3QP$
- C. $P + Q$
- D. P^3Q^3

Q.8. The area of the region bounded by the curves $y^2 = 4x$ and $y = 2x$ is

- A. $1/10$
- B. $1/5$
- C. $1/3$
- D. $1/8$

Q.9. Let P be a 19×19 matrix whose entries in both the diagonals are all equal to 1 and all other entries are equal to 0. Then, $\text{rank}(P)$ is equal to

- A. 9
- B. 10
- C. 11
- D. 19

Q.10. Consider a function $f(x) = x^2 + px + q$ such that the roots of $f(x) = 0$ are positive and distinct. Let the arithmetic mean, the geometric mean and the harmonic mean of the two roots be a , b and c , respectively. Then, which of the following statements is TRUE?

- A. $f(a) > f(b) > f(c)$
- B. $f(a) > f(c) > f(b)$
- C. $f(a) < f(b) < f(c)$
- D. $f(a) < f(c) < f(b)$

Answer Keys

Q. No.	Key
Q1	B
Q2	C
Q3	D
Q4	A
Q5	B
Q6	C
Q7	C
Q8	C
Q9	B
Q10	C