

PART 1: MATHEMATICS (30 Questions)

- Find the mode of the following list of numbers: 2, 4, 6, 4, 8, 2, 9, 4, 3, 8 **(MCQ - CHOOSE ONE)**
 - 2
 - 3
 - 4
 - 5
 - 6
- Which fraction is equal to 0.20%? **(MCQ - CHOOSE ONE)**
 - $\frac{1}{20}$
 - $\frac{1}{40}$
 - $\frac{1}{50}$
 - $\frac{1}{400}$
 - $\frac{1}{500}$
- An agent receives a commission of 40 cents for every \$50 of business she procures. What percent is the agent's commission? **(MCQ - CHOOSE ONE)**
 - 0.8%
 - 1.0%
 - 1.25%
 - 1.5%
 - 2.5%
- What is the value of $(x + y)(x + y)$ if $xy = -3$ and $x^2 + y^2 = 10$? **(MCQ - CHOOSE ONE)**
 - 1
 - 2
 - 3
 - 4
 - 5
- Simplify $(1 + \frac{1}{y}) / (\frac{x}{y})$ **(MCQ - CHOOSE ONE)**
 - $(y+1)/x^*$
 - $(y+1)/y$
 - $(y+1)/y^2$
 - $(x+1)/x$
 - $(y^2+1)/xy$
- If $y = 3$, then $y^3(y^3 - y) =$ **(MCQ - CHOOSE ONE)**
 - 300
 - 459
 - 648*
 - 999
 - 1099
- If a circle has the diameter of 8, what is the circumference? **(MCQ - CHOOSE ONE)**
 - 6.28
 - 12.56

- 25.13
- 50.24
- 100.48

7. Which of the following numbers could be described in the following way: an integer that is a natural, rational and whole number? **(MCQ - CHOOSE ONE)**

- 0
- 1*
- 233
- -3
- none of the above

8. If an object travels at five feet per second, how many feet does it travel in one hour? **(MCQ - CHOOSE ONE)**

- 30
- 300
- 720
- 1800
- 18000

9. Which of the following is a true statement? **(MCQ - CHOOSE ONE)**

- (-1, 0) lies on the X-axis
- (3, -4) lies on the Y-axis
- (2, -3) lies in the third quadrant
- (0, -4) lies on the X-axis
- (-3, 0) lies on the Y-axis

10. If 300 jellybeans cost you x dollars. How many jellybeans can you purchase for 50 cents at the same rate? **(MCQ - CHOOSE ONE)**

- $150/x$
- $150x$
- $6x$
- $1500/x$
- $600x$

11. If the ratio of the number of boys to girls in a club is 3:5, what percentage of the club members are girls? **(MCQ - CHOOSE ONE)**

- 37.5 %
- 40 %
- 50 %
- 60 %
- 62.5 %

12. If first 12 km are traveled at a speed of 40 km/hr and the next 9 km are traveled at the speed of 45 km/hour, the average speed is **(MCQ - CHOOSE ONE)**

- 40.5
- 40
- 42.14
- 42.5
- 45

13. Which of the following is a true statement? **(MCQ - CHOOSE ONE)**

- A triangle can have two right angles.
- A triangle can have two obtuse angles.
- A triangle can have two acute angles.
- All angles of the triangle can be more than 60°
- All angles of the triangle can be less than 60°

14. If $y + 2$ is a positive integer, than y must be **(MCQ - CHOOSE ONE)**

- even
- odd
- less than 2
- greater than -2
- positive

15. If one side of a square is 5 units, what is the area of the square? **(MCQ - CHOOSE ONE)**

- 10
- 15
- 20
- 25
- 30

16. Which of the following has the least value? **(MCQ - CHOOSE ONE)**

- 0.27
- $\frac{1}{4}$
- $\frac{3}{8}$
- $\frac{2}{11}$
- 11%

17. . A box is manufactured to contain either laptop computers or notebook computers. When the computer systems are removed from the box, it is reused to hold other items. If the length of the box is 20cm, the width is 15cm, and the height is 25cm, what is the volume of the box?

(MCQ - CHOOSE ONE)

- 150
- 750
- 300
- 7500
- 15000

18. If $\sin x = \cos x$ then angle x is equal to **(MCQ - CHOOSE ONE)**
- 30 degrees
 - 60 degrees
 - 45 degrees*
 - None of the above
19. The number of rational numbers between 0 and 1 is **(MCQ - CHOOSE ONE)**
- Finite
 - Countable*
 - Both a and b
 - Infinite
20. Solve the following equation for A: $2A/3 = 8 + 4A$ **(MCQ - CHOOSE ONE)**
- -2.4*
 - 2.4
 - 1.3
 - -1.3
 - 0
21. Equation of the line parallel to x-axis and passing through origin is **(MCQ - CHOOSE ONE)**
- $x = 0, y = 0$
 - $y = 0$ *
 - $x = y$
 - $x = 0$
22. $x^{2/4} - y^{2/9} = 0$ is the equation of **(MCQ - CHOOSE ONE)**
- Circle
 - Ellipse
 - Hyperbola
 - Pair of lines*
23. $a = (4096 * 256) / 1024, b = (512 * 1024) / 256 =$ **(MCQ - CHOOSE ONE)**
- $a > b$
 - $a < b$ *
 - $a = b$
 - if the answer is not A, B, or C
24. A number increased from 120 to 150. By what percent, of its original value, did this number increase? **(MCQ - CHOOSE ONE)**
- 20 %
 - 11 %
 - 25 %
 - 6 %
 - 21 %

25. If $3/p = 6$ and $3/q = 15$ then $p - q = ?$ (MCQ - CHOOSE ONE)
- $1/3$
 - $2/5$
 - $3/10^*$
 - $5/6$
 - None of the above
26. What is the next number in the sequence? 6, 12, 24, 48, ____ (MCQ - CHOOSE ONE)
- 72
 - 96
 - 108
 - 112
 - 124
27. The location in the plane of the point $P(x,y)$ for which $y=0$ is (MCQ - CHOOSE ONE)
- x-axis
 - y-axis
 - 2nd Quadrant
 - 4th Quadrant
28. The solution of the equation $|-2x + 2| - 3 = -3$ is (MCQ - CHOOSE ONE)
- 1
 - $1/4$
 - -1
 - None of the above
29. $3^{102} + 9 \cdot 3^{100} + 3^{103}/3 = ?$ (MCQ - CHOOSE ONE)
- 3^{101}
 - 3^{102}
 - 3^{103}^*
 - 3^{104}
 - 3^{105}
30. If functions f and g are such that $f(x) = g(x) + k$. Where k is a constant, then (MCQ - CHOOSE ONE)
- $f'(x) = g'(x) + k$
 - $f'(x) = g'(x)^*$
 - $f'(x) = 2g'(x)$
 - None of the above

PART 2: ENGLISH (30 Questions)

Section I - (Grammar)

1. The plane will stay on the runway _____ five minutes. **(MCQ - CHOOSE ONE)**
 - at
 - on
 - in
 - for
2. What's more important _____ you, independence or security? **(MCQ - CHOOSE ONE)**
 - of
 - to
 - with
 - on
3. _____ you speak French before you moved to Paris? **(MCQ - CHOOSE ONE)**
 - Can
 - Could
 - Do
 - Learnt
4. Either your brakes or your eyes _____ at fault. **(MCQ - CHOOSE ONE)**
 - is
 - are
 - were
 - aren't
5. The Government has _____ the price of petrol. **(MCQ - CHOOSE ONE)**
 - increasing
 - increased
 - increases
 - increase
6. More statues and monuments have been damaged in the last fifty years than in _____ past two hundred decades. **(MCQ - CHOOSE ONE)**
 - B) the
 - C) a
 - D) an
7. In the kingdom of Nepal, high up in the Himalayas and within sight of Mt. Everest, _____ world's highest mountain, the way of life in the villages has hardly changed in hundreds of years. **(MCQ - CHOOSE ONE)**
 - the
 - a
 - an
8. Some people think that life was _____ a hundred years ago. **(MCQ - CHOOSE ONE)**
 - badly
 - worst

- well
- better

9. He came late because he can't run _____ the others. (MCQ - CHOOSE ONE)

- as fast as
- faster as
- the fastest of
- quickly as

10. Since the old lady's husband died, she's been living _____. (MCQ - CHOOSE ONE)

- herself
- by herself
- by itself
- by her

11. The committee has decided to award the prize to you and _____. (MCQ - CHOOSE ONE)

- I
- we
- he
- me

12. The manner of addressing people in Britain is quite different from ours, ___? (MCQ - CHOOSE ONE)

- it is
- isn't there
- is it
- isn't it

13. There were many mistakes in your dictation, ___? (MCQ - CHOOSE ONE)

- weren't they
- were there
- weren't there
- aren't there

14. _____ that life in New York is very expensive, it can be extremely exciting. (MCQ - CHOOSE ONE)

- In spite of
- Though
- Despite the fact
- Although

15. To do his homework, Ali went through various history books. _____, he took notes from several encyclopedias. (MCQ - CHOOSE ONE)

- Furthermore
- Despite
- However
- So

16. Do not give up so readily, _____ you will regret it later. (MCQ - CHOOSE ONE)

- and
- otherwise
- but

- since

17. I read the morning papers for a while. _____, I went for a walk. (MCQ - CHOOSE ONE)

- Than
- Afterwards
- Moreover
- Furthermore

Section-II (Vocabulary)

18. 'Once you have recovered from the illness, you will be _____ from the hospital.' (MCQ - CHOOSE ONE)

- discharged
- acquitted
- dismissed
- expelled

19. After working hard all day long, Ahmed was really _____ (MCQ - CHOOSE ONE)

- nervous
- confused
- bored
- exhausted

20. 'Ahmed _____ believes in the benefits of healthy diet.' (MCQ - CHOOSE ONE)

- firmly
- routinely
- steadily
- regularly

21. The train station is _____ located near the schools. (MCQ - CHOOSE ONE)

- correctly
- conveniently
- considerately
- conspicuously

22. Our city has reached a very high level of _____.' (MCQ - CHOOSE ONE)

- atmosphere
- environment
- plantation
- pollution

Section-III (Complete the Sentence)

23. Processing the applications here is not very difficult. -----, you need to sort them according to date received and then file them. **(MCQ - CHOOSE ONE)**

- First
- Similarly
- In conclusion
- Meanwhile

24. Usman is failing two of his courses. -----, people still consider him one of the most gifted students in the college. **(MCQ - CHOOSE ONE)**

- Because of this
- Moreover
- In spite of this
- To summarize

25. The population in the area has increased dramatically. -----, a new high school is being built. **(MCQ - CHOOSE ONE)**

- On the contrary
- For example
- Despite this
- As a result

26. It's very unlikely that the bank will be robbed again. -----, we want all of our employees to be prepared. **(MCQ - CHOOSE ONE)**

- Even then
- As a result
- Moreover
- In fact

ENGLISH-IV (Structuring & Organizing of Paragraph)

27. Choose the options with the correct order of sentences that forms a coherent paragraph.

1. Unfortunately, summer passes too quickly.
2. I enjoy summer sports like water skiing and baseball.
3. Summer is my favorite season.
4. Gardening is another summertime hobby of mine.

5. The weather is usually sunny, hot, and perfect for swimming.

(MCQ - CHOOSE ONE)

- 4, 5, 1, 2, 3
- 3, 1, 4, 5, 2
- 3, 5, 2, 4, 1
- 1, 5, 4, 3, 2

28. Choose the best topic sentence for the paragraph given

_____. Wall murals depicting cheese making prove that it was part of ancient Egyptian culture. Pottery remains with ancient dairy residue suggest that humans from that time may have kept cows, goats, and sheep in order to make cheese. In ancient Rome, many larger houses included separate cheese kitchens, where dairy products could mature.

_____.

(MCQ - CHOOSE ONE)

- Historical accounts and ancient artefacts indicate that people have been making cheese for thousands of years
- Cheese making was an important custom that had a significant impact on art, architecture, and daily life in ancient Rome
- New findings indicate that that people have been raising cows and goats for longer than previously thought

29. Choose the best concluding sentence for the given paragraph

_____. The plumbing doesn't work properly and the landlord refuses to fix it. I also have noisy neighbours who keep me up all night. Furthermore, there are so many bugs in my apartment that I could start an insect collection. _____.

(MCQ - CHOOSE ONE)

- I want to stay here forever
- I really want to move
- I am very poor

30. Choose the best concluding sentence for the given paragraph.

_____. Some people constantly complain about petty things. They hunger after luxuries which they cannot afford. They become frustrated and sick. Whereas some others take things easy and keep themselves happy, cool and poised. In other words, happiness can be experienced by cultivating healthy thinking. _____.

(MCQ - CHOOSE ONE)

- Happy are those who take life easy
- Therefore, it is always advisable to make a habit of finding happiness in little things
- Happiness is difficult to achieve