

ALL ANSWERS MUST BE GIVEN ON THE COMPUTERIZED ANSWER SHEET
BY CROSSING THE CORRESPONDING LETTER

English M.C.Q's

No. of Questions: 30 (from 1 to 30)

Questions on Page Nos: 1 To 4

Time: 45 Minutes

Negative markings: Yes

1. I _____ a new bike yesterday.
 A. bought B. have bought C. had bought D. was bought
2. I would spend my holidays in the USA if I _____ enough money.
 A. would get B. would have C. have D. had
3. I hope our services _____ your expectations.
 A. exceeds B. accedes C. have access D. broadens
4. Some people feel that his _____ to the President was unnecessary.
 A. expectation B. allusion C. illusion D. respect
5. The outcome of the project was entirely _____. He planned every step!
 A. causal B. casual C. correlation D. accidental
6. The police threatened to _____ the faulty goods.
 A. cease B. seize C. capture D. allow
7. The lawyer would like to _____ a response from his client.
 A. illicit B. elicit C. investigate D. examine

[8-10] Fill in the blanks by choosing appropriate letters provided in Questions 8 to 10 below:

One encouragement for ministers _____ their measures to protect spending on services for elderly and disabled people _____; average spending on social _____ to be rising this year by 1.6%.

8. A. could be that B. should have been that C. was that D. is that
9. A. appear to be working B. appear to have worked C. appear that had worked
 D. would work
10. A. care could be shown B. care was shown C. care is shown
 D. care would be shown

[11-13] Fill in the blanks by choosing appropriate letters provided in Questions 11 to 13 below:

Now it _____ that this savings figure is somewhat notional. In fact, _____ the select committee report, the axeing of the commission _____ end up actually costing the taxpayer more.

11. A. seems B. seemed C. had seemed D. would seem
12. A. had said B. said C. is saying D. says
13. A. would B. might C. may D. could

[14 -15] Fill in the blanks by choosing appropriate letters provided in Questions 14 and 15 below:

This could be particularly significant _____ children, _____ whom donor tracheas are much more difficult to find.

14. A. in B. from C. for D. by
15. A. for B. on C. in D. by

16- 24 Choose the best option

A huge solar farm in Lincolnshire and another in Cornwall started generating green electricity on Thursday to become the UK's two biggest solar installations, as developers rushed to beat an imminent cut in government subsidies.

The 1MW Fen Farm solar park and the 1.4MW Wheal Jane park in Truro are two (16) _____ several such large-scale projects rushing to connect to the grid. They are trying to benefit (17) _____ a higher level of feed-in tariff payments (18) _____ the government cuts the rates by up to 75% on 1 August.

When the cuts were confirmed last month, ministers defended them on the grounds that the funding for payments (19) _____ protected for householders. But energy industry figures and campaigners (20) _____ that making such large projects financially unviable would "crush" the solar industry and cost the UK "major manufacturing opportunities, jobs and global competitiveness".

The developers of the Truro park (21) _____ of a disused tin mine worked around the clock to finish the project (22) _____ to beat the tariff cuts. Solarcentury and Lightsource Renewables originally planned to finish the park (23) _____ August. They were forced to (24) _____, at significant extra cost.

16. A. of B. from C. in front of D. on
17. A. for B. from C. in D. by
18. A. for B. on C. by D. before
19. A. wanted to be B. needed to be C. had to be D. would like to be
20. A. required B. suggested C. warned D. deployed
21. A. at the scene B. at the venue C. on the spot D. on the site
22. A. in time B. on time C. at the moment D. by the time
23. A. before the end of B. by the end of C. during the month of D. by the month of
24. A. bring both projects forward B. produce both the projects forward
C. categorize both the projects D. decide both the projects

25-30 Comprehension passage : Choose the best option. This set of questions are based on the following:

Rules and Regulations for Members of Brightwood Leisure Centre

Membership allows an individual to use the leisure centre's facilities subject to the conditions of their membership and availability. Please note prices may change and/or increase from time to time.

All members must read and agree to follow the rules below before using the leisure centre facilities.

Membership Rules

General

1. The owners reserve the right to terminate membership for breach of the rules, or behaviour which is damaging to the character or interests of the club or offensive to other members or staff.
2. Members must advise staff of any personal disability or illness such as a heart condition, eye or hearing

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problems and other conditions before using the facilities to help to avoid accidents or injuries to themselves and others.

3. Whilst using the club facilities all Members accept responsibility for their state of health and physical condition.
4. The owners' responsibility or liability for damage or loss to Members' property is strictly limited to any damage or loss occurring as a direct result of the negligence of owners or their staff.
5. No pets will be allowed in the club or its grounds with the exception of guide dogs.
6. Entry to the club is permitted only through the main reception entrance.
7. The owners may at any time withdraw all or any part of the club facilities for any period or periods where and when it is necessary for repair, maintenance, alteration or for safety reasons.

Making Changes to Membership

All memberships are payable monthly by Direct Debit - normally taken on the 5th of each month.

If you wish to cancel your membership, you must contact the Membership Secretary in writing giving 2 weeks' notice. Joining fees will not be refunded unless you cancel within 14 days of joining.

In the case of having to temporarily suspend membership due to long/medium term injury, illness or pregnancy, you must obtain written acceptance of the suspension from the Club Manager.

All membership is personal to each Member, however it is possible to transfer membership to another names person providing notice is given to the Membership Secretary by the 15th of the month. The transferee will be required to complete a Membership Application form but will not be required to pay a joining fee or pay any of the membership subscriptions which have been paid in advance by the original member.

A Member who wishes to transfer membership may not actively market such a transfer (for example on the internet) and may only transfer to a friend or family member.

Lockers

Lockers are provided to secure and protect your personal belongings and valuables while exercising. For security reasons and the benefits of other members all lockers must be emptied by the end of each visit.

All lockers will be checked and emptied by leisure centre staff at the end of every day and any contents will be disposed of for security reasons. This policy is adopted for Member's safety and security.

Personal Belongings

Our liability to compensate you in the case of loss or damage other than death or personal injury is limited to a reasonable amount having regard to such factors as to whether the damage was due to a negligent act or omission by us.

If any personal property is found please hand in at the reception. Any property that is not claimed within 28 days will be donated to a local charity.

Cars must be parked correctly in the car park. No liability is accepted for loss or damage to cars or property and are left at the owners risk.

25. If you wish to cancel your membership, you must _____.

- A. contact the membership secretary
C. convince the membership secretary

- B. inform the membership secretary
D. repay the membership secretary

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26. Entry to the club is permitted only through _____.
- A. the main gate B. the parking lot C. the main reception entrance D. the rear gate
27. Membership may be put on hold due to _____.
- A. illness B. criminal record C. death D. financial problems
28. Damage to members' vehicles _____.
- A. is unlikely due to secure parking B. will be paid for by the centre if it is their fault
C. is not the responsibility of the centre D. may result due to negligence.
29. Lockers _____.
- A. should be emptied every day B. could be used for keeping belongings overnight
C. would be in the custody of member D. would be supervised by the staff.
30. Membership transfers through a public medium _____.
- A. is not encouraged B. is appreciated by the management
C. could lead to cancellation of membership D. would be done by the management

Stop. Do not turn the next page. Wait for the invigilator's signal.

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Mathematics M.C.Q's

No. of Questions: 50 (from 31 to 80)
Questions start from page 5

Time allowed: 50 Minutes
Negative markings: Yes

Q31 If $x^2 - 36 > 0$, what are the possible values of x ?

- A) $x > 6$
- B) $x < 6$
- C) $x > -6$
- D) $x < -6$ or $x > 6$

Q32 Points $R = (6, 4)$, $Q = (4, 3)$, and $P = (-2, b)$ are collinear. What is the value of b ?

- A) 0
- B) 1
- C) 2
- D) 3

Q33 What is the perimeter of the triangle with vertices $L = (1, 5)$, $M = (-3, -3)$, and $N = (3, 1)$?

- A) $6\sqrt{10} + 4\sqrt{13}$
- B) $6\sqrt{5} + 2\sqrt{13}$
- C) $4\sqrt{5} + 2\sqrt{18}$
- D) None of these

Q34 If $f(x)$ is a linear function such that $f(2) = 5$ and $f(4) = 13$, $f(x) =$

- A) $f(x) = 3x - 4$
- B) $f(x) = 4x - 3$
- C) $f(x) = 4x + 3$
- D) None of these

Q35 If $2x^{-5} = 64$, what is the value of x ?

- A) 2
- B) 1.5
- C) 1
- D) 0.5

Q36 When n is divided by 12, the remainder is 6. What is the remainder when n is divided by 6?

- A) 0
- B) 1
- C) 2
- D) 3

Q37 If x is the average of k and 10, and y is the average of k and 4, what is the average of x and y , in terms of k ?

- A) $\frac{k+14}{4}$
- B) $\frac{k+14}{42}$
- C) $\frac{k+7}{2}$
- D) $7k$

Q38 $6.7 \times 10^{-2} =$

- A) 0.0067
- B) 0.067
- C) 0.67
- D) 670

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Q39 If x and y are distinct prime numbers less than 10, which of the following *cannot* be the sum of x and y ?

- A) 5
- B) 6
- C) 7
- D) 8

Q40 If the radius of a circle is increased by 10% then the area is increased by

- A) 2.1%
- B) 21%
- C) 121%
- D) None of these

Q41 In a right isosceles triangle, the lengths of the two nonhypotenuse sides are designated a . What is the perimeter of the triangle in terms of a ?

- A) $4a$
- B) a^2
- C) $(2 + \sqrt{2})a$
- D) None of these

Q42 The first term in a sequence is -5 , and each subsequent term is 6 more than the immediately preceding term. What is the value of the 104th term?

- A) 607
- B) 613
- C) 618
- D) 619

Q43 In the sequence $\frac{1}{8}, \frac{1}{4}, \frac{1}{2}, \dots$ each term after the first is equal to the previous term times a constant. What is the value of the 13th term?

- A) 228
- B) 256
- C) 512
- D) 1024

Q44 If $x + y = \alpha - \beta$ and $x - y = \alpha + \beta$, then xy is

- A) $\alpha^2 + \beta^2$
- B) $-\alpha\beta$
- C) $\alpha\beta$
- D) None of these

Q45 In the xy -coordinate system, if $(-3, \beta)$ and $(\alpha - 3, \beta - 3)$ are two points on the line defined by $x + 3y = 12$, then $\alpha =$

- A) 5
- B) 7
- C) 9
- D) 11

Q46 What is the product of the distinct prime factors of 150?

- A) 150
- B) 75
- C) 50
- D) 30

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Q47 If $x|y + 9| > 0$, which of the following must be true?

- A) $x < 0$
- B) $x > 0$
- C) $y < -9$
- D) $y > -9$

Q48 The average of three consecutive integers such that twice the greatest integer is 2 less than 3 times the least integer is

- A) 6
- B) 7
- C) 8
- D) None of these

Q49 The area of a circle of radius r is the same as the area of a square of side a . Ratio of r to a is

- A) 1 : 1
- B) $a : r\pi$
- C) $a : r$
- D) None of these

Q50 Humera wants to put up fencing around three sides of her rectangular yard and leave a side of 20 feet unfenced. If the yard has an area of 680 square feet, how many feet of fencing does she need?

- A) 40
- B) 68
- C) 74
- D) 88

Q51 If the price of CNG increases by 20% and Rizwana intend to spend only 5% more on CNG, by how much % should she reduce the quantity of CNG she buys?

- A) 0.125%
- B) 12.5%
- C) 33.33%
- D) None of these

Q52 All possible values of an integer variable x satisfying the conditions below are:

$$3x + 9 < 14 \text{ and } 1 - x \leq 3$$

- A) -2, -3, -4, -5
- B) -2, -1, 0, 1
- C) 1, 2, 3, 4
- D) None of these

Q53 What is the smallest integer u for which $5^u > 625$?

- A) 3
- B) 4
- C) 5
- D) 6

Q54 Which of the following is not a solution to the equation $x^3 - x^2 - 9900x = 0$?

- A) -99
- B) 0
- C) 100
- D) 1000

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Q55 The average of 5 consecutive integers starting with m as the first integer is n . What is the average of following integers?

$$m + 1, m + 3, m + 5, m + 7, m + 9$$

- A) $m + 4$
- B) $n + 6$
- C) $m + 5$
- D) None of these

Q56 An entry test conducted by IBA demanded that the test takers answer 45 quantitative questions within 65 minutes. Which of the following is closest to the average amount of time the test takers can spend on each question?

- A) 2 minutes, 18 seconds
- B) 2 minutes, 10 seconds
- C) 1 minute, 29 seconds
- D) 1 minute, 49 seconds

Q57 A jar has three black marbles and three white marbles. If you draw three marbles, replacing each marble before drawing the next one, what is the probability that you will draw at least one black marble?

- A) $\frac{1}{2}$
- B) $\frac{3}{8}$
- C) $\frac{5}{8}$
- D) $\frac{7}{8}$

Q58 If $3x + 2y = 1$ and $2x + 3y = 4$, then $x + y$ must be

- A) 1
- B) 2
- C) 3
- D) $1 - y$

Q59 How many 2-digit numbers satisfy the following conditions:

The units digit is smaller than the tens digit?

- A) 50
- B) 45
- C) 35
- D) 30

Q60 Solve the inequality $3(x + 4) < 4x$

- A) $x < -12$
- B) $x > -12$
- C) $x < 12$
- D) $x > 12$

Q61 The first three terms of a sequence are -2 , 4 , and -8 . If each subsequent term is the product of the preceding two terms, how many of the first 90 terms are negative?

- A) 16
- B) 30
- C) 45
- D) None of these

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Q62 If $f(x) = x + 2$ and $f(g(1)) = 6$, which of the following could be $g(x)$?

- A) $3x$
 - B) $x + 3$
 - C) $x - 3$
 - D) $2x + 1$
-

Q63 For all values of u for which it is defined, the expression $\frac{u^2 - 5u + 4}{u^2 - u}$ can be simplified to

- A) $\frac{4-u}{u}$
 - B) $\frac{u-4}{u}$
 - C) $\frac{4+u}{u}$
 - D) $-4u + u$
-

Q64 Which of the following is divisible by 9?

- A) 2,999,777
 - B) 3,888,666
 - C) 4,777,555
 - D) 5,666,444
-

Q65 In the xy -plane, the graph of the function h is a line. If $h(-1) = 4$ and $h(5) = 1$, what is the value of $h(0)$?

- A) 2.2
 - B) 3.3
 - C) 3.5
 - D) 3.7
-

Q66 Which of the following is equivalent to $(x + 2)(x^4 + 16)(x - 2)(x^2 + 4)$?

- A) $x^2 - 4$
 - B) $x^4 - 16$
 - C) $x^8 - 256$
 - D) None of these
-

Q67 What is the least possible value of $(x + 2)^2$ if $-3 \leq x < 0$?

- A) -4
 - B) -1
 - C) 0
 - D) 1
-

Q68 A circle is tangent to both axes. If the distance from the origin to the centre of the circle is r , what is the area of the circle?

- A) $\frac{\pi r^2}{2}$
- B) πr^2
- C) $2\pi r$
- D) None of these

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Q69 If the function f is defined by the equation $f(x, y) = x^2 y^3$ and $f(a, b) = 10$, what is the value of $f(2a, 2b)$?

- A) 50
- B) 100
- C) 160
- D) 320

Q70 If the sum of the interior angles of a regular polygon measures up to 1440 degrees, how many sides does the polygon have?

- A) 10 sides
- B) 9 sides
- C) 8 sides
- D) 7 sides

Q71 What is the area of the circle defined by the equation $(x - 5)^2 + (y + 7)^2 = 3^2$?

- A) 3π
- B) 6π
- C) 9π
- D) 18π

Q72 What are the roots of the equation $3x^2 + 24x = 27$?

- A) $(-1, 9)$
- B) $(1, 9)$
- C) $(1, -9)$
- D) $(-1, -9)$

Q73 If $2^{(-5y)} = 32^{(2+y)}$, then value of y is

- A) 2
- B) 1
- C) 0
- D) -1

Q74 Which of the following sets contains only factors of 180?

- A) $\{12, 15, 16, 30\}$
- B) $\{12, 18, 20, 22\}$
- C) $\{1, 2, 4, 9, 15\}$
- D) $\{2, 9, 30, 16\}$

Q75 A Pythagorean triple is a triple of positive integers (a, b, c) such that a right triangle exists with legs a, b and hypotenuse c . Following are Pythagorean triples, except

- A) (3, 4, 5)
- B) (5, 12, 13)
- C) (10, 11, 12)
- D) (10, 24, 26)

Q76 What is the length of the diagonal of a square whose area is 289 square inches?

- A) $289\sqrt{2}$
- B) $289\sqrt{3}$
- C) $17\sqrt{2}$
- D) $17\sqrt{3}$

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Q77 Freed and Sami are standing 45 miles apart and they start walking toward each other at the exact same moment. If Freed's speed is 4 miles per hour and Sami's speed is 5 miles per hour, how many miles has Sami walked when they meet?

- A) 5
- B) 20
- C) 25
- D) 30

Q78 If Sami can finish a job in 3 hours and Maria can finish the same job in 12 hours; in how many hours could they finish the job if they worked on it together at their respective rates?

- A) 2
- B) 2.4
- C) 3.25
- D) 4

Q79 There are eight job applicants sitting in a waiting room – four women and four men. If two of the applicants are selected at random, what is the probability that both will be the men?

- A) $\frac{1}{2}$
- B) $\frac{3}{7}$
- C) $\frac{3}{14}$
- D) $\frac{1}{10}$

Q80 At a restaurant, you must choose an appetizer, a main course and a desert. If there are two possible appetizers, three possible main courses, and five possible deserts, how many different meals one can order?

- A) 10
- B) 20
- C) 30
- D) 40

End of The Test.