1) The mathematician who was awarded Abel’s prize for a proof of Fermat’s Last Theorem is [Question ID = 19249]

1. Andrew Wiles. [Option ID = 46987]  
2. Johan F. Nash. [Option ID = 46988]  
3. S. R. Srinivasa Varadhan. [Option ID = 46989]  
4. Lennart Carleson. [Option ID = 46990]  

Correct Answer :-  
• Andrew Wiles. [Option ID = 46987]

2) Founder of Indian Mathematical Society(IMS) was [Question ID = 19252]

1. Asutosh Mukherjee. [Option ID = 47000]  
2. S. Narayana Aiyer. [Option ID = 47001]  
3. M.T. Narayaniyengar. [Option ID = 47002]  
4. V. Ramaswamy Aiyer. [Option ID = 46999]  

Correct Answer :-  
• V. Ramaswamy Aiyer. [Option ID = 46999]

3) Let R be a commutative ring with identity. If R is an Artinian domain, then the total number of prime ideals in R is [Question ID = 19280]

1. 1 [Option ID = 47111]  
2. infinite. [Option ID = 47114]  
3. [Option ID = 47113]  
4. 2 [Option ID = 47112]  

Correct Answer :-  
• 1 [Option ID = 47111]

4) Riemann hypothesis is associated with the function [Question ID = 19250]

1. \( f(s) = \int_0^\infty t^{s-1} e^{-t} \, dt \). [Option ID = 46991]  
2. \( f(x, y) = \int_0^1 t^{x-1} (1-t)^{y-1} \, dt \). [Option ID = 46992]  
3. Hermite polynomial \( f(s) = \sum_{n=1}^{\infty} \frac{1}{n^s}, \ s \in \mathbb{C} \). [Option ID = 46994]  
4. \( f(s) = \sum_{n=1}^{\infty} \frac{1}{n^s}, \ s \in \mathbb{C} \). [Option ID = 46993]  

Correct Answer :-  
• \( f(s) = \sum_{n=1}^{\infty} \frac{1}{n^s}, \ s \in \mathbb{C} \). [Option ID = 46993]

5) For the stream function of a two dimensional motion, which of the following is not true [Question ID = 19297]

1. Stream function is constant along a stream line. [Option ID = 47181]  
2. Stream function is harmonic. [Option ID = 47180]  
3. Stream function exists for steady motion of compressible fluid. [Option ID = 47179]  
4. Stream function has dimension \( L^2T^{-2} \). [Option ID = 47182]  

Correct Answer :-  
• Stream function has dimension \( L^2T^{-2} \). [Option ID = 47182]

6) The famous Indian mathematician Srinivas Ramanujan passed away in the year [Question ID = 19248]

1. 1920 [Option ID = 46984]  
2. 1922 [Option ID = 46985]  
3. 1921 [Option ID = 46983]  
4. 1919 [Option ID = 46986]  

Correct Answer :-  
• 1920 [Option ID = 46984]

7) Let F be a finite field with 9 elements. How many elements of F have order 8? [Question ID = 19287]
8) For a viscous compressible fluid Consider the following statements:

(I) Stress matrix is symmetric.

(II) Kinematic coefficient of viscosity is dependent on the mass.

(III) Rate of dilatation is $\nabla \cdot \mathbf{q}$.

Then

Correct Answer :-
- 4 [Option ID = 47140] 

9) Let $f : R \rightarrow R'$ be a ring homomorphism. Assume that 1 and 1' are multiplicative identities of the rings $R$ and $R'$ respectively. Then $f(1) = 1'$ if

I $f$ is onto.

II $f$ is one-one.

III $R$ is a domain.

IV $R'$ is a domain.

The correct options are

Correct Answer :-
- only I and III are true. [Option ID = 47164] 

10) For a solid stationary sphere of radius $a$ placed in an incompressible fluid of uniform stream with velocity $-U \hat{i}$:

(I) velocity potential $\phi(r, \theta) = U \cos \theta (r + \frac{a^3}{2r^2})$.

(II) there exist two stagnation points $(a, 0)$, $(a, \pi)$.

(III) stagnation pressure $p_\infty + \frac{1}{2} \rho U^2$, $p_\infty$ is a pressure at $\infty$.

(IV) velocity at any point of surface of sphere is $(0, \ U \sin \theta, 0)$.

Then

Correct Answer :-
- only I, II, III are true. [Option ID = 47176] 

11) Let $R = \{a + ib : a, b \in \mathbb{Z}\}$. Then $R$ is a Euclidean domain with
12) Consider the sequence of Lebesgue measurable functions \( f_n \) on \( \mathbb{R} \)

\[
f_n(x) = \begin{cases} 
5, & x \geq 2^n \\
0, & x < 2^n.
\end{cases}
\]

Then \( \lim_{n \to \infty} \int_{-\infty}^{\infty} f_n(x) \, dx \)

[Question ID = 19263]
1. does not exist [Option ID = 47046]
2. equals 0 [Option ID = 47043]
3. equals 5 [Option ID = 47044]
4. equals \( \infty \) [Option ID = 47045]

Correct Answer :-
- equals \( \infty \) [Option ID = 47045]

13) Let \( f(x) = \sin x + \cos x \) on \([0, \pi]\). Then \( \|f\|_\infty \) is equal to

[Question ID = 19269]
1. 1 [Option ID = 47067]
2. \( 2\sqrt{2} \) [Option ID = 47070]
3. \( \sqrt{2} \) [Option ID = 47068]
4. \( 1/\sqrt{2} \) [Option ID = 47069]

Correct Answer :-
- \( \sqrt{2} \) [Option ID = 47068]

14) Let \( f \) be a continuous function on a finite interval \([a, b]\). Then

\[
\lim_{t \to \infty} \int_{a}^{b} f(x) \sin tx \, dx
\]

[Question ID = 19260]
1. equals 0 [Option ID = 47033]
2. equals sup \( x \in [a, b] \) \( f(x) \) [Option ID = 47034]
3. does not exist [Option ID = 47032]
4. equals \( \int_{a}^{b} f(x) \, dx \) [Option ID = 47031]

Correct Answer :-
- equals 0 [Option ID = 47033]

15)
Let \((X, d)\) be a metric space and \(A \subseteq X, B \subseteq X\). Consider the following statements:

I If \(x \notin A\) then \(d(x, A) > 0\).
II If \(A \cap B = \emptyset\), then \(d(A, B) \geq 0\).
III If \(A\) is closed and \(x \notin A\) then \(d(x, A) > 0\).
IV If \(A\) and \(B\) are closed and \(A \cap B = \emptyset\) then \(d(A, B) \geq 0\).

Then,

**Correct Answer:**
* only III is correct. [Option ID = 47028]
20) The general integral of the partial differential equation \( yzp + xzq = xy \), where \( p = \frac{\partial z}{\partial x} \), \( q = \frac{\partial z}{\partial y} \) (\( G \) being an arbitrary function) is

\[
\begin{align*}
1. & \quad z^2 = x^2 - G(x^2 + y^2) \quad \text{[Option ID = 47150]} \\
2. & \quad z^2 = y^2 + G(x^2 + y^2) \quad \text{[Option ID = 47147]} \\
3. & \quad z^2 = y^2 + G(x^2 - y^2) \quad \text{[Option ID = 47149]} \\
4. & \quad z^2 = x - G(x^2 - y^2) \quad \text{[Option ID = 47148]}
\end{align*}
\]

Correct Answer:

\[ z^2 = y^2 + G(x^2 - y^2) \quad \text{[Option ID = 47149]} \]

21) Let \( f(x) = \begin{cases} x^2 \sin \frac{1}{x}, & x \neq 0 \\ 0, & x = 0 \end{cases} \). Then

\[
\begin{align*}
1. & \quad \text{For any } \delta > 0, f \text{ is not monotonic on } [0, \delta] \quad \text{[Option ID = 47020]} \\
2. & \quad f \text{ has a local extremum at } x = 0 \quad \text{[Option ID = 47021]} \\
3. & \quad \text{For any } \delta > 0, f \text{ is convex on } [0, \delta] \quad \text{[Option ID = 47022]} \\
4. & \quad f' \text{ is continuous at } x = 0 \quad \text{[Option ID = 47019]}
\end{align*}
\]

Correct Answer:

\[ \text{For any } \delta > 0, f \text{ is not monotonic on } [0, \delta] \quad \text{[Option ID = 47020]} \]

22) Let \( F = \mathbb{Q}(\sqrt{2}, \sqrt{3}) \). Then \( F \) is minimal splitting field of the polynomial \( (x^2 - 2)(x^2 - 3) \) over \( \mathbb{Q} \). The field \( F' \) is not the minimal splitting field of which of the following polynomials over \( \mathbb{Q} \)

\[
\begin{align*}
1. & \quad x^4 - 10x^2 + 1 \quad \text{[Option ID = 47135]} \\
2. & \quad x^4 - x^2 + 6 \quad \text{[Option ID = 47137]} \\
3. & \quad x^4 + x^2 + 1 \quad \text{[Option ID = 47136]} \\
4. & \quad x^4 + x^2 + 25 \quad \text{[Option ID = 47138]}
\end{align*}
\]

Correct Answer:
23) An elementary solution of the partial differential equation

\[ \frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} = 0 \]

is of the form \( \vec{r} = xi + yj, \vec{r}' = x'i + y'j \)

1. \( u = \log |\vec{r}| \) \[ \text{[Option ID = 47154]} \]
2. \( u = \log \frac{1}{|\vec{r} + \vec{r}'|} \) \[ \text{[Option ID = 47151]} \]
3. \( u = \log \frac{1}{|\vec{r}'|} \) \[ \text{[Option ID = 47153]} \]
4. \( u = \log \frac{1}{|\vec{r} - \vec{r}'|} \) \[ \text{[Option ID = 47152]} \]

Correct Answer: 
\( u = \log \frac{1}{|\vec{r} - \vec{r}'|} \) \[ \text{[Option ID = 47152]} \]

24) Let \( E = \{ x \in (0, \sqrt{2}) : x \text{ is a rational number} \} \cup \{ y \in [2, 3] : y \text{ is an irrational number} \} \)
Then the Lebesgue measure of \( E \) is

1. \( \sqrt{2} \) \[ \text{[Option ID = 47048]} \]
2. \( 1/2 \) \[ \text{[Option ID = 47049]} \]
3. \( \sqrt{2} \) \[ \text{[Option ID = 47050]} \]
4. \( \sqrt{2} + 1 \) \[ \text{[Option ID = 47047]} \]

Correct Answer: 
\( 1 \) \[ \text{[Option ID = 47048]} \]

25) Let \( H \) be a Sylow \( p \)-subgroup and \( K \) be a \( p \)-subgroup of a finite group \( G \). Which of the following is incorrect is incorrect \( (H \text{ char } G \text{ means } H \text{ is characteristic in } G) \)

1. \( K \triangleleft G \Rightarrow K \subset H \). \[ \text{[Option ID = 47119]} \]
2. \( K \triangleleft G \Rightarrow K \text{ char } H \). \[ \text{[Option ID = 47121]} \]
3. \( K \subset H \text{ if } K \triangleleft G \). \[ \text{[Option ID = 47120]} \]
4. \( K \triangleleft G \neq H \cap K \triangleleft H \). \[ \text{[Option ID = 47122]} \]

Correct Answer: 
\( K \triangleleft G \neq H \cap K \triangleleft H \) \[ \text{[Option ID = 47122]} \]

26)
A two dimensional motion with complex potential \( w = U(z + \frac{a^2}{z}) + ik \log \frac{z}{a} \) has
(I) stream lines as circle \(|z| = a\).
(II) circulation zero about circle \(|z| = a\).
(III) has two stagnation points in general.
(IV) velocity at infinity equal to (-U).

Then

[Question ID = 19295]
1. only I, IV are true. [Option ID = 47172]
2. only I, III, IV are true. [Option ID = 47173]
3. only I, II, III are true. [Option ID = 47171]
4. only II, III, IV are true. [Option ID = 47174]

Correct Answer :-
• only I, III, IV are true. [Option ID = 47173]

27) Let \( G \) be an abelian group of order 15. Define a map \( \phi : G \to G \) by \( \phi(g) = g^8 \) for all \( g \in G \). Consider the statements:
   I \( \phi \) is a homomorphism.
   II \( \phi \) is one-to-one.
   III \( \phi \) is onto.
Then

[Question ID = 19281]
1. only I and III are true. [Option ID = 47117]
2. only I and II are true. [Option ID = 47116]
3. only I is true. [Option ID = 47115]
4. all statements are true. [Option ID = 47118]

Correct Answer :-
• all statements are true. [Option ID = 47118]

28) Let \( \xi \) be a primitive \( n^{th} \) root of unity where \( n \equiv 2( \mod 4) \). Then \( [\mathbb{Q}(\xi) : \mathbb{Q}(\xi^2)] \)
   is
   (Here \([V : F] \) denotes the dimension of the vector space \( V \) over \( F \))

[Question ID = 19285]
1. 1 [Option ID = 47131]
2. 2 [Option ID = 47132]
3. \( \phi(n) \) [Option ID = 47133]
4. \( \phi(n)/2 \) [Option ID = 47134]

Correct Answer :-
• 1 [Option ID = 47131]

29) The closed topologist’s sine curve \( \{(x, \sin \frac{1}{x}) | x \in (0, 1] \} \) as subspace of real line \( \mathbb{R} \) is

[Question ID = 19272]
1. a path connected space [Option ID = 47081]
2. connected but not locally connected [Option ID = 47079]
Let \( R(T) \) and \( N(T) \) denote the range space and null space of the linear transformation \( T : P_2(\mathbb{R}) \rightarrow M_{2 \times 2}(\mathbb{R}) \) which is given by
\[
T(f) = \begin{pmatrix} f(1) - f(2) & 0 \\ 0 & f(0) \end{pmatrix}.
\]

Then

**Question ID = 19275**

1. \( \dim(R(T)) = 2 \text{ and } \dim(N(T)) = 1 \) [Option ID = 47094]
2. \( \dim(R(T)) = 0 \text{ and } \dim(N(T)) = 2 \) [Option ID = 47093]
3. \( \dim(R(T)) = 2 \text{ and } \dim(N(T)) = 0 \) [Option ID = 47091]
4. \( \dim(R(T)) = 1 \text{ and } \dim(N(T)) = 1 \) [Option ID = 47092]

**Correct Answer:**
- \( \dim(R(T)) = 2 \text{ and } \dim(N(T)) = 1 \) [Option ID = 47094]

**Question ID = 19265**

1. \(-i\frac{z+1}{z-1}\) [Option ID = 47053]
2. \(\frac{z+1}{z-1}\) [Option ID = 47052]
3. \(i\frac{z+1}{z-1}\) [Option ID = 47051]
4. \(i\frac{z-1}{z+1}\) [Option ID = 47054]

**Correct Answer:**
- \(-i\frac{z+1}{z-1}\) [Option ID = 47053]

**Question ID = 19274**

1. only I, III, and IV are true [Option ID = 47089]
2. all the statements are true. [Option ID = 47090]
3. only III is true [Option ID = 47088]
4. only I and II are true [Option ID = 47087]

**Correct Answer:**
- only I, III, and IV are true [Option ID = 47089]
33) For the boundary value problem: $L(y) = y'' = 0$, $y(0) = 0$, $y'(1) = 0$, the Green’s function is

$$G(x, \xi) = \begin{cases} x, & x \leq \xi \\ -x, & x > \xi \end{cases}$$

1. 
2. 
3. 
4. 

Correct Answer: 

$$G(x, \xi) = \begin{cases} x, & x \leq \xi \\ -x, & x > \xi \end{cases}$$

34) Let $E = \{x \in [0, \pi) : \sin 4x < 0\}$. Then Lebesgue measure of $E$ is

$$\frac{\pi}{2}$$

1. 
2. 
3. 
4. 

Correct Answer: 

$$\frac{\pi}{2}$$

35) Let $x_1, x_2, \ldots, x_n$ be non-zero real numbers. With $x_{ij} = x_ix_j$, let $X$ be the $n \times n$ matrix $(x_{ij})$. Then

1. the matrix $X$ is positive definite if $(x_1, x_2, \ldots, x_n)$ is a non-zero vector 
2. the matrix $X$ is positive semi definite for all $(x_1, x_2, \ldots, x_n)$ 
3. for all $(x_1, x_2, \ldots, x_n)$, zero is an eigenvalue of $X$ 
4. it is possible to chose $x_1, x_2, \ldots, x_n$ so as to make the matrix $X$ non singular

Correct Answer: 

for all $(x_1, x_2, \ldots, x_n)$, zero is an eigenvalue of $X$. 

Praveen Chhikara
36) Let $A = \{ f : \mathbb{R} \to \mathbb{R} | f \text{ is continuous on } \mathbb{Q} \text{ and discontinuous } \mathbb{Q}' \}$, where $\mathbb{Q}$ is the set of all rational numbers and $\mathbb{Q}'$ is the set of all irrational numbers. Let $\mu$ be a counting measure on $A$. Then

$\mu(A) = \sum_{q \in \mathbb{Q}} \frac{1}{2^n}$
1. $\mu(A)$ is infinite [Option ID = 47026]
2. $\mu(A) = 0$ [Option ID = 47024]
3. $\mu(A) = 2$ [Option ID = 47025]

Correct Answer: $\mu(A) = 0$ [Option ID = 47024]

37) Let $R = \mathbb{Z}_2 \oplus \mathbb{Z}_3 \oplus \mathbb{Z}_5$. Then the total number of zero divisors in $R$ is

1. 15 [Option ID = 47106]
2. 10 [Option ID = 47105]
3. 20 [Option ID = 47104]
4. 22 [Option ID = 47103]

Correct Answer: 22 [Option ID = 47103]

38) Let $a, b \in \mathbb{C}$ such that $0 < |a| < |b|$. Then the Laurent expression of $\frac{1}{(z-a)(z-b)}$ in the annulus $|a| < |z| < |b|$ is

$\frac{1}{a - b} \left[ \sum_{n=0}^{\infty} \frac{z^n}{b^n} + \sum_{n=0}^{\infty} \frac{a^n}{z^n+1} \right]$
1. $\frac{1}{a - b} \left[ \sum_{n=0}^{\infty} \frac{z^n}{b^n+1} + \sum_{n=0}^{\infty} \frac{a^n}{z^n+1} \right]$ [Option ID = 47057]
2. $\frac{1}{a - b} \left[ \sum_{n=0}^{\infty} \frac{z^n}{a^n+1} + \sum_{n=0}^{\infty} \frac{b^n}{z^n+1} \right]$ [Option ID = 47055]
3. $\frac{1}{a - b} \left[ \sum_{n=0}^{\infty} \frac{z^n}{a^n+1} + \sum_{n=0}^{\infty} \frac{b^n}{z^n+1} \right]$ [Option ID = 47056]
4. $\frac{1}{a - b} \left[ \sum_{n=0}^{\infty} \frac{z^n}{b^n+1} + \sum_{n=0}^{\infty} \frac{a^n}{z^n+1} \right]$ [Option ID = 47058]

Correct Answer: $\frac{1}{a - b} \left[ \sum_{n=0}^{\infty} \frac{z^n}{b^n+1} + \sum_{n=0}^{\infty} \frac{a^n}{z^n+1} \right]$ [Option ID = 47055]

39) Consider the following statements:

I. $x^3 - 9$ is not irreducible over $\mathbb{Z}_7$.
II. $x^3 - 9$ is not irreducible over $\mathbb{Z}_{11}$.

Then

[Question ID = 19279]
40) The contour integral $\int_C \frac{e^z}{(z^2+\pi^2)^2} \, dz$, where $C$ is the circle $|z| = 4$ taken anti-clockwise equals

$\frac{i}{2\pi}$ \hspace{1cm} $\frac{4}{\pi}$ \hspace{1cm} $\frac{i}{4}$ \hspace{1cm} $\frac{i}{\pi}$

Correct Answer: $\frac{i}{\pi}$

41) The pressure $p(x, y, z)$ in steady flow of inviscid incompressible fluid of density $\rho$ with velocity $\vec{q} = (kx, -ky, 0)$, $k$ is a constant, under no external force when $p(0, 0, 0) = p_0$, is

$p_0 - \rho k^2(y^2 - x^2)/2$ \hspace{1cm} $p_0 - \rho k^2(y^2 + x^2)$ \hspace{1cm} $p_0 - \rho k^2(y^2 - x^2)$ \hspace{1cm} $p_0 - \rho k^2(y^2 + x^2)/2$

Correct Answer: $p_0 - \rho k^2(y^2 + x^2)/2$

42) Let $E$ be a Lebesgue non-measurable subset of $\mathbb{R}$. Define $f : \mathbb{R} \rightarrow \mathbb{R}$ by

$$f(x) = \begin{cases} 2, & x \in E \\ -2, & x \notin E \end{cases}.$$ 

Then

neither $f$ nor $|f|$ is Lebesgue measurable \hspace{1cm} $f$ is Lebesgue measurable but $|f|$ is not Lebesgue measurable \hspace{1cm} $f$ is not Lebesgue measurable but $|f|$ is Lebesgue measurable \hspace{1cm} $f$ and $|f|$ both are Lebesgue measurable.
43) Every non trivial solution of the equation \( y'' + (\sinh x)y = 0 \) has

- only finitely many zeros in \((0, \infty)\).
- infinitely many zeros in \((-\infty, 0)\).
- infinitely many zeros in \((0, \infty)\).
- at most one zero in \((0, \infty)\).

Correct Answer: 

\[ \text{Option ID = 47159} \]

44) Which of the following statements is true [Question ID = 19253]

1. If \( 0 \leq a_n \leq b_n \) and \( \sum b_n \) diverges then \( \sum a_n \) diverges.
2. \( \lim_{n \to \infty} a_n = 0 \), then \( \sum \frac{a_n}{a_n^2 + n^2} \) converges.
3. \( \sum_{k=1}^{\infty} \left( \tan^{-1} \frac{1}{k} - \tan^{-1} \frac{1}{k+1} \right) = \frac{\pi}{8} \)
4. \( \sum_{n=1}^{\infty} \frac{1}{n^3} \geq 2 \)

Correct Answer:

\[ \text{Option ID = 47004} \]

45) Which of the following statements is not true [Question ID = 19254]

1. The set of all algebraic numbers is countable. [Option ID = 47010]
2. The set of rational numbers is equivalent to the set of natural numbers. [Option ID = 47008]
3. Given a set \( A \), there exists a function \( f : A \to P(A) \) that is onto. \( (P(A) \) denotes power set of \( A) \)
4. There is one-one function taking \((-1, 1)\) onto \( \mathbb{R} \). [Option ID = 47007]

Correct Answer:

\[ \text{Option ID = 47009} \]

46) Which of the following statements is not true [Question ID = 19270]

1. An uncountable discrete space is not separable. [Option ID = 47072]
2. Every closed subspace of a separable space is separable. [Option ID = 47073]
3. Every compact metric space is Lindelof. [Option ID = 47074]
4. Every second countable space is separable. [Option ID = 47071]

Correct Answer:

\[ \text{Option ID = 47073} \]

47) Which of the following is not correct (Here \([V : F] \) denotes the dimension of the vector space \( V \) over \( F) [Question ID = 19284]

1. \([\mathbb{Q}(\sqrt{2}, \sqrt{3}, i, \sqrt{6}) : \mathbb{Q}] = 16.\) [Option ID = 47130]
2. \([\mathbb{Q}(\sqrt{2}, \sqrt{3}, i) : \mathbb{Q}] = 8.\) [Option ID = 47129]
3. \([\mathbb{Q}(\sqrt{3}) : \mathbb{Q}] = 2\). [Option ID = 47127]
4. \([\mathbb{Q}(\sqrt{3}, i) : \mathbb{Q}] = 4\). [Option ID = 47128]

Correct Answer :-
1. \([\mathbb{Q}(\sqrt{2}, \sqrt{3}, i, \sqrt{6}) : \mathbb{Q}] = 16\). [Option ID = 47130]

48) Which of the following Banach spaces is not a Hilbert space [Question ID = 19268]

1. \([L^2([0, 1]), \|\cdot\|_2] [Option ID = 47064]
2. \(\mathbb{R}^n\) with the norm \(\|x\| = \sqrt{\xi_1^2 + \xi_2^2 + \cdots + \xi_n^2}\), where \(x = (\xi_1, \xi_2, \cdots, \xi_n)\) [Option ID = 47065]
3. \(\mathbb{R}^n\) with the norm \(\|x\| = \max\{|\xi_1|, |\xi_2|, \cdots, |\xi_n|\}\), where \(x = (\xi_1, \xi_2, \cdots, \xi_n)\) [Option ID = 47066]
4. \([L^2, \|\cdot\|_2]\) [Option ID = 47063]

Correct Answer :-
1. \(\mathbb{R}^n\) with the norm \(\|x\| = \max\{|\xi_1|, |\xi_2|, \cdots, |\xi_n|\}\), where \(x = (\xi_1, \xi_2, \cdots, \xi_n)\) [Option ID = 47066]

49) Which of the following websites is of Mathematical Reviews [Question ID = 19251]

2. https://mathscinet.ac.in [Option ID = 46995]

Correct Answer :-

50) Let \(G\) be a cyclic group of order 42. The number of distinct composition series of \(G\) is [Question ID = 19283]

1. 8 [Option ID = 47126]
2. 16 [Option ID = 47123]
3. 10 [Option ID = 47125]
4. 6 [Option ID = 47124]

Correct Answer :-
1. 6 [Option ID = 47124]