PROVISIONAL ANSWER KEY

Question Paper Code:	78/2026/OL
Category Code:	219/2025, 720/2025
Exam:	Higher Secondary School Teacher (Mathematics)
Date of Test	05-05-2026
Department	Kerala Higher Secondary Education

Question1:-If A is a square matrix of order five and the dimension of the solution space $AX = 0$ is at least two. Then

A:-Rank $(A^2) \leq 3$

B:-Rank $(A^2) \geq 3$

C:-Rank $(A^2) = 3$

D:-Det $(A^2) \neq 0$

Correct Answer:- Option-A

Question2:-Let V be an inner product space consisting of the linear polynomials P: $[0, 1] \rightarrow R$ such that $p(x)=ax+b$; a, b $\in$ R with the inner product defined as : $\langle p, q \rangle = \int_0^1 p(x)q(x)dx,$ p, q $\in$V. Then an orthonormal basis for V is

A:-{1, x}

B:-$\{1, \sqrt{3}x\}$

C:-$\left\{1, x - \frac{1}{2}\right\}$

D:-$\{1, \sqrt{3}(2x - 1)\}$

Correct Answer:- Option-D

Question3:-The number of non-singular 3×3 matrices over F_2, the finite field with two elements is

A:-384

B:-168

C:-2^3

D:-3^2

Correct Answer:- Option-B

Question4:-Let the minimal polynomial of a linear transformation T : $R^4 \rightarrow R^4$ be y^2 + y+ 1, then

A:-All Eigen values of T are real

B:-T has no real Eigen values

C:-T has exactly two real Eigen values

D:-T has exactly one real Eigen value

Correct Answer:- Option-B

Question5:-Let T : $V \rightarrow V$ be a linear operator, then which of the following is/are true ?
i. {0} is invariant under T
ii. V is invariant under T
iii. kernel T is invariant under T
iv. image of T is invariant under T

A:-i only

B:-i and ii only

C:-i, ii and iii only

D:-All of the above

Correct Answer:- Option-D

Question6:-Let A be a square matrix of order four with dim [N(A-2I)]=2, dim [N(A-4I)] = 1 and
Rank (A) = 3, then which of the following is not true ?

A:-0, 2 and 4 are Eigen values of A

B:-Det (A) = 0

C:-A is not diagonalizable

D:-Trace of A = 8

Correct Answer:- Option-C

Question7:-The number of all non-singular linear transformations T : $R^4 \to R^3$ is

A:-3

B:-1

C:-0

D:-4

Correct Answer:- Option-C

Question8:-The value of c in the Mean Value Theorem $f'(c)=\frac{f(b)-f(a)}{b-a}$ for the function $f(x)=18x^2-9x+7$ on [3, 37] is

A:-5

B:-20

C:-25

D:-None of the above

Correct Answer:- Option-B

Question9:-Which of the following is not Riemann-integrable on [0, 1] ?

A:- $f(x)=\begin{cases} 0 & \text{if } x=0 \\ 1 & \text{if } x>0 \end{cases}$

B:- $f(x)=\begin{cases} x+1 & \text{if } x \in \mathbb{Q} \\ x & \text{if } x \in \mathbb{R}-\mathbb{Q} \end{cases}$

C:- $f(x)=\begin{cases} 1 & \text{if } x=0 \\ \frac{1}{n} & \text{if } x=\frac{m}{n} \text{ with } (m,n)=1 \\ 0 & \text{if } x \in \mathbb{R}-\mathbb{Q} \end{cases}$

D:-Both (B) and (C)

Correct Answer:- Option-B

Question10:-Let A be a 5×4 matrix and B be a 4×5 matrix. Then which of the following is necessarily an eigen value of AB ?

A:-0

B:-1

C:--1

D:-None of the above

Correct Answer:- Option-A

Question11:-Let V be a finite vector space. Then which of the following is a possibility for |V| ?

A:-|V|=38

B:-|V|=28

C:-|V|=18

D:-|V|=8

Correct Answer:- Option-D

Question12:-Let f:[0, 1] $\rightarrow$ R and g:[0, 1] $\rightarrow$ R are two functions defined as f(x) = $\begin{cases} \frac{1}{n}; & x=\frac{1}{n}, n\epsilon N \\ 0; & \text{otherwise} \end{cases}$ and g(x)= $\begin{cases} n; x=\frac{1}{n}, n\epsilon N \\ 0; \text{otherwise} \end{cases}$, then

A:-Both f and g are Riemann integrable functions

B:-f is Riemann integrable function but g is not

C:-g is Riemann integrable function but f is not

D:-Neither f nor g is Riemann integrable function

Correct Answer:- Option-B

Question13:-If f(x) is a twice differentiable function and |f(x)|<α,$|f''(x)|<\beta$ in the range x>a, then

A:-$|f'(x)|<2\sqrt{\alpha\beta}$; if x>a

B:-$|f'(x)|\leq 2\sqrt{\alpha\beta}$; if x>a

C:-$|f'(x)|>2\sqrt{\alpha\beta}$; if x>a

D:-$|f'(x)|=2\sqrt{\alpha\beta}$; if x>a

Correct Answer:- Option-A

Question14:-Consider the improper integrals $I_1=\int_1^\infty \frac{dx}{x\sqrt{x^2+1}}$ and $I_2=\int_0^\infty e^{-x^2}\,dx,$ then

A:-I_1 divergent but I_2 convergent

B:-I_1 convergent but I_2 divergent

C:-both I_1 and I_2 convergent

D:-both I_1 and I_2 divergent

Correct Answer:- Option-C

Question15:-Let f be a bounded measurable function on a set X of finite measure, then

A:-$\left|\int_E f d\mu\right| = \int_E |f| d\mu$

B:-$\left|\int_E f d\mu\right| \leq \int_E |f| d\mu$

C:-$\left|\int_E f d\mu\right| \geq \int_E |f| d\mu$

D:-$\left|\int_E f d\mu\right| < \int_E |f| d\mu$

Correct Answer:- Option-B

Question16:-Let f be a non negative measurable function on E, then which of the following statement is false ?

A:-$\int_E f d\mu = 0$ if and only if f = 0 on E

B:-If $A \subset B$ then $\int_A f d\mu \leq \int_B f d\mu$

C:-If $\mu(E) = 0$ then $\int_E f d\mu = 0$, even if $f(x) = \infty$ for every $x \in E$

D:-If $f(x)=0$, $\forall x \in E$ then $\int_E f d\mu = 0$, even if $\mu(E) = \infty$

Correct Answer:- Option-A

Question17:-Let f be a bounded function defined on the closed bounded interval [a, b],
i. If f is Riemann integrable over [a, b] then f is Lebegue integrable over [a, b] and the two integrals are equal
ii. If f is Riemann integrable over [a, b] then f is Lebegue integrable over [a, b] and the two integrals may be equal
Then which is true ?

A:-only i is true

B:-only ii is true

C:-i is false

D:-neither i nor ii is true

Correct Answer:- Option-A

Question18:-Which of the following is true ?

A:-$\Gamma(n+1) = n\Gamma(n)$ for any real number

B:-$\Gamma(n) = n\Gamma(n+1)$ for any real number

C:-$\Gamma(n+1)=n\Gamma(n)$ for $n > 1$

D:-$\Gamma(n)=n\Gamma(n+1)$ for $n > 1$

Correct Answer:- Option-C

Question19:-$f(x, y)=2x^3-3x^2+2y^3+3y^2$, $\nabla f = 0$ at

A:-(0, 0), (0, -1), (1, 0), (1, -1)

B:-(0, 0), (0, 1), (-1, 0), (-1, 1)

C:-(0, 0), (1, -1) only

D:-None of these

Correct Answer:- Option-A

Question20:-$f : R^2 \to R$ defined by $f(x_1, x_2) = x_1+x_2+x_2^2$, then the directional derivative at the point (1, 3) in the direction $\vec{u} = (1, 0)$ is

A:-1

B:-7

C:-2

D:-13

Correct Answer:- Option-A

Question21:-Which of the following statement is true for the following function ?

f(x, y)= $\begin{cases} \frac{xy}{x^2+y^2}, & (x,y) \neq (0,0) \\ 0, & \text{otherwise} \end{cases}$

A:-partial derivatives exist and f is differentiable at (0,0)

B:-partial derivatives not exist and f is not differentiable at (0,0)

C:-partial derivatives exist but f is not differentiable at (0,0)

D:-partial derivatives not exist but f is differentiable at (0,0)

Correct Answer:- Option-C

Question22:-Let G be a group, which is not cyclic. Then which is not necessarily true ?

A:-Order of G is 35

B:-Order of G is 55

C:-Order of G is 255

D:-None of these

Correct Answer:- Option-B

Question23:-What is the non admissible value of order of a group G if the converse of Lagranges Theorem is true ?

A:-35

B:-55

C:-255

D:-None of these

Correct Answer:- Option-D

Question24:-The factor group $\mathbb{R}/\mathbb{Z}$is isomorphic to <G, .>. Then G is

A:-G = {z$\in\mathbb{C}$:|z|=1}

B:-$\mathbb{R}^*$

C:-$\mathbb{Q}^*$

D:-$\mathbb{C}^*$

Correct Answer:- Option-A

Question25:-Let p be a prime and let <G, .> be a group where G = {x $\in \mathbb{C} / x^{p^n}$ =1, n$\in \mathbb{N}$}. Now consider the following three statements
i. G is an infinite p-group
ii. G is an infinite group in which every element possess finite order
iii. G is an infinite group in which every proper subgroups of G are of finite order.
Then which is true ?

A:-only i is true

B:-both i and ii are true

C:-all i, ii and iii are true

D:-none of these

Correct Answer:- Option-C

Question26:-Let G be a group of order $5^4 \times 7^3$. Now consider the statements
i. G has a subgroup of order 7
ii. G has atleast 6 elements of order 7
Then which is true ?

A:-only i is true

B:-only ii is true

C:-both i and ii are true

D:-neither i nor ii is true

Correct Answer:- Option-C

Question27:-Let A be a 13 $\times$13 matrix where A = $\begin{bmatrix} 0 & 0 & 0 & . & . & . & 0 & 0 & 1 \\ 0 & 0 & 0 & . & . & . & 0 & 1 & 0 \\ 0 & 0 & 0 & . & . & . & 1 & 0 & 0 \\ . & . & . & . & . & . & . & . & . \\ 0 & 1 & 0 & . & . & . & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 & . & . & . & 0 & 0 \end{bmatrix}$ then det A=

A:-1

B:--1

C:-0

D:-2

Correct Answer:- Option-A

Question28:-Which is not true ?

A:-A_{30} has a sylow 11-subgroup of order 121

B:-the sylow 11-subgroup of A_{30} is abelian

C:-A_{30} has a normal subgroup of order 11

D:-the sylow 11-subgroup of S_{30} is a subgroup of A_{30}

Correct Answer:- Option-C

Question29:-Consider the following two statements,
i. as a group $\mathbb{Z}$ and $2\mathbb{Z}$ are isomorphic
ii. as a ring $\mathbb{Z}$ and $2\mathbb{Z}$ are isomorphic

A:-only i is true

B:-only ii is true

C:-both i and ii are true

D:-both i and ii are false

Correct Answer:- Option-A

Question30:-Let F=E=$\mathbb{Z}_7$ and consider the evaluation homomorphism $\phi_4 : F \to E$. Then ϕ_4 $(3x^{106}+5x^{99}+2x^{53})$ is

A:-1

B:-0

C:-3

D:-2

Correct Answer:- Option-B

Question31:-Let F is a field of 2^3 elements. Then <F, +> is isomorphic to

A:-$\mathbb{Z}_2 \times \mathbb{Z}_2 \times \mathbb{Z}_2$

B:-$\mathbb{Z}_2 \times \mathbb{Z}_4$

C:-$\mathbb{Z}_8$

D:-$\mathbb{Q}_8$

Correct Answer:- Option-A

Question32:-Let R be the ring of all functions from $\mathbb{R} \to \mathbb{R}$. Then which of the following is an ideal of $\mathbb{R}$?

A:-the set of all constant functions from $\mathbb{R} \to \mathbb{R}$

B:-the set of all functions from $\mathbb{R} \to \mathbb{R}$ such that f(2)=0

C:-the set of all continuous functions from $\mathbb{R} \to \mathbb{R}$

D:-the set of all differentiable functions from $\mathbb{R} \to \mathbb{R}$

Correct Answer:- Option-B

Question33:-Let F be field of 2^{60} elements and K be a subfield of F. Then which of the following is a possibility for number of elements in K ?

A:-2^{18}

B:-2^{22}

C:-2^{26}

D:-2^{30}

Correct Answer:- Option-D

Question34:-The spitting field of $\sqrt[3]{2}$ over Q is,

A:-$Q\left(\sqrt[3]{2}\right)$

B:-$Q\left(\sqrt[3]{2}, i\right)$

C:-$Q\left(\sqrt[3]{2}, i, \sqrt{3}\right)$

D:-$Q\left(\sqrt[3]{2}, i\sqrt{3}\right)$

Correct Answer:- Option-D

Question35:-The set of integers $\mathbb{Z}$with the binary operation "*" defined as a*b=a+b+1 for a, b $\in \mathbb{Z}$ is a group. The identity element of the group is

A:-0

B:-1

C:--1

D:-3

Correct Answer:- Option-C

Question36:-For which of the following topology, the set of all real numbers $\mathbb{R}$ is disconnected ?

A:-Usual topology

B:-Co-finite topology

C:-Lower limit topology

D:-Co-countable topology

Correct Answer:- Option-C

Question37:-If f is a continuous function from a topological space (X, $\mathfrak{C}$) into a topological space (Y, $\mathfrak{I}$), then

A:-f^{-1} (A) is compact if A is a compact subset of Y

B:-For all V$\in \mathfrak{I}$, f^{-1} (V)$\in \mathfrak{C}$

C:-$\overline{f(A)} \subset f(\overline{A})$, for all A$\subset$X

D:-None of these

Correct Answer:- Option-B

Question38:-
If (X, $\mathfrak{I}$) is a topological space satisfy the T_1-axiom and then which of the following is incorrect ?

A:-Singleton subset of X is closed

B:-The intersection of all neighborhoods of an arbitrary point of X is a singleton

C:-The co-finite topology on X is stronger than the topology $\mathfrak{I}$

D:-Every finite subset of X is closed

Correct Answer:- Option-C

Question39:-Which of the following is a Hausdorff space ?

A:-Co-finite topology on an infinite set

B:-Co-countable topology on an uncountable set

C:-Indiscrete topology on an infinite set

D:-Discrete topology on an infinite set

Correct Answer:- Option-D

Question40:-Consider $\mathbb{R}$ with discrete topology. Let A = (0, 1), then set of all limit points of A is

A:-Φ

B:-{0, 1}

C:-(0, 1)

D:-[0, 1]

Correct Answer:- Option-A

Question41:-Which one of the following is not true ?

A:-Every indiscrete space is compact

B:-Every topology defined on a finite set is compact

C:-An infinite discrete space is compact

D:-Every co-finite topological space is compact

Correct Answer:- Option-C

Question42:-Consider $\mathbb{R}$ with usual topology, then which of the following is true ?

A:-$\mathbb{Q}$ is a closed subset of $\mathbb{R}$

B:-$\mathbb{Q}$ is a dense subset of $\mathbb{R}$

C:-$\mathbb{Q}$ is an open subset of $\mathbb{R}$

D:-$\mathbb{Q}$ is an connected subset of $\mathbb{R}$

Correct Answer:- Option-B

Question43:-Which of the following is the closed subset of $\mathbb{C}$?

A:-$S_1=\{z\in\mathbb{C}:z=x+iy$ with x and y are rational$\}$

B:-$S_2=\{z\in\mathbb{C}:z=0$ or $z=\frac{1}{n}$, for positive integers n$\}$

C:-$S_3=\{z\in\mathbb{C}:z=2$ and $|z|<2\}$

D:-$S_4=\{z\in\mathbb{C}:0<|z|\leq 1\}$

Correct Answer:- Option-B

Question44:-The radius of convergence of the series $\frac{z}{2}+\frac{1.3}{2.5}z^2+\frac{1.3.5}{2.5.8}z^3+\cdots$ is

A:-$\frac{2}{3}$

B:-$\frac{1}{2}$

C:-$\frac{3}{2}$

D:-1

Correct Answer:- Option-C

Question45:-The value of $\int_{|z|=1} e^z z^{-n} dz$ is

A:-$\frac{2\pi i}{(n-1)!}$

B:-$\frac{2\pi i}{n!}$

C:-0

D:-1

Correct Answer:- Option-A

Question46:-The function $f(z)=z^3$ with z = x+iy is analytic

A:-in the entire z-plane

B:-for positive values of x and y only

C:-at x = 0, y = 0 only

D:-on the line y = 1 only

Correct Answer:- Option-A

Question47:-The value of $\int_{|z|=\pi} \cot \pi z \, dz$ is

A:-$2\pi i$

B:-7i

C:-6i

D:-14i

Correct Answer:- Option-D

Question48:-The singularity of the function f(z)= $\frac{e^z}{(z-1)^4}$ at z = 1 is

A:-Simple pole

B:-Pole of order 4

C:-Removable singularity

D:-Essential singularity

Correct Answer:- Option-B

Question49:-The analytic function f(z) of real part e^x cosy is

A:-e^z

B:-e^{iz}

C:-e^{-iz}

D:-$e^{|z|}$

Correct Answer:- Option-A

Question50:-Which of the following normed space is not a Banach space ?

A:-l^p, $1 \leq p \leq \infty$ with norm $||\ \ ||_p$

B:-$L^p(E)$, $1 \leq p \leq \infty$ with norm $||\ \ ||_p$ and E is a Lebegue measure subset of R

C:-C_{00}, the space of scalar sequences having only fininely many nonzero terms

D:-$C_0=\{x \in l^\infty$, x(j) converges to 0}

Correct Answer:- Option-C

Question51:-The property $|\langle x, y\rangle|^2 \leq \langle x, x\rangle\langle y, y\rangle$ of inner products is known as

A:-Positive definiteness

B:-Schwarz inequality

C:-Polarization identity

D:-Parallelogram law

Correct Answer:- Option-B

Question52:-Let H be a Hilbert space. If $S^\perp$ denotes the set of all vectors orthogonal to S, then which of the following is true ?

A:-$\{0\}^\perp=H$

B:-$H^\perp=\phi$

C:-$S \cap S^\perp=\phi$

D:-$S^\perp$ is not a closed linear subspace of H

Correct Answer:- Option-A

Question53:-The distance between two orthonormal vectors in an inner product space

A:-0

B:-1

C:-2

D:-$\sqrt{2}$

Correct Answer:- Option-D

Question54:-An operator A is unitary, then

A:-$A^*=A$

B:-$A^*=A^{-1}$

C:-$AA^*=A^2$

D:-$A^*=A^2$

Correct Answer:- Option-B

Question55:-X and Y are two Banach spaces and $F : X \to Y$ is a closed linear map. Which of the following is always true for F ?

A:-One to one

B:-F^{-1} exists

C:-Continuous

D:-Not continuous

Correct Answer:- Option-C

Question56:-Which of the following is always true ?

A:-Every Banach space is Hilbert

B:-Every Hilbert space is Banach

C:-A space is Hilbert if and only if it is Banach

D:-Every Banach space is closed

Correct Answer:- Option-B

Question57:-The partial differential equation $u_{xx} - x^2u_{yy}=0$ is

A:-Parabolic

B:-Ellyptic

C:-Hyperbolic

D:-None of these

Correct Answer:- Option-C

Question58:-Lagrange's auxiliary equation corresponding to the partial differential equation $y^2zp+x^2zq=xy^2$ is

A:-$\frac{dx}{y^2z}+\frac{dy}{x^2z}=\frac{dz}{xy^2}$

B:-$\frac{dx}{y^2z}=\frac{dy}{x^2z}=\frac{dz}{xy^2}$

C:-$\frac{dx}{y^2z}+\frac{dy}{x^2z}+\frac{dz}{xy^2}=0$

D:-$\frac{dx}{y^2z}-\frac{dy}{x^2z}=\frac{dz}{xy^2}$

Correct Answer:- Option-B

Question59:-If the ends of the rod are insulated in one dimensional heat flow problem, the boundary condition is

A:-u(L, t)) is a constant

B:-$\frac{\partial u(L,t)}{\partial x}=0$

C:-$\frac{\partial u(L,t)}{\partial x}$ is a constant

D:-None of these

Correct Answer:- Option-B

Question60:-The two ordinary differential equations obtained by reducing the partial differential equation $u_{tt}=c^2u_{xx}$ by the method of separation of variables.

A:-X'' - kX = 0, Y'' - c^2kY = 0

B:-X'' - kX = 0, Y'' + c^2kY = 0

C:-X'' + kX = 0, Y'' - c^2kY = 0

D:-X'' + kX = 0, Y'' + c^2kY = 0

Correct Answer:- Option-A

Question61:-The function f satisfies the equation f'(x)-3f(x)=0, f(0)=e^2. Then the function is

A:-e^{2x+3}

B:-e^{3x+2}

C:-e^{2x-3}

D:-e^{3x-2}

Correct Answer:- Option-B

Question62:-General solution of the non homogeneous linear system $y_1' = y_2+e^{3x}$, $y_2' = y_1-3e^{3x}$

A:-$y_1=c_1e^{-x}+c_2e^{x}$, $y_2=-c_1e^{-x}+c_2e^{x}-e^{3x}$

B:-$y_2=c_1e^{-x}+c_2e^{x}$, $y_1=-c_1e^{-x}+c_2e^{x}-e^{3x}$

C:-$y_1=c_1e^{-x}+c_2e^{x}$, $y_2=-c_1e^{-x}+c_2e^{x}$

D:-$y_1=c_1e^{-x}+c_2e^{x}$, $y_2=-c_1e^{-x}+c_2e^{x}+e^{3x}$

Correct Answer:- Option-A

Question63:-Harmonic functions are solutions of

A:-Heat equation

B:-Wave equation

C:-Cauchy equation

D:-Laplace equation

Correct Answer:- Option-D

Question64:-What is the remainder when 1! + 2! + . . . +100! is divided by 15 ?

A:-0

B:-1

C:-2

D:-3

Correct Answer:- Option-D

Question65:-If $\phi(n) = \frac{n}{2}$, then which of the following is always true ?

A:-n is a prime number

B:-n is the product of two distinct primes

C:-n is of the form 2p, where p is an odd prime

D:-n is of the form 2^k, where $k \geq 2$

Correct Answer:- Option-D

Question66:-The smallest positive number n satisfying the linear congruences $n \equiv 1 \pmod 3$,
$n \equiv 2 \pmod 5$ and $n \equiv 3 \pmod 7$

A:-105

B:-157

C:-52

D:-73

Correct Answer:- Option-C

Question67:-24 divides 35x-47. Then which of the following can be the value of x ?

A:-0

B:-10

C:-13

D:-11

Correct Answer:- Option-C

Question68:-The Euler's ϕ function has the value $\phi(n)=18$. Then n is

A:-19

B:-24

C:-125

D:-36

Correct Answer:- Option-A

Question69:-Number of primitive roots of 54

A:-6

B:-2

C:-4

D:-5

Correct Answer:- Option-A

Question70:-Number of positive integers not greater than 3000 and are divisible by 3, 5 and 7

A:-1600

B:-1528

C:-1427

D:-1629

Correct Answer:- Option-D

Question71:-What does the term "feedback loop" signify in the context of assessment and evaluation ?

A:-A continuous process of providing feedback throughout the learning period

B:-A one-time assessment at the end of the academic year

C:-Ignoring student feedback

D:-Assessing teacher performance

Correct Answer:- Option-A

Question72:-What is the primary purpose of formative assessment in an evaluation system ?

A:-Assigning final grades

B:-Providing feedback during the learning process

C:-Ranking students in a class

D:-Conducting standardized testing

Correct Answer:- Option-B

Question73:-How does the concept of "Inclusive Education" align with effective teaching practices ?
i. By excluding students with diverse needs
ii. By accommodating and valuing the diversity of all students
iii. By focusing solely on advanced learners

A:-only i

B:-only ii

C:-only iii

D:-both i and iii

Correct Answer:- Option-B

Question74:-What does the acronym "STEM" represent in the context of education ?

A:-Scientific Techniques for Educational Management

B:-Structured Teaching and Effective Methods

C:-Science, Technology, Engineering and Mathematics

D:-Student Testing and Evaluation Measures

Correct Answer:- Option-C

Question75:-How does the concept of "Blooms Taxonomy" contribute to instructional design ?
i. By promoting a single level of cognitive engagement
ii. By categorizing cognitive skills into hierarchical levels
iii. By emphasizing rote memorization

A:-Only i

B:-Only ii

C:-Only iii

D:-Both i and iii

Correct Answer:- Option-B

Question76:-In a research context, what does reliability refer to ?

A:-The consistency and stability of measurement

B:-The generalizability of findings

C:-The ethical conduct of the researcher

D:-The accuracy of statistical tests

Correct Answer:- Option-A

Question77:-What is plagiarism in the context of research ethics ?

A:-Proper citation of sources

B:-Independent research contributions

C:-Unauthorized use of others' work without proper attribution

D:-Collaborative research

Correct Answer:- Option-C

Question78:-What is the primary purpose of obtaining informed consent in research ?

A:-To manipulate participants

B:-To ensure confidentiality

C:-To respect participants' autonomy and rights

D:-To control external variables

Correct Answer:- Option-C

Question79:-What is the initial step in the research process ?

A:-Data analysis

B:-Formulating a hypothesis

C:-Conducting a literature review

D:-Identifying the research problem

Correct Answer:- Option-D

Question80:-What characterizes a longitudinal research design ?

A:-Data collected from diverse geographic locations

B:-Data collected from multiple groups

C:-Data collected over an extended period from the same subjects

D:-Data collected based on participants' astrological signs

Correct Answer:- Option-C

Question81:-Which of the following statement is/are correct about the suspension of fundamental rights ?
i. Parliament can suspend fundamental rights by passing a law with a two-third majority
ii. During an emergency, the President, by order, can suspend the enforcement of some fundamental rights
iii. By the proclamation of emergency issued on the ground of war or external aggression, all fundamental rights are automatically suspended
iv. Fundamental Rights cannot be suspended

A:-Only i and ii

B:-Only ii and iii

C:-Only ii

D:-Only iv

Correct Answer:- Option-C

Question82:-Match the following Articles in the Constitution with suitable provisions.
a. Article 124 i. Extension of jurisdiction of High Court to Union territories
b. Article 136 ii. Special leave to appeal by the Supreme Court
c. Article 230 iii. Constitution of Supreme Court
d. Article 224 iv. Appointment of additional and acting judges in High Court by the President

A:-a-iii, b-ii, c-iv, d-i

B:-a-ii, b-iii, c-i, d-iv

C:-a-i, b-iv, c-iii, d-ii

D:-a-iii, b-ii, c-i, d-iv

Correct Answer:- Option-D

Question83:-Assertion (A) : The Legislature of a state or High Court has no role in the removal of the Governor.
Reason (R) : No Governor can be removed from the office till the completion of five year.

A:-Both (A) and (R) are true and (R) is the correct explanation of (A)

B:-Both (A) and (R) are true but (R) is not the correct explanation of (A)

C:-(A) is true but (R) is false

D:-(A) is false but (R) is true

Correct Answer:- Option-C

Question84:-Which of the following features has been correctly listed about Centre-State relations in
India ?
i. Constitution ensures equal representation of states in Rajya Sabha.
ii. Legislative and executive powers are divided between Central Government and State Governments.
iii. Union Parliament can make any law for implementing international treaties and agreements without the state's consent, even if the subjects are covered in the State List.
iv. If the Rajya Sabha passes a resolution, supported by one-third of members present and voting, that it is necessary or expedient in the national interest, then parliament can make laws on any subject in the State List.

A:-Only iii and iv

B:-Only ii, iii and iv

C:-Only ii and iii

D:-All the above

Correct Answer:- Option-C

Question85:-The Chairman and the members of the UPSC shall only be removed from office, on the ground of misbehaviour, by an order of

A:-the Prime Minister on the recommendation of Council of Ministers

B:-the President on the basis of resolution passed by the Parliament

C:-the President on the report of Supreme Court

D:-the Prime Minister on the recommendation of Supreme Court

Correct Answer:- Option-C

Question86:-Arrange the formation of following commissions in chronological order.
i. National Human Rights Commission
ii. National Commission for Protection of Child Rights
iii. National Commission for Women
iv. National Commission for Scheduled Tribes

A:-i, ii, iii, iv

B:-iii, i, iv, ii

C:-iv, i, iii, ii

D:-i, iii, iv, ii

Correct Answer:- Option-B

Question87:-How parliament can amend a list in the Seventh Schedule of the Constitution of India ?

A:-The amendment Bill passed in both the Houses of Parliament by a majority of members present and voting

B:-The amendment Bill passed in both Houses of Parliament by two third majority of members present and voting and a majority of total membership of the House

C:-Ratification by more than half of State Legislatures

D:-The amendment Bill passed in both Houses of Parliament by two third majority of members present and voting and a majority of total membership. Ratification by not less than half of State Legislatures are also required

Correct Answer:- Option-D

Question88:-Which of the following statements about the duration of State Emergency is correct ?
i. The proclamation, under Article 356, will cease to operate at the expiry of two months unless both houses of the Parliament have approved it before that period.
ii. A proclamation issued under Article 356 can be in force normally for one year at a stretch.
iii. Parliament can extend the period of State emergency beyond one year, if the Election Commission certifies that it is necessary on account of the difficulties in holding the general elections to Legislative Assembly of the concerned state.
iv. Parliament can extend the period of State Emergency beyond one year if a proclamation of emergency under Article 352 is in operation.

A:-Only iii and iv

B:-Only ii, iii and iv

C:-Only ii and iii

D:-All the above (i, ii, iii and iv)

Correct Answer:- Option-D

Question89:-Originally Preamble was not considered as a part of constitution. But the Supreme Court held that it was a part of Constitution. The Supreme Court gave this verdict in which of the following case ?

A:-Kesavananda Bharati vs State of Kerala

B:-Golak Nath vs State of Punjab

C:-Minerva Mills vs Union of India

D:-A.K. Gopalan vs State of Madras

Correct Answer:- Option-A

Question90:-Which of the following statement is/are not the objective of Right to Information Act ?
i. to empower the citizens
ii. to promote transparency and accountability in the working of government
iii. to make our democracy work for the people in the real sense
iv. to have time bound redressal of grievances of citizen

A:-Only i and iii

B:-Only ii, iii and iv

C:-Only iv

D:-All the above (i, ii, iii and iv)

Correct Answer:- Option-C

Question91:-Swami Vagbhatananda denounced caste barriers and idol worship and exhorted his followers to abjure such practices. He was the founder of

A:-Sidhasramam

B:-Atma Vidya Sangham

C:-Yogakshema Sabha

D:-Arya Samaj

Correct Answer:- Option-B

Question92:-The first full fledged Malayalam work printed in the language using Malayalam types was

A:-Christiya Matatatwam

B:-Samkshepa Vedartham

C:-Vrithamanjari

D:-Malayalavilasam

Correct Answer:- Option-B

Question93:-The famous Kerala reform leader K. Ayyappan is related with
i. Popularised the idea of Misrabhojanam.
ii. Promoted women education.
iii. Encouraged Gender Equality.
iv. Founded Sahodara Sangham.

A:-i, iii are correct

B:-ii only correct

C:-i and iv are correct

D:-All are correct

Correct Answer:- Option-C

Question94:-"Enlighten through education and strengthen by union" who said these words ?

A:-Swami Vivekananda

B:-Sri Narayana Guru

C:-Swami Dayananda Saraswathi

D:-K. Kelappan

Correct Answer:- Option-B

Question95:-With regard to the incident Gandhiji said, "A miracle of modern times and a smriti which is the people's charter of spiritual emancipation".

A:-Pandara pattom proclamation

B:-Temple entry proclamation

C:-Kundara proclamation

D:-Tenants Act

Correct Answer:- Option-B

Question96:-Proclamation of Free Primary Education in 1817 is remarkable in the education sector. The proclamation was during the reign of

A:-Sri Chithirathirunal Balarama Varma

B:-Marthanda Varma

C:-Gouri Parvathy Bhai

D:-Regent Setu Lakshmi Bai

Correct Answer:- Option-C

Question97:-Nalappat Narayana Menon has immortalised himself in Malayalam poetry by his beautiful elegy

A:-Odakuzhal

B:-Kannunirtulli

C:-Duravastha

D:-Vinapuvu

Correct Answer:- Option-B

Question98:-As a part of the campaign for eradication of untouchability a Satyagraha was organised during the period of December-April 1948 and it evoked the willing participation of princes of Royal families of Cochin. Which Satyagraha was mentioned above ?

A:-Guruvayoor Satyagraha

B:-Mahad Satyagraha

C:-Paliyam Satyagraha

D:-Vaikom Satyagraha

Correct Answer:- Option-C

Question99:-The news paper Swadesabhimani, was owned by

A:-K. Ramakrishna Pillai

B:-Abdul Khadir Maulavi

C:-Sir Syed Ahmed Khan

D:-Sisir Kumar Ghosh

Correct Answer:- Option-B

Question100:-Royal proclamation of July 26, 1859 is related to

A:-Mappila Revolt

B:-Vaikom Satyagraha

C:-Shanar Agitation

D:-Paliyam Satyagraha

Correct Answer:- Option-C