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Maximum: 100 marks

Time: 1 hour and 30 minutes

- 1. Which among the following statement is not true?
 - (A) Lord Curzon ordered to partition Bengal on July 20, 1905
 - (B) Partition of Bengal Came into force on October 16, 1905
 - (C) Bengal was partitioned in order to disrupt the unity between Hindus and Muslims
 - (D) All are true
- **2.** Consider the following statements and find out which among them are correct?
 - 1. 2023 Lokmanya Tilak National Award was given to Narendra Modi.
 - 2. It was given on August 1 of every year.
 - 3. August 1 is the death anniversary of Lokmanya Tilak.
 - 4. Narendra Modi is the 41st recipient of this Award.
 - (A) 1 and 2 are correct

(B) 1, 2 and 3 are correct

(C) 2, 3 and 4 are correct

- (D) All are correct
- 3. 2023 G 20 Empower summit was held in:
 - (A) Gandhinagar

(B) Bhubaneswar

(C) Chennai

- (D) New Delhi
- **4.** Which among the following is not true?
 - (A) Jupiter 3 is world's largest private satellite
 - (B) Jupiter 3 was launched in the month of August 2023
 - (C) It was launched in Florida, USA
 - (D) It was launched by Elon Musk exploration company spacex
- **5.** Which among the following statements is not true?
 - (A) Simon Commission was an Indian Statutory Commission
 - (B) Simon Commission was created in November 1927
 - (C) Indians protested against the commission because all the members of the commission were Europeans
 - (D) The protest against the commission resulted in a lathicharge leading to the death of Bipin Chandra Pal

6.	Whi	ch am	ong the following are true in connectio	n with	n Civil Disobedience Movement?								
	1.	Civil Disobedience Movement was started with Dandi March.											
	2.	Dandi March was started on March 12, 1930.											
	3.	The March was started with 78 followers of Gandhiji.											
	4.	Gandhiji broke salt law on April 6, 1930.											
		(A)	1 and 2 are true	(B)	2 and 3 are true								
		(C)	1 and 4 are true	(D)	All are true								
7.	Which among the following statement is true with regard to the Government of India Act 1935?												
		(A) The Act was passed during the time of Lord Linlithgow											
		(B)	The Act introduced dyarchy in the pro-	ovince	\mathbf{s}								
		(C) The Act provided separate autonomy to the provinces											
		(D)	The Act was repealed in 1936										
8.	Vaikunta Swamikal Founded Samatva Samajam in the year :												
		(A)	1835	(B)	1836								
		(C)	1837	(D)	1840								
9.	Consider the following statements with regard to the removal untouchability in Kerala. Find out which is incorrect:												
		(A) C. Krishnan Championed against untouchability through Desabhimani											
		(B) T.K. Madhavan was a dynamic leader who stood against untouchability											
		(C)	Mannath Padmanabhan organised untouchability	Sava	arna Jatha against the practice of								
		(D)	K. Kelappan led vaikam satyagraha a	agains	t untouchability								
10.	Whi	ch am	ong the following statements are true?	•									
	1.	Kera	la State gets rainfall both from South	West	and North-East Monsoons.								
	2.	South-West Monsoons starts towards the end of May and fades out by about Septen											
	3.	Sout	h-West Monsoon was discovered by Hi	ppalu	s, the Egyptian Pilot in 45 A.D.								
		(A)	Only 1 is true	(B)	Only 2 is true								
		(C)	Only 3 is true	(D)	All are true								
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11.	Regular e	exercise and controlled diet are c	onducive ——	good health.	
	(A)	for	(B)	with	
	(C)	in	(D)	to	
12.	Either the	e captain or his crew ————	responsible	for the mishap.	
	(A)	is	(B)	am	
	(C)	are	(D)	was	
13.	Choose th	ne correct question tag:			
	I am on the	he right track, ———			
	(A)	aren't I?	(B)	amn't I?	
	(C)	am I?	(D)	None of these	
14.	The crimi	nal was supposed to be	— European	, wearing —	- yellow T-shirt.
	(A)	an, a	(B)	a, an	
	(C)	an, an	(D)	a, a	
15.	When the	e opposition leader arrived, the n	neeting ——		
	(A)	started	(B)	had started	
	(C)	has started	(D)	will start	
16.	Which of	these is a Portmanteau word?			
	(A)	electrocute	(B)	brush	
	(C)	grasshopper	(D)	post office	
17.	It is bette	er to — a good dictionar	ry to find the	exact meaning of the	word.
	(A)	look at	(B)	look for	
	(C)	look on	(D)	look up	
18.	The antor	nym of <u>naive</u> :			
	(A)	sophisticated	(B)	proud	
	(C)	simple	(D)	guilty	
19.	The out of	f syllabus questions put the stud	dents ———		
	(A)	at bay	(B)	at bottom	
	(C)	at sea	(D)	at hand	

20.		er Prime Minister, P.V. Narasimha g. (give one-word substitute for the un		was a <u>person who could speak many</u> d words):
	(A)	lexicographer	(B)	polyglot
	(C)	linguist	(D)	glutton
21.	By adding	g soap in water, its surface tension :		
	(A)	Increases	(B)	Decreases
	(C)	Remains the same	(D)	Becomes infinite
22.	The exces	s pressure inside a soap bubble of rad	ius 'r' h	aving surface tension ' S ' is :
	(A)	$\frac{2S}{r}$	(B)	$\frac{S}{r}$
	(C)	$\frac{4S}{r}$	(D)	$\frac{3S}{r}$
23.	The princ	iple based on which Venturimeter wo	rks is :	
	(A)	Bernoulli's principle	(B)	Pascal's principle
	(C)	Newton's principle	(D)	Stoke's principle
24.		of radii of two wires of same materian, what is the ratio of stresses produce		1. If these wires are stretched by equal em?
	(A)	9:1	(B)	4:1
	(C)	1:9	(D)	1:4
25 .		modynamic process in which no heat	enters (or leaves the thermodynamic system is
	(A)	Isochoric	(B)	Isothermal
	(C)	Isobaric	(D)	Adiabatic
26.	The effici-		at engi	ne working between sink at 300 K and
	(A)	25	(B)	75
	(C)	50	(D)	80

27.	Under ste	eady state condition, tem	perature of a body —	
	(A)	Increases with time		
	(B)	Decreases with time		
	(C)	Does not change with	time and is same at a	ll points of the body
	(D)	Does not change with	time and can be differ	rent at different points of the body
28.		rent sources have ampli num to minimum intens		I interfer each other. Then the ratio of
	(A)	3:1	(B)	4:1
	(C)	9:1	(D)	1:3
29.	The proce	ess of achieving population	on inversion in a LAS	ER system is known as ———
	(A)	Stimulation	(B)	Absorption
	(C)	Inversion	(D)	Pumping
30.	When Ne	_	ed by a monochroma	tic light in reflected mode, the central
	(A)	Dark	(B)	White
	(C)	Bright	(D)	Yellow
31.	Which an	nong the following is an	example of a crystalli	ne material?
	(A)	Glass	(B)	Plastic
	(C)	Rubber	(D)	Salt
32.	Which sp spectrum		en atom lies in the	visible region of the electromagnetic
	(A)	Lymann Series	(B)	Balmer Series
	(C)	Brackett Series	(D)	Pfund Series
33.	Which an	nong the following nucle	us has the highest va	lue of binding energy per nucleon?
	(A)	Iron	(B)	Copper
	(C)	Tin	(D)	Zinc
34.	What is the	he value of the Lande's ş	g factor associated wit	th the atomic state symbol 3P_1 ?
	(A)	$\frac{1}{3}$	(B)	$\frac{2}{3}$
	(C)	$\frac{3}{2}$	(D)	$\frac{3}{1}$
		2		1
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35.	temp equi	perati	ility products of AgCl and PbCl ₂ are 1. are. Hydrochloric acid is added to a so m concentration of Cl ⁻ becomes 0.10 M m?	lution	n that contains Ag+ and Pb ²⁺ until the							
		(A)	$1.7 imes 10^{-5}\mathrm{M}$	(B)	$1.7 imes 10^{-4}\mathrm{M}$							
		(C)	$1.7 \times 10^{-3}\mathrm{M}$	(D)	$1.8 \times 10^{-10} \text{ M}$							
36.	Which of the following statements are INCORRECT?											
	(i)	i) A solution of EDTA can be standardized using CaCO ₃ .										
	(ii)	EDT	A combines with metal ions in a 1:1 ra	atio re	egardless of the charge on the cation.							
	(iii)		erally, the indicators used in EDTA ti ates with metal ions.	tratio	ons are organic dyes that form colored							
	(iv)		he determination of hardness of water, A chelate is incorporated in the buffer									
		(A)	(i) and (ii)	(B)	(i) and (iv)							
		(C)	(iii) and (iv)	(D)	None							
37.	Whi	ch of	the following statement(s) is/are related	l to H	eisenberg's Uncertainity Principle?							
	(i)	The	concept of orbitals for electrons instead	of or	bits.							
	(ii)	Broa	adening of molecular spectra.									
	(iii)	It is	related to the wave-particle duality of 1	partic	les.							
	(iv)	It af	fects the precision in measuring the en	ergy l	evels of molecules.							
		(A)	(i) alone	(B)	(i) and (iv)							
		(C)	(ii), (iii) and (iv)	(D)	All of these							
38.	Among the following compounds, which one exhibits all three types of chemical bonds: ionic covalent and coordinate bonds?											
		(A)	NH ₄ Cl	(B)	$\mathrm{KCl.MgCl}_2$							
		(C)	Hydrochloric acid	(D)	Fe(OH) ₃							
39.	Unp	ollute	ed rainwater is :									
		(A)	Neutral									
		(B)	Slightly acidic									
		(C)	Slightly basic									
		(D)	Slightly acidic or basic depending on t	he sea	ason							

40.		onversion of phenol to o-l reactive intermediate form		yde using chloroform and alkali, the
	(A)	Carbon free radical	(B)	Dichlorocarbene
	(C)	Phenoxide carbocation	(D)	CCl_3 carbanion
41.	The IUPA	AC name of the compound w	with the following s	structure is :
			H ₃ C CCCH	
	(A)	3-methyl-3-buten-1-yne	(B)	2-methyl-4-buten-1-yne
	(C)	2-methyl-1-buten-3-yne	(D)	3-methyl-1-butyne-3-ene
42.	The octan	e number of a fuel is determ	nined by comparin	ng the fuel to a mixture of :
	(A)	Iso-octane and n-heptane	(B)	Iso-octane and n-octane
	(C)	n-octane and the fuel	(D)	Iso-octane and the fuel
43.	What is the	he product of the ring-openi	ing reaction of an	epoxide on acid catalysed hydrolysis?
	(A)	An aldehyde and a ketone	e (B)	A ketone
	(C)	A glycol	(D)	A carboxylic acid
44.	In the var	n der Waals equation of rea	l gases, the param	eter "b" represents :
	(A)	Volume of the molecules		
	(B)	Attraction of the molecule	es	
	(C)	Average distance between	the molecules	
	(D)	Average velocity of the mo	olecules	
45.		s measured to be 1.0. Wha		ar wavelength. The absorbance of the
	(A)	10%	(B)	50%
	(C)	90%	(D)	100%

46.	In th	ne foll	owing reaction at equilibrium,									
$N_2O_4(g) \rightleftharpoons 2NO_2(g) \Delta H = +58 \text{ kJ}$												
	whic	ch of t	he following changes will cause the equ	ıilibri	um to shift to the right?							
		(A)	(A) Lowering of temperature									
		(B) Pressure is increased by adding N_2										
		(C)	Adding a catalyst to the system									
		(D)	Decreasing the pressure of the system	1								
47.	Whi	ch of t	the following solutions will have the hig	ghest	equivalent conductance?							
		(A)	0.1 M NaCl									
		(B)	0.01 M NaCl									
		(C)	0.001 M NaCl									
		(D)	All of the above will have same equiva	alence	conductance							
48.	How	man	y proton NMR signals will be obtained i	for isc	butane?							
		(A)	One singlet	(B)	One singlet and one quartet							
		(C)	One doublet and one quartet	(D)	One doublet and dectet							
49.	Whi	ch one	e is a WRONG statement about sieve tu	ibes?								
	(i)	The	y are found in pteridophytes and gymno	sperr	ns.							
	(ii)		y consist of vertical cells placed one abound walls by sieve pores.	ve th	e other forming long tubes connected at							
	(iii)	Siev	e areas do not form sieve plates.									
	(iv)	Siev	e areas are not well differentiated.									
		(A)	(i), (ii) and (iii)	(B)	(i), (iii) and (iv)							
		(C)	(ii) only	(D)	(i) and (ii)							
50.	Whi	ch am	ong the following statements is TRUE?									
	(i)	All a	algae possess chlorophyll and carotenes									
	(ii)	A pa	arasitic sporophyte over gametophyte is	found	d in ferns.							
	(iii)	Mul	ticellular branched rhizoids and leafy g	ameto	ophytes are found in all bryophytes.							
	(iv)	Ulot	hrix is a filamentous alga with flagellar	ted re	productive stages.							
	(v)	Mul	ticiliate spermatozoids are found in Pte	<i>ris</i> an	d Cycas.							
		(A)	(i), (ii) and (iii) correct; (iv) and (v) wro	ong								

(i), (ii) and (iv) correct; (iii) and (v) wrong (i), (iii) and (v) correct; (ii) and (iv) wrong

(i), (iv) and (v) correct; (ii) and (iii) wrong

(B)

(C) (D)

51.	Mate	ch the	followi	ng and	choose	e the	CORRE	CT answei	
		(a)	Catkin			(i)	Achyrai	nthes	
		(b)	Spadix			(ii)	Colocas	ia	
		(c)	Spike			(iii)	Coriano	dum	
		(d)	Umbel			(iv)	Ficus		
						(v)	Morus		
			(a)	(b)	(c)	((d)		
		(A)	(i)	(iii)	(iv)	((v)		
		(B)	(ii)	(v)	(iii)	((i)		
		(C)	(iv)	(iii)	(ii)	((i)		
		(D)	(v)	(ii)	(i)	((iii)		
52.	Choc	ogo th	o CORR	ЕСТ т	atch f	rom	the follo	wing :	
<i>02</i> .	CHOC	ose un	e conn	EOI III	awii i	10111	the lone	wing.	
	Bern	ry: —		-, Cypse	ella: —		, Re	gma: ——	, Syconium:
		(A)	Tomate	0,	Ricin	us,		Mimosa,	Piper
		(B)	Guava	,	Sunf	flowe	er,	Ricinus,	Ficus
		(C)	Piper,		Eupa	itorii	ım,	Mimosa,	Pine apple
		(D)	Mango	,	Caps	icum	1,	Banana,	Avocado
53.	Choo	se the	e CORR	ECT aı	nswer	:			
	(i)	Com	panion (cells ar	e nucl	eate	d cells of	phloem.	
	(ii)	Vess	els cont	ain onl	y livin	ıg cel	lls.		
	(iii)	Sieve	e cells a	re enuc	eleated	l at r	naturity.		
	(iv)	Abno	ormal se	condar	y grov	vth d	lue to acc	cessory car	nbia is found in Asparagus.
		(A)	True, I	False, T	rue, T	rue		(B)	True, False, True, False
		(C)	False,	True, T	rue, T	rue		(D)	False, True, False, True

- **54.** Which among the following statement is TRUE?
 - (i) Water absorbed by the roots reaches the top of a tree by transpiration pull and cohesion of water molecules.
 - (ii) Conduction of sap in old plants when heart wood decayed occurs through phloem.
 - (iii) Warburg effect is associated with bidirectional transport of xylem sap.
 - (iv) Parthenocarpic fruits are produced by spraying auxins on flowers.
 - (A) (i) and (ii)

(B) (i) and (iv)

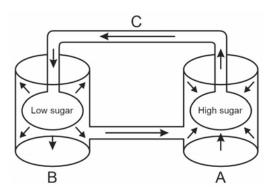
(C) (ii) and (iii)

- (D) (ii) and (iv)
- **55.** is the hydrogen transporter in the photosynthetic electron transport system.
 - (A) Cytochrome f

(B) Pheophytin

(C) Plastocyanin

- (D) Plastoquinone
- **56.** Which one of the following statements is NOT applicable to the experimental set up of Munch's mass flow hypothesis given below. Here chamber A contains concentrated sugar solution and chamber B contains dilute sugar solution.



- (A) Turgor pressure gradient is responsible for mass flow from A to B through C
- (B) Chamber A rapidly absorbs water and result in high TP
- (C) The water from chamber B will diffuse out and can again pass through the chamber A
- (D) The flow from A to B through C cannot be prolonged even after maintaining a continuous supply of sugar solution to chamber A
- **57.** Morphologically useful and edible part in pineapple is:
 - (A) Peduncle, bracts, perianth and pericarp
 - (B) Pericarp and thalamus
 - (C) Pericarp and placenta
 - (D) Exocarp and mesocarp

58.	A fibre y	ielding	plant wh	ere the	source c	of fibre is t	he p	hloem:
	(A)	Cann	abis sati	iva			(B)	Cocos nucifera
	(C)	Cotto	n				(D)	Bamboo
59 .	Choose t	he INC	ORRECT	`statem	ent fron	n the follow	wing	::
	(A)	The r	najor aeı	rosol pol	lutant p	present in	the j	et plane emission is CFC
	(B)	Oxide	es of carb	on give	rise to p	photochem	ical	smog and PAN
	(C)	CO, I	N ₂ O and	SO3 com	ibine wi	th haemog	globi	n and impede oxygen transport
	(D)	Oxyg	en is not	release	d in the	burning o	f coa	al
60.	Bharatpı	ır Bird	Sanctua	ry is als	o known	ı as		
	(A)	Chilk	ka Sancti	ıary			(B)	Darrah Sanctuary
	(C)	Keib	ul Lamba	ao Natio	nal parl	k	(D)	Keoladeo Ghana National park
61.	The com							air pollution occurred in 1952 were te and humidity or water from fog.
	(A)	CFC					(B)	NO_2
	(C)	SO_2					(D)	PAN
62.	Match th	e follow	ving and	choose t	he COR	RECT ans	swer	·:
	(a)	Raim	iona		(i)	Nuclear	fallo	ut
	(b)	Oxyg	en tank		(ii)	National	parl	k
	(c)	Torre	ey canon		(iii)	Thunder	drag	gon
	(d)	Sr90)		(iv)	Oil spilla	ıge	
					(v)	Climate	chan	age
		(a)	(b)	(c)	(d)			
	(A)	(i)	(iv)	(iii)	(v)			
	(B)	(ii)	(iii)	(iv)	(i)			
	(C)	(iii)	(iv)	(i)	(ii)			
	(D)	(iv)	(iii)	(v)	(i)			

63.	Which part of the heart conducting system is responsible for initiating the electrical imputhat stimulate the heart to contract?								
	(A)	Atrioventricular (AV) Node	(B)	Sinoatrial (SA) Node					
	(C)	Bundle of His	(D)	Purkinje fibers					
64.	When an heart?	electrical impulse reaches the Purkir	nje fibe	ers, what action do they initiate in the					
	(A)	Contraction of the atria	(B)	Relaxation of the ventricles					
	(C)	Contraction of the ventricles	(D)	Stimulation of the SA node					
65.	Which blo	ood cells are formed in the bone marrov	v from	magakaryocytes?					
	(A)	Erythrocytes	(B)	Monocytes					
	(C)	Basophils	(D)	Platelets					
66.	What is tl	he primary factor that shifts the oxyhe	moglol	oin dissociation curve to the right?					
	(A)	Decreased CO ₂ levels							
	(B)	Increased pH (alkalosis)							
	(C)	Decreased temperature							
	(D)	Increased 2, 3-BPG (2, 3 – bisphosph	oglyce	rate)					
67.	_	auscle contraction, which molecule bin	ds to	calcium ions to initiate the interaction					
	(A)	Troponin	(B)	Tropomyosin					
	(C)	Myosin	(D)	Titin					
68.	The neuro	phypophysis, is composed mainly of glia	al-like	cells called:					
	(A)	Pituicytes	(B)	Astrocytes					
	(C)	Microglia	(D)	Oligodendrocytes					
69.	Which str	ructure is responsible for the storage a	nd rele	ase of calcium ions in striated muscle					
	(A)	Sarcolemma	(B)	Sarcoplasmic reticulum					
	(C)	T-tubules	(D)	Myofibrils					

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70.	Mesokary	otic cells is present in :		
	(A)	Bacteria	(B)	Prions
	(C)	Dinoflagellate	(D)	Coenorhabditis
71.	Cisternae	, Tubules and Vesicles are the compo	nents of	·:
	(A)	Endoplasmic reticulum	(B)	Lysosomes
	(C)	Peroxisomes	(D)	Ribosomes
72.	The flavo	protein present in the Complex $I-of$	the inne	er mitochondrial membrane is :
	(A)	Sccinate Dehydrogenase	(B)	Coenzyme Q
	(C)	Cytochrome C	(D)	NADH Dehydrogenase
73.	The termi	nal part of a chromosome beyond sec	ondary o	constriction is called :
	(A)	Telomere	(B)	Satellite
	(C)	Nucleolar Organizer	(D)	Chromatid
74.		teristic cytoplasm that contains abeliaters and also many Golgi vesicle is		endoplasmic reticulum arranged in eciality of:
	(A)	Eisinophils	(B)	NKCells
	(C)	Neutrophils	(D)	Plasmacells
75.	A type I h	ypersensitive reaction is induced by o	ertain t	types of antigens referred to as :
	(A)	Paratopes	(B)	Immunogens
	(C)	Allergens	(D)	Epitopes
76.	Which am	ong the following is an example for A	utoimm	une disease?
	(A)	Erythroblastosis foetalis		
	(B)	Lukaemia		
	(C)	Insulin-Dependent Diabetes Mellitu	ıs (IDDI	M)
	(D)	AIDS		

77. If the matrix $A = \begin{bmatrix} 2 & 3 \\ x & y \end{bmatrix}$ has eigen values 4 and 8, then:

(A)
$$x = 4, y = 10$$

(B)
$$x = -4, y = -10$$

(C)
$$x = -4, y = 10$$

(D)
$$x = 4, y = -10$$

78. Let *A* be a square matrix such that $A^k = 0$. Then inverse of I - A is:

(B)
$$I + A$$

(C)
$$I + A^{k-1}$$

(D)
$$I + A + A^2 + ... + A^{k-1}$$

79. The value of $\left| \frac{1-w}{w^2+w} \right|$ where w is a non-real cube root of 1.

(A)
$$\sqrt{3}$$

(B)
$$\sqrt{2}$$

(D)
$$\frac{4}{\sqrt{3}}$$

80. The value of $\sqrt{-2+2\sqrt{3}i}$ is:

(A)
$$\pm \sqrt{3} + i$$

(B)
$$\pm \sqrt{3} - i$$

(C)
$$\pm (1 + i\sqrt{3})$$

(D)
$$\pm (1 - i\sqrt{3})$$

81. The distance between the foci of an ellipse is 6 units and its minor axis is 8 units. Then the eccentricity is:

(A)
$$\frac{4}{5}$$

(B)
$$\frac{1}{\sqrt{52}}$$

(C)
$$\frac{3}{5}$$

(D)
$$\frac{1}{2}$$

82. If the distance between the points (3, b) and (8, 7) is 13, then b is equal to:

(A)
$$5 \text{ or } -19$$

(C)
$$-5 \text{ or } -19$$

(D)
$$-5 \text{ or } 19$$

83. Which of the following is true for the function $f(x) = x^3 - 6x^2 + 9x + 25$?

(A)
$$f$$
 has a maxima at $x = 1$ and minima at $x = 3$

(B)
$$f$$
 has a maxima at $x = 3$ and minima at $x = 1$

(C)
$$f$$
 has only minima at $x = 1$

(D)
$$f$$
 has only maxima at $x = 3$

- 84. $\lim_{x\to\infty} \frac{2023x^2 + 2022x + 2021}{x^2 + 2022x + 2020}$ equals:
 - (A) 2023

(B) 1

(C) $\frac{2021}{2020}$

- (D) «
- 85. Which of the following equations is an exact differential equation?
 - (A) $(x^2 + 1)dx xy dy = 0$

(B) x dy + (3x - 2y)dx = 0

(C) $2xy dx + (2 + x^2)dy = 0$

- $(D) \quad x^2 y \, dy y dx = 0$
- **86.** An integrating factor of $x \frac{dy}{dx} + (3x+1)y = xe^{-2x}$ is:
 - (A) xe^{3x}

(B) $3xe^x$

(C) xe^x

- (D) x^3e^x
- 87. If \overline{a} , \overline{b} , \overline{c} are unit vectors and $\overline{a} + \overline{b} + \overline{c} = \overline{0}$ then $\overline{a} \cdot \overline{b} + \overline{b} \cdot \overline{c} + \overline{c} \cdot \overline{a}$ is:
 - (A) $\frac{2}{3}$

(B) 0

(C) $\frac{-3}{2}$

- (D) 1
- **88.** If $|\overline{a}| = 3$, $|\overline{b}| = 4$ and $\overline{a} \cdot \overline{b} = 6$, then find the value of $|\overline{a} \times \overline{b}|$:
 - (A) $\sqrt{3}$

(B) $4\sqrt{3}$

(C) $6\sqrt{3}$

- (D) $8\sqrt{3}$
- 89. Consider the following statements:

Statement (i) : All cyclic groups are abelian.

Statement (ii) : The order of a cyclic group is same as the order of its generator.

Which of the following is correct?

- (A) Both (i) and (ii) are false
- (B) (i) is true (ii) is false

(C) (i) is false (ii) is true

- (D) Both (i) and (ii) are true
- **90.** Which of the following is not a field?
 - (A) \mathbb{Z}_4

(B) \mathbb{Z}_5

(C) \mathbb{Z}_7

(D) \mathbb{Z}_2

91.	கீழே கொடு (A) (C))க்கப்பட்டுள்ளவற்றில் வெத்திலை பெரிசு	சரியான வார்த்தைன	யத் ெ (B) (D)	தரிவு செய்க : வெங்கலம் தேநீர்
92.	'தவளை' எ (A) (C)	ன்ற பெயர்ச் சொல்லுக் ₍ முரலுகிறது இரைகிறது	கு ஏற்ற வினைச் சொ	ര്തെ (B) (D)	
93.	நாள் + மல (A) (C)	ர் – சேர்த்தெழுது : நாள்மலர் நாண்மலர்		(B) (D)	நான்மலர் நன்மலர்
94.	(A)	– பிரித்தெழுது : எள் + நெய் எண் + நெய்		(B) (D)	எள் + ணெய் எண் + ணெய்
95.	மாதவி பாம (A) (C)	_{டி} னாள் என்பது எவ்வன எழுவாய்த் தொடர் வினையெச்சத் தொடர்	, ,	(B) (D)	வினைத் தொடர் பெயரெச்சத் தொடர்
96.	'இது யாரு (A) (C)	டைய வீடு?' என்பது எ செய்தி வாக்கியம் ஐய வாக்கியம்	வ்வகை வாக்கியம்?	(B) (D)	வினா வாக்கியம் உணர்ச்சி வாக்கியம்
97.	கீழ்வருவன	வற்றுள் சரியான வாக்க	கியத்தைத் தேர்ந்தெடு	த்து எ	ழுதுக :
	(A) (C)	இங்கு வந்தவை எது? இங்கு வந்தன எது?		(B) (D)	இங்கு வந்தது யாவை? இங்கு வந்தது எது?
98.	சரியான பழ	ழமொழியைத் தெரிவு (ிசய்க :		
	(A)	ஓர் அந்துப்பூச்சி போழ		நல்லுக்	<u>Б</u>
	(B)	ஆயிரம் கலம் நெல்லு	க்குப் போதும் ஓர் அ	<u>ந</u> ்துப்பு	_{பூ} ச்சி
	(C)	ஆயிரம் கலம் நெல்லு	க்கு ஓர் அந்துப்பூச்சி	போத	ضر
	(D)	கலம் நெல் ஆயிரத்துக்	க்கு அந்துப்பூச்சி ஒன்	று பே	ாதும்
99.	கும்பாபிவே	டிகம் என்பதன் தமிழ்ச்	சொல் :		
	(A)	குடமுழுக்கு		(B)	குட நீராட்டு
	(C)	கும்ப நீராட்டு		(D)	கும்பமுழுக்கு
100.	காதில் மெ	ல்லச் சொல்லுதல் என்ப	தன் பொருள் :		
	(A) (C)	சொல்லுதல் பேசுதல்		(B) (D)	ஓதுதல் சாற்றுதல்

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