Module Name : MTech Green Energy Technology-E Exam Date : 19-Sep-2020 Batch : 09:00-11:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Object	ive Question			
1	1	Let y be the solution of the initial value problem $\frac{dy}{dx} = (y^2 + x); y(0) = 1$ using Taylor method of order 2 with the step size h=0.1, the approximate value of y(0.1) is	4.0	1.00
		A1 : 1.315		
		A2 1.415		
		A3 1.115		
		A4 1.215		
Object	ive Question			
2	2	For the function $f(z) = \sin\left(\frac{1}{\cos(\frac{z}{z})}\right)$, the point z=0 is	4.0	1.00
		Al A removable singularity		
		A2 A pole		
		A3 An essential singularity		
		A4 A non-isolated singularity		

3		3	The real part of $z = \frac{1}{1 - \cos\theta + i \sin\theta}$ is	4.0	1.00
			$ \begin{array}{c} A1 \\ \vdots \\ 1-\cos\theta \end{array} $		
			$\begin{array}{c} A2 & \frac{1}{2} \\ \vdots & \frac{1}{2} \end{array}$		
			$\frac{A3}{2}\frac{1}{2}tan\theta$		
			^{A4} : 2		
C	Object	ive Question			
				1.0	1 00

	A1 : Maxima or Minima is not fixed	
	A2 Nature of stationary point is can not be known	
	A3 Accuracy is not good	
	A4 Nature of stationary point is known but can not give maxima or minima	

	· ·			
5	5	Let h be the finite difference, then forward difference operator is defined by	4.0	1.00
		$ \overset{A1}{:} f(x) = f(x+h) - f(x) $		
		$ \overset{A2}{:} f(x) = f(x-h)-f(x) $		
		$\begin{array}{l} A3\\ \vdots \end{array} f(x) = f(x*h) \end{array}$		
		$\frac{A4}{2} f(x) = f(x)$		

6	6	The period of $3\sin(x)/3$ is	4.0	1.00
		A1 π :		
		$\stackrel{A2}{:} 2\pi$		
		$\overset{A3}{:}$ 3π		
		A4 : 6π		

7	7	If $z = \left(\frac{\sqrt{3}}{2} + \frac{i}{2}\right)^5 + \left(\frac{\sqrt{3}}{2} - \frac{i}{2}\right)^5$ then	4.0	1.00
		$\frac{A1}{2}$ Re (z) = 0		
		$\stackrel{A2}{:} \text{ Im } (z) = 0$		
		$^{A3}_{:}$ Re (z) > 0, Im (z) > 0		
		$\frac{A4}{z}$ Re (z) > 0, Im (z) < 0		

Objec	tive Question			
3	8	A set of linear equations is represented by the matrix equation $Ax = b$. The necessary condition for the existence of a solution for this system is	4.0	1.00
		A1 A must be invertible		
		A2 : b must be linearly depended on the columns of A		
		A3 b must be linearly independent of the columns of A :		
		A4 None of these		
Dbiec	tive Ouestion			
)	9	Which of the following statements applies to the bisection method used for finding roots of functions?	4.0	1.00
		A1 Converges within a few iterations		
		A2 Guaranteed to work for all continuous functions		
		A3 Is faster than the Newton-Raphson method		
		A4 : Requires that there be no error in determining the sign of the function		
Objec	tive Question			
.0	10	The interval in which the Lagrange's theorem is applicable for the function $f(x) = 1/x$ is	4.0	1.00
		A1 [-3,3]		
		A2 [-2,2]		
		A3 [2,3]		
		A4 : [-1,1]		
Dbjec	tive Question			
1	11	A focus of an ellipse is at the origin. The directrix is the line $x = 4$ and the eccentricity is $1/2$. Then the length of the semi-major axis is	4.0	1.00
		A1 4/3		
		A2 8/3		
		A3 7/3		

Object	ive Question			
12	12	Linear second order ordinary differential equation is non homogeneous if	4.0	1.00
		A1 There is no constant in equation		
		A2 Solution is zero		
		A3 Solution has some value		
		A4 Independent variable is present		

13	13	The conjugate of a complex number is 1/i-1. Then the complex number is	4.0	1.00
		A1 -1/i-1 :		
		A2 1/i+1		
		A3 1/i-1		
		A4 -1/i+1 :		

Objective Questic

14	14	Civen the function $f(x) = x^2 e^{-2x} x \ge 0$ Then $f(x)$ has the	4.0	1.00
		Given the function $f(x) = x^2e^{-x}, x > 0$. Then $f(x)$ has the maximum value equal to		
		A1 - 2		
		: e -		
		$A^{2}_{:}e^{-1}$		
		A3		
		44		
		$(2e)^{-1}$		
Objec	tive Question			
15	15		4.0	1.00

The maximum number of linearly independent solutions of the differential equation $\frac{d^4y}{dx^4} = 0$, with the condition y(0)=1, is

1.00

		A3 4 :		
		A4 : Infinite		
Dbjec	tive Question			
6	16	While solving the equation $x^2-3x+1=0$ using the Newton-Raphson method with the initial guess of a root as 1, the value of the root one iteration is	4.0	1.00
		A1 1.5		
		A2 : 1		
		A3 0.5		
		A4 0		
Dbjec	tive Question			
7	17	The maximum value of $z=3x-y$ subject to $2x-y\leq 1$ and $x,y\geq 0$ is	4.0	1.00
		A2 4		
		A3 6		
		A4 9 :		
Dbjec	tive Question			
.8	18	Consider the system of linear equations $x+y+z=3$, $x-y-z=4$, $x-5y+kz=6$. Then the value of k for which this system has an infinite number of solutions is	4.0	1.00
		A1 -5		
		A2 0 :		
		A3 1 :		
		A4 3		
Obiec	tive Question			
Jojee			4.0	1.00

		A particular solution of $x^2 \frac{d^2 y}{dx^2} + 2x \frac{dy}{dx} + \frac{y}{4} = \frac{1}{\sqrt{x}}$ is A1 $\frac{1}{2\sqrt{x}}$ A2 $\frac{\log x}{x}$ A3 $\frac{(\log x)^2}{2\sqrt{x}}$ A4 $\frac{\log x\sqrt{x}}{2}$		
Objec 20	tive Question		4.0	1.00
20	20	The function $f(x) = x^3 - 6x^2 + 9x + 25$ has	т. U	1.00
		A1 A maxima at x=1 and a minima at x=3		
		$\stackrel{A2}{:}$ A maxima at x=3 and a minima at x=1		
		A3 No maxima, but a minima at x=1		
		$\stackrel{A4}{:}$ A maxima at x=1, but no minima		
Objec	tive Question			
21	21	The angular momentum of the electron in hydrogen atom can possibly be	4.0	1.00
		$\stackrel{A1}{:}\hbar$		
		^{A2} ħ/2		

1.00

A3 Change in temperature

A4 None of these

		:		
Object 23	23	The gibb's potential is defined as	4.0	1.00
		Al _{G=U-PV+TS}		
		A2 _{G=U+PV+TS}		
		A3 G=U-PV-TS		
		A4 G=U+PV-TS		
Object 24	24	The example of integrating instrument is	4.0	1.00
		A1 Moving coil meter		
		A2 Moving iron meter		
		A3 Tangent galvanometer		
		A4 Energy meter		
Object	tive Question			
25	25	The force which is always directed away or towards a fixed center and magnitude of which is a function only of the distance from the fixed center is	4.0	1.00
		A1 Coriolis force		
		A2 Centripetal force		
		A3 Centrifugal force		
		A4 Central force		
Object	tive Question			1.00
26	26	The pointing vector \vec{S} of an electromagnetic wave is	4.0	1.00
		$\overset{A1}{:} \vec{S} = \vec{E} \times \vec{H}$		
		$\overset{A2}{:} \vec{S} = \vec{E} \times \vec{B}$		
		A3		

		$\vec{s} = \vec{E} / \vec{H}$		
		$\frac{A4}{S} = \vec{E} / \vec{B}$		
Objec	ctive Question			
27	27	The electric potential due to a linear quadrupole varies inversely with	4.0	1.00
		Al r		
		$\stackrel{A2}{:} r^2$		
		$\overset{A3}{:}$ r ³		
		$A4 r^4$		
Objec	ctive Question			
28	28	Which of the following is not a Fermion?	4.0	1.00
		Al Electron		
		A2 : Muons		
		A3 Neutrons		
		A4 Photons :		
Objec	ctive Question			
29	29	The degree of freedom of a gas is n, then the ratio of C_p and C_v is	4.0	1.00
		A1 + (2/n)		
		A2 + (1/n)		
		$ \stackrel{A3}{:} {}^{1+(1/2n)} $		
		$A4_{2n/(1+2n)}$		
Objec	ctive Question			
30	30	The visible spectrum of electromagnetic radiation varies approximately in the range	4.0	1.00
		A1 $10 \text{ nm to } 10^4 \text{ nm}$		
		A2 370 nm to 770 nm		

		A3 200 nm to 1200 nm		
		$^{A4}_{:}$ 1000 nm to 10 ⁶ nm		
Objec	tive Question			
31	31	Which element is the most electronegative?	4.0	1.00
		Al Oxygen		
		A2 Arsenic		
		A3 Selenium		
		A4 Carbon		
Objec	tive Question			
32	32	The reagent commonly used to determine hardness of water titrimetrically is	4.0	1.00
		Al Oxalic acid		
		A2 : Disodium salt of EDTA		
		A3 Sodium citrate		
		A4 Sodium thio sulphate		
Objec	tive Question			
3	33	The fluoride for which the dipole moment is not equal to zero is:	4.0	1.00
		Al SF ₄		
		A2 XeF ₄		
		A3 CF ₄		
		A4 PF ₅		
bjec	tive Question			
4	34	Identify the missing term in the following nuclear equation ${}^{130}{}_{52}\text{Te} + {}^{2}{}_{1}\text{H} \rightarrow {}^{131}{}_{53}\text{I} + ?$	4.0	1.00
		Al positron		

		A2 proton		
		A3 electron		
		A4 neutron		
Obiec	tive Ouestion			
35	35	An example of buffer solution is	4.0	1.00
		A1 HCl + CH ₃ COOH		
		$\begin{array}{c} A2\\ \vdots\\ \end{array} CH_3COOH + CH_3COONa\\ \vdots \end{array}$		
		$^{A3}_{:}$ NaOH + NH ₄ OH		
		A4 NaCl+ NaOH		
Objec	tive Question			
36	36	The agency to look after the climate changes and for action to cut greenhouse gases is	4.0	1.00
		A1 who		
		A2 DOE		
		A3 UNFCCC		
		A4 UN :		
Objec	tive Question			
37	37	For the reaction, the thermodynamic properties $2Cl(g) \rightarrow Cl_2(g)$	4.0	1.00
		$\Delta G, \Delta H \text{ and } \Delta S \text{ are positive}$		
		$\stackrel{A2}{:} \Delta G, \Delta H \text{ and } \Delta S \text{ are negative}$		
		$\overset{A3}{:} \Delta G, \Delta H \text{ are negative and } \Delta S \text{ is positive}$		
		ΔG is negative and $\Delta H \Delta S$ are positive		
Ohiec	tive Question			
38	38	For a face centred cubic lattice, the Miller indices for the first Bragg's peak (smallest Bragg angle) are	4.0	1.00

		A1 002		
		A2 111 :		
		A3 001		
		A4 110 :		
01	tin On time			
39	39	The de-Brogile wavelength for a He atom travelling at 1000 m/s (typical speed at room temperature) is	4.0	1.00
		$ \stackrel{A1}{:} 99.7 \ge 10^{-12} \text{ m} $		
		$ \stackrel{A2}{:} 199.4 \text{ x } 10^{-12} \text{ m} $		
		$ \overset{A3}{:} 199.4 \ge 10^{-18} \text{ m} $		
		A4 99 x 10 ⁻⁶ m		
Ohia				
40	40	Which of the full units of Manuall's relation has to Changing Changes a section?	4.0	1.00
10	10	which of the following Maxwell's relation leads to Clausius-Clapeyron equation?	1.0	1.00
		$ \overset{A1}{:} (\partial T/\partial V)_{S} = - (\partial P/\partial V)_{V} $		
		$\stackrel{A2}{\cdot} (\partial S/\partial V)_{T} = (\partial P/\partial T)_{V}$		
		$ \overset{A3}{:} (\partial T / \partial P)_{S} = (\partial V / \partial S)_{P} $		
		$ \begin{array}{l} A3 \\ \vdots \\ A4 \\ (\partial V/\partial T)_{P} = - (\partial S/\partial P)_{T} \end{array} $		
Ohie	ctive Question	$ \begin{array}{l} A3 \\ \vdots \\ A4 \\ \vdots \\ (\partial V/\partial T)_{P} = - (\partial S/\partial P)_{T} \end{array} $		
Object 41	ctive Question 41	A3 $(\partial T/\partial P) = (\partial V/\partial S) P$ A4 $(\partial V/\partial T) = -(\partial S/\partial P) T$ The pair of compounds having the same hybridization for the central atom is	4.0	1.00
Objec 41	ctive Question 41	A3 $(\partial T/\partial P) = (\partial V/\partial S) P$ A4 $(\partial V/\partial T) P = -(\partial S/\partial P) T$ The pair of compounds having the same hybridization for the central atom is A1 V_{1} P_{2} = 150 P_{2}	4.0	1.00
Objea 41	ctive Question	A3 ($\partial T/\partial P$) s = ($\partial V/\partial S$) p A4 ($\partial V/\partial T$) p = - ($\partial S/\partial P$) T The pair of compounds having the same hybridization for the central atom is A1 XeF ₄ and [SiF ₆] ²⁻	4.0	1.00
Objea 41	ctive Question 41	$A_{1}^{A3} (\partial T / \partial P)_{S} = (\partial V / \partial S)_{P}$ $A_{1}^{A4} (\partial V / \partial T)_{P} = -(\partial S / \partial P)_{T}$ The pair of compounds having the same hybridization for the central atom is $A_{1}^{A1} XeF_{4} \text{ and } [SiF_{6}]^{2}$ $A_{2}^{A2} [NiCl_{4}]^{2} \text{ and } [PtCl_{4}]^{2}$	4.0	1.00
Objec 41	ctive Question 41	$A^{3}_{:} (\partial T / \partial P) = (\partial V / \partial S) P$ $A^{4}_{:} (\partial V / \partial T) P = - (\partial S / \partial P) T$ The pair of compounds having the same hybridization for the central atom is $A^{1}_{:} XeF_{4} \text{ and } [SiF_{6}]^{2}$ $A^{2}_{:} [NiCl_{4}]^{2} \text{ and } [PtCl_{4}]^{2}$ $A^{3}_{:} Ni(CO)_{4} \text{ and } XeO_{2}F_{2}$	4.0	1.00

Objective Question

Object	tive Question			
-2	42	On the basis of LCAO-MO theory, the magnetic characteristics of N_2 and N_2^+ are	4.0	1.00
		Al p. d. y.		
		E Both diamagnetic		
		Both paramagnetic		
		A3 N ₂ diamagnetic and N ₂ ⁺ paramagnetic		
		: ¹ ² dialinagine de ano ¹ ² paramagne de		
		A4 N ₂ paramagnetic and N ⁺ diamagnetic		
		. 21 6 6		
Object	tive Question			
43	43	The crystal unit cell with parameter $a = 3.1$ Å, $b = 3.1$ Å, $c = 5.2$ Å	4.0	1.00
		and $\alpha = \beta = \gamma = 90^{\circ}$ belongs to		
		A1 Cubic crystal system		
		Cubic crystal system		
		A2 Triclinic crystal system		
		:		
		A3 Monoclinic crystal system		
		A4 None of these		
Object	tive Question			
14	44	The half-life time for a reaction at initial concentration of 0.1 and 0.4 mol^{-1} are 200 s and 50 s respectively. The order of the reaction is	4.0	1.00
		$A^2_{:}$		
		$\stackrel{A3}{:}$ 1		
		$\begin{array}{c} A^4 \\ \vdots \end{array}$		
Object 15	tive Question 45	Which of the following species have bound order of three?	4.0	1.00
		$A_1 N_2$		
		^{A2} : NO ⁻		
		A3 NO ⁺		

:
A4 C2 ⁻

tive Question			
46	The number of unshared valence electron pairs in XeF ₂ is	4.0	1.00
	Al One		
	A2 Two		
	A3 Three		
	A4 Four		
tive Ouestion			
47	A crystal will be hard and have high melting point	4.0	1.00
	tive Question 46 tive Question 47	46 The number of unshared valence electron pairs in XeF ₂ is 46 A1 A1 One : One A2 Two : Three : Three : Four	46 The number of unshared valence electron pairs in XeF2 is 4.0 A1 One A2 Two A3 Three A4 Four vive Question 40

4/	4/	A crystal will be hard and have high melting point	4.0	1.00
		A1 Covalent crystal		
		A2 Ionic		
		A3 Metallic		
		A4 : Molecular		

object	are Question			
48	48	Natural sugars and amino acids are predominantly	4.0	1.00
		A1 D-sugars and L-amino acids		
		A2 : D-sugars and D-amino acids		
		A3 : L-sugars and D-amino acids		
		A4 : L-sugars and L-amino acids		
Object	tive Question			
49	49	IUPAC nomenclature for the complex given below is C1 Pt H_3N C1 Pt C1	4.0	1.00
		A1 : Trans-dichlorodiammine platinum(II)		

A2				
	Trans-diammine	dichloro	platinum(1	II)

- A3 Trans-diammine platinum (II) dichloride :
- A4 Trans-diammine palatinate (II) chloride :

Objective Question							
50	50	The complex with inverse-spinel structure is	4.0	1.00			
		A1 Co ₃ O ₄					
		$\stackrel{A2}{:}$ Fe ₃ O ₄					
		A3 MgAlO ₄					
		A4 Mn ₃ O ₄					
Object	ive Ouestion						
51	51	In a vapour compression cycle, the refrigerant immediately after expansion valve is	4.0	1.00			
		Al Liquid					
		A2 Sub-cooled liquid					
		A3 Saturated liquid					
		A4 : Wet vapour					
Object	ive Question						
52	52	In an isothermal process, the internal energy of gas molecules	4.0	1.00			
		Al Increases					
		A2 : Decreases					
		A3 Remains constant					
		A4 May increase/decrease depending on the properties of gas					
Object	ive Question						

		A1 Conduction		
		A2 Convection		
		A3 Radiation		
		A4 Conduction and convection		
Ohiaa	tive Overting			
Objec 54	54	A non-dimensional number generally associated with natural convection heat transfer is	4.0	1.00
		A1 Grashoff number		
		A2 Nusselt number		
		A3 Weber number		
		A4 Prandtl number		
Ohiec	tive Question			
55	55	Stefan Boltzmann law is applicable for heat transfer by	4.0	1.00
		A1 Conduction		
		A2 Convection		
		A3 Radiation		
		A4 Conduction and radiation		
01:				
Objec	uve Question		4.0	1.00
50	30	Extensive property of a system is one whose value	4.0	1.00
		A1 Depends on the mass of the system, like volume		
		A2 Does not depend on the mass of the system, like temperature, pressure, etc.		
		A3 Is not dependent on the path followed but on the state		
		A4 Is dependent on the path followed and not on the state		

Object	ive Question			
7	57	The ratio of maximum demand of the plant to the sum of individual maximum demand of various equipments is called	4.0	1.00
		A1 Load factor		
		A2 Diversity factor		
		A3 Demand factor		
		A4 Maximum demand		
ect	ive Question			
	58	Pick up the incorrect statement for centrifugal pumps	4.0	1.00
		A1 Discharge α speed		
		$\stackrel{A2}{:} \operatorname{Head} \alpha (\operatorname{speed})^2$		
		$\frac{A3}{2} \operatorname{Power} \alpha (\operatorname{speed})^3$		
		A4 Discharge α diameter		
iect	ive Ouestion			
	59	A thermal electric power plant produces 1000 MW of power. If the coal releases 900 X 10 ⁷ KJ/h of energy, then what is the rate at which heat rejected from the power plant?	4.0	1.00
		A1 500 MW		
		A2 1000 MW		
		A3 1500 MW		
		A4 2000 MW		
iect	ive Question			
	60	A finned tube hot water radiator with a fan blowing air over it is kept in room during winter. The major portion of the heat transfer from the radiator to air is due to	4.0	1.00
		A1 Radiation		
		A2 Convection		

Objective Question 61 61 If the load impedance is 100 ohm and input impedance is 25 ohm, then the characteristic impedance of the transmission line 4.0						
61	61	If the load impedance is 100 ohm and input impedance is 25 ohm, then the characteristic impedance of the transmission line is	4.0	1.00		
		A1 70 ohm :				
		A2 : 60 ohm				
		A3 50 ohm				
		A4 40 ohm				
Ohiec	tive Question					
62	62	Pick up the incorrect statement for centrifugal pumps	4.0	1.00		
		$\frac{A1}{2}$ Discharge α speed				
		$\frac{A2}{H} Head \alpha (speed)^2$				
		$\frac{A3}{2} \operatorname{Power} \alpha \text{ (speed)}^3$				
		A4 Discharge α diameter				
Objec	tive Question					
63	63	What is the purpose of super charging an engine?	4.0	1.00		
		name is the purpose of super enoughing an engineer				
		A1 To increase the power output of engine				
		A2 : To reduce specific fuel consumption				
		A3 To reduce the noise of the engine				
		A4 To improve cooling of cylinders				
Ohiec	tive Question					
64	64	What is the loss of available energy associated with the transfer of 1000 kJ of heat from a constant temperature system at 600 K to another at 400 K when the environmental temperature is 300 K?	4.0	1.00		
		A1 150 KJ :				
		A2 : 250 KJ				

		^{A3} 166. 67 KJ		
		A4 180 KJ :		
Objec	ctive Question			
65	65	If a fixed amount of power is to be transmitted over certain length with fixed power loss, it can be said that volume of conductor is	4.0	1.00
		A1 Inversely proportional to magnitude of the voltage and that of power factor of the load :		
		A2 Inversely proportional to square of the voltage and square of power factor of the load :		
		A3 Proportional to square of voltage and that of power factor of the load :		
		A4 Proportional to magnitude of the voltage only :		
Objec	tive Question			
66	66	Which of the following is an intensive property of a thermodynamic system?	4.0	1.00
		A1 Volume		
		A2 Temperature		
		A3 Mass		
		A4 Energy		
Objec	tive Question			
67	67	A power station's plant load factor is defined as the ratio of	4.0	1.00
		A1 The energy generated to that of maximum energy :		
		A2 Average load to peak load		
		A3 Minimum load to peak load		
		A4 Minimum load to average load :		
Objec	tive Question			
68	68	Metals are good conductors of heat because	4.0	1.00

		A2 Their atoms are relatively far apart :		
		A3 They contain free electrons		
		A4 : They have high density		
Object	tive Question			
69	69	LMTD in case of counter flow heat exchanger as compared to parallel flow heat exchanger is	4.0	1.00
		A1 Higher		
		A2 Lower		
		A3 Same		
		A4 Depends on the area of heat exchanger		
Object	tive Question			
70	70	Thermal diffusivity is a	4.0	1.00
		A1 Function of temperature		
		A2 Physical property of a substance		
		A3 Dimensionless parameter		
		A4 All of these		
Object	tive Question			
71	71	The death of Cell or tissue within a living body is called as :	4.0	1.00
		Al Neutrophillia :		
		A2 Nephrosis		
		A3 Necrosis		
		A4 Nepolasis		
01.	time Oraciti			

A1 Measles :	
A2 COVID19	
A3 Tuberculosis	
A4 : Leprosy	

73	73	An example of trisaccharide is	4.0	1.00
		Al Sucralose		
		A2 Raffinose		
		A3 Stachyose		
		A4 Verbascose		
Object	ive Question			
74	74	The degree of unsaturation of lipids can be measured by	4.0	1.00
		Al Iodine number		
		A1 Iodine number A2 Saponification number		
		 A1 Iodine number A2 Saponification number A3 Polenske number 		

object	are Question			
75	75	Intact duplex DNA is a substrate for	4.0	1.00
		Al DNA pol 1		
		A2 DNA pol 111 :		
		A3 RNA polymerase		
		A4 DNA pol 1v		
01:				
Object	live Question			

76	76	The reactions of the Krebs cycle	4.0	1.00
		A1 Take place in the cytosol of eukaryotic cells		
		A2 Generate ATP directly by substrate phosphorylation		
		A3 Are important for the metabolism of carbohydrates but not other molecules		
		A4 Both Take place in the cytosol of eukaryotic cells and Generate ATP directly by substrate phosphorylation :		
Object	tive Question			
77	77	The Hardy-Weinberg Law describes	4.0	1.00
		A1 Genotype frequencies of a population when evolutionary forces are not acting		
		$\stackrel{A2}{:}$ How sexual reproduction would change the relative gene frequencies in a population		
		A3 How mutations occur and balance each other		
		$\stackrel{A4}{:}$ Genotype frequencies of a population when evolutionary forces are acting.		
Object	tive Question			
78	78	Which of the following fatty acids has the lowest melting point?	4.0	1.00
		A1 Fatty acids with sites of unsaturation with cis double bonds		
		A2 Fatty acids with sites of unsaturation with trans double bonds		
		A3 Fatty acids with no sites of unsaturation		
		A4 Fatty acids with longer hydrophobic tails		
Object	tive Question			
79	79	Prosthetic groups are	4.0	1.00
		A1 Required by all enzymes in the cell		
		A2 Loosely bound to enzymes via hydrogen bonds		
		A3 Sites on the enzyme molecule molecule that permit allosteric modification of enzyme activity		
		A4 : Tightly bound to enzymes and are required for their activity		

Objec	tive Question			
80	80	Pseudoautosomal gene is present on	4.0	1.00
		A1 both X- and Y- chromosomes		
		A2 both X- and autosomes		
		A3 both Y- and autosomes :		
		A4 only autosomes		
Obied	tive Ouestion			
81	81	Chlorophyll and hemoglobin are natural coordination compounds and respectively contains	4.0	1.00
		A1 Mg & Fe :		
		A2 Mg & Mn		
		A3 Ca & Co		
		A4 Fe & Ni		
Objec 82	82	The number of chromosome in down's syndrome is	4.0	1.00
		$\stackrel{A1}{:}$ ²⁴		
		A2 36		
		A3 47		
		A4 46		
Ohieo	tive Question			
83	83	The oxygen released during photosynthesis process is from	4.0	1.00
		A1 Carbon-di-oxide		
		A2 Sugar		
		A3 Water :		

		A4 Pyruvic acid					
Object	tive Question						
84	84	The oxidation of glucose by bromine water forms	4.0	1.00			
		A1 Gluconic acid					
		A2 : Mannose					
		A3 : Glucuronic acid					
		A4 None of these					
Object	tive Question						
85	85	Vitamin D deficiency causes	4.0	1.00			
		A1 : Night blindness					
		A2 : Rickets					
		A3 Goitre					
		A4 : None of these					
Object	tive Question						
86	86	Where does the formation of urea takes place in our body?	4.0	1.00			
		Al Pancreas :					
		A2 : Liver					
		A3 Kidney					
		A4 Lungs					
Object	Objective Question						
87	87	In which parts of the body glycogen is stored mainly?	4.0	1.00			
		A1 Cartilages & bones					
		A2 : Lungs					
		A3 Spleen					

		:		
		A4 Liver and muscles		
Object	tive Question			
88	88	The Chlorophyll cells within the plant leaves are perfectly optimized to absorb which of the following waves of the Sun Light?	4.0	1.00
		A1 Green		
		A2 Red & Blue		
		A3 Red & yellow		
		A4 Yellow and blue		
Object	tive Question			
89	89	Which among the following was the first vaccine ever to be developed?	4.0	1.00
		A1 Cholera		
		A2 Smallpox		
		A3 Rabies		
		A4 Tetanus		
Object	tive Question			
90	90	The world's first Murrah buffalo was born in which country?	4.0	1.00
		Al India :		
		A2 USA		
		A3 Australia		
		A4 China		
04:	tive Orestian			
object	ave Question		4.0	1.00

 91
 91
 Which element is activator of enzyme in nitrogen fixation?
 4.0
 1.00

 A1
 Mg
 A2 Mo
 Mo
 Image: Model and Model

		A3 Zn		
		^{A4} _: ^{Cu}		
Object	tive Question			
92	92	During photosynthesis, oxygen in glucose comes from	4.0	1.00
		A1 : Water		
		A2 : Carbon dioxide		
		A3 Both from water and carbon dioxide		
		A4 Air		
Object	tive Question			
93	93	Which color of light gives maximum absorption peak in chlorophyll a	4.0	1.00
		A1 Blue		
		A2 : Green		
		A3 Violet		
		A4 Red		
Object	tive Question			
94	94	C_4 plants are most efficient in photosynthesis than C_3 plants due to	4.0	1.00
		A1 : Higher leaf area		
		A2 Presence of larger number of chloroplast		
		A3 Presence of thin cuticle		
		A4 Lower rate of photorespiration		
Object	tive Question		4.0	1.00
95	95	One haemoglobin carries how many oxygen molecules?	4.0	1.00
		A1 2 :		

		A2 4		
		A3 6		
		A4 8		
Objec	tive Question			
96	96	Cell mediated immunity is possessed by	4.0	1.00

		Cert inculated initiality is possessed by				
		A1 β-lymphocytes				
		A2 Plasma cells				
		A3 : C-lymphocytes				
		A4 Thymus cells or Thymocytes				
Object	Objective Question					

97	97	D.P.T. vaccine is an example of	4.0	1.00			
		A1 Passive immunity					
		A2 Active immunity					
		A3 Both passive and active immunity					
		A4 Interferons					

objee	are Question			
98	98	Which of the following shall fail in Benedict test?	4.0	1.00
		A1 Glucose		
		A2 : Maltose		
		A3 Sucrose		
		A4 Fructose		
Objec	tive Question			
99	99	Antibodies are	4.0	1.00

		Al γ-globulin :		
		A2 : Albumin		
		A3 : Sugar		
		A4 Carbohydrate complex		
Object	ive Question			
100	100	Light emitted in a firefly as a result of oxidation of luciferin by luciferase is referred as	4.0	1.00
		A1 Fluorescence		
		A2 Phosphorescence		
		A3 Bioluminescence		
		A4 Emittance		