UNIVERSITY OF HEALTH SCIENCES, LAHORE



MEDICAL ENTRANCE TEST-2009

TOTAL TIME: 150 Minutes

Entrance Test for Candidates seeking Admission to Medical & Dental Institutions in Punjab



Shuffled Question Papers are Colour-Coded. There are in total FIVE Shuffled Question Papers in Navy, Brown, Pink, Red and Green Colours. It is important that you get and use the MCQ Response Form of the Colour corresponding to the Colour of your Question Booklet.

GENERAL INSTRUCTIONS:

In order to ensure a fair chance to every candidate and to conduct the test efficiently, the candidate must follow the instructions given in this booklet and by the Superintendent.

- 1. DO NOT FOLD THE MCQ RESPONSE FORM.
- 2. One candidate shall only be Issued One MCQ Response Form of the Colour corresponding to the Colour of the Question Booklet.
- 3. The Entrance Test will start exactly at 9:00 a.m.
- 4. All answers must be given by completely filling the Circles having the Correct Answer i.e. A, B, C, or D with Blue Ball Pen Only. Filling of circles incompletely, multiple responses and unnecessary marks may mislead the Optical Mark Reader Machine and your Responses may not be evaluated correctly for which the University will NOT be responsible.
- 5. No mobile phones, notes, books, weapons, armaments or any device that can be used for communication or to cause disturbance in the course of the Test is permitted within the premises of the "Centre".
- **6.** During the Test, candidates will not talk, whisper or turn their eyes or head away from their own papers.
- **7.** Any evidence of cheating or non-compliance of instructions will disqualify the candidate from the Test and his / her name will be removed from the List of the Candidates.
- **8.** The candidates should carefully think about their answers before filling the circles on the Response Form. Once an answer has been given on the Response Form, the candidate will not be permitted to change any of his / her answers in any way.

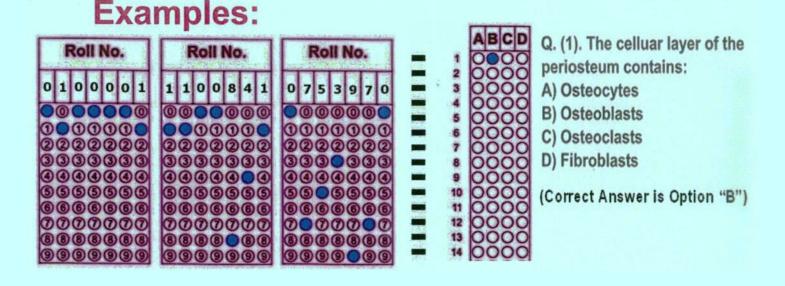


The candidates should not mark Answers on the Question Paper. All answers must be given on the MCQ Response Form Only by filling the relevant Circle with Blue Ball Pen. Erasing or Filling another Circle for the same answer shall be considered as an Incorrect Response.



Whereas the Content of Paper is Same for all the Students of Respective Groups, the MCQs and their Response Stems are shuffled to Discourage Cheating.

- **9.** All rough work must be done on the back side of the Question Paper <u>(not on the MCQ Response Form).</u>
- **10.** There will be **Negative Marking** in the Test. Each Correct Answer carries Five (05) Marks. However, for each Wrong Answer One (01) Mark will be deducted.
- **12.** The Seven Digit Roll Number should be entered carefully in the designated area both on MCQ Question Paper and the MCQ Response Form where the Corresponding Circles under each Digit should also be shaded as shown in the Examples Below.
- **13.** The MCQ Response Form is to be returned together with the MCQ Question Paper at the end of the Entrance Test.
- **14.** When the Instructor says **STOP**, the candidates should stop writing and turn over their Question Booklets and MCQ Response Forms.
- **15.** No candidate will be allowed to leave the Examination Centre before the end of the Entrance Test.
- 16. At the end of the Entrance Test the candidates are requested to fill in the "Feed Back Form" which will help the University improve its Services to the Public in Future. This "Feed Back Form" is NOT PART of the Evaluation Process.





You are to remain seated till all the MCQ Response Forms and Question Booklets have been collected from the Candidates and the Supervisor announces that it is alright for you to leave. Ensure that you have returned the MCQ Response Form and Questions Booklet to the Invigilating Staff. Failure to comply will lead to AUTOMATIC DISQUALIFICATION from MCAT 2009.

University of Health Sciences, Lahore

Roll No. of Candidate



Signature of Candidate

MEDICAL ENTRANCE TEST-2009

For F.Sc. Students Only Total MCQs: 220

Max. Marks: 1100 Time Allowed: 150 Minutes

PHYSICS

Q.1	When a helium atom loses an electron it becomes:	
	A) An alpha particle.	C) A positive helium ion.
	B) Proton.	D) A negative helium ion.
	Baka and another different and the self-record at the self-record to	
Q.2	Beta ray emitted by a radioactive substance is:	C) As also those and the discount of the second of the sec
	A) An electron which was existing outside the	C) An electron emitted by the nucleus as a
	nucleus.	result of the decay of neutron inside the
	B) An electron which was existing inside the	nucleus.
	nucleus.	D) A pulse of electromagnetic wave.
Q.3	An electric charge in uniform motion produces:	
•	A) An electric field.	C) Both magnetic and electric fields.
	B) A magnetic field.	D) Neither magnetic nor electric fields.
	, 3	, g
Q.4	What is emitted by a hot metal filament in a cathode ray	
	A) X-ray.	C) Electron.
	B) Proton.	D) Photon.
Q.5	If the mass of the bob of a pendulum is doubled its time	o poriod icu
Q.5	A) Halved.	C) Unchanged.
	B) Doubled.	D) Increases four times.
	b) boubled.	b) Thereases four times.
Q.6	The centre of Newton rings is dark due to:	
•	A) Polarization.	C) Constructive interference.
	B) Destructive interference.	D) Reflection.
Q.7	Which one is most stable element on the basis of binding	
	A) Sn.	C) Kr.
	B) Ba.	D) Fe.
	Designation of the DC should be fallowed as a second of the AC	000 Ohar What is reduce of Ohatha should
Q.8	Resistance in RC circuit of time constant 2 seconds in 10	
	A) 2 μ farad.	C) 200 µ farad.
	B) 20 μ farad.	D) 2000 μ farad
Q.9	The Lenz's law refers to induced	
Q.5	A) emf.	C) Shear.
	B) Resistance.	D) Currents.
	b) Resistance.	b) currents.
Q.10	In which of the following, output is similar to NAND gate	e if input A=0 and input B=1.
Q.10	A) NOR.	C) XOR.
	B) XNOR.	D) Both B and C.
	z, mon	b) boar b and cr
Q.11	For atomic hydrogen spectrum, which of the following se	eries lies in visible region of electromagnetic
.	spectrum?	
	A) Lyman series.	C) Balmer series.
	B) Paschen series.	D) Bohr series.
Q.12	are the particles that experience strong nu	uclear force
_	A) Electrons.	C) Neutrinos.
	B) Muons.	D) Neutrons.
		(Continued)

wavelength. A) Triple. B) Full. C) Half. D) Double. Q.18 Which of the following lights travels the fastest in optical fibres? A) Visible light. B) Invisible infra-red. C) Ultra-violet. B) Invisible infra-red. D) Ordinary light. Q.19 The algebraic sum of potential changes in a closed circuit is zero is Kirchhof's	Q.13	The vertical velocity of ball thrown upward	with time.
Q.14 The force required to bend the normally straight path of a particle into a circular path is called —— force. A) Traveling. B) Bending. C) Centriptedal. D) Centriptedal. D) Centriptedal. D) Centriptedal. D) Centriptedal. C) Carent. B) 19.6. D) 9.8. C) 22.8. D) 9.8. C) 15 Tuning of the radio is the best example of electrical ————————————————————————————————————		A) decreases linearly.	,
force. A) Traveling. B) Bending. C) Centriptgal. D) Second. C) Current. D) None of these. C) Current. D) None of these. C) Current. D) None of these. C) Half. D) Double.		B) remains constant.	D) Decreases parabolically.
A) Traveling. B) Bending. Q.15 A disc at rest without slipping, rolls down a hill of helight (3 x 9.8)m. What is its speed in m/sec wh reaches at the bottom? A) 11.4. B) 19.6. C) 22.8. B) 19.6. C) Current. A) Resonance. B) Resistance. C) Current. B) Resistance. C) Current. D) None of these. C) Current. D) None of these. C) Half. B) Full. D) Double. Q.16 Which of the following lights travels the fastest in optical fibres? A) Visible light. B) Invisible infra-red. D) Triple. D) T	Q.14		th of a particle into a circular path is called
8) Bending. Q.15 A disc at rest without slipping, rolls down a hill of height (3 x 9.8)m. What is its speed in m/sec wh reaches at the bottom? A) 11.4. B) 19.6. D) 9.8. Q.16 Tuning of the radio is the best example of electrical			C) Centrifugal
reaches at the bottom? A) 1.4. B) 19.6. C) 22.8. B) 19.6. D) 9.8. Q.16 Tuning of the radio is the best example of electrical			
A) 11.4. C.) 22.8. B) 19.6. D) 9.8. Q.16 Tuning of the radio is the best example of electrical	Q.15		eight (3 $ imes$ 9.8)m. What is its speed in m/sec when i
R. B. 19.6. B. 19.6. C. Tuning of the radio is the best example of electrical			C) 22.0
Q.16 Tuning of the radio is the best example of electrical		•	•
A) Resonance. B) Resistance. C) Current. D) None of these. Q.17 A standing wave pattern is formed when the length of string is an integral multiple of		·	,
B) Resistance. D) None of these. Q.17 A standing wave pattern is formed when the length of string is an integral multiple of	Q.16		
Q.17 A standing wave pattern is formed when the length of string is an integral multiple of ———————————————————————————————————		,	,
wavelength. A) Triple. B) Full. C) Half. D) Double. Q.18 Which of the following lights travels the fastest in optical fibres? A) Visible light. B) Invisible infra-red. C) Ultra-violet. B) Invisible infra-red. D) Ordinary light. Q.19 The algebraic sum of potential changes in a closed circuit is zero is Kirchhof's		b) Resistance.	b) Notice of these.
A) Triple. B) Full. C) Half. D) Double. Q.18 Which of the following lights travels the fastest in optical fibres? A) Visible light. B) Invisible infra-red. C) Ultra-violet. D) Ordinary light. C) If the algebraic sum of potential changes in a closed circuit is zero is Kirchhof's	Q.17		of string is an integral multiple of
B) Full. Q.18 Which of the following lights travels the fastest in optical fibres? A) Visible light. B) Invisible infra-red. C) Ultra-violet. B) Invisible infra-red. C) Ordinary light. Q.19 The algebraic sum of potential changes in a closed circuit is zero is Kirchhof's			C) Half.
A) Visible light. B) Invisible infra-red. C) Ordinary light. D) Ordinary light. C) Third. D) Ordinary light. C) Third. A) First. B) Second. C) Third. D) None of these. Q.20 In LED when an electron combines with a			D) Double.
A) Visible light. B) Invisible infra-red. C) Ordinary light. D) Ordinary light. C) Third. D) Ordinary light. C) Third. A) First. B) Second. C) Third. D) None of these. Q.20 In LED when an electron combines with a	Q.18	Which of the following lights travels the fastest in o	ptical fibres?
Q.19 The algebraic sum of potential changes in a closed circuit is zero is Kirchhof's	_	A) Visible light.	
A) First. B) Second. C) Third. D) None of these. Q.20 In LED when an electron combines with a		B) Invisible infra-red.	D) Ordinary light.
B) Second. D) None of these. Q.20 In LED when an electron combines with a	Q.19		
Q.20 In LED when an electron combines with a			,
visible light is emitted. A) High voltage. B) Photon. C) Hole. B) Photon. D) Positron. Q.21 For photons of energy greater than 1.02 MeV the probability of pair production occurrence		B) Second.	D) None of these.
A) High voltage. B) Photon. C) Hole. D) Positron. Q.21 For photons of energy greater than 1.02 MeV the probability of pair production occurrence	Q.20		during forward bias conduction, a photon of
B) Photon. D) Positron. Q.21 For photons of energy greater than 1.02 MeV the probability of pair production occurrence			C) Hole
as the energy increases. A) Increase. B) Completely diminishes. C) Reduces to half. D) Remains unchanged. Q.22 The neutron is assumed to be made of A) One up quark and two down quarks. B) Two up quarks and two down quarks. C) Two up quarks and one down quark. D) One up quark and one down quark. C) Powered and guided. B) Un-powered and guided. C) Powered and guided. D) Un-powered and un-guided. C) Powered and guided. D) Un-powered and un-guided. C) Powered and guided. D) Un-powered and un-guided. C) Equal to. D) None of these. Q.24 Two cylinders of equal mass are made from same material. The one with the larger diameter accelerates			•
as the energy increases. A) Increase. B) Completely diminishes. C) Reduces to half. D) Remains unchanged. Q.22 The neutron is assumed to be made of A) One up quark and two down quarks. B) Two up quarks and two down quarks. C) Two up quarks and one down quark. D) One up quark and one down quark. C) Powered and guided. B) Un-powered and guided. C) Powered and guided. D) Un-powered and un-guided. C) Powered and guided. D) Un-powered and un-guided. C) Powered and guided. D) Un-powered and un-guided. C) Equal to. D) None of these. Q.24 Two cylinders of equal mass are made from same material. The one with the larger diameter accelerates	Q.21	For photons of energy greater than 1.02 MeV the pro	obability of pair production occurrence
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 Q.22 The neutron is assumed to be made of		,	,
A) One up quark and two down quarks. B) Two up quarks and two down quarks. C) Two up quarks and one down quark. D) One up quark and one down quark. Q.23 An		B) Completely diminishes.	D) Remains unchanged.
B) Two up quarks and two down quarks. D) One up quark and one down quark. Q.23 An	Q.22		
 Q.23 An missile is called a ballistic missile. A) Un-powered and guided. B) Un-guided and powered. C) Powered and guided. D) Un-powered and un-guided. C) Powered and guided. D) Un-powered and un-guided. C) Equal to. C) Equal to. D) None of these. C) Equal to. D) None of these. C1 Equal to. D) None of these. C2 Figure to. D) V1/ℓ. D) √1/ℓ. C2 Two waves of slightly different frequencies and traveling in same direction produce			
A) Un-powered and guided. B) Un-guided and powered. C) Powered and guided. D) Un-powered and un-guided. Q.24 Two cylinders of equal mass are made from same material. The one with the larger diameter accelerates		b) Two up quarks and two down quarks.	One up quark and one down quark.
B) Un-guided and powered. D) Un-powered and un-guided. Q.24 Two cylinders of equal mass are made from same material. The one with the larger diameter accelerates	Q.23		
 Q.24 Two cylinders of equal mass are made from same material. The one with the larger diameter accelerates			
accelerates the other under the action of same torque. A) Faster than. B) Slower than. C) Equal to. D) None of these. Q.25 The angular frequency of simple pendulum is directly proportional to A) ℓ . B) $1/\ell$. C) $\sqrt{\ell}$. D) $\sqrt{1/\ell}$. Q.26 Two waves of slightly different frequencies and traveling in same direction produce		b) on-guided and powered.	b) on-powered and dif-guided.
A) Faster than. B) Slower than. C) Equal to. D) None of these. Q.25 The angular frequency of simple pendulum is directly proportional to	Q.24		
B) Slower than. D) None of these. Q.25 The angular frequency of simple pendulum is directly proportional to			
A) ℓ. B) 1/ℓ. C) √ℓ. D) √1/ℓ. Q.26 Two waves of slightly different frequencies and traveling in same direction produce		•	D) None of these.
B) 1/ℓ. Q.26 Two waves of slightly different frequencies and traveling in same direction produce	Q.25	The angular frequency of simple pendulum is directl	ly proportional to
Q.26 Two waves of slightly different frequencies and traveling in same direction produce	_	A) \(\ell \).	C) √ ℓ.
A) Interference. B) Polarization. C) Stationary waves. D) Beats. Q.27 A single mode step index fibre has core of about µm diameter		B) 1/ℓ.	D) √1/ℓ.
B) Polarization. D) Beats. Q.27 A single mode step index fibre has core of about µm diameter	Q.26		
Q.27 A single mode step index fibre has core of about µm diameter			
		b) Foldlization.	u) beats.
A) F0 + 1000	Q.27		
A) 50 to 1000. C) 30.		•	

Q.28	A 5 Ohm resistor is indicated by a single	
	A) Red. B) Green.	C) Blue. D) Brown.
	b) Green.	b) blown.
Q.29	Practically current flows in a reverse bias	ed p-n junction.
_	A) No.	C) Few milliamperes.
	B) Very large.	D) Both A and C.
Q.30	Cesium coated oxidized silver emits electrons for	light
Q.30	A) Infrared.	C) Visible.
	B) Ultraviolet.	D) Green.
	,	·
Q.31	The cobalt is absorbed by	6) 1:
	A) Bones. B) Skin.	C) Liver. D) Thyoid gland.
	b) Skill.	ران) Triyola giaria.
Q.32	In a step down transformer the output current	
	A) Is reduced.	C) Remains same.
	B) Is increased.	D) None of these.
Q.33	Force in terms of base units is expressed as	
Q.33	A) kg ms ⁻² .	C) kg m ² s ⁻³ .
	$\stackrel{\circ}{\text{B}}$ kg m ² s ⁻² .	D) none of these.
Q.34	100 joules work has been done by an agency in 10 second	
	A) 1000 watt. B) 100.	C) 10 watt. D) 0.10 watt.
	5) 100.	b) 0.10 water
Q.35	The acceleration is proportional to the displacement and i	s directed towards mean position in
	motion.	C) II '
	A) Gravity. B) Simple harmonic.	C) Uniform. D) Projectile.
	b) Simple narmonic.	b) Flojectile.
Q.36	In gases the speed of sound is inversely proportional to	of the density when other
	factors are same.	
	A) Square root.	C) Third power.
	B) Square.	D) Third root.
Q.37	A watch maker uses to repair the watche	s.
_	A) Telescope.	C) Convex lens.
	B) Convex mirror.	D) Concave lens.
U 38	A 2m long pipe is open at both ends. What is second harm	onic frequency?
Q.36	A) 42.5 Hz.	C) 220 Hz.
	B) 85 Hz.	D) None of these.
		-0
Q.39	A wire has resistance 100 Ohm at 0°C and 200 Ohm at 100 K-1?	O°C. What is its temperature coefficient in
	A) -0.01.	C) 0.01.
	B) -1/273.	D) 1/273.
Q.40	The net magnetic field created by the electrons within an	atom is due to the field created by their
	motion. A) Orbital.	C) Orbital & spin.
	B) Spin.	D) Orbital x spin.
Q.41	At high temperature, the proportion of w	
	A) AM radio.	C) Shorter.
	B) Long radio.	D) Both A and C.
Q.42	In photoelectric effect removal of photons is observed at	energies.
•	A) Low.	C) Intermediate.
	B) High.	D) Both A and C.
0.43	Which dovice is the most efficient?	
Q.43	Which device is the most efficient? A) Nuclear reactor.	C) Silicon solar cell.
	B) Storage battery.	D) Dry battery cell.

(Continued)

Q.44	The units of E in E=mc ² are A) kg m s ⁻² . B) kg m2 s ⁻² .	C) N m s ⁻² . D) both B and C.
Q.45	Work done on a body equals change in itsA) Total. B) Potential.	energy. C) Kinetic. D) All of these.
Q.46	A pipe varies uniformly in diameter from 2 m to 4 m. An velocity 16m/sec. What is velocity of fluid when it leave A) 64 m/sec. B) 32 m/sec.	
Q.47	Transverse waves can not be setup in A) Metals. B) Solids.	C) Fluids. D) Soil.
Q.48	The ratio of the is called magnification. A) Image size to object size. B) Object size to image size.	C) Eyepiece size to object size. D) None of these
Q.49	Which of the following has the highest resistivity? A) Germanium. B) Silver.	C) Copper. D) Platinum.
Q.50	An n-type semi-conductor is made by doping silicon crys A) Indium. B) Aluminium.	tal with C) Arsenic. D) Both B and C.
Q.51	Objects can not be accelerated to the speed of light in fr A) Mass variation. B) Energy-mass relationship.	ee space is consequence of C) Inertia forces. D) All of these.
Q.52	A certain radioactive mass decays from 64 gm to 2 gm in A) 5 days. B) 4 days.	20 days. What is its half life? C) 10 days. D) 6 days.
Q.53	If inductance is denoted by L and resistance by R, which A) R is large, L is very small. B) R is very small, L is large.	of the following is true for a choke? C) both R and L are large. D) both R and L are very small.
Q.54	A force 2i+j has moved its point of application from (2,3 A) -10. B) +10.) to (6,5). What is work done? C) -18. D) +18.
Q.55	The escape velocity corresponds to ener infinite distance from the surface of earth. A) Total.	
Q.56	B) Potential. The drag force decreases as the speed of an object movi	D) None of these.
•	A) Increases. B) Decreases.	C) Remains constant. D) Both B and C.
Q.57	Light year is a measure of A) Distance. B) Time.	C) Intensity of light. D) Velocity.
Q.58	A yellow light of wavelength 500 mm emitted by a single apart. How far apart are two adjacent bright fringes wh away? A) 5 mm.	en interference is observed on a screen 10 m C) 0.5 mm.
Q.59	B) 1.33 mm. The heat produced by a current I in the wire of resistance A) I ² /Rt.	C) I ² /R/t.
Q.60	 B) I²Rt. Which of the following is the most ductile? A) Glass. B) Copper. 	D) IR²t.C) Cast iron.D) High carbon steel.

CHEMISTRY

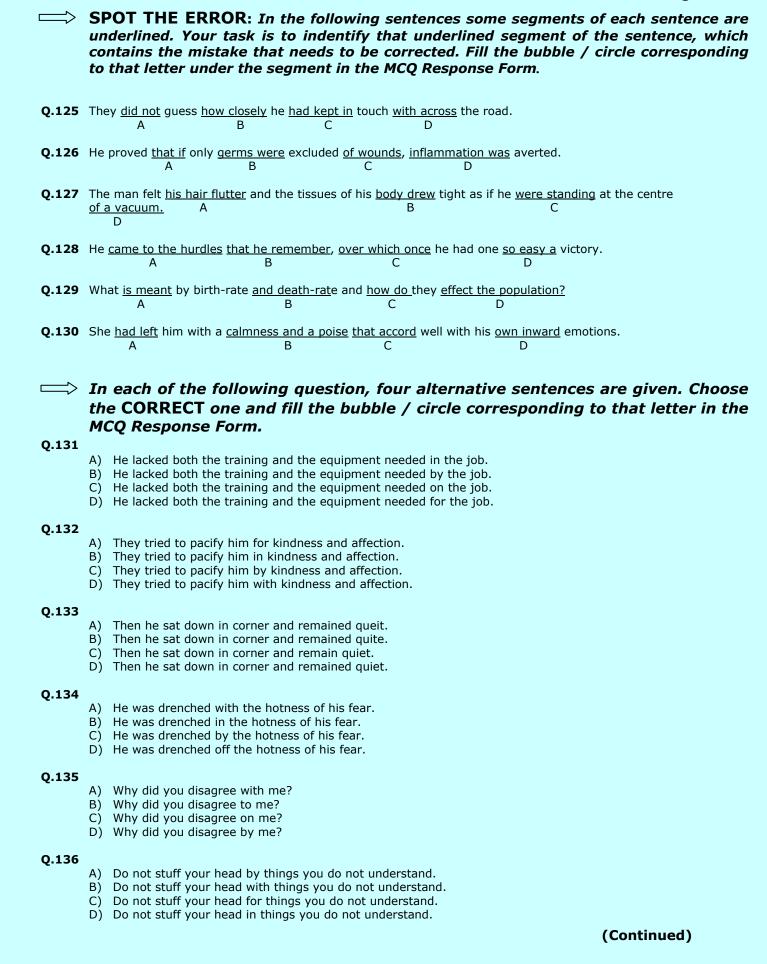
Q.61	Which type of bonding is present in NH₄Cl	۵۱	
	A) Ionic. B) Covalent.		Coordinate covalent. All of these.
Q.62	When CuSO ₄ is electrolyzed in aqueous solution using copp	er (electrodes, then the substance which
	deposits at the cathode is: A) Copper metal. B) Copper ions.	C)	Hydrogen.
Q.63	Aldehydes can be synthesized by the oxidation of	D)	Oxygen.
Q.03	A) Primary alcohols. B) Secondary alcohols.	C)	Organic acids.
Q.64	The products of the fermentation of a sugar are ethanol ar		Inorganic acids.
	A) Water. B) Oxygen.	C)	Carbon dioxide. Sulfur dioxide.
Q.65	serve as carriers of heredity from one generatio	n to	the other.
	A) Lipids B) Caeseins		Formaldehydes Nucleoproteins
Q.66	extraction is controlled by partition law.	C)	Salvant
	A) Iodine B) Benzoic acid	,	Solvent Stationery
Q.67	The process of effusion is best understood bylaw.		
_	A) Graham's B) Charles's	,	Boyle's none of these
Q.68	has dipole moment.	C \	D
	A) CO B) CO ₂		Benzene All of these
Q.69	is used as catalyst in Haber's process for NH ₃ ga	s m	anufacture.
	A) Iron B) Carbon	,	Copper Silver
Q.70	In many of its properties is quite different from the		
	A) Li B) Be	C) D)	Na K
Q.71	Which element forms long chains alternating with oxygen?		Nitrogon
	A) Carbon B) Silicon		Nitrogen All of these
Q.72	The percentage of carbon in medium carbon steel is A) 0.7-1.5	C)	0.2-0.7
	B) 0.1-0.2		1.6-2.00
Q.73	Name the rare halogen among the following.		
	A) F B) Cl	C) D)	I At
Q.74	Which bond will break when electrophile attacks an alcoho		Dath A and D
	A) O - H B) C - O	C) D)	Both A and B None of these
Q.75	The extent of un-saturation in a fat is expressed as its A) Acid number		Saponification number
	B) Iodine number	D)	None of these
Q.76	The process of filtration is used to separatepartial A) Radial		s from liquids. Insoluble
	B) Angular		Soluble
			(Continued)

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Q.77	A) Sulphur B) Phosphorous	,	Argon Sugar
Q.78	Which of the following formation is endothermic reaction? A) $2H_{2(g)} + O_{2(g)} \longrightarrow 2H_2O_{(l)}$ B) $C_{(s)} + O_{2(g)} \longrightarrow CO_{2(g)}$	C)	$N_{2(g)} + O_{2(g)} \longrightarrow N_2O_{2(g)}$ None of these
Q.79	Name the partially miscible liquids from the following? A) Alcohol-ether B) Nicotine-water	,	Benzene-water Both A ,B
Q.80	AlI ₃ is electrically a A) Conductor B) Non-conductor	,	Semiconductor None of these
Q.81	The elements of IIIA to VIIIA subgroups except He are kn A) $$ q $$ B) $$ s	C)	
Q.82	Concentrated nitric acid giveswhen it reacts v A) Nitric oxide B) Meta stannic acid	C)	tin. Ammonium nitrite None of these
Q.83	Sulphuric acid is used to manufacture A) HCl and HNO ₃ B) H ₃ PO ₄		both A and B both HCl and 2COOH
Q.84	Alkanes containingcarbon atoms are waxy so A) upto 4 B) 5 to 17	C)	18 or more None of these
Q.85	Which of the following is used to make chloral hydrate? A) Acetaldehyde B) Formaldehyde		None of these Both A & B
Q.86	Ten moles of hydrogen are allowed to react with 6 moles of from reaction on complete consumption of one gas? A) 10 moles B) 8 moles	C)	kygen. How much water will be obtained 6 moles 4 moles
Q.87	The highest temperature a substance can exist as is A) Solid B) Liquid	cal	
Q.88	hybridization leads to a regular tetrahedral structure A) sp ³ B) sp ²	C)	sp All of these
Q.89	Osmotic pressure of a solution isproperty. A) Obligative B) Fractional		Colligative Automated
Q.90	Magnesium reacts with hydrogen at high pressure in the phydride.	rese	ence of catalyst forming magnesium
	A) Dolomite B) MgI ₂		Mg ₃ N ₂ Epsom salt
Q.91	Which metal is commonly used to remove air bubbles from A) Aluminium B) Copper	C)	olten metals? Sodium Calcium
Q.92	With increase in number of unpaired electrons, paramagned A) Increases B) Decreases	C)	n Remains constant Decreases then increases
Q.93	Which element has the largest number of allotropic forms: A) Phosphorous B) Sulphur	C)	Oxygen both A & C

Q.94	Which of the following bonds has minimum bond energy? A) C - F B) C - Cl		C – I C – Br
Q.95	Which of the following does not react with water? A) Li B) Na	•	Mg Be
Q.96	Al ₂ O ₃ (SiO ₂).2H ₂ O is called A) Clay B) Talc	•	Asbestos None of these
Q.97	CaO forms fertilize slag by reaciting with A) P_2O_5 B) Fe_2O_3		Silica FeO
Q.98	is colorless volatile liquid at room temperature. A) HCl B) HF		HI HBr
Q.99	Hydrogen passed through phenol at 150°C in the presence A) Tin B) Nickel	C)	catalyst gives cyclohexanol Iron Sodium
Q.100	Ethanol-water ismixture. A) Azeotropic B) Ideal	,	Benedict's Aliphatic
Q.101	The mobile phase in paper chromatography is usually A) An organic liquid B) Sulphuric acid		Water Silver nitrate
Q.102	The amount of heat absorbed by one mole of solid at 1 at by A) ΔH_{v} B) ΔH_{f}	C)	nen it melts into liquid form is denoted $ \begin{array}{c} \Delta H_1 \\ \Delta H_s \end{array}$
Q.103	In synthetic fibresbonding is responsible for tensile A) Nitrogen B) Hydrogen	C)	ength. Oxygen None of these
Q.104	Boiling point of HF isH₂O. A) Lower than B) Higher than		Equal to Almost same as
Q.105	is necessary for development of leaves and it tends A) NO_2 B) Calcium	C)	accumulate in leaves and bark. Gypsum Nitrogen
Q.106	Which of the following is pale yellow to reddish yellow in c A) $\mbox{ Pb}_2\mbox{O}$ B) $\mbox{ PbO}_2$	C)	r? PbO 2PbCO ₃ .Pb(OH) ₂
Q.107	In which of the following carbon is double bonded with its A) Alkane B) Ether	C)	Alkene Alkyne
Q.108	In this process higher hydrocarbons can be cracked at low A) Thermal cracking B) Catalytic cracking	C)	emperature and lower pressure. Steam cracking Reforming
Q.109	Acetic acid is calledacid. A) Methanoic B) Propanoic	,	Ethanoic Butanoic
Q.110	Na may be denoted by electron configurati A) 1s ² 2s ¹ B) [Ar] 4s ¹	C)	None of these (Continued)

Q.111	Which A) KO B) Gy		gent in desicca	tors?	,	CaCl ₂ silica sand
Q.112		emperature of 327°			amb	chamber of 300 m ³ volume maintained per? 2 atm
	B) 4 a					1 atm
Q.113	The cry A) Su B) Iro		are ionic	solids.	,	Diamond NaCl
Q.114		material possesses oft drinks Inanas	the highest pH	?		Milk of magnesia Sea water
Q.115	A) Re	ectron present in a peleases pes not radiate	particular orbit	е	C)	gy. Absorbs None of these
Q.116	Al ₂ F ₂ Sid A) Gib B) Em				- /	Bauxite Cryolite
Q.117	A) Nit	the oxide in which I trous oxide tric oxide	N has the highe	st oxidation numb	C)	Nitrogen peroxide Nitrous anhydride
Q.118	A) ± 2	ı r has oxidation sta t 2 4 and +6	e of		,	None of these Both A and B
Q.119	A) Me	CH ₃ is example of - etamerism nctional group		isomerism.	,	Chain Position
Q.120	A) Ac	er are produ crylic resins dyester resins	ct of reaction o	of an alcohol and a	C)	ratic bi-functional acids. PVCs Polyaride resins
0.121				NGLISH	•	
Q.121	A) Ro B) Sto		r all valuable p	ossessions.	,	Pinched. Established.
Q.122		resence of armed go efeated. cited.	uards	us from doir	C)	nything disruptive. Irritated. Prevented.
Q.123	A) Div	ight was verted. iflected.	from Lahore	e to Islamabad air	C)	Deflected. Shifted.
Q.124	A) Lo		forward to our	picnic scheduled i	C)	ext month Seeing. Going.



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Q.150 DOZE

A) DoggedB) Diet

Q.137 A) A day later he reached his first glimpse of Lahore. B) A day later he took his first glimpse of Lahore. C) A day later he found his first glimpse of Lahore. D) A day later he caught his first glimpse of Lahore. Q.138 A) This will have a bad impact to the economy. B) This will have a bad impact on the economy. C) This will have a bad impact at the economy. D) This will have a bad impact over the economy. Q.139 A) It would save him from dying of thirst. B) It would save him from dying from thirst. C) It would save him from dying with thirst. D) It would save him from dying by thirst. 0.140A) All this flashed by his mind in an instant of protest. B) All this flashed on his mind in an instant of protest. C) All this flashed through his mind in an instant of protest. D) All this flashed by off mind in an instant of protest. In each of the following question, four alternative meanings of a word are given. You have to select the NEAREST CORRECT MEANING of the given word and fill the appropriate Bubble / Circle on the MCQ Response Form. Q.141 VEXING A) Annoying C) Viable B) Aggressive D) Waxy Q.142 VAGUE A) Respectful C) Warlock B) Uncertain D) Snow white Q.143 MANGLED A) Dodged C) Indisputable B) Grained D) Damaged Q.144 PRODIGIOUS A) Productive C) Prudential D) Waddle B) Enormous Q.145 ASTOUNDED A) Shocked C) Assured B) Discarded D) Attracted Q.146 SAGACITY A) Foolishness C) Onions B) Large City D) Wisdom **Q.147 GRIM** A) Gratis C) Severe B) Restless D) Grater Q.148 INDOLENTLY A) Lazily C) Ideally D) Gaily B) Indecently Q.149 PERISH A) Furious C) Secret B) Come to death D) Frustrated

D) Medicine to be taken

BIOLOGY

Q.151	Which of the following receptors produce sensation of p		
	A) Mechanoreceptor. B) Nociceptors.		Chemoreceptors. Thermoreceptors.
Q.152	When your finger accidentally gets caught in a door, the	pain	message is sent to your brain through
	A) Homeostasis. B) Sensory receptors.	,	Caffeine. The medulla.
Q.153	Neck has type of joint. A) Ball and socket. B) Pivot.		Hinge. Fibrous.
Q.154	End product of hemoglobin break down is:A) Creatinine.B) Bilirubin.		Hypoxanthin. Xanthin.
Q.155	In what direction can a DNA polymerase work when cata	alyzin	g the addition of nucleotide monomers to
	A) From the 5' toward the 3' end of the new strand being assembled.	-	From the 3' to the 5' end of the strand being assembled.
	B) From the replication centers in two directions called replication forks.	D)	In both directions if DNA ligase is present.
Q.156	Which bond is the potential source of chemical energy for A) C-N. B) C-O.	C)	ular activities? C-H. H-O.
0.157	Sharks and rays are included in class:	,	
Q.13 0	A) Cyclostomata. B) Chondrichthyes.		Osteichthyes. Tetrapoda.
Q.158	In what stage of aerobic respiration are 2-carbon molect A) Glycolysis. B) ETC.	C)	xidized completely to carbon dioxide? Kreb cycle. Calvin cylcle.
Q.159	Which of the following does not have specialized respirated. A) Hydra. B) Birds.	C)	organs? Cockroach. Both A and B.
Q.160	Humming birds belong to the category A) Heterotherms. B) Endotherms.	,	Ectotherms. None of these.
Q.161	Syphilis is caused by A) Neisseria gonorrhoeae. B) Catsworm.		Treponema pallidum. Herpes simplex.
Q.162	In moths male is A) Heterogametic. B) Dieogametic.		Homogametic. Both B and C.
Q.163	When carbon dioxide pressure increases the capacity of A) Increases many fold. B) Decreases.	C)	oglobin to hold oxygen Remains constant. Is doubled.
Q.164	The soluble part of the cytoplasm is termed as A) Cisternae. B) Cytosol.		Endocytosis. Both A and B.
Q.165	Name the enveloped RNA virus that causes infusion hep A) HBV. B) HAV.	C)	HCV. None of these.
Q.166	In general asexual reproduction is common in A) Humans. B) Basidiomycota.	C) D)	Deuteromycota. Basidiospores.

Q.167	Name the vertebrates which are without jaws	6)	
	A) Osteichthyes. B) Cyclostomata.	C) D)	Chondrichthyes. None of these.
Q.168	The total inside capacity of lungs of adult human beings was A) 5 ml.	vhen C)	fully inflated is 500 ml.
	B) 50 ml.	,	5000 ml.
Q.169	Which of the following belong to collenchyma cells?		
	A) Fibers. B) Vessels.	C) D)	Sclereides. None of these.
Q.170	Which of the following promotes both leaf and fruit growt		
	A) Auxins. B) Gibberellins.	C) D)	Abscisic acid. Ethane.
Q.171	Name the external factor of growth in plants	_\	
	A) Carbon dioxide B) Water	C) D)	Hormones Nutrition
Q.172	The genes of blue opsin is present on	6 \	
	A) Autosome 9. B) Autosome 7.	•	Autosome 1. Autosome 3.
Q.173	The dew drops on tips of grass leaves is an example of		
	A) Infestation.B) Bleeding.	,	Exudation Imbibition
Q.174	Which of the following modifies proteins and lipids by add	ling	carbohydrates
	A) Golgi Apparatus B) Polysome	,	Plasma membrane None of these
Q.175	Which of the following are spiral-shaped bacteria?		
	A) Cocci B) Bacilli	,	Pseudomonas Vibrio
Q.176	Which of the following is used for lowering blood cholestr	ol?	
	A) Neurospora B) Griseofulvin	C) D)	Aspergillus Lovastatin
Q.177	Which of the following are called placental mammals?		
	A) Prototheria B) Eutheria	C) D)	Metatheria All of these
Q.178	The attraction among water molecules which hold water t	oge	ther is called
_	A) Tension B) Adhesion	C)	Cohesion Ambibition
Q.179	Pick the paratonic movement from the following		
	A) Nastic B) Turgor	•	Growth Tactic
O 190	E) Which of the following controls several automatic function	ne lil	ko broathing boart rate and blood
Q.160	pressure?	115 111	ke breatiling, heart rate and blood
	A) Midbrain B) Pons		Medulla Cerebellum
Q.181	Which of the following has 40 chromosomes?		
_	A) Corn B) Sugarcane	C) D)	Frog Mouse
Q.182	The cell suspension culture of produces quinine		
	A) Soybean B) Cinchona ledgeriana		Digitalis lanata Luceferin
Q.183	Which one of the following is most slender in structure?		
	A) Microtubules B) Micro filaments		Intermediate filaments Both A and B
Q.184	Name the human tissues that contain about 85% water.		
	A) Nerve cells B) Bone cells		Brain cells None of these
	5, 50110 CC110	01	

Q.185	A) Chloroplasts B) Chromoplasts		Leucoplasts None of these
Q.186	Name the one involved in DNA replication.		
•	A) Cysts B) Mesosomes	•	Ribosomes Spores
Q.187	Which of the following has rootless sporophytes?		
	A) Psilopsida B) Tracheophyta		Lycopsida Sphenopsida
Q.188	Chlorophylls absorb mainly wave length.		
	A) Yellow B) Green		Violet-blue Indigo
Q.189	did not have the adaptations to remove the flooding		
	A) Both B, D B) Hydrophytes		None of B, D Xerophytes
Q.190	Which of the following is made up of bones and cartilage?		
	A) Endoskeleton B) Exoskeleton		Hydrostatic skeleton Both A and B
Q.191	This disease is characterized by the decline in brain function		E 11
	A) Alzheimer's disease B) Parkinson's disease	C)	Epilepsy None of these
Q.192	Prophase, metaphase and telophase are subdivisions of		
	A) Mitosis B) Karyokinesis		Cytokinesis None of these
0 102		,	None of these
Q.193	organs are functionally different but structurally ali A) Analogous	c)	Homologous
	B) Unilogous	D)	Hypologous
Q.194	Which of the following gives blue color with iodine?		
	A) Starch B) Cellulose		Glycogen All of these
0 105		D)	All of these
Q.195	Herpes simplex is caused by virus. A) Enveloped RNA	C)	Glycogen
	B) RNA tumor		Both B and C
Q.196	Name the cynobacteria which are helpful in fixing atmosph		
	A) Heterocysts B) Nostoc	D)	Akinetes Hormogonia
0.197	Name the class that contains seedless plants.	ŕ	J
	A) Angiospermae		Paraphsys
	B) Gymnosperm	,	Filicineae
Q.198	Which form of anaerobic respiration occurs in muscle cell ophysical activities?	or h	umans and otner animals during extreme
	A) Alcoholic fermentation	,	Glycolysis
	B) Lactic acid fermentation	-	Pyruvic acid oxidation
Q.199	How much water approximately is required to excrete 1 kg A) 500 ml		ammonia nitrogen? 300 litre
	B) 5 litre	,	500 litre
Q.200	Which disease causes immobility and fusion of vertebral jo		
	A) Sciatica B) Spondylosis	,	Disc slip Rickets
Q.201	Which hormone continues to promote protein synthesis th	,	
•	growth?		
	A) TSH B) ADH	,	ACTH STH
0.202	Position of a gene on the chromosome is called its	,	
~	A) Phenotype	•	Junction
	B) Locus	D)	Genotype
			(Continued)

Q.203	Pick the biotic component from the following.	C \	A true a a un la a un
	A) Soil B) Water		Atmosphere Animals
Q.204	The two strands in DNA are coiled to each other.	۵.	
	A) Parallel B) Antiparallel		Both A,B None of these
Q.205	Name the class without antennae.		
	A) Arachnida B) Myriapoda	,	Insecta Crustacea
Q.206	The African sleeping sickness is caused by A) Entamoeba histolytica B) Trypanosoma		Zooflagellates Ciliates
0.207	Which of the following does not belong to angiospermic fa	,	
•	A) Picea B) Poaceae	C)	Rosaceae Fabaceae
Q.208	Name the nutrition resulted by feeding on dead and decays A) Saprophytic B) Parasitic	C)	matter. Symbiotic Both B & C
Q.209	How many grams of nitrogen can be eliminated in the form		
	A) 20 B) 25	C) D)	
Q.210	Which disease is caused by low calcium in the blood?	_,	
	A) Tetany B) Cramp		Muscle fatigue Sciatica
Q.211	It is known that red light flowering in the lon A) Synchronizes B) Inhibits	C)	ay plants. Promotes Does not affect
Q.212	The color phenotype of the grain is the sum of individual e		
	A) Six B) Five		Four Five or three
Q.213	In zone the light is insufficient to support photos: A) Desert		nesis. Littoral
	B) Profundal	,	All of these
Q.214			
	The optimum temperature for enzymes of human body is	C)	3130K
	The optimum temperature for enzymes of human body is A) 32°F B) 46°C	,	313°K 37°C
Q.215	A) 32°F B) 46°C Which of the following damages wooden ships?	D)	37°C
Q.215	A) 32°F B) 46°C	D) C)	
	 A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax Which of the following may build coral reefs along with cor 	D) C) D) ral a	37°C Teredo Ostrea
	A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax	C) D) ral a C)	37°C Teredo Ostrea
Q.216	A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax Which of the following may build coral reefs along with coral may be a body cavity?	C) D) ral a C) D)	37°C Teredo Ostrea animals? Green algae Red algae
Q.216	A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax Which of the following may build coral reefs along with coral Myxomycota B) Brown algae	D) C) D) ral a C) D) C)	37°C Teredo Ostrea Inimals? Green algae
Q.216 Q.217	A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax Which of the following may build coral reefs along with coral Myxomycota B) Brown algae Which of the following do not have a body cavity? A) Pseudocoelomata B) Acoelomata Name the neurotic disorder characterized by bouts of over	C) ral a C) D) C) C) C) eat	Teredo Ostrea nimals? Green algae Red algae Coelomata None of these ing of fattening foods.
Q.216 Q.217	A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax Which of the following may build coral reefs along with coral Myxomycota B) Brown algae Which of the following do not have a body cavity? A) Pseudocoelomata B) Acoelomata	C) ral a C) D) C) C) D) eat C)	Teredo Ostrea inimals? Green algae Red algae Coelomata None of these
Q.216 Q.217 Q.218	A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax Which of the following may build coral reefs along with coral may be	C) D) ral a C) D) C) D) c) C) D) eat C) D)	Teredo Ostrea Inimals? Green algae Red algae Coelomata None of these ing of fattening foods. Anorexia nervosa Salmonella called metanephridiuin?
Q.216 Q.217 Q.218	A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax Which of the following may build coral reefs along with coral may be	C) D) ral a C) D) C) D) eat C) D) tem C)	Teredo Ostrea Inimals? Green algae Red algae Coelomata None of these ing of fattening foods. Anorexia nervosa Salmonella
Q.216 Q.217 Q.218 Q.219	A) 32°F B) 46°C Which of the following damages wooden ships? A) Sepia B) Limax Which of the following may build coral reefs along with coral may be	C) D) ral a C) D) C) D) eat C) D) tem C)	Teredo Ostrea Inimals? Green algae Red algae Coelomata None of these ing of fattening foods. Anorexia nervosa Salmonella called metanephridiuin? Cockroach Earthworm