19711

120 MINUTES

1.	The be A)	est examples of Faults	ductile B)	or plast Joints	ic defor		of rock layers. Folds	D)	Shears
2.	The ty	pical gas used i Radon	in Induc B)	tively C Neon	Coupled		(ICP) spectron Helium	metry.	Argon
3.	One of A) C)	f the most common Horn antenna Paraboloid and		sed ante	enna, es B) D)		antenna	e radion	neters.
4.		avity anomaly terrain. Helmert Cond Isostatic gravi Free-air gravit Bouguer anon	lensation ty anom	n gravit naly	_		ch it is measur	red and	the attraction
5.		of the follo ometric analysi Strahler Stream Gravelius Stream Horton Stream Shreve Stream	is of dra m order eam orde n order i	inage b is a 'tog er is a 'l is a 'top	asins is p up' sy cottom u down'	incorrect stem. up' syste system.	et? em.	stream	ordering in
6.	The permitted migma (A) (C)	erson who coin atites. H. G. F. Wink J. J. Sederholr	ler	term 'a			olmquist	e possil	ole origin of
7.		the world wide rect answer. <u>List-I</u> Marinoan Huronian Andean–Sahar Sturtian	ran	tions in	a) b) c) d) e)	2400 M 360 Ma 715 Ma 450 Ma 650 M	List-II Ma – 2500 Ma a – 260 Ma a – 680 Ma a – 420 Ma a – 635 Ma	in List-l	I and choose
	A) C)	i-c, ii-e, iii-a, ii-d, ii-a, iii-b,			B) D)		e, iii-e, iv-a , iii-d, iv-c		
8.	The sc A) C)	ientific study o Ichthyology Iconology	f Trace	fossils i	is called B) D)	Ichnolo			

9. Asteroid impacts causes is associated with which of the following mass extinction Earth?									
	A)	Triassic–Jurassic extinction e	vent						
	B)	Late Devonian extinction eve							
	C)	Ordovician–Silurian extinction							
	D)	Cretaceous-Paleogene extino	tion	event					
10.	is inco	orrect?	_	ing Deccan Volcanic Province (DVP) in India					
	A) B)			vince. sed close to the Cretaceous-Tertiary					
	C)	Boundary at about 65 Ma. It is the largest and most con-	snici	ious among the Cenozoic volcanics of India.					
	D)	Deccan basalts are mainly the	-	_					
11.		_		nyan basin to the Aravalli Craton?					
		Great Boundary Fault		Delwara Lineament					
	C) F	Rikhabdev Lineament	D)	Jahazpur Thrust					
12.		er impacts such as injuries and	loss	ich involves steps to reduce vulnerability to of life and property:					
	A)	Response	B)	Preparedness					
	C)	Recovery	D)	Mitigation					
13.	The pr			xic chemicals and hazardous wastes is					
	A)	Recycling	B)	Incineration					
	C)	Sanitary Landfill	D)	Composting					
14.	In maj	ps doubly plunging folds are re	pres	ented by:					
	A)	Concentric circles	B)	V-shaped patterns					
	C)	Parabolas	D)	Concentric ellipses					
15.	What	is the most frequent use for the	Bru	inton Compass in the field?					
	A)	Locate oneself in the field.							
	B) C)	Demark sampling locations. Calculation of the strike and	din c	of geological features					
	D)	Identify small mineral crysta	-	-					
16.	The g	eophysical exploration method	d wi	dely used for detailed exploration of oil and					
	gas.		D)						
	A) C)	Seismic Refraction Method Magnetic Method	B) D)	Gravity Method Seismic Reflection Method					
	,	_	ים	Selection Method					
17.		S stands for	h a						
	A) B)	Database Manufacturing System Database Monitoring System							
	C)	Database Mapmaking System							
	D)	Database Management System							
		,							

18.	The radial distance between where an object appears in an aerial photograph to where it actually should be according to a planimetric coordinate system: A) Stereoscopic Parallax B) Vertical Exaggeration											
	C)	Overlap		Relief Displacement								
19.	The mA)	nost preferred method of deep Drift mining Hydraulic Suction mining	sea bee B) D)	d mining for polymetallic modules is Continuous-line bucket system Shaft mining								
20.	The property (A) (C)	rocess for concentration of pri Froth Flotation process Leaching	imarily B) D)									
21.	The unA)	niversal plant indicator for Co Ocimum homblei Eriogonium oralifolium	opper d B) D)	eposits: Viola calaminaria Equisetum arvense								
22.	The most accepted method of sampling best suited for bedded, banded and vein type ore deposits.											
	A) C)	Chip sampling Grab sampling	Muck sampling Channel Sampling									
23.	Uranium mineralization of Jaduguda in Singhbhum district, Bihar is a A) Metamorphic deposit B) Hydrothermal deposit C) Sedimentary deposit D) Magmatic deposit											
24.	The In A)	ndian state which has the large Chattisgarh B) Karna		rves of iron ores: C) Odisha D) Jharkhand								
25.	Which A) C)	n of the following is matched of Silicon – Atmophile Cadmium – Lithophile	correct B) D)									
26.	The mA)	nost correct sequence of the m O>Si>Fe>Ca>Al Si>O>Al>Ca>Fe	ass abu B) D)	undance of elements in the Earth's Crust is: Ca>Fe>Al>Si>O O>Si>Al>Fe>Ca								
27.	The si	implified form of Ghyben-Her $z = 40/h$ B) $z = h/h$	_	relation: C) $z = 40h$ D) $h= 40z$								
28.	The tresour	-	ed to l	nave fluoride contamination in groundwater								
	A) C)	Wayanad and Ernakulam Trichur and Ernakulam	B) D)	Malappuram and Kollam Alappuzha and Palakkad								
29.		n of the following engineerin ation sites for construction?	g prop	erty tests are not required for rocks used as								
	A) C)	Shear Strength Tensile strength	B) D)	Uniaxial Compressive strength Crushing strength								

30.		basic measure kage limit, pla			I water contents of a fine grained soil, viz., its								
	A)	Albrecht lin			B)		rberg limits						
	C)	Liebig limit			D)		ichaev limit	S					
31.		single continer	nt Panga	ea was f	ormed	when L	aurussia and	d Gondwa	naland	collided			
	A)	Alpine Orog	geny		B)	Ande	an Orogeny	,					
	C)	Hercynian (D)		lonian Orog						
32.	The l	Miller indices	of a crys	_	e having	g the pa		: infinity	b : 1c:				
	A)	210	B)	201		C)	102	D)	120				
33.		largest seismic	ally acti	ve conti		-		arth today	:				
	A)	Baikal Rift	D:0		B)		Sea Rift						
	C)	West Antaro	ctic Rift		D)	East .	African Rift						
34.	The 1	Earth's fastest	present	day seaf	loor sp	oor spreading centre is in							
	A)	the East Pac	cific Rise	9	B)		Iid-Atlantic						
	C)	the Central	Indian R	lidge	D)	the S	outh Atlanti	c Ridge					
35.	Pi di	agrams and Be	ta diagra	ams are	techniq	ues of s	tereographi	c analysis	of	•			
	A)	Folds	B)	Faults	S	C)	Joints	D)	Uncon	formities			
36.	Whic	ch of the follow	wing env	rironmer	nt is the	most fa	avourable fo	or preserva	ation of	fossils?			
	A)	Lacustrine	B)	Fluvia	al	C)	Marine	D)	Glac	ial			
37.	The	Upper Gondw	ana litho	ostratigra	aphic u	nit und	erlying the	Cretaceou	is succe	ssion in			
		richinopoly A											
	A)	Kallamedu		on	B)		kudi Limes						
	C)	Terani Plant	t Beds		D)	Karai	Shale Beds	5					
38.		concept of a bi		al origin				by:					
	A)	Stanley Mil			B)		Oparin						
	C)	Harold C. U	Jrey		D)	Franc	eisco Redi						
39.		ch of the follo				ool botl	n for dating	tree-ring	sequen	ces and			
	_	eoclimatologica		struction		77 1	1 .						
	A)	Radiodensit	-		B)	-	odensitomet	•					
	C)	Spot densite	ometry		D)	Line	densitometr	У					
40.		14 Bravais latt			rith 32]		-		-				
	A)	446	B)	230		C)	430	D)	246				
41.		unconformity			een Cai	mbrian	strata and I	Precambri	an base	ment in			
		Grand Canyon i		•	D)	Diago	onformity						
	A) C)	Nonconform Paraconform			B) D)		ess or onlap	unconfor	mity				
	\sim $^{\prime}$	I aracomon	111t y		וע	Duu	os or omap		TITIC A				

42.			-		es the collective effects of changes in the Earth's climate over thousands of years?						
	A)	Calvin-Benson		B)		on Cycle					
	C)	Milankovitch	Cycle	D)	Soth	ic Cycle					
43.	The primpur	product of therr	nal metam	orphism	of dolo	mitic lime	stone with s	mall silice	ous		
	A)	Serpentine Ma	arble	B)	Bruc	ite Marble					
	C)	Tremolite Ma	rble	D)	Fors	terite Marb	ole				
44.		h the following a	and choose	the corr	ect answ						
		ranulite facies		a)	Low Pr		- Low Temp	erature			
	,	anidinite facies		,	High Pr		Low TempLow Temp				
	/	rehnite-pumpell	vite facies		Low Pre		Medium T		3		
		lornblende-horn	-	,	Low Pre		 High Temp 		-		
	• •			,			- High Tem				
	A)	i-d, ii-a, iii-c,	iv-e	B)	i-c, i	i-e, iii-a, iv	7-b				
	C)	i-e, ii-d, iii-a,	iv-c	D)	i-b, i	ii-d, iii-c, iv	v-e				
45.46.	precipitated phase and the liquid to produce a new solid phase. A) Peritectic point B) Solidus point C) Eutectic point D) Congruent melting point										
47.	The o	only unambiguou	ıs dwarf pla	anet:							
	A)	Ceres	B) Ha	umea	C)	Pluto	D)	Eris			
48.	i) 7 ii) 7 iii) (h the following ist I Tetragonal Syste Triclinic System Orthorhombic Sy Monoclinic Syste	ystem	a) b) c) d)	List Gypsum Beryl Ty Baryte Ty Zircon	Type ype Γype					
				e)	Axinite	Type					
	A) C)	i-d, ii-c, iii-e, i-c, ii-d, iii-a,		B) D)		ii-b, iii-e, iv ii-e, iii-c, iv					

49.		Which of the following depicts a scientific way of describing the topography of ocean floor?											
	A) C)	Hypsometric Hygrometric			B) D)		ereliptic Curve sographic Curv						
50.	of m	fine grained sec icroscopic, calc siliciclastic sec Hydrogenou Pelagic sedii	careous diment s sedim	or silico or a mix	eous sh	nells of these an Terri	phytoplanktor	or zooents		-			
51.	Chor A) C)	ndrites and acho Tektites Iron Meteor		belong	to the c B) D)	Ston	 y-Iron Meteori y Meteorites	tes					
52.	The (A)	only spherical r Phobos	natural s B)	satellite (Moor	-	g a terre C)	strial planet: Titan	D)	Deimos				
53.		vast, extended, bunding the Sol ets: Asteriod Bel Kuiper Belt	lar Systo lt	-	_	t to be	_	-	-				
54.	Incis A) B) C) D)	ed meanders ar Interruption Old age of fl Rejuvenation Mature stage	in fluvi luvial cy n in fluv	al cycle ycle vial cycl	e	ic and f	avourable evid	lences o	f				
55.		Standstill theorounded to explain the origin of the origin of	ain: `coral re		ontrol (B) D)	the o	and the Subsist rigin of mount rigin of wadies	ains	eory have bee	n			
56.	degre		alli Inte B)	nsity sca	ale to n		the intensity o	f earthqu D)	uakes has	-			
57.	A) Whice A) B) C) D)	6 Ch of the follow San Andreas Andes Mour Alpine Fault East Africa 1	ring is a Fault contain Ra of New	classic of Weste ange of V	rn Nor Westerr	th Amei	vergent plate be	ŕ					
58.	Mou glaci	ntain peaks tha	t projec	t out pro	minen	tly abov	ve the general s	surface o	of a continenta	ιl			
	A)	Inselbergs	B)	Corri	es	C)	Nunataks	D)	Aretes				

59.	The zo A)	one of illuviation C-horizon	on in a s B)	oil prof A-hori		C)	D-horizon	D)	B-horizon
60.	The w	orld's first man	nned ex	pedition	n to rea	ch the	deepest point i	n each	of the Earth's
	A) C)	Challenger Ex Bathyscaphe l	-		B) D)		Deeps Expeditionsea challenge E		on
61.	The G	reat Pacific Gar	rbage P	atch is 1	elated t	0			
	A) C)	Ocean gyres Oil spills			B) D)	Ocean Marine	tides e industrial pol	lution	
62.		umber of miner sonal System:	als incl	uded in	the Mo	oh's sca	le of hardness	that cry	ystallize in the
	A)	3	B)	2		C)	1	D)	0
63.	Time 1	ock unit equiva	alent to	Epoch:					
	A)	Series	B)	Forma	tion	C)	Erathem	D)	Group
64.	The sh A) C)	nape of indicatr Sphere Prolate Sphere		ıniaxial	positive B) D)	Ellipso			
<i>65</i>	The re			and are	of the o		-		
65.	A)	rest of the com Grossular	В)	Uvaro	_	C)	Almandine	D)	Pyrope
66.	Which	of the follow bles?	ving se	dimenta	ıry basi	n types	s is correctly	matche	d with world
	A)	Passive margi			_				
	B) C)	Strike Slip base Foreland basis					erica		
	D)	Forearc basin		_					
67.		dary chemical ating interlocke							
	A)	Scour marks	B)	Concr	etions	C)	Stylolites	D) S	Septaria
68.	_	rained sedimen g fissility:	tary roc	ek comp	osed pr	edomin	antly of indura	ited clay	y particles and
	A)	Pisolites	B)	Shale		C)	Spherulite	D)	Argillites
69.	Which A) B) C) D)	Abundant spe Distinctive or Short geograp Wide stratigra	cimens easily rohic dist	responsi ribution	ible	ic of go	od and useful i	ndex fo	essil?
	-,		T 14						

70.	The Brachiopod 'Syringothyris' belongs to the geological periods:											
	A)	Carboniferous		B)	Dev	onian						
	C)	Silurian		D)	Ord	ovician						
71.	Choo	ose the correct sequen	nce of evol	ution o	f hors	es from ancient	to the m	nodern horses:				
	A)	Merychippus \rightarrow P				1.1						
	B)	Parahippus \rightarrow Me	rychippus	→Hipp	arion	→ Pliohippus						
	C)	Pliohippus \rightarrow Hip	-	-								
	D)	$Hipparion \rightarrow Para$	hippus →	Pliohip	pus –	→ Merychippus						
72.		single most importan		nich dec	eides v	whether a severe	e ground	water problem				
		ely to occur in a tunr										
	A)	Relative position										
	B)	Intensity of rainfa										
	C) D)	Presence of horizon Type of rock, i.e.,	5		tary o	r matamorphic						
	D)	Type of fock, i.e.,	igneous, s	cumini	itai y O	i inctamorpine.						
73.	Whic	ch of the following is		-	of an	•						
	A)	Shale B)	Granit	te	C)	Laterite	D)	Sandy-Clay				
74.		electrode arrangementation are called		he ele	ctric	resistivity surv	veys for	r groundwater				
	A)	Arrays B)	Loops	5	C)	Overlays	D)	Tessellates				
75.	The 1	response of an eleme	nt to geoch	nemical	dispe	rsion is governo	ed by its					
	A)	Mobility		B)	Den	sity						
	C)	Melting Point		D)	Con	ductivity						
76.		lower unaffected pard the	t of the or	e body	in the	e supergene sul	phide er	nrichment is				
	A)	Supergene zone		B)	Mes	ogene zone						
	C)	Hypogene zone		D)	Epig	gene zone						
77.		Titano-magnetite de	eposits of	Adiror	ndack	Region, New	York is	an important				
	A)	Residual Liquid In	njection									
	B)	Immiscible Liquid	l Segregati	on								
	C)	Residual Liquid S	0									
	D)	Immiscible Liquid	I Injection									
78.	field,	re classifying device large ore particles		-	-							
		l ore particles: Elutriator		B)	V no	lson Concentra	tor					
	A) C)	Hydrocyclone		Б) D)		chert cone conc						
	\sim	11 yai oo yo lo lic		D)	TCIC		ominatol					

79.	The digital image processing technique of transforming different sets of data into coordinate system:										
	A) C)	Image rest Image enh	oration		B) D)	_	e rectification e registration				
80.	Anor	thosites have	economic	valu	ie for the j	presenc	e of:				
	A)	Rutile	B)	Scl	neelite	C)	Wolframite	D)	Ilmen	ite	
81.	globa <u>Colu</u> i) N ii) H iii) (al users in Co		nd ch <u>Co</u> a) b) c)		orrect a		rith the	correspo	onding	
	A)	i-c, ii-a, iii	-b, iv-e		B)	i-d, ii	i-e, iii-a, iv-c				
	C)	i-a, ii-c, iii	-e, iv-b		D)	i-d, i	i-a, iii-b, iv-c				
82.	Orbit A) C)	tal period of a 23 hours 11 hours 5			is B) D)	1 day 23 ho	ours 58 minute	S			
83.			ndustrial procarbon		_	nufactu Meth	essentially no red for human tane on dioxide			out are	
84.	A)	most importa Screening	nt step in I	Envir	onment Ir	B)	Reporting				
	C)	Monitoring				D)	Scoping				
85.	A)	c geological e Clinometer Geological H		of ar	ny geologi	B)	for collecting s GPS Sample bags	sample:			
86.	A)	first task in an Geochemical Geophysical	l Investiga	tion	econnaissa	B)	idy: Geological Ma Geological Sai				
87.		ch among to othesis' of ori Planetesim Dynamic I	igin of the nal Hypoth	Eartlesis	h and Sola		under the cat m? Protoplanet Tidal Hypot	Hypothe	_	arental	

88.	A wave on the surface of a lake or landlocked bays, caused by atmospheric or seismic disturbances:													
	A) Surge B) Swash C) Seiche D) Swell													
89.		hydrochemic Trilinear dia Calcium-C Sodium- C Magnesium Mixed typ	ngram: Chloride ty Chloride ty m bicarbo	ype ype	ater sam	ple falling in	the Field	1 5 of the Hill-						
90.		It makes e benchmark It encoura It propose of mining	Jnion Cab fforts to have to help ges the pu s to grant and acqui	pinet is wrong narmonize tax the private seablic sector to status of indu- sition of fore	ly quoted es, levies ector. take up t stry to m ign mine		with work ration. to boost private se	financing ctor.						
91.	The AAABAACAACAACAACAACAACAACAACAACAACAACAAC	nodern electronic scintillation counter was invented by John Mine Sir Samuel Curran Sir Robert Alexander Watson Watt Sheldon Breiner												
92.	conc A)	entration of Prothoate	compo	ounds.	Perc	hlorate	e of the	relatively high						
	C)	Chlorofor	mate	D)	Soth	iocyanate								
93.	Later A) C)	ral faults, tran Thrust fau Dip slip fa	lts	faults, wrench B) D)	Strik	r tear faults re te slip faults que slip faults								
94.	Thick A) C)	kening and the Parallel fo Isoclinal fo	lds	beds at the cr B) D)	Cone	troughs is cha centric folds lar folds	aracteristi	c of:						
95.	Which A) B) C) D)	Planes cha R-tectonite B-tectonite	racterize e is B-tect es are dor	tement is not of the rock fabri- tonite in whice minated by plate of flattening sta	c of S-te h the fab anar elem	ric elements l	nave been	rotated						
96.	Uran A)	ium-Thoriun Zircon	n-Lead da B)	ting method i Muscovite	-	erformed on t Hornblend		al: Biotite						

97.	The principle which states that changes in the temperature, pressure and volume of concentration of a system will result in predictable and opposing changes in the system in order to achieve new equilibrium state:										
	A)	Bernoulli's p			B)	Stefa	n-Boltzmann I	_aw			
	C)	Le-Chatelier'	-		D)		Lussac's Law				
98.	Close	ly spaced highe	er value	contou	rs in a c		•				
	A)	Steep slope			B)		e slope				
	C)	Convex slope	2		D)	Conv	exo-concave s	lope			
99.	Catac crust.	lastic metamor	phic ro	ocks tha	t are p	roduced	along shear	zones d	eep within	the	
	A)	Skarns	B)	Mylo	nites	C)	Eclogites	D)	Hornfels		
100.	Which A) B) C) D)	h of the following Shapefile (Shapefile (Shapefile (Shapefile (Shapefile Shapefile (Shapefile Shapefile Shapefile Shapefile Shapefile Shapefile (Shapefile Shapefile Shapefile Shapefile Shapefile Shapefile Shapefile (Shapefile Shapefile Shapefile Shapefile (Shapefile (Shap	HP) (GDB) tion Mo	odel (DI	EM)	ospatial	format?				
101.		ding to D. W. taka fall under				n of sho	orelines, the sh	noreline	s of Kerala	and	
	A)	Shorelines of		_	B)	-	oound Shoreling	nes			
	C)	Shorelines o	f emerg	gence	D)	Neutr	al Shorelines				
102.	latest: A) B) C)	Matuyama, E Gauss, Matuy Matuyama, C	Brunhes yama, C Gauss, C	, Gilbert Gilbert, l Gilbert, l	t, Gauss Brunhes Brunhes	5 5 5	e epochs or c	hrons f	rom earliest	: to	
	D)	Gilbert, Gaus	ss, Mati	ıyama, I	Brunhes	5					
103.		n pressure cond Oceanic side Continental s	litions o			nd eclog Abys		ır on the		ure	
104.	_	geochemical type within the ear	-	Mid-Oce	an Rid	ge Basa		om a d	eeper enricl	hed	
	A)	N-MORBs	B)	T-MC	ORBs	C)	E-MORBs	D)	I-MORB	S	
105.	Which A) C)	h of the followi Nuclear energy Solar energy	_	non-ren	ewable B) D)	Wind	ee? energy of these				

106.		graphs? Flying he Focal len	ngth of came	era lens							on	aerial
107.		vity of a b tivity.	g to charace ody which Displacemen	is in the		quilib	orium w		surro	unding is		
	C)	Kirchoff	-		D)			Radiatio				
108.	unsupp	orted met								nder the	categ	ory of
A) Room and Pillar Mining B) Shrinkage stoping C) Sublevel stoping D) Cut and fill stoping												
109.												
110.	The to A)	ol for mai Sonic log	ntaining the		er and s	-		orehole aliper lo		D)	Indu	ction log
111.	The ma A) B) C) D)	Heavy m Selective Residual	n for geoch ineral accur concentrat accumulati ermal accun	mulation ion on		mali	es:					
112.		Beds wit Beds wit Beds wit Beds wit	llowing geon the upstre h gentle upstre h gentle down h steep down ich are fault	am direc stream d wnstrear ynstream	tion? ip. n dip.	ns is	ideal f	for cons	truct	ion of a	dam v	vith 10° to
113.	Which A) C)	Earthqua	lowing is no kes use effect	ot a likel	ly caus B) D)	De	eforesta		ock			
114.	,	do-Africa Transfor	n boundary m boundary ative bound	7	,	dian Co	and Af		lates idary		·.	

115.	Which of the following statement is incorrect? A) Mid-Oceanic ridge belt is the longest of the active seismic belts. B) Pacific Sciencia belt is the biggest of all the gaignia belts.							
	B) C)	Pacific Seismic belt is the biggest of all the seismic belts. Alpine-Himalayan belt is the result of Palaeozoic closure of the Tethys						
	D)	Ocean. The Indian Ocean Tsunami of 2004 is associated with Pacific Seismic Belt.						
116.	The Archaean intrusions of post-charnockite age found in Kalpetta hills and Sultan's Battery in the Malabar region of Kerala is correlated with:							
	A)	Untala Granite		B)	Penin	sular Gneissi	c Comple	ex
	C)	Berach Granite		D)	Close	pet Granite	•	
117.	The humans, chimpanzees, gorillas and orangutans are included under the biological family:							
	A)	Cebidae		B)	Hylol	oatidae		
	C)	Cercopithecidae		D)	Homi	nidae		
118.	The taxonomic name of woolly mammoth an extinct species of mammal that lived during the Pleistocene with its extinction in the early Holocene epoch:							
	A)	Mammathus meridionalis I			Mammathus primigenius			
	C)	Mammathus subpl	anifrons	D)	Mam	mathus rumai	nus	
119.	The land bridge between Asia and North America believed to be the migration route of a small human population from Eastern Siberia during the last glacial maximum before expanding into the American settlements sometime after 16500 years B.P:							
	A)							
	C)	Beringia		D)		Peninsula		
120.	Paludal sediments are characteristics oftype of depositional environments.							
	A)	Dolines B)	Lagoo		C)	Marshes	D)	Tidal flats