



# ELIGIBILITY/COMPETITIVE EXAM 2024 PAPER-2

Total Number of Questions: 100 Maximum Marks: 200

MENTION YOUR REGISTER NUMBER				
ACRES ASSISTAN	No. P. Line Street, St	The state of the s		

Serial Number:

Subject: EARTH SCIENCE

## **INSTRUCTIONS FOR CANDIDATES**

#### DOs:

- 1. This question booklet is issued to you at **9.55 a.m.** by the room invigilator.
- 2. Check whether the Register Number has been entered and shaded in the respective circles on the OMR answer sheet.
- 3. The Version Code of this question booklet should be entered on the OMR answer sheet and the respective circles should also be shaded completely.
- 4. The Version Code and Serial Number of this question booklet should also be entered on the Nominal Roll without any mistakes.
- 5. Compulsorily sign at the bottom portion of the OMR answer sheet in the space provided.

### DONTs:

• THE TIMING AND MARKS PRINTED ON THE OMR ANSWER SHEET SHOULD NOT BE DAMAGED / MUTILATED / SPOILED.

## **IMPORTANT INSTRUCTIONS TO CANDIDATES**

- In case of usage of signs and symbols in the questions, the regular textbook connotation should be considered unless stated otherwise.
- 2. This question booklet contains 100 questions and each question will have one statement and four different options / responses & out of which you have to choose one correct answer.
- 3. At **10.00 a.m.** remove the paper seal of this question booklet and check that this booklet does not have any unprinted or torn or missing pages or items etc., if so, get it replaced by a complete test booklet within **5** minutes of the commencement of exam. Read each item and start answering on the OMR answer sheet.
- 4. Completely darken / shade the relevant circle with a blue or black ink ballpoint pen against the question number on the OMR answer sheet.

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COL	RRECT	METH	HOD	8	2	3	4	1	2	3	<b>4</b>	1	•		4
1		3	4	•	2	3	4	1		3	4	1	2	3	4

- 5. Please note that even a minute unintended ink dot on the OMR answer sheet will also be recognized and recorded by the scanner. Therefore, avoid multiple markings of any kind on the OMR answer sheet.
- 6. Use the space provided on each page of the question booklet for Rough Work. Do not use the OMR answer sheet for the same.
- Once the last Bell rings at 1.00 P.M., stop writing on the OMR answer sheet and hand over the OMR
  answer sheet to the room invigilator as it is.
- 8. After separating the top sheet (Office copy), the invigilator will return the bottom sheet replica (Candidate's copy) to you.
- 9. All questions carry equal marks.
- 10. Use of Mobile Phones, Calculators and other Electronic / Communication gadgets of any kind is prohibited inside the Examination venue.

1.	The half-life of radiocark	oon (14C) is:		
	(1) 6,730 years		(2) 5,730 years	
	(3) 57,300 years		(4) 5,370 years	
2.	Which of the following is	s NOT a trace fossil?		
	(1) Tracks, trails and burn	211	(2) Coprolites and faecal pellets	
	(3) Dinosaur eggs		(4) Wood fossil	
3,	Match the following and		swer	
	Stratigraphic Period	Associated Fossils		
	a) Cambrian	i) Ammonites		
	b) Devonian	ii) Dinosaur		
	c) Jurassic	iii) Trilobite		
	d) Cretaceous	iv) Fishes		
	(1) a-iii, b-i, c-ii, d-iv		(2) a-ii, b-i, c-iv, d-iii	
	(3) a-iii, b-iv, c-ii, d-i		(4) a-iv, b-iii, c-ii, d-i	
4.	The Miller-Urey experim	ent on Abiogenesis w	vas proposed by	
	(1) Alexsander Oparin &	J.B.S. Haldane		
	(2) Charles Urey & Georg	ge Harward		
	(3) George Cavendish &	Miller		
	(4) Stanely.M & George	Cavendish		
5.	The name of John Henry	/ Pratt is closely relat	ed to the theory of	
J.	(1) Isostasy		(2) Plate tectonics	
	(3) Magnetic field	*	(4) Origin of life	
				34
6.	Examine Assertion (A) a			
			lement in the Earth's crust	
	Reason (R) : Silicate Min			
	(1) Both (A) and (R) are to			
	(2) Both (A) and (R) are t	rue but (R) is not the	correct explanation	
	(3) (A) is true but (R) is F	alse		
	(4) (Δ) is False but (R) is	true		

7.	Which among the follow	ing is a Uranium M	line of India?	
	(1) Malanjkhand		(2) Khetri	
	(3) Thinthini		(4) Jaduguda	
8.	Pedogenesis is the stud			
	(1) Origin of Formation o	f Soil	(2) Classification of Humus	
	(3) Formation of Laterite	!S	(4) Fumeroles	
9.	The system in which the	mineral "Aragonit		
	(1) Isometric		(2) Hexagonal	
	(3) Orthorhombic		(4) Monoclinic	
10.	The most abundant roc	ks found in Mahara	ishtra are	
10.	(1) Granites		(2) Basalts	
	(3) Dolerites		(4) Diorites	
11.	Match the following and	d select the correct	option:	
	Earth's Layer	<b>Broad Composi</b>		
	a) Core	i) Si – Mg		
	b) Continental Crust	ii) Fe – Ni		
	c) Oceanic Crust	iii) Si – Al		
	d) Mantle	iv) Fe – Mg		
	(1) a-ii, b-iii, c-i, d-iv		(2) a-i, b-ii, c-iii, d-iv	
	(3) a-iv, b-iii, c-ii, d-i		(4) a-iii, b-ii, c-i, d-iv	_ 81
12.	Beneath the ocean floo	or the MOHO lies a	t the depth of	
	(1) 2 –3 Km		(2) 5 –10 Km	1
	(3) 18 –20 Km		(4) 20 -25 Km	2
13.	The mineral whose orig	entation is conside	red in the palaeomagnetic studies is	
15.	(1) Hematite		(2) Magnetite	
	(3) Chromite		(4) Pyrite	
14.	Joints that break rock	into generally hexa	gonal columns are called as	
	(1) Cross joints		(2) Master joints	
	(3) Cross-strike joints	* .6.	(4) Columnar joints	

		L.				
15.	Sea mounts are formed by					
	(1) Extinct Volcanoes	(2) Ocean Floor Subsidence				
	(3) Transform Faulting	(4) Lava-sediment interaction				
16.	In modern oceans, the removal of dissolv	red silica is principally carried out by				
	(1) Diatoms	(2) Radiolaria				
	(3) Silicoflagellates	(4) Sponges				
17.	Which Ocean is having the highest red cla	ay deposits in oceans floor?				
	(1) Arctic Ocean	(2) Pacific Ocean				
	(3) Atlantic Ocean	(4) Indian Ocean				
18.	The Calcite Compensation Depth (CCD) in	n Indian Ocean is				
	(1) > 6000m	(2) < 3000m				
	(3) 4000 – 5000m	(4) 5000 – 6000m				
19.	The sequence of atmospheric layers above	ve the Earth's surface is				
	(1) Troposphere – Stratosphere – Mesosphere – Thermosphere					
	(2) Stratosphere – Mesosphere – Thermo	(2) Stratosphere – Mesosphere – Thermosphere – Troposphere				
	(3) Thermosphere – Mesosphere – Tropos	sphere – Stratosphere				
	(4) Troposphere – Thermosphere – Mesos	sphere – Stratosphere				
20.	Among the proportion of sediment types	covering the deep sea floor,				
	calcareous oozes represent	% in the Indian Ocean.				
	(1) 54%	(2) 44%				
	(3) 34%	(4) 64%				
21.	In India, mud volcanoes are witnessed in					
	(1) Lakshadweep	(2) St. Mary's Islands				
	(3) Andaman and Nicobar Islands	(4) Sunderbans				
22.	The most widely used antenna in GPS is					
	(1) Parabolic antenna	(2) Microstrip antenna				
	(3) Horn antenna	(4) Slotted antenna				

	Processes	Hazards	
	a) Extraterrestrial	i) Tornadoes	*
	b) Hydrological	ii) Landslides	
	c) Geological	iii) Floods	
	d) Meteorological	iv) Asteroids imp	pact
	(1) a-i, b-ii, c-iii, d-iv		(2) a-ii, b-iii, c-i, d-iv
	(3) a-iv, b-iii, c-ii, d-i		(4) a-iii, b-ii, c-i, d-iv
24.	Which of the following is	considered as the	secondary pollutant?
	(1) Ozone		(2) Benzene
	(3) Sulphur dioxide		(4) Carbon monoxide
25.	Exploitation of minerals chiefly due to	by open-cast mini	ng is more hazardous than underground mining
	(1) Depletion of mineral r	eserves	(2) Depletion of water resources
	(3) Dust pollution		(4) Soil erosion
26.	Which of the following management of the following managem		(4) Soil erosion represents the transition between diagenesis and
26. 27.	Which of the following management of the following managem	pellyite nolite - Albite ioclase – Quartz ite – Plagioclase	represents the transition between diagenesis and
	Which of the following management regional metamorphisms (1) Prehnite — Pum (2) Chlorite — Action (3) Hornblende — Plag (4) Hornblende — Aug	pellyite nolite - Albite ioclase – Quartz ite – Plagioclase	represents the transition between diagenesis and
	Which of the following management of the following managem	pellyite nolite - Albite ioclase – Quartz ite – Plagioclase	represents the transition between diagenesis and
	Which of the following management of the following management of the following management of the following management of the following results of	pellyite nolite - Albite ioclase – Quartz ite – Plagioclase ocks are completely	represents the transition between diagenesis and y unfoliated? (2) Schists
27.	Which of the following management of the following management of the following management of the following management of the following results of	pellyite nolite - Albite lioclase – Quartz lite – Plagioclase ocks are completely	represents the transition between diagenesis and y unfoliated? (2) Schists (4) Hornfels
27.	Which of the following management of the following managem	pellyite nolite - Albite lioclase – Quartz lite – Plagioclase ocks are completely bined impact of ure m	represents the transition between diagenesis and y unfoliated? (2) Schists (4) Hornfels
27.	Which of the following management of the following management of the following management of the following results of the	pellyite nolite - Albite lioclase – Quartz lite – Plagioclase ocks are completely bined impact of ure m	represents the transition between diagenesis and y unfoliated? (2) Schists (4) Hornfels

29.	Match the following a	nd choose the correct	answer
	List-l	List-II	
	a) Eclogite	i) Calcite-Dolomite	
	b) Granulite	ii) Garnet-Omphac	ite
	c) Amphibolite	iii) Opx-Cpx-Plagio	clase
	d) Marble	iv) Hornblend-Plagi	oclase
	(1) a-iv, b-ii, c-iii, d-i		(2) a-ii, b-iii, c-iv, d-i
	(3) a-iii, b-ii, c-iv, d-i		(4) a-iii, b-iv, c-ii, d-i
30.	Choose the correct se	quence in increasing g	grade of Metamorphism.
	(1) Slate – Shale – Phy	llite – Schist – Gneiss	
	(2) Phyllite – Shale – S	Schist – Gneiss – Slate	
	(3) Shale – Slate – Phy	/Ilite – Schist – Gneiss	
	(4) Schist – Phyllite –	Slate – Gneiss – Shale	
31.	The characteristic mir	eral present in Charno	ockite is
	(1) Diopside		(2) Augite
	(3) Hypersthene		(4) Pigeonite
32.	The vertical angle bet	ween the horizontal pl	ane and the axis of the fold is termed as
	(1) Plunge		(2) Buckling
	(3) Pitch		(4) Monocline
33.	Continuous Cleavage	with a distinctive silky	lusture in low-grade metamorphic rock is
	(1) Schistosity		(2) Gneissosity
	(3) Disjunctive cleavag	ge	(4) Phyllitic cleavage
34.	Examine carefully Ass	ertion (A) and Reason	(R) and choose the correct Answer
	· ·	n rock is subjected to ation in the initial stage	o increasing stress, it passes through elastic
	Reason (R): During ela	stic deformation the s	train is reversible.
	(1) Both (A) & (R) are fa	lse	
	(2) (A) is correct but (R	) is not the correct exp	lanation
	(3) Both (A) & (R) are to	rue and (R) is the corre	ct explanation
	(4) (A) is not correct be	ut (R) is correct	

35.	Two sets of joints that are at right angles to	one another is known as
	(1) Sheet Joints	(2) Mirror Joints
	(3) Orthogonal system of Joints	(4) Strike Joints
36.	It is called true dip when the angular relation	nship between dip and strike of a bed is at
	(1) 90°	(2) 60°
	(3) 45°	(4) 22°
37.	Tablet shaped lenses of a relatively rigid lit collectively undergone layer parallel stretch	hology embedded in a weaker matrix, that have ing are called as
	(1) Augen	(2) Boudins
	(3) Necking	(4) Millions
38.	Single toed Pliohippus fossil occur in  (1) Early to middle Pliocene  (2) Eocene – Paleocene	period
	(3) Paleocene – Cretaceous	
	(4) Permian - Triassic	
39.	Axial lobe of a Trilobite lies between	
	(1) Plural lobes	(2) Glabellar lobes
	(3) Free cheek and fixed cheek	(4) Pygidial spine and Pleural spine
40.	The Dinosaurs appeared first in	and became extinct during
	(1) Early Triassic and Late Cretaceous	
	(2) Early Jurassic and Early Cretaceous	
	(3) Late Triassic and Early Cretaceous	<b>y</b> .
	(4) Middle Triassic and Middle Cretaceous	
41.	Thalassinoides are	
	(1) Ichnofossils	(2) Body fossils
	(3) Living fossils	(4) Derived fossils
42.	The Gastropod having spines and exhibiting	g dextral coiling is
	(1) Physa	(2) Turritella
	(3) Volute	(4) Murex

43.	Conodonts are micro foss	ils
	(1) Calcareous	(2) Phosphatic
	(3) Siliceous	(4) Organic
44.	Flame structures are	
	(1) Ball and Pillow like structures	
	(2) Slump structured found in wet sedin	nents
	(3) Fingers of mud that protrude into th	e overlying sediments
	(4) Planar structures found in grits	
45.	If a Mineralogical association of a s matrix 4%, rock fragments 19%, then it of	edimentary rock shows Quartz 36%, feldspar 41%, can be called as
	(1) Grit	(2) Lithic Arkose
	(3) Siliceous Limestone	(4) Feldspathic Wacke
46.	A Sediment having excess fine material	exhibits
	(1) Negative Skewness	(2) Positive Skewness
	(3) No Skewness	(4) Random Skewness
47.	Sequence Stratigraphy deals with	
	(1) Faulting mechanism	(2) Folded rocks
	(3) Lithification and Diagenesis	(4) Chronostratigraphy and facies
48.	Lameta beds occurring below the traps	in Rajamundry area are called
	(1) Intertrappean beds	(2) Intratrappean beds
	(3) Infratrappean beds	(4) Supratrappean beds
49.	Match the following and choose the co	rrect answer
	List-II List-II	
	a) Upper Siwaliks i) Fluviati	le Environment
	b) Middle Siwaliks ii) Marshy	Environment
	c) Lower Siwaliks iii) Lacustr	ine Environment
	(1) a-i, b-ii, c-iii	(2) a-iii, b-ii, c-i
	(3) a-ii, b-i, c-iii	(4) a-ii, b-iii, c-i

50.	What is the approximate collective length of	mid-ocean edges?
	(1) 80,000 km	(2) 10,000 km
	(3) 20,000 km	(4) 30,000 km
51.	What is the significance of the drill cores t vessel Challenger Expedition in 1968?	aken from the seafloor by the research drilling
	(1) Confirmed seafloor spreading & plate tect	onics
	(2) Confirmed hot springs in Pacific Ocean	
	(3) Discovered Polymetallic nodules	
	(4) Discovered mantle plumes in Indian Ocea	an
52.	Many Countries have their own navigation S of Russia is known as	ystem and the Satellite based navigation system
	(1) Compass	(2) QZSS
	(3) Galileo	(4) GLONASS
53.	India's Exclusive Economic Zone (EEZ) has a	n area of
	(1) 55,450 sq km	(2) 50,450 sq km
	(3) 1,305,143 sq km	(4) 2,305,143 sq km
54.	The concentration of CO <sub>2</sub> in Earth atmosphe Concentration in atmosphere during the Las	re is Currently at nearly 412 ppm. What is the $CO_2$ at Glacial Maximum (LGM)?
	(1) 80 ppm	(2) 180 ppm
	(3) 280 ppm	(4) 380 ppm
55.	Sea because of	line compared to the surface water of the Arabian
	(1) More freshwater discharge	
	(2) Higher evaporation over precipitation	
	(3) More rain over Arabian Sea	×
	(4) Less evaporation at Arabian Sea	
56.	What is the smallest unit of element that ref	
	(1) Proton	(2) Atom
	(3) Molecule	(4) Electron

57. In which region of the periodic table are the alkali metals found			alkali metals found?
	(1) Group 1		(2) Group 2
	(3) Group 17		(4) Group 18
58.	lonic substitution in mine lattice. Which factor main		eplacement of one ion by another in the crystal stitution?
	(1) Atomic radius		(2) Atomic mass
	(3) Ionization energy		(4) Electronegativity
59.	What is the basic concep	t of Phase Rule?	
	(1) To predict mineral read	ctions	
	(2) To calculate mineral h	ardness	
	(3) To determine mineral	composition	
	(4) To predict the number	red phases in a syste	em
60.	Match the following and	select the correct an	swer:
	List-I	List-II	
	a) Lithophile	i. Low affinity for o	oxygen but bond with sulphur
	b) Atmophile	ii. Elements prefe	rentially partitioned into iron and Ferroalloys
	c) Chalcophile	iii. Elements that a	are preferentially concentrated as volatiles
	d) Siderophile	iv. Preferentially p	partitioned into silicate minerals
	Codes:		
	(1) a-iv, b-iii, c-i, d-ii		(2) a-iii, b-iv, c-ii, d-i
24	(3) a-iii, b-ii, c-i, d-iv		(4) a-ii, b-iii, c-iv, d-i
61.	The longest half-life is ob	served in which of th	ne following decay systems?
	(1) Rb-Sr	Đ.	(2) K-Ar
	(3) 14C		(4) 7H
62.	The Deogiri is known for	mining of:	
	(1) Manganese		(2) Copper
	(3) Silver		(4) Gold

63.	Match the following and choose the correct answer.					
	Ores		Mode of occurrence	ν		
	a) Vein-type gold	i.	Banded deposit			
	b) Chromite	ii.	Fracture-controlled			
34	c) Coal	iii.	Orthomagmatic			
	d) Hematite	iv.	Bedded			
	(1) a-i, b-ii, c-iv, d-iii		(2) a-ii, b-iii, c-i, d-	iv		
	(3) a-ii, b-iii, c-iv, d-i		(4) a-iii, b-ii, c-i, d-	iv		
64.	The chief source of m	nanga	nese mineral is			
04.	(1) Carbonates	iang	(2) Silicates			
	(3) Sulphides		(4) Oxides			
	•			inerals?		
65.		orma	ly known in which of the following mi (2) Bauxite	interals.		
	(1) Galena		(4) Chromite			
	(3) Pyrolusite		(4) Cilionite			
66.	Gas hydrates are fou	nd in				
	(1) Hydrothermal dep	osits	(2) Beneath the o	cean floor		
	(3) In the gas pools		(4) Fumeroles			
67.	Sitapundi Complex i	s fam	ous for			
97.	(1) Anorthosites		(2) Magnesites			
	(3) Granite		(4) Charnockites			
		! !	IOT a component of the Earth's cryos	nhere?		
68.		ig is i	(2) Glaciers	priore.		
	(1) Polar Ice cap		(4) Ocean curren	ts		
	(3) Permafrost		(4) Occur curren			
69.	Choose the correct	answ	er from the following statements:			
			consists of granite – greenstones			
			n in Dharwar Craton increases from N			
	c) Grade of metamor	phis	n in Dharwar Craton increases from S	outh to North		
	d) Chief lithological	comp	onents of Dharwar Craton are limesto	nes and dolerites		
	(1) a and b are correc		(2) a and c are co	orrect		
	(3) b and d are corre	ct	(4) a is correct ar	nd b is incorrect		

70.	What is the main characteristic of a cratonic nucleus in geology?			
	(1) High volcanic activity	(2) Thick Sedimentary rock layer		
	(3) Stable continental crust	(4) Frequent Earthquakes		
71.	Which geological belt is characterised by high-grade metamorphism?			
	(1) Chitradurga Schist Belt	(2) Hutti-Maski Schist Belt		
	(3) Sargur Schist Belt	(4) Sandur Schist Belt		
72.	What do geologists use to determine the age of rocks and geological events?			
	(1) Radiocarbon dating	(2) Fossil evidence		
	(3) Geochronology	(4) Lithological Contacts		
73.	What is the Primary source of information regarding life in the Precambrian era?  (1) Fossils of complex organism			
	(2) Fossils of single-celled organisms			
	(3) Hiatus in stratigraphic rec	(3) Hiatus in stratigraphic record		
	(4) Presence of plant fossils			
74.	Periods episodes of rapid ice-rafted debris deposition as a result of the massive discharge of Icebergs is known as			
	(1) Younger dryas	(2) Heinrich Events		
	(3) Bolling Allenod	(4) Little Ice Age		
75.	The number of Quaternal of	ry interglacial-glacial cycles is approximately in the order		
	(1) 30 – 50	(2) 5 – 10		
	(3) 2 – 5	(4) 60 – 80		
76.	What is the age of the uppermost unit of the Youngest Toba Tuff (YTT) eruption?			
	(1) 800 ka	(2) 80 ka		
	(3) 740 ka	(4) 74 ka		
77.	I lived in the last Ice.Age. I am a herbivore. I am a Siberian. Who am I?			
	(1) Giant Sloth	(2) Woolly Mammoth		
	(3) Mastodon	(4) Sober tooth tiger		

78.	Age of Fossil is determ (1) 12.5%	nined as 17, 190 years o	ld. What is the remaining % of C-14 in that fossil?  (2) 25.0%
	(3) 50.0%		(4) 75.0%
79.	(1) 41 events	gaard – Oeschger ( D-O)	events are reported during the last glacial period?  (2) 12 events  (4) 25 events
80.		is NOT a method of su	ub-surface exploration in mineral exploration?
	<ul><li>(1) Drilling</li><li>(3) Channel sampling</li></ul>		<ul><li>(2) Seismic survey</li><li>(4) Ground-Penetrating Radar (GPR)</li></ul>
81.	In remote sensing what (1) Geological Imaging (3) Geographic Intellig	System	(2) Geographic Information System (4) Global Imaging System
82.	<ul><li>(1) Designing buildings</li><li>(2) Designing building</li><li>(3) Designing building</li></ul>	y, what does seismic does seismic does to withstand Earthquass with optimal acoustics to resist Hurricane was for energy efficiency	properties inds
83.	(1) Examining the phys (2) Determining the m	centration of metal in th	erals
84.	Match the following a Properties a) Fresh water b) Saline water c) Brackish water d) Brines	nd choose the correct  TDS  i) 1000 –10,000 ppn  ii) >35,000 ppm  iii) <1000 ppm  iv) 10,000 –35,000 p	pm
	(1) a-iii, b-iv, c-i, d-ii		(2) a-iii, b-ii, c-i, d-iv (4) a-i, b-iii, c-ii, d-iv
	(3) a-i, b-iv, c-ii, d-iii		(T) a-i, D-iii, C-ii, a-iv

85.	Which of the following has	the highest wind	velocity?		(A)
	(1) Typhoon		(2) Hurricane	14-1	
	(3) Cyclone		(4) Tornado		
86.	Potholes/ Plunge holes are formed by				
	(1) Abrasion		(2) Hydraulic action		
	(3) Attrition		(4) Solution		
87.	The Coalescence of alluvial fans results in				
	(1) Panplain		(2) Bajada		
	(3) Pediment		(4) Pediplain		
88.	Match the following and choose the correct answer:				
	Events	Causative facto	ors		
	a) Cyclones i)	Ground instabil	ity		
	b) Draughts ii)	Anthropogenic			
	c) Landslides iii)	Climatological			
	d) Pollution iv)	Variation in win	d pressure		
	(1) a-iv, b-iii, c-ii, d-i		(2) a-iii, b-iv, c-ii, d-i		
	(3) a-iv, b-iii, c-i, d-ii		(4) a-iii, b-iv, c-i, d-ii		
89.	The 'geoid' is a reference surface used in geophysics to				
	(1) Represent the shape of the Earth's crust				
	(2) Define the magnetic pole locations				
	(3) Provide a reference for measuring elevation and Earth's shape				
	(4) Determine the locations	of seismic events			
90.	What is the primary purpose of numerical differentiation in Geophysics?				
	(1) Analysing seismic move forms				
	(2) Evaluating geological cross-sections				
	(3) Approximating derivatives of data				

(4) Solving algebraic equations

91.	What is the primary function (1) Filtering noise (2) Sampling data	on of Fourier transfo	ormation in signal processing?
	(3) Decomposing signals into their frequency components		
	(4) Measuring signal power		t
92.	Match the following and c	hoose the correct a  Characteristics	nswer
	a) P- Waves i)	Surface wave that	travels as ripples
	b) S- Waves ii)	Waves that cause	horizontal shearing of the ground
	c) Rayleigh Waves iii)		
	c) itayioigii iiai	Transverse Waves	
	(1) a-iii, b-iv, c-ii, d-i		(2) a-iii, b-iv, c-i, d-ii
	(3) a-iii, b-i, c-ii, d-iv		(4) a-ii, b-iii, c-i, d-iv
93.	the Sun: It moves north	during the Northe nter. As a result, the ustralia	Zone (ITCZ) varies seasonally because it follows rn Hemisphere Summer and South during the ITCZ is responsible for the
94.	According to Koppen's ty (1) Tropical Desert Climate (2) Tropical Savanna Clim (3) Tropical Steppe Clima (4) Tropical dry Summer (	e nate te	ification "Aw" is
95.	The quantity of water in a particular volume of air is referred to as		
	(1) Thermal Humidity		(2) Quantum Humidity
	(3) Absolute Humidity		(4) Relative Humidity
96.	Modern concentration of atmospheric CO <sub>2</sub> is		
	(1) 200 ppm		(2) 300 ppm
	(3) 420 ppm		(4) 500 ppm

97.	New sea floor is created at	
	(1) Deep sea trench	
	(3) Subduction zono	

(2) Mid-oceanic trench

(4) Transform fault

98. A periodic change towards unusual colder side is called

(1) La Nina

(2) El Nino

(3) Upwelling

(4) Downwelling

99. Ocean currents that move towards the poles are

(1) Warm

(2) Cold

(3) Warm in Northern hemisphere and cold in Southern hemisphere

(4) Cold in Northern hemisphere and warm in Southern hemisphere

100. As deep ocean water becomes colder it also becomes

(1) Saltier

(2) Denser

(3) Clearer

(4) Lighter