Greology

11P/205/30

Ouestion Booklet No.....

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(To be filled up by the candidate by blue/blo	ıck ball-point pen)						
Roll No.							
Roll No. (Write the digits in words)							
Serial No. of OMR Answer Sheet							
Day and Date	(Signature of Invigilator)						

## INSTRUCTIONS TO CANDIDATES

(Use only blue/black ball-point pen in the space above and on both sides of the Answer Sheet)

- 1. Within 10 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question is missing. In case of faulty Question Booklet bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
- 2. Do not bring any loose paper, written or blank, inside the Examination Hall except the Admit Card without its envelope.
- **3.** A separate Answer Sheet is given. It should not be folded or mutilated. A second Answer Sheet shall not be provided. Only the Answer Sheet will be evaluated.
- 4. Write your Roll Number and Serial Number of the Answer Sheet by pen in the space provided above.
- 5. On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.
- 6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and also Roll No. and OMR Sheet No. on the Question Booklet.
- 7. Any change in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.
- 8. Each question in this Booklet is followed by four alternative answers. For each question, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by ball-point pen as mentioned in the guidelines given on the first page of the Answer Sheet.
- 9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
- 10. Note that the answer once filled in ink cannot be changed. If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero mark).
- 11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
- 12. Deposit only the OMR Answer Sheet at the end of the Test.
- 13. You are not permitted to leave the Examination Hall until the end of the Test.
- 14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

## No. of Questions/प्रश्नों की संख्या : 150

Full Marks/पूर्णीक: 450 Time/समय: 2 Hours/घण्टे Attempt as many questions as you can. Each question carries 3 marks. One Note/नोट: (1) mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question. अधिकाधिक प्रश्नों को हल करने का प्रयत्न करें। प्रत्येक प्रश्न 3 अंक का है। प्रत्येक गलत उत्तर के लिए एक अंक काटा जाएगा। प्रत्येक अनुत्तरित प्रश्न का प्राप्तांक शून्य होगा। (2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one. यदि एकाधिक वैकल्पिक उत्तर सही उत्तर के निकट प्रतीत हों, तो निकटतम सही उत्तर दें। Stalactite is what kind of feature? (1) Depositional feature (2) Replacement feature (4) None of the above (3) Erosional feature Nick point is associated with (2) river (4) delta (1) lake (3) sea Ventifacts are formed as a result of

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(2) deflation

(1) attrition

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(3) ablation

(4) abrasion

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4.	Var	ve deposits belor	ng to	)				
	(1)	glacial deposits			(2)	deltaic deposits		
	(3)	fluvial deposits			(4)	marine deposits	<b>;</b>	
5.	Rin	nd of fire' the lar	gest	number of activ	ve vo	olcanoes on eart	h is	found in
	(1)	Atlantic Ocean			(2)	Pacific Ocean		
	(3)	African rift valle	ys		(4)	the Mid-oceanic	rid	ges
6.	The	e process respons	ible :	for the lowering o	of mo	ountains and deri	ivatio	on of sediments is
	(1)	denudation	(2)	weathering	(3)	erosion	(4)	decomposition
7.	Du	e to weathering	of fe	ldspar which of	the	following residua	al pr	roducts form?
	(1)	Limonite	(2)	Haematite	(3)	Clay minerals	(4)	Quartz grains
8.	The	e crescent shaped	dur	ne in which the c	onve	x side of which fa	ces	wind direction is
	(1)	parabolic dunes	3		(2)	transverse dun	e	
	(3)	longitudinal du	ne		(4)	Barchan dunes	i	
9.	An	tecedent streams	are	those which		•		
	(1)	maintain their	origi	nal course acros	ss a	rea of uplift		·
	(2)	follow the slope	of	the initial land	surfa	ace		
	(3)	develop on the	slop	ing sides of stre	eam	valley		•
	(4)	flowing on expo	sed	older rocks				•

•		
10.	Loess is associated to	
	(1) fluvial (2) eolian	(3) lacustrine (4) glacial
11.	In glacial environment 'eskars' are	
	(1) small, smooth and elliptical hills	(2) basin like depression
	(3) long winding ridges	(4) ridge or layer of tills
12.	'Flower structure' is associated with	
	(1) transform fault boundaries	(2) divergent boundaries
	(3) convergent boundaries	(4) mid-oceanic ridges
13.	'Wadati-Benioff zone' is well known for	
	(1) deep focus earthquake	(2) shallow focus earthquake
	(3) intermediate focus earthquake	(4) tectonically stable zone
14.	Horst and graben structure is mainly a	associated with
	(1) subduction zone	(2) divergent boundary
	(3) collision zone	(4) transform boundary
15.	In internal structure of earth, the outer	er core is composed of
	(1) solid material (2) gases	(3) liquid material (4) All the three
16.	The consolidated larger fragments such a cone are called	as bombs or blocks of older rocks near volcanic
	(1) conglomerate (2) breccia	(3) agglomerate (4) scoriae
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17.	Shear waves passe	s through					
	(1) liquid only	(2) solid only	(3) ga	is only	(4)	All the	three
18.	'Laterites' are form	ed as a result of					
	(1) weathering		(2) ch	nemical precip	itatio	n	
	(3) biogenic activit	у	(4) se	dimentation			
19.	Angle of inclination	n in a fault plane m	easured	from vertical	axis	is call	.ed
	(1) heave	(2) throw	(3) ha	ade	(4)	rake	
20.	The angle of inclin	ation of hing line wi	ith the l	norizontal is			
	(1) plunge	(2) dip	(3) pi	tch	(4)	strike	
21.	Thrust faults are						
	(1) high angle reve	erse fault	(2) lo	w angle revers	se fa	ult	
	(3) high angle nor	mal fault	(4) lo	w angle norm	al fa	ult	
22.	In fold classification	n Ramsay's classifie	d the fo	lds on the ba	sis o	f	
	(1) dip isogon	(2) dip amount	(3) in	terlimb angle	(4)	symm	etry
23.	Foliation in a rock	is defined as			•		
	(1) a planar featur	re with randomly or	iented m	ninerals			
	(2) a planar featur	re with well oriented	l minera	ds .			
	(3) a linear featur	e with randomly orio	ented m	inerals			
	(4) a linear featur	e with well oriented	mineral	s			
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24.	When a bedded sedi	mentary rock overlyir	ıg th	e non-bedded ign	neous rock, then it	is
	(1) disconformity		(2)	nonconformity	•	
	(3) angular unconf	ormity	(4)	blended unconf	ormity	
25.	When younger rock	s are surrounded by	old	er rock, then th	is structure is cal	led
	(1) klippe	(2) window	(3)	inlier	(4) outlier	
26.	Basalts usually con	nprises				
	(1) mural joints	•	(2)	columnar joints	s	
	(3) sheet joints		(4)	bedding joints		
27.	An up-fold where b	eds dip radially out	vard	in all directions	s from the centers	is
	(1) basin	(2) klippe	(3)	dome	(4) window	
28.	In a fold the lower	limb gets overturned	1 wit	h nearly horizor	ntal axial plane, it	is
	(1) recumbent fold		(2)	overturned fold		
	(3) isoclinal fold		(4)	fan fold		
29.	The maximum amo	unt of slope along a	line	perpendicular t	o the strike is	
	(1) true dip	(2) apparent dip	(3)	plunge	(4) pitch	
30.	Sheet joints usually	y confined to				
	(1) quartzite	(2) granite	(3)	shale	(4) slate	
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31.	In an anticline, layers of earth materia	l cor	nverge in which direction?
	(1) Upward	(2)	Parallel to bedding planes
	(3) Downward	(4)	No convergence
<b>32.</b>	In similar folds, the bed is		
	(1) thinner at limb and thicker at hing	ge	
	(2) thickness does not change		
	(3) thicker at limb and thinner at hing	ge	;
	(4) thinnest at crest		
22	In november family as atmosphic and indicated		
33.	In reverse fault, $\sigma_1$ , stress is applied		
	(1) horizontal to block	(2)	perpendicular to block
	(3) at some angle	(4)	no stress applies
34.	The transform faults are associated wit	h th	ne e
	(1) plate boundaries	(2)	bedding planes
	(3) veins	(4)	mineral deposits
35.	Fold is formed as a result of		
		(0)	
	(1) tensional force	(2)	shear force
	(3) compression force	(4)	no force applied
36.	In box folds, there are		
	(1) one hinge (2) two hinges	(3)	sharp hinges (4) quaqaversal dip
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37.	In isoclinals folds, the limbs are									
	(1) dipping in same direction with different dip									
	(2) dipping towards each other									
	(3) dipping in same direction with same	me dips								
	(4) dipping away from each other									
38.	Which of the following minerals is use	ed as the source of phosphate in fertilizer?								
	(1) Dolomite (2) Fluorite	(3) Apatite (4) Corundum								
39.	Crystals which do not possess plane a occurs in two positions and which are	and center of symmetry, contain a form that e mirror image of each other is called								
	(1) holohedral form	(2) enantiomorphic form								
	(3) hemihedral form	(4) hemimorphic form								
40.	Which of the following minerals has a low chemical weathering at the earth's sur	ow solubility and therefore is least susceptible to rface?								
	(1) Calcite (2) Plagioclase	(3) Olivine (4) Quartz								
41.	For a given mineral, the physical property	perty which displays the greatest variation is								
	(1) color (2) hardness	(3) streak (4) luster								
42.	Which of the following common items	is not a mineral?								
	(1) Salt	(2) Ice								
	(3) Talcum powder	(4) Asphalt								
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43.	Olivine commonly a	alters to				
	(1) serpentine	(2) clay minerals	(3)	feldspar	(4)	amphiboles
44.	Which one of the fe	ollowing is fibrous v	ariet	y of amphibole?		
	(1) Gaucophane	(2) Crocidolite	(3)	Pargasite	(4)	Tschemakite
45.	In feldspar group s	anidine is				
	(1) a high tempera	ture orthoclase	(2)	a low temperat	ure o	orthoclase
	(3) gem variety of	albite	(4)	bright green m	icroc	line
46.	Uvarovite belongs t	o which garnet grou	b5			
	(1) Ca-Al bearing		(2)	Mg-Al bearing		
	(3) Ca-Cr bearing		(4)	Mn-Al bearing		
47.	Which one of the fo	ollowing is Li-bearing	g pyı	roxene?	_	
	(1) Hedenbergite	(2) Augite	(3)	Spodumene	(4)	Johannsenite
48.	In Scalenohedron, t	here are				
	(1) 12 triangular fa	aces	(2)	6 rhomb-shape	d fac	ces
	(3) 24 triangular fa	aces	(4)	8 equilateral tr	iangı	ılar faces
49.	In double chain sili	cate, the Si: O rati	o is			
	(1) 1:3	(2) 4:11	(3)	4:10	(4)	2:7
•	•					

50.	Which of the following minerals is having dual hardness?								
	(1) Talc	(2) Epidote	(3)	Kyanite	(4)	Gypsum			
51.	Pericline twinning is associated with								
	(1) plagioclase	(2) orthoclase	(3)	rutile	(4)	aragonite			
52.	Which one of the fo	ollowing is true for '	ortho	orhombic form'?		•			
	(1) $a \neq b \neq c, a \wedge b \wedge c$	c = 90°	(2)	$a \neq b \neq c$ , $a \land b \neq 90^{\circ}$ , $b \land c = 90^{\circ}$					
	$(3)  a=b=c, \ a\wedge a=1$	90°	(4)	$a \neq b \neq c, a \wedge b \wedge c$	c ≠ 9	0°			
53.	Domes are example	of							
	(1) open form			closed form					
	(3) combination for	(4)	general form						
54.	Which system has	maximum number o	of cla	sses?					
	(1) Tetragonal	(2) Hexagonal	(3)	Isometric	(4)	Triclinic			
55.	In a phase diagram	an eutectic point r	epre	sents the point v	wher	e			
	(1) only liquid pha	se exists	(2)	only solid phas	e ex	ists			
	(3) all the phases	coexist	(4)	no phase exists	3				
56.	Which of the follow	ing rock does not c	ontai	n alkali feldspar	.5				
	(1) Andesite	(2) Trachyte	(3)	Adamellite	(4)	Syenite			
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57.	K-feldspar decomposes in lucite and qu	ıartz	on melting. It is	s an	example of
	(1) congruent melting	(2)	incongruent me	lting	5
	(3) transformation	(4)	None of the abo	ove	
58.	is a coarse grained, igneous plutor	nic r	ock which is comp	osec	d of 90% olivine.
	(1) Peridotite (2) Monzonite	(3)	Dunite	(4)	Kimberlite
59.	In Bowen's reaction series, from olivine	to	quartz, the temp	eratu	ıre
	(1) increases	(2)	decreases		
	(3) first increases then decreases	(4)	first decreases	then	increases
60.	The process of differentiation is favoured	ed b	y		
	I Rate of cooling				
	II Settling of crystallized heavy minera	als			
	III Escaping of gases				
	(1) I only (2) II only	(3)	I and II only	(4)	II and III only
61.	Lamprophyres are				
	(1) metamorphic rock	(2)	plutonic rock		
	(3) hypabyssal rock	(4)	volcanic rock		
<b>62.</b>	In anorthosite, the feldspar dominantly	pre	sent is		
	(1) anorthite (2) labradorite		sandine	(4)	microcline

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63.	The crescent shape strata is	d bodies of igneous	s rocks tha	at occupy crests	and toughs of folded
	(1) Phacolith	(2) Lopolith	(3) Lac	ccolith (4)	Batholith
64.	Igneous rocks cont	aining partly diges	sted xenoli	ths are called	
	(1) hybrid rocks	(2) acid rocks	(3) ba	sic rocks (4)	ultrabasic rocks
65.	Which of the follow	ving magma is hav	ving high v	riscosity?	
	(1) Andesitic		(2) Ba	saltic	
	(3) Rhyolitic		(4) No	ne of the above	
			-:4- :-		
66.	Volcanic equivalent	t of nepheline syer	nite is		
	(1) ijolite	(2) rhyodacite	(3) ph	onolite (4)	trachyandesite
67.	An intergrowth of exsolved lamellae				, KAlSi <sub>3</sub> O <sub>8</sub> includes is
	(1) perthitic textur	re	(2) an	ti-perthitic textu	re
	(3) graphic texture	e	(4) my	yrmekitic texture	
68.	Khondalite is				
	(1) graphite bearing	ng rock	(2) hy	persthene bearin	ng rock
	(3) dominantly py	roxene bearing roo	k (4) m	ainly composed	of actinolite
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69.	In a phase diagram, the solidus curve represents the										
	(1)	(1) temperature above which substance is stable in solid state									
	(2)	(2) temperature below which substance is stable in solid state									
	(3)	pressure below	whi	ch substance	is stab	le in solid state					
	(4)	pressure above	whi	ch substance	is stab	le in solid state					
70.	Wh	ich one of the fo	ollov	ring rocks do	es not o	contain olivine?					
	(1)	Dunite	(2)	Basanite	(3)	Basalt	(4)	Andesite			
71.	Peg	matites are asso	ciat	ed with							
	(1)	basalt	(2)	gabbro	(3)	granite	(4)	kimberlite			
72.	Div	ritrification is the	e pr	ocess in which	h						
	(1) glassy material converts into crystallized state										
	(2)	crystallized mat	teria	l converts int	o glassy	y material					
	(3)	glass forms dire	ectly	from the ma	igma	•					
	(4)	None of the ab	ove								
73.	Are	enaceous rocks a	re c	composed of							
	(1)	pebbles	(2)	clay	(3)	boulders	(4)	sand			
74.	Do	lomites are ——	– rc	cks.							
	(1)	clastic			(2)	non-clastic					
	(3)	organically forn	ned		(4)	scoriae					
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75.	A well-sorted rock will be defined as	the rock composed of	
	(1) well rounded grains	(2) angular grains	
	(3) oblate grain	(4) prolate grains	
76.	Salt rocks are		
-	(1) sedimentary rocks	(2) igneous rocks	
	(3) metamorphic rocks	(4) None of the above	
77.	The tendency for variations in current particle size is called	velocity to segregate sediments on the ba	sis of
	(1) lithification (2) compaction	(3) metamorphism (4) sorting	
78.	Particles move into the open ocean or	lake from a river and settle by	
	(1) size and density	(2) only size	
	(3) only density	(4) specific gravity	
79.	What is the main difference between	a conglomerate and a sedimentary brecci	ia?
	(1) Breccia clasts are angular; congle	merate clasts are rounded	
	(2) a breccia is well stratified; a cong	glomerate is poorly stratified	
	(3) breccia clasts are the size of base	eballs; conglomerate clasts are larger	
	(4) breccia has a compacted, clay-ric	h matrix; conglomerate has no matrix	
80.	Coarse clastic material can be transp	orted into a deep marine environment by	7
	(1) turbidity currents	(2) wind	
	(3) river	(4) All of these	
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81.	In v	which of the follow	ving	environments wo	uld	you expect to find	i syn	nmetrical ripples?
	(1)	Alluvial	(2)	Beach	(3)	Deep sea	(4)	Desert
82.	1171-	at is the marcoit	v of	newly deposited	mli	40		
04.		•	y OI	newly deposited				
	` '	< 5%			(2)	5%-25%		•
	(3)	25%-50%			(4)	> 50%		
83.	Sha	le refers to a ro	ck fo	ormed from				
	(1)	sand size mater	rial		(2)	plant remains		
	(3)	clay minerals			(4)	carbonates		
84.		sedimentary roc re feldspar than		-	, cor	nposed of mainly	the	rock fragments with
	(1)	arkose	(2)	sub-arkose	(3)	gray-wacke	(4)	quartz arenite
85.	Wh	ich of the follow	ing s	structures is bes	t in	dicator of the flo	w d	irection?
	(1)	Ripple marks			(2)	Mud cracks		
	(3)	Graded bedding	3		(4)	Rain imprint		
86.	Myl	lonite is a/an						
	(1)	igneous rock			(2)	sedimentary roo	k	
	(3)	metamorphic ro	ock		(4)	structure		
87.	Wh	ich of the follow	ing f	formations is ric	h in	mammalian fau	na?	
	(1)	Siwalik			(2)	Lower Himalaya	ι	
	(3)	Tethys Himalay	a		(4)	Nagri		

88.	Syringothyris limestone, of permo-carboniferous is associated with				
	(1) Kashmir	(2) Kutch	(3) Cudappah	(4) Dharwar	
89.	Age of Deccan trap				
	(1) Paleocene	(2) Tertiary	(3) Jurassic	(4) Triassic	
90.	The ——— was an	era dominated by	the dinosaurs.		
	(1) Precambrian	(2) Paleozoic	(3) Mesozoic	(4) Cenozoic	
91.	The boundaries better present on earth.	ween ——— seem to	o coincide with majo	r changes in the life forms	
	(1) Precambrians	(2) Systems	(3) Eras	(4) Epochs	
92.	What is the correct	sequence of Kutch	1?		
	(1) Patcham—Chari—Katrol—Umia—Bhuj				
	(2) Chari—Patchan	ı—Umia—Katrol—B	Bhuj		
	(3) Umia—Patchan	ı—Katrol—Chari—B	Bhuj		
	(4) Katrol—Patchar	n—Chari—Umia—B	Bhuj		
93.	Which of the follow sample (< 20000 ye	_	topes is most usefu	ıl for dating a very young	
	(1) Rubidium-87	(2) Uranium-238	(3) Carbon-14	(4) Potassium-40	
94.	Which of the follow	ring represents the	longest time period?	?	
	(1) Precambrian	(2) Paleozoic	(3) Mesozoic	(4) Cenozoic	
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95.	Tri	lobites are index	foss	sil of				
	(1)	Paleozoic	(2)	Mesozoic	(3)	Cenozoic	(4)	Archean
96.	Tac	dpatri shales bel	ong	to				
	(1)	Papaghani grou	ıp		(2)	Cheyair group		
	(3)	Nallamlai group	)		(4)	Kistna group		
97.	Pu	rple sandstone a	nd r	neobolus shale b	elon	g to		
	(1)	salt range	(2)	Kashmir	(3)	Spiti	(4)	Trichonaplly
98.	The	e Vindhyan is de	line	ated from the Si	walil	k by		
	(1)	main central th	ırust	:	(2)	main boundary	thr	ust
	(3)	main frontal th	rust		(4)	Tsangpo Suture	e zor	ne
99.	The	e metal content	of aı	n ore is called				
	(1)	gangue	(2)	tenor	(3)	carat	(4)	ore mineral
100.	Epi	igenetic ore depo	sits	are those which	fori	ned		
	(1)	before the host	roc	k formation	(2)	same time as t	he h	ost rock
	(3)	later than the	host	rock formation	(4)	No relation with	n ho	st rock
101.	Wh	aich one of the fo	ollow	ring does not be	long	to magmatic de	posit	ts?
	(1)	Segregation dep	osit	s	(2)	Immiscible liqu	id in	ijection
	(3)	Dissemination of	depo	sits	(4)	Sublimation de	posit	:s

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102.	The placer deposits that occur along hill slopes are							
	· -	(2) eolian placer		(4) eluvial placer				
103.	Supergene enrichm	ent deposit has the	process except					
	(1) oxidation and s	solution in the zone	of oxidation					
	(2) deposition in th	ne zone of oxidation						
	(3) supergene sulfi	(3) supergene sulfide deposition						
	.,	m carbonate rich wa	ater					
104.	Which one of the fe	ollowing is not the o	ore of manganese?					
	(1) Braunite	(2) Bornite	(3) Manganite	(4) Psilomelane				
105.	Which one of the fo	ollowing is an ore m	ineral of iron?					
100.		-		(4) 36-1-14				
	(1) Manganite	(2) Magnesite	(3) Magnetite	(4) Malachite				
106.	The diaspore, alum	inium bearing miner	ral has the ——— ch	emical composition.				
	(1) AlO(OH)	(2) Al <sub>2</sub> O <sub>3</sub> ·H <sub>2</sub> O	(3) Al <sub>2</sub> O <sub>3</sub> ·2H <sub>2</sub> O	(4) Al <sub>2</sub> O <sub>3</sub> ·3H <sub>2</sub> O				
105	0.151							
107.	Sulfide ore of merc	ury is						
	(1) galena	(2) sphalerite	(3) chalcopyrite	(4) cinnabar	•			
108.	Bauxite is occurrin	g in —— mode.						
	(1) blanket deposit	_	(2) pocket deposits					
	-	,	_	•				
	(3) detrial deposits		(4) All of these					

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					,			
109.	Ramp	oura-Agucha m	ines	are famous for				
	(1) H	Ig-Sn	(2)	Fe-Cu	(3)	Pb-Zn	(4)	Co-Ni
110.	Azuri	te and malach	ite a	are the ——— de	posi	ts of copper.		
	(1) s	ulphide	(2)	carbonate	(3)	oxide	(4)	silicate
111.	Whic	h one of the fo	llow	ring is not a gold	l fie	ld?		
	(1) K	Kolar Field	(2)	Hutti Field	(3)	Koderma Field	(4)	Wyanad Field
112.	Whic	h one of the fo	llow	ing is known as	'bro	own coal'?		
	(1) F	Peat Peat	(2)	Lignite	(3)	Bituminous	(4)	Anthracite
113.	A pet	roleum system	doe	es not contain				
	(1) s	ource rock	(2)	reservoir rock	(3)	traps	(4)	boreholes
114.	Whic	h one of the fo	llow	ring is not a type	e of	oil traps?		
	(1) A	anticlines	(2)	Salt domes	(3)	Unconformity	(4)	Mesa
115.	The o	oil-bearing form	atio	on in Digboi Oil	Field	l is		
	(1) T	`ipam	(2)	Kalol	(3)	Panna	(4)	Barail
			•					
116.	Magn	esite is formed	by	action of CO <sub>2</sub> a	nd l	H <sub>2</sub> O on		
	(1) a	mbhibolite	(2)	serpentine	(3)	dacite	(4)	komattite
(258)				18				
(200)				10				

117.	The process of formation of coal is		
	(1) preservation of plant material	(2)	biochemical changes
	(3) carbonization and metamorphism	(4)	All of the above
118.	Match the following		
	Group—1		Group—2
	P. Lead		1. Magmatic
	Q. Aluminium		2. Pegmatitic
	R. Chromite		3. Residual
	S. Muscovite		4. Hydrothermal
	(1) P-2, Q-1, R-3, S-4	(2)	P-4, Q-3, R-1, S-2
	(3) P-3, Q-1, R-4, S-2	(4)	P-1, Q-2, R-3, S-4
119.	The arrangement in which teeth are ra	adiatir	ng from umbo is
	(1) isodont (2) desmodont	(3)	dysodont (4) schizodont
120.	The geological age of Spirifer is		
	(1) Orodovician to devonian	(2)	Triassic to present
	(3) Jurassic	(4)	Silurian to Permian
121.	Arca, Ostrea, Cardita, Maya all these	belong	g to phylum
	(1) Mollusca (2) Brachiopoda	(3)	Arthropoda (4) Echinodermata
122.	Arrange in correct order		
	(1) cephalon—pygidium—thorax	(2)	thorax—cephalon—pygidium
	(3) cephalon—thorax—pygidium	(4)	pygidium—thorax—cephalon
(258)		19	(P.T.O.)

123.	The form in which	two	adductor muscle	im	pressions are pr	eserv	ved is called
	(1) Isomyariyan	(2)	Monomyariyan	(3)	Dimyarian	(4)	Anisomyraian
124.	The aperture of the	gas	stropod shell is o	cover	red by a plate kr	10wr	1
	(1) Peristome	_	Operculam				Umblicus
105	/m/	1	4 - 3 4 - 1			1	
125.	The suture line wit	n ro	unded saddles a	na a	angular lobes is	Knov	wn as
	(1) straight	(2)	cerratitic	(3)	goniatitic	(4)	ammonoid
126.	The trilobites in wh	ich	suture commenc	es fi	rom posterior ma	rgin	and ends at lateral
	(1) Protopariyan			(2)	Hypopariyan		
	(3) Propariyan			(4)	Opisthopariyan		
127.	Cephalon of trilobit	e is	the part of —	<del></del> .			
	(1) head	(2)	body	(3)	tail segments	(4)	legs
128.	Which of the follow	ring	is the sinistral f	orm	of Gastropoda?		
	(1) Natica	(2)	Murex	(3)	Physa	(4)	Voluta
129.	In Brachipoda the	two	valves are joined	<b>i</b> at			
	m Bradinpoaa are		varvoje are jenice	· uc			
	(1) hinge line	(2)	posterior	(3)	anterior	(4)	didictor
(258)			20	l			

130.	Index fossils are	Index fossils are those which have					
	(1) short geologic	cal range and short	geograj	phical range			
	(2) wide geologic	al range and very v	vide geo	graphical range			
	(3) short geologic	cal range and very	wide ge	ographical range	:		
	(4) wide geologic	al range and short	geograp	hical range			
131.	A specimen of a	species from the sa	me loca	lity of as its ho	lotyp	e or syntyp	e
	(1) lectotype	(2) neotype	(3)	plesitotype	(4)	topotype	
132.	Which of the foll	owing is the phosph	natic mi	crofossil?			
	(1) Conodont	(2) Diatoms	(3)	Dinoflagellates	(4)	Coccoliths	
133.	The organisms w	ho are free swimme	ers are o	called			
	(1) plankton	(2) nekton	(3)	pecten	(4)	taxon	
134.	Which of the foll	owing is not the pro	ocess of	fossilization?			
	(1) Petrification		(2)	Replacement of	min	eralization	
	(3) Carbonization	n ·	(4)	Hydrolysis			
135.	The function of t	he lophophore in B	rachiopo	oda is			
	(1) respiration		(2)	gathering food			
	(3) movement		(4)	supporting orga	ans		
<b>258</b> )			21				(P.T.O.)

136.	The brachio	pods havin	g dental syst	em are	known as		
	(1) Articula	nta (2)	Inarticulata	a (3)	Delthryum	(4)	Deltidium
137.	The organis	sm in which	n the last wh	orl shell	covers all th	ne previo	ous whorls is
	(1) Patella	(2)	Turritella	(3)	Natica	(4)	Cypraea
138.	The organis	sm that car	ı be divided i	n two e	qual halves i	S	
	(1) Brachio	poda (2	Pelecypoda	(3)	Gastropoda	(4)	Cephalopoda
139.	Lamellibran	chia is clas	ssified in the	f	ollowing brar	nch/brar	iches.
,	(1) active	(2	sessile	(3)	burrowing	(4)	All of these
140.	The placer	deposites a	re formed by	the pro	cess of		
	(1) replace	ment		(2)	mechanical	concent	ration
	(3) seggrag	ation		(4)	disseminati	on	
141.	Gondite and	d kodurites	are				·
	(1) Mg dep	osits		(2)	Mn deposit	S	
	(3) Mo dep	osits		(4)	Cu deposits	5	
142.	Smithsonite	e is an ore	of				
	(1) Zn	(2	) Pb	(3)	Hg	(4)	Tn
(DEQ)				22			

143.	The reservoir rocks	in Bombay High	are			
	(1) sandstone	(2) limestone	(3) shale	(4) clay		
144.	The marble used in	ı Taj Mahal had b	prought from			
	(1) Reewa	(2) Sultanpur	(3) Jabalpur	(4) Makrana		
145.	The principal of ori	iginal horizontality	states that			
	(1) most rocks in	the earth's crust a	are layered horize	ontally		
	(2) igneous rocks f	form essentially h	orizontal layers			
	(3) metamorphic gradients are essentially horizontal before deformation					
	(4) sediments are	deposited as esser	ntially horizontal	layers		
146.	What scientific aver the earth?	nue of investigatio	n gave scientists	the best estimate of the	e age of	
	(1) Dating fossils		(2) Archaeol	ogical dating		
	(3) Radiometric da	ting	(4) Carbon (	lating		
147.	The mineral found	in silica-undersat	urated rock is			
	(1) perovskite	(2) tchermekite	(3) fuschite	(4) coesite		
148.	The igneous rock,	Obsidian possesse	es — texture.			
	(1) porphyritic		(2) sub-ophi	tic		
	(3) aphanitic		(4) ophitic			
(258)			23		(P.T.O.)	

149.	. The kimberlites pipes are holding diamond as				
	(1) xenocrysts (2) porphyroblasts	(3) porphyroclasts (4) clasts			
150.	A volcano built mainly of tephra fall de	posits located immediately around the vent			
	(1) Cinder cone	(2) Strato volcano			
	(3) shield volcano	(4) lava dome			

\* \* \*

## अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण-पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल नीली या काली बाल-प्वाइंट पेन से ही लिखें)

- 1. प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
- 2. परीक्षा भवन में *लिफाफा रहित प्रवेश-पत्र के अतिरिक्त*, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
- 3. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा, केवल उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
- 4. अपना *अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन* से निर्धारित स्थान पर लिखें।
- 5. उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।
- 6. ओ॰ एम॰ आर॰ पत्र पर अनुक्रमांक संख्या, प्रश्न-पुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न-पुस्तिका पर अनुक्रमांक सं॰ और ओ॰ एम॰ आर॰ पत्र सं॰ की प्रविष्टियों में उपरिलेखन की अनुमति नहीं है।
- 7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।
- 8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिये आपको उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाढ़ा करना है।
- 9. प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
- 10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो सम्बन्धित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
- 11. रफ् कार्य के लिये प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाले पृष्ठ तथा अंतिम पृष्ठ का प्रयोग करें।
- 12. परीक्षा के उपरान्त केवल *ओ०एम०आर० उत्तर-पत्र* परीक्षा भवन में जमा कर दें।
- 13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।
- 14. यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की, भागी होगा/होगी।