Mec

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15P/205/2

Question Booklet No ..

		(To be	filled up	by the	e candii	date by	) blue,	e/black ball-point pen)
Roll No.								
Roll No. (Write the	digits in	words)						
Serial No.	of OMR	Answer S	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)

- 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.
- 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.
- 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.
- 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).
- 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.

[उपर्युक्त निर्देश हिन्दी में अन्तिम आवरण-पृष्ट पर दिये गए हैं]

[No. of Printed Pages: 28+2





# No. of Questions/प्रश्नों की संख्या : 150

Time/समय : 2 Hours/घण्टे

Full Marks/पूर्णांक : 450

- (1) Attempt as many questions as you can. Each question carries 3 marks. Note: One mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question.
  - अधिकाधिक प्रश्नों की 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 वैकस्पिक उत्तर सही उत्तर के मिकट प्रतीत हों, तो निकटतम सही उत्तर . ःदें।
  - 1. The incorrectly matched pair among the following
    - (1) nesosilicates—forsterite (2) cyclosilicates—talc.
    - (3) phyllosilicates—muscovite
- (4) tectosilicates. orthoclase
- 2. Which of the following is not a mineral?
  - (1) Olivine (2) Talc
- (3) Calcite
- (4) Quartzite

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(P.T.O.)



3	Which is not a notemant of 11	1.010.0
J.	Which is not a polymorph of Al	281O57
	(1) Kyanite (2) Calcite	(3) Sillimanite (4) Andalusite
4.	Which mineral shows double ha	ardness?
	(1) Magnesite (2) Quartz	(3) Feldspar (4) Kyanite
5.	Hardness of fluorite is	
	(1) 3 (2) 4	(3) 7 (4) 5
6.	Augite crystallized in which crys	
	(1) Isometric system	(2) Monoclinic
	(3) Triclinic	(4) Orthorhombic
7.	The maximum number of axes of	of symmetry ——— found in crystal system.
	(1) 13 (2) 10	(3) 22 (4) 9
8.	Match the crystal system with o	·
	Group-I (Crystal System)	
	P. Isometric	1 3
	Q. Orthorhombic	2. 12
	R. Hexagonal	3. 7
	3. Tetragonal	4. 5
	(1) P-1, Q-2, R-3, S-4	(2) P-4, Q-1, R-3, 8-2
	(3) P-3, Q-4, R-2, S-1	(4) P-4, Q-1, R-2, S-3
<b>(5</b> )		2



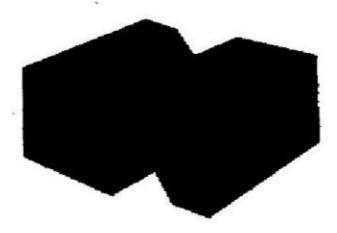
Se.	•							
9.	Total number of	classes in cr	ystal s	yste	m is	5		
	(1) 22	(2) 6		(3)	32	(4)	13	
10.	is an imag			-			_	
	(1) Axial plane			(2)	Reference pla	ne		
	(3) Plane of sym	metry		(4)	Twin plane		9	i.
11.	Which one is not	t a physical p	ropert	y of	a mineral?			
	(1) Hardness	(2) Streak		(3)	Form	(4)	Extinction	ı.
12.	Which crystal is	the non-piece	hroic	syst	em?		8   8	
	(1) Hexagonal	(2) Triclinic	i.	(3)	Cubic	(4)	Tetragona	1
13.	Biaxial minerals	are not belon	g to —		- crystal system	m.		
	(1) triclinic			(2)	tetragonal			
, 1, <b>1</b> 5.11	(3) monoclinic	*	3	(4)	orthorhombic			*
14.	Which mineral sl	nows the dou	ble refi	racti	ion?		•	
	(1) Calcite	(2) Quartz		(3)	Feldspar	(4)	Galena	
15.	Streak of hematic	te is						
	(1) black colour	(8)		(2)	yellow			
	(3) cheffy red			(4)	None of these		* * ·	*
(345)			3					(P.T.O.)



16.	Point of maximum	n curvature in fold	is defined as	1.5	
	(1) hinge point		(2) inflection poi	nt	
	(3) plunge		(4) centre of cur	vature	
17.	Transcurrent faul	It is a type of		9	
	(I) normal fault		(2) reverse fault		
	(3) stike-slip faul	t	(4) oblique fault	•:•	8
18.	A plane is dipping	45° (True dip) towa	rds NE, the appare	nt dip of plane can be	
	(1) > 90°		(a) 45° to 0°		
19.	True dip of a plan	ne is 30°, what wi	ll be head of the p	olane?	
	(1) 45°	(2) 60°	(3) 90°	(4) O°	
20.	The direction of lir plane is known a	ne along which an is s	nclined bed or plan	e intersects a horizon	tal
	(1) fault trace	9.34	(2) dip direction		
	(3) strike		(4) plunge		
21.	Point of maximum	n elevation in fold	is termed as		1,
	(1) hinge point	(2) tip point	(3) crest	(4) tough	
(345)		4			



### 22. The net slip in following fault is



- (1) ab
- (2) ac
- (3) bc
- (4) ad

### 23. Unconformity is define as

- (1) plane representing the time of non-deposition and erosion
- (2) plane of asymmetric deposition
- (3) plane of joint and fault on regional scale
- (4) plane of faulting
- 24. Which one is not a deformational structure?
  - (1) Fold
- (2) Fault
- (3) Joint
- (4) Disconformity

### 25. Match the following:

Group-I (Terms)

- P. Cross-section
- Q. Profile section
- R. Similar fold
- S. Parallel fold
- (1) P-1, Q-2, R-4, S-3
- (3) P-4, Q-2, R-3, S-1

### Group-II (Definition)

- 1. Dip isogones that are perpendicular to bedding throughout the fold
- 2. A vertical plane through a fold
- 3. Dip isogones that are parallel to each other
  - 4. The surface perpendicular to the hinge line
    - (2) P-4, Q-2, R-1, S-3
    - (4) P-1, Q-2, R-3, S-4

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(P.T.O.)



26.	Intermediate principle stress (σ2) is vertical in								
	(1) normal fault		(2) strike-slip	fault					
	(3) reverse fault		(4) thrust far	ult					
27.	Which of followin	g is a correct sta	tement?		•				
	(1) The angle between interlimb angle		s measured in th	e cross-s	ection is called th	ne			
	(2) A fold with a horizontal axial surface by definition must have a horizontal hinge line, and is called a reclined fold								
	(3) The high point of the hinge line in a doubly-plunging fold is called culmination								
	(4) In an anticlin	e, the beds are y	younger towards	the core					
28.	is an area	of older rocks s	urrounded by yo	unger ro	cks.				
	(1) Inlier	(2) Outlier	(3) Dome	(4)	Basin				
29.	having net	slip equal to di	p-slip and rake o	of net slip	p 90°.				
	(1) Dip fault	*	(2) Dip-slip f	ault					
	(3) Strike fault		(4) Bedding	fault					
30.	is defined a		rock between th	e sides of	which there is	30			
	(1) Fold	(2) Fault	(3) Joint	(4)	Shear zone				
31.	A topographic con	ntour is defined	B.S						
	(1) line joining th	e point of equal	stratigraphic ho	rizons					
	(2) line joining th	e point of equal	elevation	to the second se					
	(3) line joining th	e point of equal	thickness						
	(4) line joining po	oint of same age	rocks						
345)	•		6	ñ	•				
	19								



32.	The surface waves are
	(1) P-waves (2) S-waves
	(3) both P and S waves (4) L-waves
33.	Conrad discontinuity separates boundary between
	(1) lower crust and upper mantle
	(2) upper mantle and lower mantle
	(3) outer core and inner core
	(4) upper crust and lower crust
34.	The new oceanic surface are created at —— plate margin.
	(1) constructive (2) distractive (3) conservative (4) convergent
35.	Match the name of scientist (Group I) and their famous theories (Group II)
	Group—II Group—II
	P. Alfred Wegener 1. Isostasy
	Q. Airy 2. Sea floor spreading
	R. Herry Hess 3. Theory of continental drift
	S. Pratt 4. Big Bang theory
	(1) P-1, Q-2, R-3, S-4 {2} P-3, Q-1, R-2, S-4
	(3) P-4, Q-1, R-2, S-3 (4) P-1, Q-2, R-4, S-3
345)	7 (P.T.O.)
*	

36.	Which of the follo	wing is superconti	neni	i?		(*)
	(1) Gondwanalan	1	(2)	Laurasia		
	(3) Pangea		(4)	Panthalassa.		
37.	Mechanical erosio	n cannot takes pla	ce i	n following ma	nne	
	(1) Abrasion		(2)	Attrition		
	(3) Cavitation		(4)	Dissolving act	ion	(*)
38.	An isolated table-	land area with stee	ер в	ides called as		4,
	(1) knick point	(2) escarpment	(3)	mesa	(4)	peneplains
39.	Which one is not	a river pattern?			*	
	(1) Antecedent	(2) Consequent	(3)	Insequent	(4)	Trellis
40.	Which of the follo	wing term is not r	elat	ed to wind eros	ion	?
	(1) Deflection	(2) Traction	(3)	Abrasion	(4)	Attrition
41.	Blow-outs formed	due to				
	(1) wind	(2) river	(3)	glacier	(4)	impact .
42.	Fiords are formed	by action of				
	(1) wind	(2) river	(3)	glacier	(4)	lake
345)		. 8				•



43.	Which of the following is not erosic	mal	process of continental glaciers?
	(1) Plucking	(2)	Avalanching
	(3) Rasping	· (4)	None of the above
44.	Caverns are related to		
	(1) underground water	(2)	river .
	(3) glacier	(4)	wind
45.	Blind valley is formed due to		
	(1) erosional (2) deposition	(3)	steep slope (4) surface runoff
46.	In the following, which combination	ı is ı	wrong?
	(1) Knick point, escarpment, Mesa	(2)	Plucking, avalanching, rasping
	(3) Hamada, Yardang, sand dunes	(4)	Pedestal, cirques, arete
47.	Fine grained igneous rocks are		
	(1) intrusive body	(2)	plutonic
	(3) extrusive body	(4)	sedimentary body
48.	Hard, massive, compact with inter- bedding is the essential feature of	locki	ng grains and absence of Fossil and
	(1) igneous rocks	(2)	sedimentary rocks
	(3) metamorphic	(4)	limestone
345)		)	(P.T.O.)



49.	Volcanic equivale	nt of granite is				
	(1) basalt	(2) gabbro	(3)	rhyolite	(4)	diorite
50.	Gabbro is a ——	- type of igneous r	ock	•		
	(1) volcanic		(2)	plutonic		
	(3) hypabyssal		(4)	metasedimenta	ury	
51.	Which one is not	concordant body?		6		
	(1) Laccoliths	(2) Lopoliths	(3)	Phacolitha	(4)	Batholiths
52.	Which mineral cr	ystallized last from	the	magma?		32
	(1) Olivine	(2) Quartz	(3)	Hornblende	(4)	Labradorite
<b>5</b> 3.	The 'aa structure	' is also known as				
	(1) pahoehoe		(2)	ropy lava		
	(3) blocky lava	at the state of th	(4)	flow structure		•
54.	The occurrence of that is	foreign materials wi	ithin	igneous rocks	are :	formed a structure
	(1) xenolithic stru	icture	(2)	myrmekite str	ıctu	re
	(3) sheet structur	re	(4)	amygdaloidal s	truc	cture
(345)		10		•	٠	



55.	When the igneous rocks made of on	nly glassy materials known as	
	(1) holocrystalline	(2) hemi crystalline	
	(3) holohyaline	(4) semihyaline	
56.	Perlitic cracks in crystal represent the	the conversion from	
	(1) basic magma	(2) acidic magma	
	(3) glassy condition	(4) plutonic condition	
57.	Eutectic point is a		•
	(1) univariant (2) invariant	(3) di-varient (4) tri-varient	
58.	Silica content in basic igneous rock	c is	
	(1) 44 to 55%	(2) more than 65%	
	(3) 55 to 65%	(4) more than 80%	
59.	Gem quality olivine is termed as		
	(1) norite (2) satin-spar	(3) peridot (4) ruby	
60.	Intergrowth of quartz and feldspar re	resulting	
	(1) perthite	(2) orbicular structure	
	(3) graphic texture	(4) myrmekite structure	
345)	11	1 (P.:	r.o.)



61. Correctly match the following:

Column-A

Column-B

- P. Laths of plagioclase are totally surrounded 1. Spherulitic texture in a coarse grained matrix of pyroxene crystals
- Q. Smaller grains of one mineral are completely enclosed in large
- 2. Ophitic texture
- R. Plagioclase grains show a preferred orientation due to flowage
- 3. Poikilitic texture
- S. Spherical intergrowths of radiating quartz and feldspar replace glass as a result of devitrification
- 4. Trachytic texture

- (1) P-2, Q-3, R-4, S-1
- (2) P-1, Q-2, R-3, S-4
- (3) P-2, Q-4, R-3, S-1
- (4) P-1, Q-3, R-2, S-4

62. Principle of uniformitarianism is proposed by

(1) William Smith

(2) James Hutton

(3) Gottlob Worner

(4) Harry Hess

63. Which one is most stable mineral?

- (1) Quartz
- (2) Feldspar
- (3) Zircon
- (4) Olivine

64. The phi-scale is given by

(1)  $\phi = -\log_2 d$ 

 $(2) \phi = -\log_5 d$ 

(3)  $\phi = -\log_{10} d$ 

 $(4) \phi = \log_2(-d)$ 

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65.	What is the sand particle size?			
3	(1) 2 to 0.092 mm	(2)	4 to 2 mm	
	(3) 2 to 0-0625 mm	(4)	2 to 0.0825 mm	
66.	Grain size analysis of clastic rock ca	anno	ot interpret	
	(1) environment	(2)	source rock	
	(3) energy flow	(4)	nature of transportation	
67.	The river sands are distinguished by	7		
	(1) positive skewness	(2)	negative skewness	
	(3) high porosity	(4)	sand dunes	*
68.	The ratio of number of grain to grain counted in the traverse is	n co	ntacts to the total number of	grains
٠	(1) packing density	(2)	packing proximity	
	(3) true porosity	(4)	true density	
69.	The diamictic conglomerate are char	acte	rized by	
	(1) high porosity	(2)	high matrix	
	(3) low matrix	(4)	zero matrix	
70.	Endogenetic rocks are deposited due	e to	*	•
	(1) precipitation	(2)	river deposition	
	(3) volcanic ash	(4)	mechanical weathering	
345)	. 13		•	(P.T.O.)



71.	Graywacke is a typ	pe of rock					
	(1) volcanic rock	ā B	(2)	non-clastic se	dime	entary	,
	(3) rudaceous sed	imentary rock	(4)	arenaceous se	dim	entary rock	
72.	What is mineralog	ical maturity of se	ndst	one?			
	(1) Ratio of quartz	to the olivine	(2)	Ratio of feldsp	oar t	to the quartz	
	(3) Ratio of quartz	to feldspar	(4)	Ratio of flaky	min	erals to feldspa	ır
73.	At 20° temperature flow?	, what will critical	Reyn	olds number fo	or la	minar to turbul	ent
	(1) 500	(2) 1200	(3)	700	(4)	1000	
74.	Calcium carbonate	could not found	in				
	(1) above CCD	(2) below CCD	(3)	below ACD	(4)	above ACD	
<b>75</b> .	Which of the follow	ing, original compo	nent	s bound togeth	er a	t time deposition	n?
	(1) Mudstone	(2) Wackestone	(3)	Packstone	(4)	Boundatone	
76.	Which of the follow	wing statement is	false	?			
	(1) Graded beddin	g shows the grain	size	variation with	in e	a bed	
	(2) Convolute bede	ding a deformed b	eddir	ng structure			
	(3) Secondary sec sedimentary ro	limentary structu ck	ıres	form before	the	diagenesis of	а
	(4) Hummocky cro	ss-stratification is	prin	nary sediment	агу і	structure	
348)		. 14			1/50		



77.	The metal content	in an ore is called	d as				
	(1) grade	(2) tenor	(3)	rank	(4)	gangue	
78.	—— deposits co	mprise an assemi	blag	e of high tem	pera	ture metai	norphic
	(1) Hypothermal		(2)	Mesothermal		ē.	
51	(3) Skarn		(4)	Residual			
<b>79</b> .	Among the following		s n	ot belong to t	he fe	actor affect	ing the
e	(1) Climate		(2)	Local relief			
	(3) Existence of p	roper drainage	(4)	Gravity			88
80.		nantle which is pro t of oxidation on t			resid	lual materi	als and
	(1) Gossan	(2) Overburden	(3)	Gangue	. (4)	Placer	
81.	Goethite is a/an	· ×	٠				
	(1) silicate	(2) sulphide	(3)	carbonate	(4)	oxide	
82.	Tenorite is an ore	mineral of					*
	(1) iron	(2) manganese	(3)	соррег	(4)	lead	
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83.	Which of the following is the ore mineral of manganese?					
	(1) Smithsonite	(2) Haematite				
	(3) Bornite	(4) Braunite				
84.	Manganite ore mineral has been for	and in the rock of				
	(1) gondite	(2) charnockite				
	(3) orthoquarzite	(4) marl				
<b>\$</b> 5.	Bauxite deposits occur as					
	(1) disseminated	(2) loades				
	(3) blanket	(4) hydrothermal solution				
86.	Chromium deposits occur in					
	(1) granite	(2) limestone				
	(3) acidic rocks	(4) ultrabasic rocks				
<b>8</b> 7.	Kudramukh is famous for					
	(1) Banded Hematite Quartz (BHQ)					
	(2) Magnetite					
	(3) Chromite					
	(4) Psilomelane					



88.	Ruby is a gem vari	ety of			
	(1) Olivine (	2) Labradorite	(3) Quartz	(4) Corundum	
89.	is an imperfe	ectly crystallized	diamonds with i	nclusions.	
	(1) Bort (	2) Ballas	(3) Carborando	(4) Moonstone	
<b>9</b> 0.	Secondary product	of Diaspore and	Gibbsite is	• •	
	(1) Bohemite		(2) Bauxite	•	
	(3) Hydrogillite		(4) Amazon sto	ne	
91.	Match the following	4			
	Column—A	Cohi	mn—B		
	P. Muscovite		dual concentration		
	Q. Bauxite	2. Mag	matic segregation	ı	
	R. Copper	<ol><li>Pegn</li></ol>	natitic deposits		
	S. Chromite	4. Hydr	othermal solution	n	
	{1} P-4, Q-2, R-1, S	-3	(2) P-3, Q-1, R-	-2, S-4	
Ŧ	(3) P-3, Q-1, R-4, S	-2	(4) P-4, Q-2, R-	-3, S-1	
92.	Which one among the	he following is n	ot a metamorphi	c rock?	
	(1) Hornfels		(2) Orthoquartz	ite	
	(3) Metagranite		(4) Biotite gneis	35	
45)		17			P.T.O.)

93.	Which one of the	following h	clongs high	grade metam	orphi	sm?
	(1) Epizone	(2) Acme	zone (3)	Mesozone	(4)	Katazone
94.	structure is	found in th	ne rocks com	posed of equid	imen	sional minerals.
	(1) Gneissose	(2) Macui	osc (3)	Granulose	(4)	Schistose
95.	Which rock is a	parametam	orphic?			
	(1) Metacharnoki	te	(2)	Metaqurtzite		
	(3) Biotite gneiss		(4)	Khondalite	2	
96.	Which one from	the followin	ig is non-foli	ated metamor	phic	rock?
	(1) Gneiss	(2) Phylli	te (3)	Slate	(4)	Quartzite
97.	is the high	temperati	are and high	pressure me	tamo	rphic facies.
	(1) Blueschist	(2) Green	schist (3)	Eclogite	(4)	Amphibolite
98.	The term 'blast o	or blastic' u	ised as prefi	x in the case	of	
	(1) palimpsest te	xture	(2)	aphanitic tex	ture	
	(3) phanitic textu	ıre	(4)	glassy textur	e	
99.	In the Al <sub>2</sub> SiO <sub>5</sub> p	olymorphs,	which show	s highest grad	de of	metamorphism?
	(1) Andalusite		(2)	Kyanite		
	(3) Sillimanite		(4)	All of the ab	ove	w.
(345)			18			



100.	In the following indicates the ascending order of temperature of formation					
	(1) Eclogite, Greenschist, Zeolite, Bl	ueschist				
	(2) Greenschist, Blueschist, Eclogite	, Granulite				
	(3) Zeolite, Amphibolite, Granulite, I	Cologite				
	(4) Blueschist, Granulite, Amphiboli	te, Eclogite				
101.	Omphacite and Pyrope Garnet are the	ne representative minerals for				
	(1) Zeolite facies	(2) Greenschist facies				
	(3) Glaucophane-schist facies	(4) Eclogite facies				
102.	Which is not related to metamorphic	sm?				
	(1) Wind	(2) Pressure				
	(3) Temperature	(4) Chemically active fluid				
103.	An uniform pressure is also called					
	(1) direct pressure	(2) hydrostatic pressure				
	(3) compression	(4) tension				
104.	— metamorphism occurs arou low temperature.	nd larger intrusives at compara	tively			
	(1) Pyrometamorphism	(2) Contact metamorphism				
	(3) Metasomatism	(4) Auto-metamorphism				
		12.				
245	19	(P	T.O.)			



105.	Wh	ich one of the following	is l	ithostratigraphic unit?
	(1)	Eratham (2) Acm	e 20	ne (3) Series (4) Formation
106.	The	e Paleozoic era is restric	ted	between
	(1)	65 to 225 Ma		(2) 1.8 to 65 Ma
	(3)	570 to 2500 Ma		(4) 225 to 570 Ma
107.	Ma		ns a	and give the correct answer:
	ь	Column—A		Column—B
	P.		100	Chlorite
		Greenschist		Plagioclase
	R.	Granulite	3.	Mg-Garnet
	S.	Eclogite	4.	Glaucophane
	(1)	P-4, Q-1, R-2, S-3		(2) P-1, Q-4, R-3, S-2
	(3)	P-2, Q-3, R-1, S-4		(4) P-3, Q-2, R-4, S-1
108.	Co	rrectly match Column A	and	B:
		Column—A		Column—B
	P.	Shale	1.	Quartzite .
	Q.	Sandstone	2.	Amphibolite
	R.	Granite	3.	Slate

(345) .

S. Baselt

(1) P-1, Q-2, R-4, S-3

(3) P-3, Q-1, R-4, S-2

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(2) P-2, Q-1, R-4, S-3

(4) P-4, Q-3, R-2, S-1

4. Gneiss

	e S	
109.	Which era is called as 'Age of Rept	iles'?
	(1) Palacozoic era	(2) Mesozoic era
	(3) Cainozoic era	(4) Proterozoic era
110.	Which formation belongs to the Lo	wer Gondwana Sequence?
	(1) Zawar (2) Poladpur	(3) Rohtas (4) Iron stone
111.	Semri Group is related to the	
	(1) Upper Vindhayan	(2) Lower Gondwana
	(3) Lower Vindhyan	(4) Upper Gondwana
112.	Which is not related to coalfield?	
	(1) Chandrapur (2) Sohagpur	(3) Ramgarh (4) Panna
113.	Arranged in correct sequence from	older to younger :
	(1) Sargurschist complex, Peninsula	a gniessic complex, Dharwar super group
	(2) Patcham, Umia, Katrol, Chari	
	(3) Karharbari, Raniganj, Barakar,	Kulti
	(4) Papaghani, Nallamalai, Cheyair,	Kistna
114.	Which one of the following separate t	he Eastern Dharwar to Western Dharwar?
	(1) Peninsula gneissic complex	(2) Bababudan
	(3) Rani Bennur	(4) Closepet granite
(345)	2	(P.T.O.)



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115.	The maximum Genera and	Species in Upper Gondwans	Sequence found in
	(1) Mahadev (2) Jaba	alpur (3) Rajmahal	(4) Maleri
116.	Kaladgi Group belongs to		
	(1) Archaean era	(2) Proterozoic era	L
	(3) Palaeozoic era	(4) Mesozoic era	
117.	The general trend of Arava	lli Group is	
	(1) NW-SE (2) E-W	(3) ESE-WNW	(4) NE-SW
118.	Dhokpathan formation is	overlain by ——— formation.	,
	(1) Pinjor (2) Tatr	ot (3) Nagri	(4) Chinji
119.	Match the following:		
	Column—A	Column—B	
	P. Dhosa Oolite	1. Gondwana Sequence	
	Q. Mansar	2. Dhawar Super Group	
	R. Umaria Marine Bed	3. Sausar Group	
	S. Hutti Goldfield	4. Jurassic of Kutch	
	(1) P-3, Q-1, R-4, S-2	(2) P-2, Q-4, R-1,	S-3
	(3) P-1, Q-2, R-3, S-4	(4) P-4, Q-3, R-1,	S-2
120.	Which is not an invertebra	ite fossil in the following?	
	(1) Productus (2) Ptyle	ophylum (3) Trigonia	(4) Murex
(345)		22	
		•	



141,	WILLIAM ONC 18 AND II	INCA IDOOLI	14	120)		
	(1) Trilobite	(2) Natiloids	(3) Gastropods	(4) Bivalves		
122.	Match the followin	g;				
	Column-A (Phylur	n) <i>Column</i> -	-B (Species)			
	P. Brachiopoda	1. Turr	itella			
	Q. Cephalopoda	2. Goni	atite			
372	R. Gastropoda	3. Sprif	er			
	S. Bivalvia	4. Spor	ıdylus			
	(1) P-1, Q-2, R-3,	S-4	(2) P-1, Q-3, R-2,	S-4		
	(3) P-3, Q-1, R-4,	S-2	(4) P-3, Q-2, R-1,	S-4		
123.	What are the char	acteristics of an in	ndex fossil?			
	(1) Wide geographical range and limited time range					
	(2) Both time and	geographical rang	ges should be wide			
	(3) Limited geographical range and wide time range					
	(4) None of the ab	ove				
124.	Trigonia has —	- dentition pattern	ı.	59 		
	(1) Isodont	(2) Schizodont	(3) Heterodont	(4) Desmodont		
125.	The coiling of shell	l in ——— is sinis	stral.	4 <b>7</b>		
	(1) Trochus	(2) Murex	(3) Planorobis	(4) Physa		
(345)		23		(P.T.O.)		
(010)				2. The second of		



126.	Which is not the sub-class of Cephalopoda?					
	(1) Nautiloidea	(2) Ammonoidea	(3)	Acephala	(4) Dibranchia	
127.	The body of Trilo Shield, Thorax an		fthr	ee distinct pa	rts known as Cephalic	
	(1) Ocular plates		(2)	Genital plate		
	(3) Cerona	•	(4)	Pygidium		
128,	Ammonoidea is a	/an				
	(1) trace fossil		(2)	index fossil		
	(3) living fossil	×	(4)	plant fossil		
129.	Ceratitic suture-li	nes have				
	(1) pointed lobes	and rounded sadd	le	*		
	(2) rounded lobes	as well as rounde	ed a	addle		
	(3) divided lobes	and rounded sadd	lc	* 1		
	(4) divided lobes	and divided saddle	\$			
130.	Mouth and Anus	are centrally locat	ed i	T.		
	(1) regular Echin	oids .				
	(2) irregular Echi	noids			2	
	(3) both regular	and irregular Echir	oide	1		
	(4) neither regula	r Echinoids nor in	regu	lar Echinoids	e	
(345)		24				



131.	. Both the valves are held together by means of muscles in				
	(1) articulata brachiopods		inarticulata brachiopods		
	(3) both (1) and (2)		None of the above		
132.	Barail Series overlain by				
	(1) Tipam Series	(2)	Dupitila Series		
	(3) Surma Series	(4)	Jaintia Scries		
133.	Dinosaur commonly found in which	fort	nation?		
4	(1) Lameta Bed (2) Bagh Bed	(3)	Deccan Trap (4) Rajmahal Trap		
134.	The shell is equilateral and unequal	in			
	(1) Acephala (2) Brachiopoda	(3)	Gastropoda (4) Ammonoidea		
135.	Pupilla is a				
	(1) Discoidal Shape Gastropoda	(2)	Conical Shape Gastropoda		
×	(3) Cylindrical Shape Gastropoda	(4)	Globular Shape Gastropoda		
136.	Mamelon is the part of ——— of the	Ec	hinoids.		
	(1) Apical disc (2) Peristome	(3)	Spines (4) Tubercle		
137.	Chromite deposits result from				
	(1) carly magmatic dissemination	(2)	early magmatic segregation		
	(3) early magmatic injection	(4)	late magmatic segregation		
(345)	25		(P.T.O.)		

138.	Rock Salt is found in which place of India?						
	(1) Rajban	(2) Rampur	(3) M	landi	(4)	Manali	
139.	A rock that is por	ous but not perm	neable		1		
	(1) marble	(2) sandstone	(3) s	ilt stone	(4)	granite	
140.	A rock-cut slope l cause failure is th	75 W.		e East. The j	oint	set most likely to	
4	(1) 20° due 0	(2) 30° due E	(3) 6	0° due E	(4)	65° due E	
141.	Why basalt is fine	er grained than g	abbro?				
	(1) Basalt formed from quick cooling of magma						
	(2) Gabbro formed from quick cooling of magma						
	(3) Basalt has a mafic composition						
	(4) Gabbro has a	mafic compositio	n .				
142.	Rocks are formed	when magma					
	(1) erodes		(2) c	rystallizes			
	(3) undergoes rad	ioactive decay	(4) w	cathers			
143.	Basic source of m	agnetism is					
	(1) charged partic	les alone	(2) n	agnetic dome	in		
	(3) magnetic dipo	les	(4) n	novement of c	har	ged particles	
(345)		2	6				



	-			
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- (1) metamorphic rock which contain high mafic mineral
- (2) igneous rock which contain high Fe and Mg
- (3) volcanic glass containing high silica
- (4) sedimentary rock formed by weathering of basaltic rock

#### 145. According to Plate Tectonics Theory, most active volcanoes occur

(1) on continents

- (2) in large tectonic plates
- (3) along plate boundaries
- (4) randomly over continents

### 146. Match each items and choose the correct option :

Column-A

Column-B

P. Felsic

- 1. Magma that flows out Earth's surface
- Q. Kimberlite
- Dark-coloured rock such as gabbro that is rich in Fe and Mg

R. Lava

3. Rock that is rich in silica

S. Mafic

- 4. Ultramafic rock that can contains diamonds
- (1) P-1, Q-3, R-4, S-2
- (2) P-3, Q-4, R-1, S-2
- (3) P-2, Q-1, R-4, S-3
- (4) P-4, Q-1, R-3, S-2

### 147. Ores near Earth's surface are generally obtained from

- (1) waste-removal facilities
- (2) underground mines
- (3) open-pit mines
- (4) bodies of water with high concentrations of dissolved minerals

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(P.T.O.)



- 148. What is the main difference between a conglomerate and breccia?
  - (1) Breccia clásts are angular; conglomerate clasts are rounded
  - (2) A breccia is well stratified; a conglomerate is poorly stratified
  - (3) Breccia clasts are the size of baseballs; conglomerate clasts are larger
  - (4) Breccia has a compacted, clay-rich matrix; conglomerate has no matrix
- 149. Detrital sedimentary rocks are classified based on the
  - . (1) colours of the cementing minerals
  - (2) grain sizes of the detrital particles
  - (3) compositions of soluble minerals
  - (4) degree of compaction and lithification
- 150. Which of the following sedimentary rocks indicate long-distance transportation of the sediments?
  - (1) Quartz arenite
  - (2) Breccia
  - (3) Arkose (sandstone with lots of feldspar particles)
  - (4) Felspathic wacke

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# अभ्यर्थियों के लिए निर्देश

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

- प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख लें कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न खूटा नहीं है। पुस्तिका दोचयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष-निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
- 2. परीक्षा भवन में *लिकाका रहित प्रवेश-पत्र के अतिरिक्त*, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
- उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिवा जावेगा, केवल उत्तर-पत्र का ही मूल्यांकन किवा जावेगा।
- 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 वृशी को गाड़ा 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 अनुमित 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। प्राचेक प्रश्न के वैकल्पिक उत्तर के लिये आपको उत्तर-एव की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-एव के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार ऐन से गाड़ा करना है।
- 9. प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाका करें। एक से अधिक वृत्तों को गाका 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. रफ़ कार्य के लिये प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाले पृष्ठ तथा अंतिम पृष्ठ का प्रयोग करें।
- 12. परीक्षा के उपरान्त केवल *ओ॰एम॰आर॰ उत्तर-पत्र* परीक्षा भवन में जमा कर दें।
- 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।

