DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO



ENT: 2018-2019 TIME : 2.00 Hrs.

MATH & GAT

Sr. No. **MAXIMUM MARKS: 150**

QUESTION - BOOKLET

GENERAL INSTRUCTIONS

- 1. Do not carry any book, paper or any other material with you inside the Examination Hall.
- 2. Use only Black / Blue ball pen.
- 3. Keep the Hall Ticket with you ready for scrutiny.
- 4. Result of this Examination will be displayed on the Notice Board. The Result Sheet will

include the successful/ qualified candidates ONLY.

5. All successful candidates indicated on the list shall present themselves for the invetview on the same day.

This Test Booklet contains 150 items (Questions). Question No. 1 to 150 (MCQ) carry 1 mark 6. each You have to select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, Choose Only One response for each item.

7. All the answers must be marked on the Answer Sheet only. Do not write anything on this Test Booklet.

IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK 8. THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR QUESTION ETC. IF SO, GET IT REPLACED BY THE SUPERVISOR.

9. Ask for a separate paper for rough work.

10. Read the questions carefully, Remember, answers are to be indicated in the Answer Sheet

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

DEFENCE CAREER ACADEMY DCA Entrance Examination - 2018

Only. Return the Test Booklet, Rough work papers and the Answer Sheet immediately when asked to do so. You are NOT permitted to take away with you any paper concerning the Examination.

ANSWER SHEET

The Answer Sheet contains 150 counts, each subdivided in four { (1) (2) (3) (4) } subdivisions for indicating the correct choice of answers. After having selected the correct choice from the test Booklet, you should indicate that choice by completely blackening the respective circle, DO NOT merely cross the circle. You should indicate correct answer by blackening ONLY ONE circle in each answer. Any answer having more than ONE blackened circle will be treated as a WRONG answer.
 Before starting the answering ensure that you have filled the complete information at the top of this Answer Sheet. Incomplete Answer Sheet will be regarded as invalid.

THANK YOU AND BEST OF LUCK



DCA Entrance Examination - 2018

P.T.O.

		PAR	RT - I MATHS	
1.	If A and B are tw	o non empty subsets of a	a set P then $(A \cup B)$; =	
	1) $A' \cap B'$	2) A' ∪ B'	3) A \cap B	4) A ∪B
2.	$A \cap B = \phi$, then	$BA \cap B' = \dots$		
	1) A	2) B	3) B'	4) A'
3.	If in a class conta and 15 play neith basketball is	ining 50 students 10 Play ner basket ball nor crick	basketball but not cricket, 10 et. Then the number of stud) play cricket but not basketball dents playing boty cricket and
	1) 10	2) 15	3) 20	4) 25
4.	Simplify 1 - x +	$x^2 = \frac{x^3}{1+x}$		
	1) (1- x + x)	2) 2 + x	3) $\frac{2}{x+1}$	4) All of these
5.	The product of tw factors.	vo - digit numbers is 768	and their G.C.D. is 8. Find the	ne product of their u ncommon
	1) 96	2) 20	3) 56	4) 12
6.	The sum of two	number is 39 and their ra	atio is 5: 8 then find the num	ibers.
	1) 15:24	2) 35:40	3) 20:32	4) None of these
7.	Approximate val	ue of $\pi = \dots$		
	1) 3.151	2) 3.141	3) 3.146	4) 3.414
8.	999 + 999 × 999	9 =		
	1) 199008	2) 3999	3) 97299	4) 999000
9.	$\frac{1}{8} = \dots$			
	1) 1.25	2) 0.125	3) 1.25	4) 12.5
10.	The population of the population of	f Morgaon increases by 2 Morgaon 2 years ago?	10% per year. If the populati	on this year is 2420, what was
	1) 3000	2) 2178	3) 2000	4) 1936
11.	Factors of $3\sqrt{2}$ a	$a^2 - 5ab - \sqrt{32} b^2$ are,		
	1) $(\sqrt{2} \ a - 2)$ (3a	$+ 4 \sqrt{2} 2)$	2) $(\sqrt{2} a + 2) (3a)$	$-4 \sqrt{2} 2$)
	3) $(\sqrt{2} \text{ a-2})$ (3a -	- \sqrt{32} 2)	4) (3a - 2) ($\sqrt{2}$ a -	$-\sqrt{32}2)$
12.	Which of the fol	lowing is not a factor of	(x ³ - 19x - 30)	
	1) (x +2)	2) (x - 5)	3) (x + 5)	4) (x + 3)
×	DEFENCE C	AREER ACADEMY	Entrance Ex	$\mathbf{amination} - 2018 \qquad \mathbf{P.T.O.}$

13.	In a cricket tournament average runs of first four players is 66 and that of the remaining seven players is 22. Find the average runs by all the players in that innings.				
	1) 44	2) 41	3) 39	4) 38	
14.	Factors of $x^2 - 2\sqrt{5}$	x - 15 are:			
	1) $(x - \sqrt{5}) (x + 3) (x + 3)$	5)	2) (x - 3 $\sqrt{5}$) (x + 5	$5\sqrt{5}$)	
	3) $(x + \sqrt{5}) (x - 3)$	5)	4) (x- 5 $\sqrt{3}$) (x + $\sqrt{3}$	/3)	
15.	If $9x^2 + 24y + (m + 5)$) ² is a perfect square, what i	is the value of m?		
	1) -4	2) 11	3) -2	4) 10	
16.	x + y = 4; $x - y = 2$				
	1) (3, 1)	2) (2, 1)	3) (1, 2)	4) (1,3)	
17.	x + y = 4; $2x - 5y = 1$	then what is the value of x	and y.		
	1) (3, 1)	2) (2, 1)	3) (1, 2)	4) (1,3)	
18.	If Principal amounts the rate of interest.	to Rs. 5800 after 2 years an	d to Rs. 7000 after 5	years. Find the principal and	
	1) Rs. 1200; 8 p.c.p.a	l.	2) Rs. 5000; 10 p.c.	p.a.	
	3) Rs. 5000; 8 p.c.p.a	l.	4) None of these		
19.	3x - 2y = -12; $x + 6$	= y			
	1) (3, 1)	2) (0, 6)	3) (6, 0)	4) (6,1)	
20.	The distance between	the point (2, -3) and (2, 2)	is :		
	1) 5 units	2) 2 units	3) 4 units	4) 3 units	
21.	The perimeter of a tri	iangle whose vertices are (7	, 0), (0, 24) and (-10,	o) is units	
	1) 34	2) 68	3) 51	4) 65	
22.	The co-ordinates of a	point situated on y-axis at a	a distance 8 units from	n x - axis is :	
	1) (-8, 8)	2) (8, 0)	3) (0, 8)	4) (8, -8)	
23.	The ratio of two num	bers is 7 : 3. difference betw	veen the numbers is 60). Then the greater number is	
• •	1) 45	2) 70	3) 90	4) 105	
24.	The ratio of the prese of supriya was 28 yes	nt ages of supriya and her marked ars, then their present ages i	nother is 2 : 9. Mother in year are respectivel	's age at the time of the birth y.	
	1) 8, 36	2) 6, 34	3) 4, 32	4) 2,30	
25.	$\Box ABCD \text{ is a parallel} $ of $\angle A$ is :	ogram, the ratio of the measu	ures of its $\angle A$ and \angle	B is 13 : 7, then the measure	
	1) 55 ⁰	2) 63 [°]	3) 117 ⁰	4) 125 [°]	
26.	A sack contains 20 kg	g of rice. How many such sa	acks are required to fi	ll in 460 kg. of rice.	
	1) 230	2) 23	3) 46	4) 64	
×	DEFENCE CARI	EER ACADEMY 2	Entrance Exa	mination - 2018 P.T.O.	

27.	The average score o class is 71.8, the rati	f boys in an examination is to of number of boys and nu	71, and that of girls mber of girls is	is 73. If average score of the
	1) 2 : 1	2) 1:2	3) 3 : 2	4) 2 : 3
28.	data is collected	ed by the reasearcher for one	e self	
	1) Group	2) Secondary	3) Primary	4) All of these
29.	Raw data : 50, 60, 7	0, 72, 74, 75, 80, 88, 75, 10	$0 \therefore$ Frequency of the	class 60 - 68 is
	1) 5	2) 1	3) 6	4) 3
30.	The average of 4 con	nsecutive odd numbers is 42	. What is the largest of	of these odd numbers?
	1) 45	2) 39	3) 33	4) 43
31.	The measure of an a the angle is	angle is four times the measu	are of its supplementa	ry angle. The the measure of
	1) 36 ⁰	2) 72°	3) 108 [°]	4) 144 ⁰
32.	Which of the follow	ring statements are true?		
	1. Similar trianges a	re congruent		
	2. Congruent triangl	es are similar		
	3. If two triangles ar	re not congruent, they ar not	similar.	
	4. If two triangles an	e not similar then they are c	ongruent.	
	1) 1 and 2	2) 2 and 4	3) 2 and 3	4) 1 and 4
33.	If two triangles are s	imilar then		
	1) Their two sides an	re in proportion		
	2) The length of the	ir two sides is same.		
	3) The corresponding	g angles between their two p	pairs is equal.	
	4) The corresponding	g pairs of two angles are in	proportion.	
34.	The ratio of the leng	ths of the corresponding sid	es of two triangles is	1. Then the triangles
	1) are not similar	2) are congruent	3) are similar	4) (2) and (3) both
35.	In two sides of a tria	ingle are congruent then the	angles oppoisite to the	em are
	1) Complementary		2) Supplementary	
	3) Of equal measure		4) None of these	
36.	At least or make the triangles c	ne-one correspondence betw ongruent.	een the vertices of tw	woo triangles is necessary to
	1) 1	2) 2	3) 3	4) 4
37.	A chord subtending	an angle of 120° at the centr	e of the circle of radi	us 10 cm is cm. long.
	1) 10 $\sqrt{3}$	2) 12 $\sqrt{3}$	3) 5 $\sqrt{3}$	4) 25 $\sqrt{3}$
38.	Line AB is tangent to cm.	o the circle of centre C at point	n t A. BC = 10 cm, A	$B = 5 \text{ cm.} \therefore \text{Radius CA} = \dots$
	1) $3\sqrt{5}$	2) $5\sqrt{3}$	3) $2.5\sqrt{3}$	4) None of these
*	DEFENCE CAR	EER ACADEMY 3	Entrance Exa	mination - 2018 P.T.O.

39.	C is the centre of two concentric circles. a is any point of outer circle of radius 10. Radius of innecircle is 8. Then the length of then tangent segment from A to the linner circle is			
	1) 4	2) 5	3) 6	4) 7
40.	Which of the follow	wng statements are not true?		
	1) Every square is a	parallelogram	2) Every rectangle	is not a parallelogram
	3) Every parallelogr	am is not a square	4) Every rhombus i	s a rectangle.
41.	The measures of two measures are respec	o consecutive angles of a participation of a partic	rallelogram are (3y + 2	20°) and (2y - 30°) then these
	1) 134°, 46°	2) 46° , 134°	3) 122° , 58°	4) 58°, 122°
42.	The measures of the $+ 30^{\circ}$). Then the part	angles in the pair of consecu allelogram is	itive angles of a parall	elogram are $(a + 60^{\circ})$ and (2a
	1) Trapezium	2) Rectangle	3) Rhombus	4) None of these
43.	The distance betwee	en the points $P \equiv (-6, -3)$ and	$Q \equiv (-1, -9)$ is	
	1) 12	2) 15	3) 9	4) 11
44.	The segment AB is of A are.	divided at $P \equiv (4, 5)$ internally	v in the ratio 3 : 4. If B	$ \equiv$ (8, 9) Then the coordinates
	1) (2, 1)	2) (1, 2)	3) (-1, 2)	4) (-2, 1)
45.	The line segment join C are.	ining A (-2,-1), B (3, 3) is ex	tended to C. If $BC =$	3 AB, then the coordinates of
	1) (-18, -15)	2) (15, 18)	3) (18, -15)	4) (18, 15)
46.	If $\sin \theta = \frac{3}{5}$, then the	the value of cose θ is :		
	1) $\frac{3}{5}$	2) $\frac{5}{3}$	3) $\frac{1}{3}$	4) $\frac{1}{5}$
47.	If $\tan \theta = \frac{2}{7}$, then t	he value of $\cot \theta$ is :		
	1) $\frac{7}{2}$	2) $\frac{2}{7}$	3) $\frac{1}{2}$	4) $\frac{1}{7}$
48.	The perimeter of tria	angle is 48 cm and one of tw	o congruent sides as l	ength 18 cm then, the area is
	1) 72 $\sqrt{2}$	2) 72	3) 72 $\sqrt{3}$	4) 72 $\sqrt{5}$
49.	Right angled triangle then, the area is sq.	e as hypotenuse of length 41 cm.	cm and one of the ren	naining side is of lenght 9 cm
	1) 180	2) 108	3) 90	4) 45
50.	The length of the sid the area in sq. cm. is	les of a triangle are in the rati	o 17 : 12 : 25 and its s	semiperimeter is 270 cm then,
	1) 9050	2) 9000	3) 10,000	4) None of these
×	DEFENCE CAR	REER ACADEMY 4	Entrance Exa	mination - 2018 P.T.O.

51.	How many type of quad	rilateral		
	1) 6	2) 5	3) 8	4) 7
52.	The sum of the measure	of the angles of a triangle	e is	
	1) 90 ⁰	2) 360 ⁰	3) -180°	4) 180 ⁰
53.	Two years ago, the ratio	of the ages of Meenaksh	i and Bhagyashri was 5	5 : 6 Today the ratio of their
	ages is 6 : 7. What is Me	eenakshi's present age?		
	1) 10 years	2) 12 years	3) 14 years	4) 13 years
54.	How many percent of R	s. 5 is 90 paise?	2	4) 10
<i></i>	1) 12 CCD of 144 and a mark	2) 14	3) 16 $(3, 10) = 72$ Eind the	4) 18
55.	G.C.D of 144 and a num	2) 260	2) 240	4) 360
56	1) 510 The enclose of a	2) 200	3) 340	4) 300
30.	1) different	2) normandiaular	2) congruent	1) supplementary
	1) different	2) perpandicular	3) congruent	4) supplementary
57.	How many times should	$\frac{4}{7}$ be added to $\frac{4}{7}$, so that	t the sum is 4?	
	1) 4	2) 5	3) 6	4) 8
58.	The observation with ma	aximum frequency is calle	ed the	,
	1) Mean	2) Mode	3) Median	4) None of these
59.	Measures of central ten	dency.		
	1) Mean	2) Median	3) Mode	4) all of above
60.	Find the mean of the fol	lowing data 87, 92, 63, 7	8, 92, 59, 72, 66,	
	1) Mean = 76.125	2) Mean = 76.7	3) Mean = 76	4) Mean = 67
61.	In \triangle RST, m \angle R = 90°	. seg RP⊥side ST.		
	Which of the following	is the point of concurrence	ce of the altitudes of Δ	RST ?
	1) R	2) S	3) T	4) P
62.	A line segment which jo	ins a vertex of a triangle	with a point on the opp	osite side is called as
	1) median	2) cevian	3) centroid	4) bisector
63.	The area of the vertical frespectively, find its bre	faces of a cu boid is 450 s adth.	sq cm. If its length and	height are 25 cm and 5 cm
	1) 20 cm	2) 10 cm	3) 32 cm	4) 11 cm
64.	The equation of X - axis	is		
	1) y = 0	2) $x = 0$	3) $xy = 0$	4) $x + y = 0$
65.	At least how many spec	ific elements are necessa	ry to construct a triang	le?
	1) 1	2) 3	3) 6	4) 4
66.	Which of the following	is not linear equation in t	wo variable.	
	1) x - y = 1	2) xy = 2	3) $2a + 4b = -1$	4) $p + q = 2$
67.	Three angles of a quade	rilateral are 75°, 95°, 125°		
	1) 50°	2) 360°	3) 70 [°]	4) 65 [°]
×	DEFENCE CAREE	RACADEMY 5	Entrance Exam	nination - 2018 P.T.O.

68.	The side of a square is 10 areas of the squ areas in	0 cm. The diagonal of and square centimetres?	other square is 10 cm.	What is the difference in the
	1) 40	2) 50	3) 60	4) 150
69.	Find the remainder by us	ing remainder thorem whe	en the polynomial x^3 - 3	$3x^2 + x + 1$ is divided by x-1
	1) 1	2) 2	3) -1	4) 0
70.	What is the total surface	are of a cube with side 5	5 cm?	
	1) 150 sq cm	2) 125 sq cm	3) 120 sq cm	4) 100 sq cm
71.	Which of the following is	s not a parallelogram?		
	1) Rectangle	2) Square	3) Trapezium	4) Rhombus
72.	A triangle whose length	of sides making the right a	angle are 15 cm and 20	cm. then the area of triangle
	is			
	1) 300 cm^2	2) 150 cm ²	3) 50 cm ²	4) 75 cm^2
73.	Find the LCM and HCF	of 8 and 12.		
	1) 4, 24	2) 20, 2	3) 2, 20	4) 24, 4
74.	"Every square is a rhom	bus". This statement is		
	1) false	2) can't say	3) True	4) None of these
75.	If $(3^9 \times 3^{-5})^x = 27$, then x	x = ?		
	1) $\frac{4}{3}$	2) $\frac{3}{4}$	3) 4	4) -4
		PART - I	IGAT	

Q.76. to 79 : Read the following passage carefully and answer the questions choosing the correct option.

It has often been said that the scale of natural phenomena in India and her total dependence on the monsoon, have helped to form the character of her people. Even today. Major disters, such as flood, famine and plaque are hard to cheeck and in older times, their control was almost impossible. Many other ancient civilisations, such as those of the Greeks, romans and Chinese had to contend with hard winters, which encourged sturdiness and resourcefulness. India, on the other hand, was blessed by a bounteous nature, who demanded little of man in return for sustenance, but in her terrible anger could not be appeased by any human effort. Hence, it has been suggested, the Indian character has tended to quietism, accepting fortune and misfortune alike without complaint.

- 76. The author's main argument is
 - 1) description of natural phenomena of India
 - 2) unpredictability of Indian monsoon
 - 3) correlation between the climate and the character of the inhabitants of a region

6

4) hardships caused by natural calamities

DEFENCE CAREER ACADEMY

Entrance Examination - 2018

P.T.O.

77. Which one of the following civilisations did not have to face hardships due to bad winter?1) Indian2) Greeks3) Chinese4) Romans

78. The expression "India, on the other hand, was blessed by a bounteous nature" means.

1) Indian soil is fertile

2) Indian is a land of flora and fauna.

3) Indian people have been rewarded more generously by nature in proportion to their efforts

4) Indian soil is suited for growing a variety of crops.

79. Which trait of India has been formed by the monsoon?

1) Fatalism2) Sturdiness3) Asceticism4) Epicureanism

Q.79. to 83 : Read the following passage carefully and answer the questions choosing the correct option.

As society becomes more and more affluent, people would prefer to work shorter hours at their regular employment so that they may enjoy longer house of leisure during which they can indulge in more congenial activates. They will not like to waste their leisure time performing routing domestic chores which tend to sap their energy. The idea of robot slave which would be capable to performing many of these monotonous chores is one that will appeal to a many. Already robots are used in mines and factories to perform tasks which are too risky for human beings. It takes a lot of research by dedicated scientists and sufficient financial backing for a model to be developed to perform tasks. This in turn depends on the number of people who feel the need for a robot to perform tasks around the house is not insurmountable. A domestic robot slave with its own computer and response mechanism and source of power, which can be programmed to perform certain specific tasks, is not impossibility.

- 80. In an affluent society people prefer to work shorter hours because:
 - 1) They are lazy2) They do not have the strength to work
 - 3) They want time to carry out other activities
- 4) They abhor their work

4) Are too time-consuming

2) Are too demanding

- 81. Domestic chores:
 - 1) Are welcome by housewives
 - 3) Lead to family discord
- 82. Robots are already used in mines and factories to perform:
 - 1) Hazardous tasks2) Tasks with greater efficiency than humanbeings

3) Tasks which lead to economy in the operations 4) Tasks which are forbidden by the labor laws

83. Developing a robot capable of performing a new task:

1) Is difficult for the scientists 2) Is impossible for the scientists

2) is impossible for the scientists

3) Requires huge capital

4) Depends on the number of people who require it

FILL IN THE BLANKS

*	Directions : Choose the	word or phrase (a, b, c,	or 4) which best comp	pletes each sentence.
84.	Where does he h	is cigarettes? In this draw	ver?	
	1) Guard	2) find	3) hold	4) keep
85.	Mrs. Rao lives in this bu	ilding, on the third		
	1) level	2) floor	3) ceiling	4) flat
86.	Geeta was baldy in	n a car accident.		
	1) harmed	2) damaged	3) pinched	4) wounded
87.	She lost her socks. She w	will have to buy a new		
	1) set	2) couple	3) ones	4) pair
88.	When he's 58, he'll	with pension.		
	1) Dismiss	2) resign	3) retire	4) withdraw
89.	The fire brigade's promp	ot action prevented the fi	re from	
	1) Spreading	2) flowing	3) scattering	4) spilling
90.	How much is the t	o Mumbai, if you travel	by train in first class?	
	1) cost	2) bill	3) fare	4) fee
*	Directions : Give the S	ynonyms of :		
91.	Pure			
	1) clean	2) unmixed	3) fresh	4) clear
92.	Doubt			
	1) ignorance	2) dullness	3) mistake	4) disbelief
93.	Triumph			
	1) excitement	2) victory	3) gain	4) joy
94.	Outstanding			
	1) admirable	2) prominent	3) notorious	4) interesting
95.	Voluminous			
	1) long	2) bulky	3) shining	4) loud
*	Directions : Give the A	ntonyms of :		
96.	Artificial			
	1) red	2) natural	3) truthful	4) solid
97.	Virtue			
	1) crime	2) wickedness	3) fraud	4) vice
98.	Shallow			
	1) deep	2) hollow	3) hidden	4) high
99.	Gather			
	1) spend	2) scatter	3) suspend	4) separate
100.	Reserved			
×	DEFENCE CAREER	RACADEMY 8	Entrance Exam	nination - 2018 P.T.O.

	1) companionable	2) popular	3) talkative	4) silent
101.	In a certain code, CC code?	MPUTER is written a	s RFUVQNPC. How	is MEDICINE written in the same
	1) EOJDJEFM	2) EOJDEJFM	3) MFEJDJOE	4) MFEDJJOE
*	Direction : In each are alike in some m	of the following quest anner and the forth of	tions, four words ha	we been given, out of which four bose out the odd one.
102.	1) Sleet	2) Fog	3) Hailstone	4) Vapour
*	Direction : In each Choose the correct	of the following quest alternative that will c	tions, a number serie ontinue the same pa	es is given with one term missing. ttern and fill in the blank spaces.
103.	1, 2, 3, 6, 9, 18, (), 54		
	1) 18	2) 27	3) 36	4) 81
104.	Going 50 m to the Sc North, she goes 30 m	outh of her house, Radh	nika turns left and goe ng to her house. In wl	es another 20m. Then, turning to the hich direction is she walking now?
	1) North-west	2) North	3) South-east	4) East
*	Direction : In each given words on one is to be found from words of the given	of the following que side of : :and one wo n the given alternativ pair bear. Choose th	estions, there is a c ord is given on anoth ves, having the sam he correct alternativ	ertain relationship between two ner side of : : while another word he relation with this word as the e.
105.	Melt : Liquid : : Free	eze:?		
	1) Ice	2) Condense	3) Solid	4) Crystal
106.	What is chemical for	rmula of POP?		
	1) CaSO ₄	$2) \operatorname{CaSO}_{4}, \operatorname{H}_{2}O$	3) $CaSO_4$, $2H_2O$	4) Ca (OH) ₂
107.	How is corosion of i	iron prevented?		
	1) Using anti-rust sc	olution	2) coating surface b	by paint
	3) Gal vanising the s	urface	4) All of these	
108.	Magnetism is induce	d in the disc with the	help of	
	1) Light	2) Sound	3) Heat	4) Electricity
109.	Find odd			
	1) Liver	2) Pancrease	3) Thyroid	4) Salivary
110.	Functional unit of re	production in plant is	_	
	1) Leaf	2) Flower	3) Inflorencence	4) stem
111.	What kind of taste gi	ves Amla?		
	1) Sweet	2) Sour	3) Salty	4) Bitter
112.	An element has one	electron in its valence	e shall, the element is	s likely to be a
	1) noble gas	2) halogen	3) metal	4) non-metal
113.	is use	ed in black & white photon	otography	
*	DEFENCE CAR	EER ACADEMY	9 Entrance	e Examination - 2018 P.T.O.

	1) silver nitrate	2) silver bromide	3) alumina	4) gypsum
114.	The S.I. unit of an el	ectric charge is		
	1) volt	2) ampere	3) coulomb	4) ohm
115.	When a ray of light p	passes from a rarer me	dium to a denser mediu	im the angle of refraction is ——
	1) equal to angle of	incidence	2) equal to 90°	
	3) smaller than angle	e of incidence	4) greater than	angle of incidence
116.	The sulphide ores or	es first converted into	oxides by heating stroi	ngly in excess of air. This process
	is called as —			
	1) calcinations	2) refining	3) roasting	4) corrosion
117.	Electronic configurat	tion of Al is		
	1) 8,8,2	2)2,8,1	3) 2,8,3,	4) 2,8,2
118.	Symbol of wire cros	sing is — ⁺ ──	+ +	(·)
	1)	2)	3)	4)
119.	Formula of washing	soda is		
	1) Na ₂ Co ₃ 10H ₂ O	2) $Na_2Co_3 H_2O$	3) NaHco ₃ H_2C	4) NaHCo ₃ 10H ₂ O
120.	Symbol of heat used	in reaction is		
	<u>1) </u>	2) 🗆	3)↑	$4) \rightarrow$
121.	The father of History	<i>'</i> is		
	1) Socrates	2) Herodotus	3) Thucydies	4) Sophocles
122.	Man in prehistoric pe	eriod was unknown of	the	
	1) Use of fire	2) Use of stone	3) Writing skil	4) Use of Iron
123.	The revoluation of Pr	rophet Muhammad wer	r compiled in the book	named
	1) Holy Quran	2) Safarnama	3) Tarikh-i Hin	d 4) Al Beruni
124.	The well fortified cas	stle of the Lords was k	nown as	
105	1) Manors	2) Palace	3) Mansion	4) Forts
125.	The book entitled "If	2) Zwingly	2) John Colvin	1) John Huss
126	1) Erasums Desearch on blood of	2) Zwingly	3) John Calvin	4) John Huss
120.	1) Gilbert	2) Holdmont	3) Willian Har	vev 4) John Kenler
127	In Englan	was the main busines	5) William Har	yey 4) John Replet
127.	1) Iron	2) Coal	3) Cotton	4) Garment
128.	The British Parliame	nt passed i	n the year 1764 in Am	erican colonies.
	1) Sugar Act	2) Stamp Act	3) Income Tax	Act 4) None of these
	-	-		
×	DEFENCE CAR	EER ACADEMY	10 Entrance	Examination - 2018 P.T.O.

129.	There are approximat	tely thousand villa	ages in Maharashtra.	
	1) 65	2) 41	3) 51	4) 53
130.	In Maharashtra maxin	mum area is under	type of irrigation.	
	1) Well	2) Canal	3) Tank	4) Lift
131.	Occupatio	on depends entirely on natur	al resources.	
	1) Secondary	2) Primary	3) Tertiary	4) Quaternary
132.	Rice Research centre	is at in Maharas	shtra.	
	1) Pune	2) Karjat	3) Amravati	4) Nandurbar
133.	The first cotton mill y	was set up at Mumbai	in Maharashtra.	
	1) 1852	2) 1854	3) 1856	4) 1851
134.	Which is not a natur	al ecosy ecosystem?		
	1) Desert	2) Aquarium	3) Forest	4) Grassland
135.	The rock which is ma	ade up of molten magma is.		
	1) Sedimentary		2) Metamorphic	
	3) Igneous		4) Metamorphosed	igneous
136.	Which is the largest	continent in the world?		
	1) asia	2) europe	3) africa	4) north america
137.	It is the official resid	lence of the president of Ind	lia.	
	1) Rashtrapati bhavar	1	2) Annand Bhawan	
	3) Sansad Bhawan		4) Lok Sabha	
138.	The Maharashtra geo category called socia	vernment has recently grant lly and Educationally Backy	ed reservation to whic vord class (ESBC)	h community under a new
	1) Dhangar	2) Lingavat	3) Buddhist	4) Maratha
139	What is the theme of	the 2018 world Toilet day (WTD)	i) maratha
107	1) Follow he flush	2) When Nature calls	3) Wastewater	4) Toilets and Nutrition
140.	Which country has o	fficially opened the world's	longest sea-crossing	bridge.
1.00	1) Russia	2) China	3) Indonesia	4) Japan
141.	The following is (are	e) Not a factors of soil form	ation.	.) • • • • • •
	1) organic matter	2) time	3) soil texture	4) all above
142.	Coal, Iron ore, petrol	leum, disel etc. are the exam	ple of.	,
	1) Biotic Resources		2) abiotic resources	5
	3) Renewable resour	cces	4) Non-Renewable	resources
143.	Which countries wer	involved in tripole alliance	agreement.	
	1) Germany - Englan	d - Italy	2) England - France	- America
	3) Germany - Austria	ı - italy	4) Germany - Russia	a - Austria
. -				
	DEFENCE CAR		Enurance Exal	$r_{100} = 2018 P.1.0.$

144.	Kaisar william II was	s the emperor of		
	1) italy	2) Austria	3) Hungery	4) Germany
145.	Hitlers autobiograph	y entitted "" is a m	anifes to of the Nazis	sm'
	1) Das capital	2) Man Kampp	3) Young turks	4) None of these
146.	In which year, the fir	st winter Games was held	?	
	1) 1904	2) 1920	3) 1924	4) 1936
147.	After how many year	s is the olympic Games he	ld?	
	1) three years	2) four years	3) 2 years	4) 5 years
148.	Who appoints the ad	vocate General of India?		
	1) Attorney General		2) Governor of th	e state
	3) Judge of Supreme	Court	4) President of In	dia
149.	Who is responsible	to parliment for all matters	concerning defence	?
	1) President	2) Prime Minister	3) Defence Minis	ster 4) Home Minister
150.	The UN secretory -	General holds office for a	period of.	
	1) 3 years	2) 4 years	3) 5 years	4) 6 years
		***>	***	