SAMPLE PAPER - 2 POST GRADUATE PROGRAMME IN FASHION TECHNOLOGY PAPER - I - GENERAL ABILITY TEST

Time Allowed: 2 Hours Max. Marks: 120 **Total Ouestions: 120** This test comprises of the following sub-tests. (1) Quantitative Ability (2) Communication Ability (3) English Comprehension (4) Analytical Ability (5) General Knowledge and Current Affairs (6) Thematic Apperception Test Each question carries one mark. (i) Answers are required to be marked only on the OMR/ICR Answer-sheet, which will be provided (ii) separately. (iii) For each question, four alternative answers have been provided out of which only one is correct. Darken the appropriate circle in the Answer-sheet by using Ball pen only on the best alternative amongst (a), (b), (c) or (d). 1. Every triangle must have at least: (b) 3 acute angles (c) 2 acute angles (a) 1 acute angle (d) no acute angle The condition, which does not determine the congruence of 2 triangles, is: 2. (a) SAS (b) AAS (c) SSS (d) AAA $\sin(2n\pi + \theta)$, where, n is a natural number which is equal to 3. (a) $-\sin\theta$ (b) $\sin \theta$ (c) $\cos \theta$ (d) $-\cos\theta$ A man buys 2 articles for a total cost of Rs.1600. By selling one article for 4/5th of its cost and the 4. other for 5/4th of its cost, he makes a profit of Rs. 200 on the whole transaction. The cost prices of the articles are: (a) 494.9, 1105.1 (b) 444.4, 1155.6 (c) 398.6, 1201.4 (d) 466.6, 1133.4 If 8 men or 11 women can reap a field in 34 days how long will 5 men and 7 women take to reap it? 5. (b) 30 days (c) 27 days (d) 24 days (a) 32 days 6. If a receptionist received an annual income of Rs. 88000, which is 10% more than the previous year. What was her income last year? (a) Rs. 76000 (b) Rs. 80000 (c) Rs. 96000 (d) Rs. 72000 7. Two numbers are said to be 'CO-PRIME' (a) If both are prime numbers (b) If they do not have a common factor other than 1. (c) If both are not prime numbers (d) If they have common factor 1 8. $(25 \times 25 + 131 \times 131) =$ (c) 17786 (d) 35572 9. (a) 9/8 (c) 1/8 (b) $\frac{1}{2}$ (d) 1/12 Average of two numbers is 52 and their difference is 40. They are 10. (a) 23 and 72 (b) 32 and 27 (c) 23 and 27 (d) 32 and 72 11. If 2A = 3B = 4C then A:B:C is (a) 4:3:6 (b) 6:4:3 (c) 2:3:4(d) 1:2:3 12. What percent of 7.2 kg are 18 g? (c) $\frac{2}{5}\%$ (a) 25 % (b) 2.5 % (d) 0.25 % The rates of S.I. in 2 banks A and B are in the ratio of 5:4. A person wants to deposit his total savings 13. in 2 banks in such a way that he receives equal half yearly interest from both. Then his deposits in the savings account in banks A and B will be in the ratio:

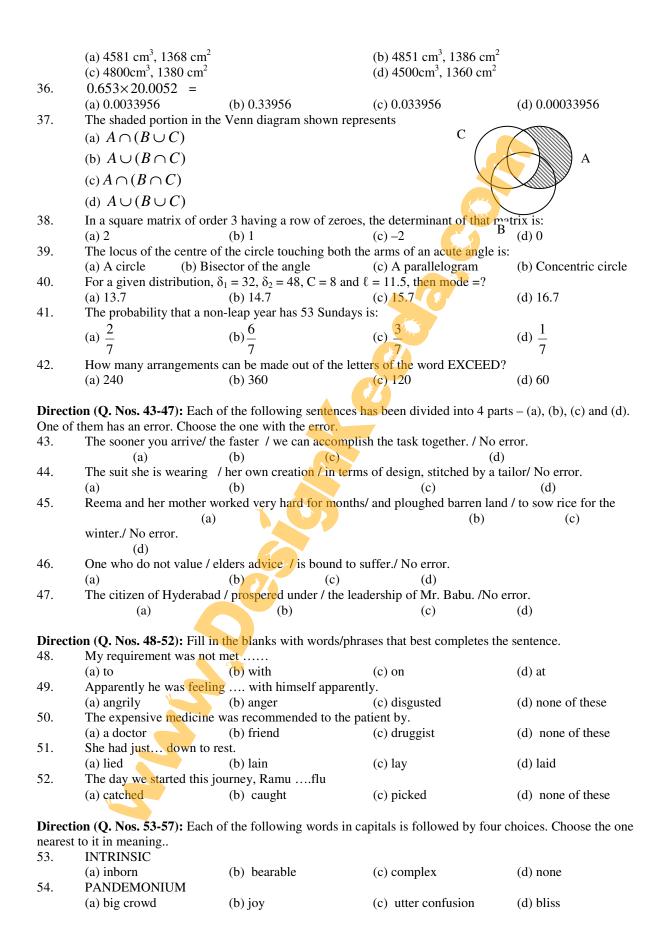
(c) 4:5

(d) 5:4

(b) 3:4

(a) 1:2

14.	Walking at ¾ of his usua	al speed, a man is late	by $2\frac{1}{2}$ hrs. The usual time v	would have been	
	(a) $5 \frac{1}{2}$ hrs	(b) 2/3 hrs	(c) 7 ½ hrs	(d) 6 hrs	
15.	A train 300 m long cross	ed a platform 900m lo	ong in 1 min 12 sec. The spe	ed of the train in (km/hr) is	
	(a) 60	(b) 50	(c) 24	(d) 42	
16.	The difference between	the circumference and	the radius of a circle is 37c	ems. The area of the circle is	
	(a) 154 cm^2	(b) 148 cm^2	(c) 259 cm^2	(d) 182 cm^2	
17.	The surface area of a cub				
	(a) 4913cm^3	(b) 2714cm ³	(c) 4096cm ³	$(d) 4197 cm^3$	
18.	$3ab^2 + 3a^2b - 10ab^2 5ab =$				
	(a) $15ab + 7ab^2$	$(b) 5ab -7ab^2 3a^2 b$	(c) $3a^2b-3ab^2$	(d) $5ab + 10a^2b$	
19.	The graph of a quadratic	function is a			
	(a) Hyperbola	(b) Circle	(c) Straight line	(d) Parabola	
20.	In the Harmonic progression the reciprocal of the terms are in				
	(a) Integer set		(b) Complex number	rs set	
	(c) Geometric Progression	on	(d) Arithmetic Progr	ression	
21.	Two sets A and B are eq	ual if			
	(a) $A \subset B$ or $B \subset A$		(b) $A \subset B$ and B	$\subset A$	
	(c) $A \subset U$ and $B \subset U$	J	(d) $A \cap B = \Phi$		
22.	The characteristic of log				
	(a) 3	(b) 2	(c)'1	(d) 0	
23.		* *		of a circle. Then their lengths	
25.	are	enora 2 are at the sam	the distance from the centre of	ra di	
	(a) chord 1 > chord2	(h	chord $1 = 2$ chord 2 or chord	ord $2 = 2$ chord1	
	(c) Equal) chord 2 < chord 1	ora 2 2 chora i	
24.	$\int (x^2 + \cos x) dx =$, chera 2 (chera)		
27.	$\int (x + \cos x) dx =$				
	(a) $\frac{1}{3}x^3 + \sin x + c$	(b) $2x - \sin x + c$	(c) $\frac{1}{3}x^3 + \cos x + c$	(d) $x^2 + \sin x + c$	
25	$d \left(\frac{1}{2} \right)$				
25.	$\frac{d}{dx}(\sqrt{x^2+2}) =$	30			
	(a) $\frac{x}{\sqrt{x^2}}$	(b) x ²	(c) $\frac{x}{\sqrt{x^2+2}}$	(d) x	
	$\sqrt{x^2}$		$\sqrt{x^2+2}$		
26.	A man can row unstream	at 6kmph and downs	tream at 8 kmph Find man	's rate in still water and the	
20.	A man can row upstream at 6kmph and downstream at 8 kmph. Find man's rate in still water and the rate of current.				
	(a) 7 and 5 km/h	(b) 7 and 2 km/hr	(c) 5 and 3 km./hr	(d) 3 and 6 km/hr	
27.			ill be the approximate price		
27.	(a) Rs. 223	(b) Rs. 300	(c) Rs.250	(d) Rs. 350	
28.		of Rs. 200 is required	to be paid for repayment of		
20.	A monthly installment of Rs. 200 is required to be paid for repayment of an interest free loan in 60 months. If it is decided to pay it in 50 months, how much will be the monthly installment in rupees?				
	(a) 200	(b) 240	(c) 420	(d) 400	
29.		* *	* *	nangoes. The ratio of the cost	
29.	of one orange to that of o		s three oranges and seven in	langues. The ratio of the cost	
	(a) 3:2	(b) 2:3	(c) 3:1	(d) 2:1	
30.			neight is 20cm. Then total su	. ,	
30.	(a) 2929 cm^2	(b) 2299 cm ²	(c) 2992 cm ²	(d) 2993 cm ²	
31.	(AUB)'=	(0) 2299 CIII	(c) 2992 cm	(u) 2993 cm	
31.		(1) A D	() A' P'	(1) 4/11 D	
22	(a) A' U B'	(b) $A \cap B$	(c) $A' \cap B'$	(d) A' U B	
32.	If $A = i \log (2 + \sqrt{3})$ then		() 1/	(1)	
2.2	(a) $\cos h [\cos h^{-1}(2)]$	(b) 0	(c) ½	(d) cos h (2)	
33.			and a perimeter of 4.6 m. Th		
2.4	(a) 17m	(b) 27m	(c) 15m	(d) 20m	
34.	If the circumference of a			(1) 0560	
25	(a) 9586 sq. m	(b) 9685 sq. m	(c) 9856 sq. m	(d) 9568 sq. m	
35.	Find the volume and surf	iace area oi a sphere o	i radius 10.5 cm.		



55.	IRKSOME					
	(a) itching	(b) troublesome	(c) boring	(d) none		
56.	LUDICROUS					
	(a) glaring	(b) funny	(c) absurd	(d) serious		
57.	EMULATE					
	(a) oppose	(b) original	(c) ornament	(d) imitate		
		_				
Directi	Direction (Q. Nos. 58-62): Each of the following words in capitals is followed by four choices. Choose the one					
opposit	opposite in meaning to it.					
58.	DEMURE					
	(a) modest	(b)reserve	(c) opaque	(d) haughty		
59.	ETIQUETTE					
	(a) behaviour	(b) conduct	(c) ill-mannered	(d) manners		
60.	ENERVATE					
	(a) upset	(b) untune	(c) discomfit	(d) strengthen		
61.	FLAG					
	(a) signalize	(b) mark	(c) droop	(d) erect		
62.	DENSITY		8-4			

Direction (Q. Nos. 63-67) Read the passage carefully and answer the questions based on it.

(b) intelligence

(a) rarity

PASSAGE

(c) clarity

(d) brightness

What, then are the prospects of a single government for the whole world? Unfortunately they are not very promising. Two attempts have been made within the last forty years to bring the nations together, first in the League of Nations, which was created after the 1914-1918 war; secondly, in the United Nations Organization which was the product of the last war. Neither of these associations has, however, been very successful. The League of Nations was helpless to prevent the second world war, and its successor, the United Nations Organisation seems to have no authority over the great powers. How, indeed, could it have such authority when it is without armed forces to impose it. Many people think that the only way in which the nations of the world can be brought together under the control of a single world government is through the domination of the rest by a single power, as the European world was dominated by Rome in the centuries immediately succeeding the birth of Christ.

63.	What are the two recent examples of a world government?				
	(a) League of Nations	(b) United Nations Organisations			
	(c) Both (a) and (b)	(d) None of the above			
64.	How did the League of Nations fail?				
	(a) It had no authority over the world powers	(b) it had no army of its own			
	(c) It could not prevent the Second World Wa	(d) None of the above			
65.	How can a World Govt. control the whole wo	·ld?			
	(a) It must have a lot of money	(b) All powerful countries should come together			
	(c) It should be controlled by a strong dictator	(d) None of the above			
66.	Why has U. N. O. failed?				
	(a) veto power is used in the Security Council	(b) it has no army to enforce its authority			
	(c) All countries are not its members	(d) None of the above			
67.	Which event caused the birth of UNO?				
	(a) Failure of the League of Nations to stop the Second World War				
	(b) Roman occupation of Europe (c) The First World war (d) None of the above			

Direction (Q. Nos. 68-77): Read the passage carefully and answer the questions based on it.

PASSAGE

To be sure, one-third of the accumulated debts of the Third World is attributable to arms imports. Forty developing countries have thought it fit to establish their own military industries for production of aircraft, tanks, armoured vehicles, artillery, warships and missiles in unceasing bouts of one-upmanship. It may

well be., as the World Bank President, Mr. Barber Conable laments, that developing countries spend \$200 billions on the military. Without in any way holding any brief for all the skewed priorities developing countries are capable of, the money they spend on Defence is still only 15 per cent of the more than \$ 1200 billions per year (or \$ 3 billions each day) spent on the manufacture of arms and armaments and for running military, based industries. (It should be remembered that the figure may well be on the lower side for, as the World Bank points out, governments are prone to understate and conceal the actual outlay on this deadly item).

Undeniably, the preoccupation shown by some of the poorer countries with arms build-up is indefensible- for instance, Africa, where almost every problem is more acute than elsewhere and most of the world's poorest live, spends 14 per cent or more of the GNP on the military, besides indulging its whim for constant internecine feuds. Even so, the per capita expenditure on armed forces is still only \$ 43 in developing countries as against \$ 524 in developed countries as a whole, North America alone topping the list at nearly \$ 1000 per capita.

It is the industrial countries, which are responsible for 97 per cent of weapons exports, the U.S. and the USSR between themselves accounting for 72.5 per cent. Two-thirds of the exports originate from NATO nations and 44 per cent from the U.S. The U.S. Congress research service has found that the country encourages bankrupt States to buy weapons, which they often do not need, paying with money which they often do not have! In 1982-84, American aid for Africa rose by 40 per cent, but this was left far behind by sales and donations of arms which went up by 150 per cent in the same period, Mr. Conable will have only himself to blame for sounding sanctimonious if he forgets, while cautioning the Third World to go easy on military spending, the preponderant role of the industrial countries in taking their poor brethren down the military path by sometimes thrusting arms down their throats.

That said, the issue raised has to be squarely faced. There is no gainsaying the deleterious impact of Defence expenditure on the overall investment and savings, agricultural and industrial production, and economic growth and development in developing countries. There is ample evidence of its affecting availability of resources for social services (including such vital areas as education and health). A U.N. study has disclosed that an average of two working places can be created in civilian sectors for every employee in the military sector. In the U.S. the job increase by diversion of \$1 billion from the military to the civilian sector has been computed to be as high as 51,000.

The monstrous drain of human and material resources on weapons of warfare and plans of destruction is so mind boggling that it may make no dent on the consciousness of most laymen unless broken into spine - chilling deprivations flowing from it.

One can therefore, readily agree with the declaration of eminent public men and renowned thinkers from all over the world who gathered at the UN headquarters a few years ago for a symposium on 'Survival in the Nuclear Age". They said: "The consequence of failure to control the arms race has been more confrontation and distrusts and the priority given to security issues has had unfortunate results not just for detente between East and West but also for North-South cooperation. Governments should plan and prepare for a process of transfer of resources from military to civil uses." It is time, too, for, to quote Alva Myrdal, "More and more States are buying more and more insecurity at a higher and higher ' price" and the pernicious paradox of the common people's craving in every country for peace and for basic necessities coexisting with their government's craze for arms continues.

Is it possible to rouse the conscience of governments and mobilize their "moral 'reserves" towards a consummation so devoutly wished and so consistently elusive? The examples of China, the USSR and Japan offers a semblance of hope. The share of GNP used in china for military purposes has fallen perceptibly from 13 per cent in the Seventies to scarcely 7 per cent in 1987, the resources thus released being channeled for activities like reforestation, family planning and agricultural development-On May 30 this year, the Soviet president, Mr.-Mikhail Gorbachev announced an across-the-board cut of 14 per cent in military expenditure next year, earmarking the funds thus obtained for improving social conditions. Japan has risen to be a formidable economic power without any commensurate military build-up. The super powers are moving steadily towards arms reduction and they could extend the principle to reducing arms exports as well.

- 68. Many developing countries establish their own military industries?
 - (a) In order to avoid import of weapons
- (b) In an effort to protect themselves from invasion
- (c) So that they can become independent
- (d) To compete with other countries
- 69. The passage points outs that developing
 - (a) Often displays lopsided priorities
- (b) Are over cautious
- (c) Are justified in their defence expenditure (d) Are not responsible for their defence

- 70. Comparing the defence expenditure of developing countries with that of the developed ones, we find that:
 - (a) The developing countries spend proportionality more
 - (b) The per capita expenditure of developed countries is more
 - (c) The developing countries have a rational basis of their expenditure
 - (d) The developed countries spend less on a consolidated basis
- 71. The actual figures available about Military expenditure
 - (a) Are accurate, according to the World Bank
- (b) Are extremely misleading
- (c) May be understatements by the governments concerned
- (d) Are used by the IMF and World Bank to suit their own purposes
- 72. The problems of third world debt
 - (a) Can be solved by cutting down defence expenditure
 - (b) May be unrelated by a bus on all defence clears with developing countries
 - (c) Is due to the production of surplus arms by developed countries.
 - (d) Cannot be tackled by ignoring the arms imports by developing countries.
- 73. The irony referred to by the writer, lies in the fact that
 - (a) Countries which are starring should go in for arms billet up
 - (b) Developing countries aim at self-sufficiency in production of arms
 - (c) The poorer countries spend more on arms than the industrial countries
 - (d) The industrial countries call for reduced military spending
- 74. The full Magnitude of problem under discussion
 - (a) Strikes home only that details about deprivations caused by Military expenditure are made available
 - (b) Is not revealed in the official reports
 - (c) Cannot be understood by the layman
- (d) Is underplayed by the United Nations Study
- 75. It is seen that the American Aid for Africa
 - (a) Is justifying its sale of arms

- (b) Has no relevance to the context
- (c) Did not increase so much as its sale of arms to Africa
- (d) Was possible because of the American sale of arms
- 76. It is the opinion of great thinkers that?
 - (a) The arms race will be a feature of the Nuclear Age.
 - (b) We will have to spend more to pressure peace
 - (c) It will be difficult to survive the Nuclear Age.
 - (d) Military expenditure should be curbed and the resources utilized for civil purposes
- 77. The writer feels that:
 - (a) Americans cannot reduce its military spending without a change of heart
 - (b) The example of China, Japan, and Russia will be followed by the rest of the world
 - (c)The industrial countries should reduce arms exports while reducing their own arms build-up
 - (d) the developing countries will have to set the trend in the Nuclear age.

Direction (Q. Nos.78 to 82): Each problem contains a question and two statements, which give certain data. You have to select the correct answer from (a) to (b) depending on the sufficiency of the data given in the statements to answer the questions.

Mark (a): If statement A alone is sufficient to answer the question and statement B alone is not sufficient to answer the question.

Mark (b): If statement B alone is sufficient to answer the question and statement A alone is not sufficient to answer the question.

Mark (c): If statements A and B together are sufficient to answer the question but neither statement alone is sufficient.

Mark (d): If statements A and B together are not sufficient to answer the question and additional data specific to the problem are needed.

- 78. What is the area of triangle ABC?
 - (A) The in radius is 5 cm
- (B) The sum of all sides of the triangle is 30 cm
- 79. What is the value of k in f (x) = $x^3 + 3x^2 5x + k$
 - (A) f(-1) = 0 (B) (x-1) is not a factor of f(x).
- 80. What is the value of $\sec \theta$?
 - (A) θ is an acute angle

(B) $\cos \theta = 5/6$.

81. If mode = 3 what is mean

(A) median < mean

(B) Median = 2

82. What is the value of x?

(A) $x + y^2 = 10$

(B) $y^4 = 16$

Direction for Question 83-87. The following table gives the results of 5 schools:

School	Number of Students scoring less than 60% marks	T	otal No. of students
A	230		550
В	190	7	475
С	250	, see	600
D	150	777	350
E	170		450

83. Total No. of students scoring more than 60% is:

- (a) 1440
- (b) 990
- (c) 1340
- (d) 1435

84. Which school has the lowest percentage of students scoring less than 60%

(a) A

(b) E

(c) C

(d) B %.

85. Which school has the second lowest percentage of students scoring less than 60%.

(a) B

(b) E

- (c) C 60% is so
- (d) A

86. What is the percentage of students scoring more than 60% is school 'C'?

- (a) 41.5%
- (b) 63%
- (c) 58%
- (d) 48%

87. Which school has the highest percentage of students scoring more than 60%.

(a) E

(b) D

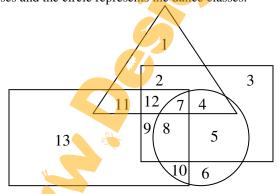
- (c) C
- (d) B

Directions for Question Nos. 88-89: In each of the following questions, four words have been given, out of which three are alike in same manner and the fourth one is different. Choose odd one out.

- 88. (a) Spectacles
- (b) Goggles
- (c) Binoculars
- (d) Microphone

- 89. (a) Engineer
- (b) Architect
- (c) Mechanic
- (d) Manson

Direction for Question Nos. (90-94): In the following figure, the square represents those who are attending drawing classes the triangle represents the students who have joined the music classes, the rectangle represents the painting classes and the circle represents the dance classes.



90. Which number represents the students who have music, drawing and painting?

(a) 7

- (b) 13
- (c) 9

(d) 4

91. Number 5 represents the set that have

- (a) dance and drawing
- (b) music and dance
- (c) music and drawing
- (d) painting and dance

92. Which number represents the set who have drawing and painting?

- (a) 7
- (b) 8

- (c) 13
- (d) 9

93. Which number represents the students with all the four hobbies?

(a) 11

(b) 8

(c) 13

(d) 7

94. Which number represents the students who have printing and dance?

(a) 9

(b) 10

(c) 7

(d) 13

95.	Bread is related to Wheat (a) day	is the same way as Brick i (b) fire	s related to (c) cement		(d) building
Directi	ons for questions nos. 96	to 97: These questions are 1	based on the	following defir	nition of operators.
	is greater than	% means less than		is equal	ntion of operators.
	equal to	+ is a little more than		is little less that	n.
96.	$p \Delta q$ and $q + v$, then				
	(a) $r + p$	(b) p % r	(c) r % p	V	(d) p + r
97.	If $r = p$ and $p = q$ then	· / I	. , 1		, <u>1</u>
	(a) $q \Delta p$	(b) $r \square p$	(c) $q = r$	85	(d) None of these
	on for question nos. 98-10 as given in each of the following		diagrams bes	st represents the	e relationship between
	(1)	(2)	(3)	(4)	
98.	Algebra, trigonometry, m	athematics.			
<i>7</i> 0.	(a) 1	(b) 2	(c) 3		(d) 4
99.	Car, jeep, four wheelers.	(6) 2			(0)
	(a) 1	(b) 2	(c) 3		(d) 4
100.	Pigeons, birds, dogs				, ,
	(a) 1	(b) 2	(c) 3		(d) 4
101.	Sun, star, moon				
	(a) 1 (b) 2 (c) 3	(d) 4			
102.	Student, soccer players, c	ricket fans			
	(a) 1 (b) 2 (c) 3	(d) 4			
100	T 1 C 11 11				
103.	Land of white elphant is	(1) D	() T 1'		(1) TPI 11 1
104	(a) Kenya	(b) Burma	(c) India		(d) Thailand
104.	The highest dam in the w		(a) In:		(d) No1.
105.	(a) Bhakra Official reports of the Bri	(b) Grorple dixence tish government are called	(c) Inguri		(d) Nurek
105.	(a) Blue Books	(b) Grey Books	(c) Green E	Rooke	(d) White Books
106.	The disputed Black Sea f		(c) Green E	TOOKS	(u) White Books
100.		(b) Georgia and Ukraine	(c) Rumani	a and Russia (d) Bosnia and Croalia
107.	The tip of the lead pencil		(-)		-,
	(a) Lead	(b) Carbon	(c) Graphit	e	(d) Zinc
108.	A panchayat Samiti at the	block level is only	. , .		, ,
	(a) an advisory body	-	(b) a consu	ltative comunit	ee
	(c) a co-ordinating and su	pervisory authority	(d) an admi	inistrative author	ority
109.	• •	try civil suits up to the valu			
	(a) no limit	(b) Rs.500 (c) Rs.2	$200 \qquad (d)$) cannot by any	amount civil suit
110.		national language was for			
111	(a) Hindustani	(b) English	(c) Hindi		(d) Urdu
111.		to be one of the world's la			
112	(a) Delhi The most important source	(b) Bhopal	(c) Kolkatta	1	(d) Hyderabad
112.	The most important source	_	(a) appala		(d) tube wells
113	(a) wells The hottest time of the da	(b) tanks	(c) canals		(d) tube wells
113.	(a) 12.00 am	(b) 1.00 pm (c) 3.0	0 nm - (d) hetween 2 00	pm and 4.00pm
114	The vast and hot gaseous	- · · · · · · · · · · · · ·	o pin (u	, between 2.00	hiii aiia 4.00hiii

(c) Moon

(d) Earth

(b) Planet

(a) Sun

(b) Lunar day (a) Solar day (c) Sidereal day (d) apparent day Directions for Question Nos. 116-118: In each of the following questions there are problem figures marked A, B, C, D etc., followed by answer figures named (a), (b), (c) and (d). Choose the right answer from the given options, which best completes into the series. 116. PROBLEM FIGURES: D E A ANSWER FIGURES (a) (b) (c) (d) 117. PROBLEM FIGURES C D ANSWER FIGURES (a) (b) (c) (d) 118. PROBLEM FIGURES В C D Α ANSWER FIGURES (b) (c)

The duration of the period of exactly 24 Hours is called

115.

Direction for Question Nos. 119-120: In the following picture, a piece of paper is folded as shown in A, B and C and is punched. The paper when unfolded looks like:

119. A B C

