DO NOT OPEN THIS TEST BOOKLET TILL YOU ARE ASKED TO DO SO.

Tr:/STCSPT/GS-I/TPSC/21

TEST BOOKLET

GENERAL STUDIES PAPER - I

(Signature of the Candidate)

(Invigilator's Signature)

Time Allowed - 3 hours (Three hours)

Test Booklet Series



Maximum Marks - 150

INSTRUCTIONS

- PLEASE CHECK THE TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
- 2. ENCODE CLEARLY THE TEST BOOKLET SERIES IN THE APPROPRIATE PLACE IN THE ANSWER SHEET BY BLACK BALL POINT PEN ONLY.
- 3. (a) This Test Booklet is divided into three sections, i.e., Section-I, Section-II and Section-III.
 - (b) Section-I (MCQ pattern) contains 100 items (questions). Each question, carrying one (1) mark only, has four responses (answers). You will select the response which you want to mark on the OMR Sheet. In case you feel that there is more than one correct response, mark the response which you consider the most appropriate. In any case, choose ONLY ONE response for each item.
 - (c) Questions under Section-III and Section-III (both are Conventional Methods) contain 25 marks each is to be answered in separate Answer Books. 2 (two) Answer Books will be supplied to each candidate for writing answers of Section-III and Section-III. Answers to Section-III and Section-III must be written either in English or in Bengali. It must not be answered partly in English and partly in Bengali. This instruction should be followed scrupulously.
- 4. You have to mark all your responses of Section-I by Black Ball Point Pen only on the separate Answer Sheet provided. See directions in the Answer Sheet.
- 5. Before you proceed to answer the responses to various items in the Test Booklet, you have to fill in some particulars both in the OMR Answer sheet for Section-I and in the Answer Book for Section-II and Section-III.
- 6. On completion of the Examination, you should handover the OMR Answer Sheet for Section-I and Answer Books for Section-III and Section-III to the inivigilator only. You are permitted to take the Test Booklet with you.
- 7. Sheets for rough work are appended on the Test Booklet at the end.
- 8. Penalty for wrong answers for Section-I only:
 - (a) There will be four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-fourth of the mark assigned to that question will be deducted as penalty.
 - (b) If a candidate gives more than one answer, it will be treated as a Wrong Answer even if one of the given answers happens to be correct and there will be same penalty as above to that question.
 - (c) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

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Four options are given against each of the following questions. Select the best/correct option from among the four options and encode in the answer sheet by using **Black Ball Point** only as per example given below:

Example: The wheel in our National Flag has

(A) 20 spokes

(B) 24 spokes

(C) 30 spokes

(D) 25 spokes :

Answer: (A)



(C) (D)



SECTION - I

- 1. Choose one word out of the given alternatives, which can not be formed from the letters of the word 'INTERNATIONAL'.
 - (A) LATTER

(B) TERMINAL

(C) ORIENTAL

- (D) RATIONALE
- Select the combination of numbers, so that letters arranged accordingly will form a meaningful word

H L R A O C S
1 2 3 4 5 6 7

- (A) 1, 2, 3, 4, 5, 6, 7
- (B) 7, 6, 5, 1, 4, 2, 3
- (C) 7, 6, 1, 5, 2, 4, 3
- (D) 7, 6, 5, 1, 2, 4, 3
- 3. Which letter will be in the middle between 6th letter from the left and 13th letter from the right in the English alphabet sequence?
 - (A) K

(B) L

(C) J

(D) O

08 08 01		AVERAL and 2346 is written as NPSU. Then
4. In a cert how 235	tain code, 15789 is written at 549 is written in that code	as XTZAL and 2346 is written as NPSU. Then ? (B) PNTSL
(A) NP	TUL	(D) NPTSL
(C) NE	BTSL	(D) NPTSE
	Spokes Transfer	
	issing number in the seque	nce
2, 3,	5, 7, (?), 13, 17, is:	
Anna de		(B) 9
(A) 8		(D) 12 / 12 / 2
	M1.	(D) 12
(C)		416,10
	7.4	SED is equal to
(If F	= 5, PEN $=$ 35, then PAC	JEK IS Odam
0. 11 12		(B) 39
(A)	47	(D) 37
	- **	(D) 67
	58	
	-28	the related word in '?' position.
7. In	the following identify the	correctly related word in '?' position.
Ca	attle: Herd:: Sheep:?	
		(B) Swarm
(A	A) Flock	
	1.2.4	(D) Mob
(0	C) Shoal	
-11	15 hours will be equal to	
8.	15 hours will be 31	(B) 48,000 seconds
	(A) 50,000 seconds	(B) 40,000 5555
i e	(A) 30,000 Ber	(D) 60,000 seconds
	(C) 54,000 seconds	(D) 00,000 227
	(0) 54,000	
1 /T)	R/STCSPT/GS-I/TPSC/21/C-14	0 (4)

9. Which of the following represent the same relationship as 'OFTEN' has with 'FOTNE'?

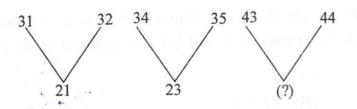
(A) HEART: TRAHE

(B) OPENS: SNEOP

(C) RISKY: IRSYK

(D) FIRST: IFRST

10. Find the missing number in the following figure in '?' position:



(A) 27

(B) 29

(C) 28

(D) 30



11. Find the missing term in the series

YEB, WFD, UHG, SKI, ?

(A) QOL

(B) QGL

(C) TOL

(D) QNL

12. If 'a' and 'b' are two non-zero numbers such that a - b = b - a then

(A) a = -b

(B) a = 2b

(C) b = 2a

 $(D) \quad a = b$

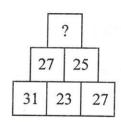
13. Arrange the given words in a meaningful sequence and then choose the most appropriate sequence from the options

- (1) Colonel
- (2) Major
- (3) Lieutenant General

- (4) Captain
- (5) Lieutenant
- (A) (5), (4), (2), (1), (3)
- (B) (3), (4), (5), (2), (1)
- (C) (1), (2), (5), (3), (4)
- (D) (5), (4), (2), (3), (1)

14.	Pointing to a man in in-law's father-in-law	n a photograph, a waw". How is the	oman man	says "He is the related to the	he father of a woman?	my only daug	hter
	(A) Father	1299 . 1200	(B)	Brother			
	(C) Husband	je sa sa gangil j	(D)	Father-in-law			
15.	Five persons K, I	wife of O. N is the	e sitti e brot	ng around di her of K and	nning table. L is the hu	K is the m sband of K.	othe The
			(D)	1. C. d			
	(A) Sister		(B)	Mother			
	(C) Mother-in-law	V	(D)	Brother-in-la	.w		
	1-133A2-50	1700				.	
16.	If $x^2 + y^2 + z^2 = 0$	with x, y, z as re	eal nu	imbers, then			
10.						1	
	(A) Two numbers	s are negative and	one	is positive	78 MA S	CAN.	
	(B) Two numbers	s are positive and	one	is negative	19	PARENTE	>
	(C) All the three	numbers are pos	itive	<	CILIO	01/3/	
	(D) $x = y = z =$	= 0			3		
17	. Total number of	days in the year	2024	will be	1.		
	(A) 365 days		(B)	366 days			
	(C) 367 days		(D)	364 days			
18	. A 'light year' is	the measurement	of	retanjiki:			
	(A) Time		(B)	Distance			
	(C) Temperature		(D)	Intensity of	light		

19. Insert the missing value in '?' position in the figure

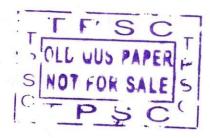


(A) 26

(B) 25

(C) 27

(D) 24



- 20. If a bucket contains apples, oranges and bananas in the ratio 3:5:7 and the total number of these three fruits is 45, then the total number of oranges is
 - (A) 30

(B) 25

(C) 15

- (D) 20
- 21. If a clock strikes once at 1 O'clock, twice of 2 O'clock etc., How many times will it strike in 24 hours?
 - (A) 300.

(B) 156

(C) 78

- (D) 136
- 22. If p, q, r, s and t are positive numbers and it is given that

$$p+q=r+s$$
, $q+s=2t$

$$s+t>p+q$$
 and $r+s>p+t$

then which of the following statement is true?

(A) s>p>q>t>r

(B) s>q>t>p>r

(C) p>q>r>s>t

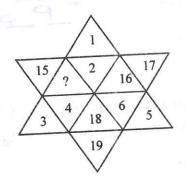
(D) p>s>q>t>r

- 23. If X is to the south of Y and Z is to the East of Y, in what direction is X with respect to Z?
 - (A) North-East

(B) North-West

(C) South - East

- (D) South-West
- 24. Insert the missing number in '?' mark in the given figure



(A) 13

(B) 14

(C) 20

- (D) 21
- 25. How many different letters are there in the word "MATHEMATICS"?
 - (A) 7

(B) 8

(C) 9

- (D) 10
- 26. The name 'Sea of Tranquality' is given to
 - (A) Atlantic Ocean
 - (B) An area in Mars
 - (C) A water less area on Moon's surface
 - (D) Pacific Ocean

27.	Fill	in the blanks with options give	en be	low:
	Cur of o		erves	of oil, while is the largest producer
	(A)	Saudi Arabia, Venezuela	(B)	Venezuela, Saudi Arabia
13	(C)	Nigeria, Russia	(D)	Russia, Nigeria
28.	Whi	ich of the following statements	regar	ding the Nobel Peace Prize are correct?
	(i)	Switzerland-based International 3-time recipient of the Nobel I		nittee of the Red Cross (ICRC) is the only
	(ii)	Jean Henry Dunant and Frederic	Passy	is joint recipient of first Nobel Peace Prize.
		Nadia Murad Basee Taha is an Peace Prize in the year 2014.	Iraqi `	Yazidi human rights activist received Nobel
				to the Organisation for the Prohibition of t answer from the codes given below:
		(A) (i), (ii) and (iii) only	(B)	(i), (ii) and (iv) only
		(C) (ii) (iii) and (iv) only	(D)	(i), (ii), (iii) and (iv) all are correct
29.	Whi	ch of the following country does	not ho	old veto power in the UN Security Council?
	(A)	China	(B)	France
	(C)	Germany	(D)	Russia
30.		ted Kingdom left the European U there in the European Union cu		on 31st January, 2020. How many members
	(A)	25	(B)	26 FFSCT
	(C)	27	(D)	S NOT FOR SALE S
1/TR	VSTC	CSPT/GS-I/TPSC/21/C-140	(9)	[Turn over

31.	Who is the Padma Shree awardee from the State of Tripura recognised for exceptional work in the field of literature and education?						
	(A) Shri Tanga Darlong						
	(B) Shri Benichandra Jamatia		60				
	(C) Sri Somdev Kishore DevVarm	nan	E Jun - Alele				
	(D) Dr. Rathindra Dutta		Tolly				
32.	Who is the founder and current C	CEO of	Amazon?				
	(A) Bill Gates	(B)	Larry Page				
	(C) Elon Musk	(D)	Jeff Bezos				
33.	Saudi Arabia opened borders for tr long hiatus of 3 decades?	ading	with which of the following countries after				
	(A) Iraq	(B)	Jordan				
	(C) Yeman	(D)	Oman				
34.	In our world, currently there are	about	people.				
	(A) 6.8 billion	(B)	7.8 billion				
	(C) 8.8 billion	(D)	9.8 billion				
35.		ounced	l economic package of Rs. 20 lakh crores lia's GDP?				
	(A) 5%	(B)	10%				
		(D)	9%				
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36.	of	me Minister Narendra Mod — denomination to mar ganisation.			
	(A)	Rs. 50	(B)	Rs. 75	
	(C)	Rs. 100	(D)	Rs. 200	landekombi engar wala S
		To annual manual Massa	Basin .		The part of the part of
367	'Da	kPay' app is a digital pa	yment app	launched by	aviil (C)
1	(A)	Information and Broadca	ast Ministry	.—.	F. SCI
	(B)	National Payment Corpo	ration of In	idia Tollar	L WUS PAPERING
	(C)	India Post		SIN	OT FOR
	(D)	State Bank of India		(
38.		ch of the following commrch, 2018-2020)?	nercial banks	s topped EASE 2.0) Banking Reforms Index
	(A)	Bank of Baroda	(B)	Punjab National	Bank
	(C)	State Bank of India	(D)	Canara Bank	
39.	In w	hich of the following State	s, maximum	Coast Guard Stati	ons have been established
	(A)	Maharashtra	(B)	Tamilnadu	
	(C)	Gujarat	abritan (D)	Andhra Pradesh	
40.	Whie Janu	ch State's assembly passe ary, 2020?	ed a resolut	ion to abolish the	e Legislative Council in
	(A)	Telangana	(B)	West Bengal	merusant (A)
((C)	Andhra Pradesh	(D)	Maharashtra	* November (1)
/TR/	STC	SPT/GS-I/TPSC/21/C-140	(11)	[Turn over

41.	The	Raja Ampat Coral Reef is local	tea 1	n which country:
	(A)	India	(B)	Indonesia
	(C)	Maldives	(D)	Sri Lanka
42.	Hov	w many times India wins the "C	Cricke	et World Cup Champion" title?
	(A)	One	(B)	Two
	(C)	Three	(D)	Four
		1287		and water the second
43.	Indi	a aims to achieve the 5 trillion	dolla	ar economy target by
	(A)	2022 A.D.	(B)	2024 A.D.
	(C)	2025 A.D.	(D)	2026 A.D.
44.		ian Navy launched 'Operation Vantries?	nilla'	in January 2020, in which of the following
	(A)	Sri Lanka	(B)	Maldives
	(C)	Madagascar	(D)	Oman
45	. Wh	nere is the "Hazur Sahib" Gurud	lwara	, one of the five Takht of Sikhism located?
	(A)	Amritsar	(B)	Patna
	(C)	Nanded	(D)	Bhatinda
46	. Wł	nich company will launch Libra	cryp	tocurrency in 2021?
	(A)) Instagram	(B)	Google
	(C)) Microsoft	(D)) Facebook
1/7	rr/s7	TCSPT/GS-I/TPSC/21/C-140	(12)

47. V	Which of the following is India's	first	Kisan Rail?		
(.	A) Devlali-Danapur Kisan Rail		900	oliči zmaszatoti pk	
(1	B) Anantpur-Adarsh Nagar Kisar	n Rail	T F'S		
((C) Yashwantpur-Ajmer Kisan Ra	il	S NOT FOR		
(1	D) Bhatinda-Bhopal Kisan Rail		O P	S.C.	
1	CYCPMGSY 901				
.48. Ir	which region Hemis Gompa is	locate	ed in India?		
(<i>A</i>	A) Sikkim	(B)	Ladakh	**************************************	
((C) Gwalior	(D)	Nagpur		
49. W	Thich of the following cities has got ity Index 2020?	top p	oosition among India	n cities in Global Sn	nart
(A	A) New Delhi	(B)	Mumbai		
(C) Hyderabad	(D)	Bengaluru		
50. W	hich of the following dances of I	Kerala	was called by Jaw	aharlal Nehru as P	oor
(A) Chavittunatakom	(B)	Kolkalli		
(C)) Ottamthullal	(D)	Kootiyattam		
51. Ou	t of the given options, which is	not a	n insert gas?		
(A)	Freon	(B)	Argon		
(C)	Neon	(D)	Xenon		

(13)

[Turn over

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52.	What is the chemical name of back	ing s	oda?
	(A) Potassium Chloride	(B)	Potassium Carbonate
	(C) Sodium Bicarbonate	(D)	Sodium Chloride
53.	Pasturization of milk is done at		
	(A) 100°F	(B)	71°F
	(C) 110°F	(D)	161°F
54.	. 1 Nibble is equal to		
	(A) 8 Kilo Bytes	(B)	8 Bytes
	(C) 4 Bytes	(D)	4 Bits
	and less y the milest receipt to		4 Bits
55	. What is the pH of human blood?		10000
	(A) 7	(B)	7.4
	(C) 0.7	(D)	6.8
56	6. What is the device used to measur	re the	e diameters of stars?
	(A) Inter-ferometer	(B)	Seismometer
	(C) Odometer	(D)	
57	7. Who among the following has immediate is often termed as 'Father of Fibr		contribution in fibre-optic communication and tics'?
	(A) Somender Singh Kapany	(B) Fancois Mitterand
	(C) Charles Chako	(D) Narinder Singh Kapany
1/	TR/STCSPT/GS-I/TPSC/21/C-140	((14) OMI-1985 SET OF STANDING TO SET

58. Which of the following mirror is used by a dentist to examine a small cavity? (B) Plane mirror (A) Concave mirror (D) Combination of convex and concave mirror (C) Convex mirror 59. Which of the following is part of National Health Mission of India? (B) PMSMA (A) PMAY (D) PMUY (C) PMGSY 60. The instrument "Cryometer" is used to measure (A) Low pressure of objects (B) Low temperature of objects (C) Measuring the pH of tears of eyes (D) Measuring the pH of body sweat 61. The operating system "LINUX" stands for (A) Lovable Intellect Not Using XP (B) Loadable Intellect Not Using XP (C) Learning of UNIX (D) None of the above 62. To combat the problem of fake printing of passports and counterfeiting of currency notes, a security 'Bi-Fluorescent Golden Ink' with dual emissive luminescent pigment (red and green) was recently discovered by (A) CSIR-NCL, Pune (B) CSIR-NPL, New Delhi (C) CSIR-NISTADS, New Delhi (D) CSIR-IICT, Hyderabad

63. 7	The prefix "Nano" comes from		
((A) A French word means billion	(B)	A Spanish word means particle
	(C) A Latin word means invisible	(D)	A Greek word means dwarf
64. I	In the ABO system, blood group 'O	' is	characterized by the
((A) Presence of antigen O		
((B) Presence of both antigen A and	anti	gen B
	(C) Presence of antigen A and abse	ence	of antigen B
	(D) Absence of both antigen A and	anti	gen B
65.	High protein diet is given to person	is su	ffering from
,	(A) Chirrhosis	(B)	Gout Jaundice
,	(C) Tuberculosis	(D)	Jaundice Shot P
66.	Which of the following is not a mi	icro-r	nutrient?
	(A) Zinc	(B)	Calcium
	(C) Boron	(D)	Molyddenum
67.	Nuclear energy is obtained by the	chem	ical process
	(A) Fusion	(B)	Fission
	(C) Both of (A) and (B)	(D)	None of them
	program of the community of the communit		
68.	Melting temperature of DNA is the	tem	perature at which
	(A) DNA melts completely	(B)	50% of the DNA is denatured
	(C) 80% of the DNA is denatured	(D)	None of these
1/TF	R/STCSPT/GS-I/TPSC/21/C-140	(1	6)

69. Which of the following subs	tance predominantly found in ur	rine?
(A) Blood proteins	(B) Creatinine	
(C) Red Blood cells	(D) White Blood cells	
70. The Sun's mass mainly const	ists of	F'SCTUUS PAPER F
(A) Hydrogen	(B) Helium S NO	T FOR SALE S
(C) Carbon dioxide		PSC
71. Which of the following gas I	nas highest contribution in Globa	l Warming?
(A) Carbon dioxide	(B) Chlorofluorocarbon	
(C) Nitrous oxide	(D) Methane	
72. The study of images of deitie	s falls within a branch of art hi	istory called
(A) Pictography	(B) Lithography	
(C) Ichthyography	(D) Iconography	
73. 'We Think Digital' is a digit company?	tal literacy program of which	global technological
(A) Google	(B) Facebook	(FCFCW
(C) Apple	(D) Amazon	
74. Ambulatory monitoring of ECC	is called	
(A) Event Cardiography	(B) Holter Cardiography	
(C) Implantable Cardiography	(D) Real-Time Cardiograph	ny
/TR/STCSPT/GS-I/TPSC/21/C-140	(17)	[Turn over

75. Wh	nich vaccine is given soon after	birth of an infant?
(A)) Hepatitis B	(B) Polio
(C)	Varicella	(D) Measles, mumps and rubella (MMR)
76. Th	e sum of the face value and pl	ace value of 7 in 343742 is
(A)) 693	(B) 700
(C)	770	(D) 707
77. Th	e speed of a train is X km/hr.	Its speed in m/sec will be
(A) 5X/18	(B) 8X/15
(C)) X/18	(D) X/15
	1.6	ed in rows and columns. The number of rows wach row. When the number of rows was double

- 78. In an auditorium, seats were arranged in rows and columns. The number of rows was equal to the number of seats in each row. When the number of rows was doubled and the number of seats in each row was reduced by 10, the total number of seats increased by 300. Find the number of seats in the auditorium after rearrangement.
 - (A) 600

(B) 900

(C) 1200

(D) 1500

79. If
$$1^2 + 2^2 + 3^2 + ... + 20^2 = 2870$$
, then $2^2 + 4^2 + 6^2 + + 40^2 = ?$

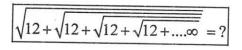
(A) 11070

(B) 11480

(C) 12070

(D) 14035

80. Find the value of



- (A) 3
- (C) 6

- (B) 4
- (D) 12



81. In a row 'A' is in the 11th position from the left and 'B' is in the 10th position from the right. If 'A' and 'B' interchange, then 'A' becomes 18th from the left. How many 'persons are there in the row other than 'A' and 'B'?

(A) 27

(B) 26

(C) 25

(D) 24

82. Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour?

(A) 9

(B) 10

(C) 12

(D) 20

83. The difference between the interest received from the different banks on Rs. 500 for two years is Rs. 2.50 and the difference between their rates is

(A) 12%

(B) 15%

(C) 25%

(D) 27%

84. Find the number which is not lying between 1/3 and 3/4

(A) 7/16

(B) 13/24

(C) 9/32

(D) 31/48

	(C) 36%	(D) 40%	
86.	The difference between the simp for 3 years at 10% per annum is	Rs. 46.5. Then, which of the following is the sun	ım n ?
	(A) Rs. 1,500	(B) Rs. 1,600	
	(C) Rs. 1,700	(D) Rs. 1,800	
87.	The least number to be added t	to 87621 × 87627 to become perfect square is	
	(A) 6	(B) 9	
	(C) 11	(D) 13	
88.	Father's age is 4 times of his son his son's age. Then their current	on's age today. Five years hence, father will be the nt ages be	ice
	(A) 60, 15	(B) 40, 10 OLL UUS PAPER	
	(C) 20, 5	(D) 32, 8 S NOT FOR SALE S	
89.	The ratio of the areas of a regul	lar hexagon and a square having the same perime	eter
	(A) 2√3:3	(B) √3:2	
	(C) 3√3:2	(D) 3:2	
90.	. The ratio of simple interest ear for 6 years and that of 9 years	rned by certain amount of the same rate of interest is	
	(A) 1:3	(B) 1:4	
	(C) 2:3	(D) None of these	
1/T	TR/STCSPT/GS-I/TPSC/21/C-140	(20)	

85. If the radius of a circle is diminished by 20%, the area is diminished by

(A) 25%

(B) 30%

(D) 40%

	(A) 9	(B)	15			
	(C) 17	(D)	21			
92.	380 mangoes are distributed among some boys and girls who are 85 in number. Each boy gets four mangoes and each girl gets five mangoes. the number of boys is					
	(A) 15	(B)	38			
	(C) 40	(D)	45			
93.	Which among the numbers $2\sqrt{3}$	$\overline{1}$, $3\sqrt{5}$,	$5\sqrt{29}$ and	$4\sqrt{3}$ is least	?	
	(A) $5\sqrt{29}$	(B)	3√5	TOLL UUS	PAPER	
	(C) 2√31		$4\sqrt{3}$	SNOTFO	OR SALES	
94.	Two pipes can fill a tank in 20 minutes and 30 minutes respectively. If both pipes are opened simultaneously, then the tank will be filled in					
	(A) 10 minutes	(B)	12 minutes			
	(C) 15 minutes	(D)	25 minutes			
0.#				* **		
95.	The area of a square inscribed i	n a circl	e of radius	4 cm is		
	(A) 32 sq.cm	(B)	18 sq.cm			
	(C) 25 sq.cm	(D)	64 sq.cm			
96.	Two sides of a triangle are 85 cm the area of the triangle is	m and 15	4 cm and	the perimeter	is 324 cm. Then	
	(A) 7216 cm ²	(B)	1350 cm ²			
	(C) 1431 cm ²	(D)	2772 cm ²			
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91. If the sum of 3 consecutive odd numbers is 51, the least of three is

- 97. The greatest positive integer less than 418 and divisible by 31 is
 - (A) 407

(B) 403

(C) 372

- (D) 341
- 98. The average of 4 numbers is 25 and the average of 3 of these numbers is 30. Then the 4th number is
 - (A) 20

(B) 10

(C) 27

- (D) 22
- 99. If the arithmetic mean and geometric mean of two positive numbers m and n are equal, then
 - (A) m = n

(B) m > n

(C) m = 2n

- (D) m = 4n
- 100. If the 20% of 30% of 40% of a number is 24, then the number is
 - (A) 600

(B) 1000

(C) 500

(D) 250



101. Answer any five (5) questions out of the six questions given below. Select the correct answer and write in answer script from the options given below: **Example**: The Independence Day in India is celebrated on the 15th August, every year (a) (b) the 26th January, every year (c) the 14th August every year (d) the 20th August every year **Answer**: (a) the 15th August of every year. (i) How much amount of sulphur is permissible in Bharat Stage (BS) IV petrol and diesel? (B) 50 ppm (A) 40 ppm (C) 45 ppm (D) 60 ppm (ii) Where the National Coral Reef Research Centre is located? (A) Andaman and Nicobar Islands (B) Kachchh (C) Thoothukudi (Tuticorin) (D) Lakshadweep (iii) Out of the following countries which country has the highest population density? (A) Barbados (B) Malta (D) Mauritius (C) Bahrain (iv) Arrange the following gases in descending order of their Global Warming Potential (GWP): (ii) Nitrous Oxide (i) Sulfur Hexafluoride (iii) CFC (iv) Methane

(A) (i), (iii), (ii), (iv)

(C) (i), (ii), (iii), (iv)

(B) (iv), (ii), (iii), (i)

(D) (iv), (iii), (ii), (i)

- (v) Which of the following pairs is correctly matched?
 - (A) Cartagena Protocol Biosafety to the convention on Biological Diversity
 - (B) Ramsar Convention Procedure for certain hazardous chemicals
 - (C) Vienna Convention Wetlands
 - (D) Bonn Convention Protection of ozone layer

(vi) Aerobic degradation of organic matters by bacteria releases

(A) chlorine

- (B) hydrogen
- (C) hydrogen sulphide
- (D) carbon dioxide

Very short answer type questions:

102. Answer any five (5) questions out of six (6) questions (Each question carries 2 marks): 2×5=10

- (i) Mention the main objective of Montreal Protocol.
- (ii) What is the full form of SEIAA and SEAC as per Environment (Protection) Rules 1986?
- (iii) Write full form of BOD and define it.
- (iv) Why is the energy pyramid always erect?
- (v) Why does increase in atmospheric CO₂ concentration causes global warming?
- (vi) Define 'Biomagnification'.

Short answer type questions:

- 103. Answer any two (2) questions out of three (3) questions. (Each question carries 5 5×2=10
 - (i) Write a short note on E-waste management rules enacted in 2016.
 - (ii) What is biogas? How is it produced? What are the barriers to increase the production and use?
 - (iii) Explain with examples the Mitigation and Adaption measures relating to climate change.

SECTION - III

104. Answer any <i>five</i> (5) questions of Select the correct answer and	out of six (6) questions (Each question carries 1 mark write in answer script from the options given below
	1 2 -
Example: The Independence	Day in India is celebrated on
(a) the 15th August, ever	ry year
(b) the 26th January, even	ry year FFSCT
(c) the 14th August every	y year (1) TOIL WUS PAPER H
(d) the 20th August every	year SINOT FOR SALES
Answer: (a) the 15th August	of every year.
	(i) Denice magnitude and intensity of earthqual
(i) State of Tripura is most vu	ilnerable to
	(B) Earthquake
(C) Cyclone	(D) Landslide
(ii) In which year the Disaster	Management Act was promulgated in India?
(4) 2004	- (B) 2005 been H vinummo) pistered (b)
(C) 2006	(D) 2007
(iii) India has a Coast line of	106. Answer any rise (2) questions out of three (3)
	(B) 6516 km
(C) 7516 km	(D) 5050 t
(iv) In which year the Bhopal Ga	as disaster occurred?
(A) 1984	(B) 1983 (B) India. (B) 1983
(C) 1985	(D) 1986
10/31. SIN JJO!	

(25)

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- (v) What is the wind speed of Super Cyclone as classified by IMD? (B) >250 km/hr (A) >220 km/hr
 - (C) >200 km/hr

- (D) 119-220 km/hr
- (vi) Who is the Chairperson of NDMA?
 - (A) President of India
- (B) Prime Minister of India
- (C) Union Home Minister
- (D) Union Defence Minister
- 105. Answer any five (5) questions out of six (6) questions (Each question carries 2 marks):
 - Define magnitude and intensity of earthquake disaster.
 - (ii) What are four phases of disaster management cycle?
 - (iii) What is Rainwater Harvesting and Artificial Recharge to Groundwater? Name any two types of Groundwater Recharging structures.
 - (iv) Name any four structural and non-structural measures of Cyclone Risk Mitigation.
 - (v) What is vulnerability, in connection with climate change?
 - (vi) Explain Community Based Disaster Management.
 - 106. Answer any two (2) questions out of three (3) questions (Each question carries 5 marks):
 - (i) Name the measures taken/to be taken in India to reduce the impact of Earthquake? What is seismic (Earthquake) retrofitting and how will it be useful?
 - (ii) What is Disaster Risk Reduction (DRR) and explain the Institutional Structure of Disaster Management in India.
 - (iii) Discuss the recent development in forecasting, warning and monitoring system during flood in India.

