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Read the following instructions carefully before you begin to attempt the questions. **INSTRUCTIONS TO CANDIDATE**

- (1) This booklet contains 100 Questions.
 - CBT I (Mathematics, Mental Ability, General Science & General Awareness) (100 Questions)
- (2)All the questions are compulsory and carry equal marks.
- (3)Before you start to attempt the questions, you must explore this booklet and ensure that it contains all the pages and find that no page is missing or replaced. If you find any flaw in this booklet, you must get it replaced immediately.
- (4)Each question carries negative marking also as 1/3 mark will be deducted for each wrong answer.
- (5)Answer must be shown by completely blackening the corresponding circles on the Answer-Sheet against the relevant question number by Black/Blue ball pen only.
- (6)Failure to comply with any of the above Instructions will make a candidate liable to such action/penalty as may be deemed fit.
- (7)Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any question.
- (8)Mobile phones and wireless communication device are completely banned in the examination halls/rooms. Candidates are advised not to keep mobile phones/any other wireless communication devices with them even switching it off, in their own interest. Failing to comply with this provision will be considered as using unfair means in the examination and action will be taken against them including cancellation of their candidature.
- (9)No rough work is to be done on the Answer-Sheet.
- No candidate can leave the examination hall before completion of the exam.

NAME OF CANDIDATE	
DATE :	CENTRE CODE :
ROLL No	

Maximum Marks 100 **Total Questions** 100 Time Allowed 90 Min.

DO NOT OEPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

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CBT I (Mathematics, Mental Ability, General Science & General Awareness)

1.	The Indian king who oppose (A) Ambhi (C) Dhanananda	sed Alexander was (B) Porus (D) Chandragupta		(A) 42 (C) 56	(B) 52 (D) 60
2.	With which game do associated? (A) Tennis (C) National Football	es Santosh Trophy is (B) Cricket (D) Golf	13.	The clouds float in the at low (A) Temperature (C) Pressure	tmosphere because of their (B) Velocity (D) Density
Direction	on 3 and 4: There are 6 competition, namely A, B, brothers. F and D are siste	c children taking part in a C, D, E and F. A and E are ers of E. C is the only son of a daughters of the brother of	14.	years at 12% per annum the simple interest on it at (A) ₹ 2400 (C) ₹ 2480	on a certain sum for two is ₹ 2544, then what will be the same rate for 2 years? (B) ₹ 2500 (D) ₹ 2440
3.	How many female competing (A) 5 (C) 3	itors are there? (B) 4 (D) 2	15.		n, which of the following ucated men but not urban? Government Employees / सरकारी कर्मचारी
4.	How is D related to A? (A) Cousin (C) Uncle	(B) Niece (D) Sister		9 4 6	
5.	Unit of solid angle is (A) Degree (C) Steradian	(B) Radian (D) Radian-second		(A) 9 (C) 4	Educated / शिक्षित (B) 5 (D) 11
6.	Which state is in the easte (A) Assam (C) Arunachal Pradesh	rn most part of India? (B) Nagaland (D) Manipur	16.	Which one law is not relate (A) Boyle's law (C) Gay-Lussac's law	ed to gas laws? (B) Charle's law (D) Faraday's law
7.		ge, 'COSTLY' is written as BRA' written in that code (B) RABEZ (D) RRBZE	17. Jind		oreciates at the rate of 10% alue is ₹ 729 then what is its (B) ₹ 750.87 (D) ₹ 800
8.		e photograph, Rakesh said, er grandfather is my wife". hat woman? (B) Brother (D) Son	18.	The first railways in India r (A) Rajmahal-Mugal sarai (C) Mumbai-Thane	an between
9.	When the external torque will be conservation of its	on a system is zero, there	Direction	alternatives.	odd word/letter from given
	(A) Linear momentum (C) Total energy	(B) Angular momentum (D) None of these	19.	(A) Influenza (C) Rickets	(B) Scurvy (D) Night-blindness
10.	What should come in place the following number serie 12, ?, 6, 9, 18, 45, 135	e of the question mark (?) in s?	20.	(A) ZKXJ (C) TGRF	(B) CMAL (D) FRTK
	(A) 5 (C) 2	(B) 6 (D) 4	21.	(A) Venus : Planet (C) Apple : Red	(B) Duck : Bird (D) Peas : Vegetable
11.	clockwise direction and clockwise direction. Which now?	s east. She turns 100° in then 145° in the anti- ch direction is she facing	22.	Which one of the follow optical fibres? (A) Scattering (C) Refraction	(B) Successive reflections(D) Total internal reflection
	(A) West (C) North	(B) North-East (D) South-West	23.	What is the value of	10 v 14 0
12.	•	is 50. If the average of first of last six is 52, what is the		424 × 424 × 424 - 112 × 17 424 × 424 + 424 × 112 + 1 (A) 412 (C) 312	



24.	The	earth	is	at	the	largest	distance	from	the	sun
	(Anh	(noilon)	on							

- (A) 21st June
- (B) 3rd January
- (C) 4th July
- (D) 23rd September

25. Two numbers are respectively 20% and 50% more than a third number. What is the percentage of second with respect to first?

- (A) 75%
- (B) 80%
- (C) 90%
- (D) 125%

Direction 26 and 27: There are 5 boys A, B, C, D and E, each of different weights. A weighs twice as much as B. B weighs four and a half times (4.5) the weight of C. C weighs half as much as D. E weighs less than A but more than C. D weighs half as much as E.

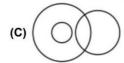
- 26. Which of the following is lightest in weight?
 - (A) A

(**B**) B

- (C) C
- (D) D
- 27. Which of the following represents the descending order of weights of the boys?
 - (A) A, B, C, D, E
- (B) A, B, E, D, C
- (C) B, D, E, A, C
- (D) C, D, E, B, A
- 28. Which of the following interchanges of numbers would make the given equation correct?
 - $8 \times 20 \div 3 + 9 5 = 38$
 - (A) 3, 8
- (B) 8, 9
- (C) 3, 5
- (D) 3, 9
- 29. The sum of HCF and LCM of two numbers is 403 and their LCM is 12 times their HCF. If one number is 93, then what is the another number?
 - (A) 115
- (B) 122
- (C) 124
- (D) 138
- 30. Identify the diagram that best represents relationship among the classes given below? Professor, Author and Infants









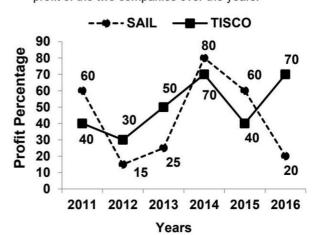
- 31. NNP is equal to
 - (A) GNP + Depreciation
- (B) GNP + Export
- (C) GNP Depreciation
- (D) GNP Export
- 32. If the given interchanges sign '+' and '-', numbers '5' and '8' are made then which one of the four equations would be correct?
 - (A) 82 35 + 55 = 2
- **(B)** 82 35 + 55 = 102
- (C) 85 38 + 85 = 132
- **(D)** 52 35 + 55 = 72
- 33. The total number of students in a school is 819. If the number of girls in the school is 364, then what is the respective ratio of the total number of boys to the total number of girls in the school?
 - (A) 26:25
- (B) 21:17
- (C) 18:13
- (D) 5:4

- 34. Soap helps in cleaning the clothes because
 - (A) it adsorbs dust
 - (B) it reduces the surface tension of solution
 - (C) it absorbs dust
 - (D) all of the above
- 35. A is thrice as fast as B, and is therefore able to finish a work in 60 days less than B. What is the time in which they can do it working together?
 - (A) 17.5 days
- (B) 22.5 days
- (C) 18.5 days
- (D) 25.5 days
- 36. Who formulates the monetary policy in India?
 - (A) SEBI
- (B) RBI
- (C) NABARD
- (D) Planning Commission

Direction 37 to 39: Select the related word/letter/number from the given alternatives.

- 37. Rickets: Bones::?
 - (A) Gout : Spleen
- (B) Malaria: Lungs
- (C) Eczema: Throat
- (D) Cataract : Eyes
- 38. ABCD: WXYZ:: EFGH:?
 - (A) STUV
- (B) STOU
- (C) STUE
- (D) TSUV
- 39. 145:195::17:
 - (A) 42
- (B) 35
- (C) 30
- (D) 24
- One day, Ram left home and cycle 10 km 40. Southwards, turned right and cycle 5 km and turned right and cycled 10 km and turned left and cycled 10 km. How many kilometers will he now have to cycle in a straight line to reach his home?
 - (A) 10
- (B) 15
- (C) 20
- (D) 25

Direction 41 to 43: The following graph shows the percentage profit of the two companies over the years.



- 41. For which of the following years is the percentage of expenditure with respect to income is 80% for SAIL?
 - (A) 2014
- (B) 2016
- (C) 2013
- (D) 2011











42. The income of SAIL in 2013 and the expenditure of TISCO in 2016 are same. What is the ratio of income of TISCO in 2016 to expenditure of SAIL in 2013?

> (A) 4:5 (C) 17:8

(B) 5:4 (D) 8:17

43. If the difference between the expenditure of SAIL in 2011 and that of in 2016 in ₹ 20 lakh, then find the difference between the income of TISCO in 2011 and that in 2016?

(A) 30 lakh

(B) 28 lakh

(C) 25 lakh

(D) Data inadequate

44. Ashish remembers that Sunny's birthday is certainly after January 13 but not later than 16th January. Meena remembers that Sunny's birthday is before 16th of January but not before 12th January. On which of the following day was sunny birthday?

(A) 14th

(B) 15th

(C) 16th

(D) Either 14th or 15th

45. The speed of three cars are in the ratio 2:3:4. What is the ratio among the times taken by these cars to travel the same distance?

(A) 3:4:5

(B) 6:4:5

(C) 6:4:3

(D) 6:5:3

46. The gas commonly used in anesthesia is

(A) Methane (C) Nitrogen

(B) Nitrous oxide (D) Hydrogen peroxide

If $x = P + \frac{1}{P}$ and $y = P - \frac{1}{P}$, then what is the value of 47.

 $x^4 - 2x^2y^2 + y^4$?

(A) 24(C) 16

(D) 8

48. The marked price of a radio set is ₹ 480. The shopkeeper allows a discount of 10% and gains 8%. If no discount is allowed, what would be his gain percent?

(A) 25%

(B) 18%

(C) 18.5%

(D) 20%

Direction 49 to 51: In the following question, based on the given statement which of the following conclusion(s) is/are follow.

Give answer:

(A) If only I follows.

(B) If only II follows.

(C) Both I and II are follow.

(D) Neither I nor II follows.

49. Statements: I. Some A are B.

II. All B are C.

Conclusions: I. All C are B.

II. Some C are A.

50. Statements: I. All stars are planets.

II. All planets are galaxies.

Conclusions: I. All galaxies are planets.

All stars are galaxies.

51. Statements: I. No year is a month.

II. No month is a second.

Conclusions: I. All months are second.

II. No second is year.

52. In a certain code language, 'PETROL' is written as 'OFSSNM'. What is the code 'DIESEL' in that code language?

(A) DJCTMD

(B) CJDTMD

(C) DJCTDM

(D) CJDTDM

53. 150 metres long train crosses a platform of length 250 metres in 30 seconds. What is the time for train to cross a bridge of 130 metres?

(A) 17 seconds

(B) 21 seconds

(C) 23 seconds

(D) 25 seconds

54. Anti-terrorism Day is observed on which date?

(A) 21 May

(B) 23 June

(C) 22 June

(D) 23 May

55. Which is the folk dance of Himachal Pradesh?

(A) Nati

(B) Chong

(C) Kolattam

(D) Macha

Directions 56 to 58: A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

BDF, ?, PRT, WYA 56.

(A) GJK

(B) HKL

(C) IKM

(D) IJK

57. 2, 5, 10, ?, 26

> (A) 19 (C) 17

(B) 21 (D) 25

58. K, G, C, Y, U, ?

(A) P

(B) Q

(C) R

(D) O

59. What should come in place of the question mark (?) in the following question?

 $[(1.3)^2 \times (4.2)^2] \div 2.7 = ?$

(A) 7.2

(B) 21.19

(C) 18.52

(D) 11.04

60. What is the least number to be multiplied with 294 to make it a perfect square?

(A) 2

(B)3

(C) 6

(D) 24

61. Which of the following games is not included in the Olympic games?

(A) Cycling

(B) Archery

(C) Cricket

(D) Skiing

62. In the following question, based on the given statement which of the following assumption(s) is/are implicit.

Statements: The XYZ company has decided to issue tax-free and taxable bonds to raise its resources.

Assumptions: I. The XYZ company has already explored other sources to raise money.

II. The products of XYZ company have little competition in the market.

(A) If only I is implicit

(B) If only II is implicit

(C) Both I and II are implicit

(D) Neither I nor II are implicit





63.	Who was called the 'Iron Man of India'? (A) Sardar Vallabhai Patel (B) Surendranath Bannerjee (C) Bipin Chandra Pal (D) Lala Lajpat Rai	73.	eleventh inning, he increasing his average average? (A) 87	tain average for 10 innings. In the e scored 216 runs, thereby ge by 12 runs. What is his new
64.	A pipe can fill a tank in 15 hours. Due to a leak in the		(C) 84	(D) 97
04 .	bottom, it is filled in 20 hours. If the tank is full, how much time (in hours) will the leak take to empty it? (A) 48 (B) 52 (C) 60 (D) 72	74.	Double helix model of (A) Mullar (C) Stephan Hawking	(B) Meghnath Saha
65.	The Chief Minister is appointed by (A) The Governor (B) The President (C) The Chief Justice of Supreme Court (D) The Chief Justice of High Court	75.	height of first is doul mid-point of the line j the angular eleva complementary, then the shortest post?	eters apart horizontally and the ble that of the other. If from the joining their feet an observer find ation of their tops to be what is the height (in meters) o
66.	XYZ is a right angled triangle and \Box Y = 90°. If XY = 2.5 cm and YZ = 6 cm, then the perimeter of Δ XYZ		$(A) \ \frac{x}{2\sqrt{2}}$	(B) $\frac{x}{4}$
	is? (A) 6.5 cm (B) 3.25 cm (C) 3 cm (D) 2.5 cm		(C) x√2	(D) $\frac{x}{2}$
67.	Who among the following was a founder of the Swaraj Party? (A) Vallabhbhai Patel (B) Rajendra Prasad	76.	decreases by 25%.	ower, the production in a factory By what percent should the original of the
68.	(C) C. R. Das (D) Narendra Dev In the following question, based on the given statement which of the following assumption(s) is/are		(A) 20% (C) $33\frac{1}{3}\%$	(B) 25% (D) 10%
	implicit. Statements: Please consult before making any	77.	Nucleotide base pre	esent in DNA and not RNA is
	decision on exports from the company. Assumptions: I. You may take a wrong decision, if you don't consult me. II. It is important to take a right decision.		(A) Cytosin (C) Thymine	(B) Uracil (D) Guanine
	(A) If only I is implicit (B) If only II is implicit	78.	How many natural nu 6? (A) 16	umbers up to 100 are divisible by (B) 12
	(C) Both I and II are implicit (D) Neither I no <mark>r II are implicit</mark>		(C) 24	(D) 36
69.	A man sold a house at a loss of 7%. Had he been able to sell it at a gain of 9%, it would have fetched ₹ 64 more than it did. What was the cost price?	79.	The Mughal Emper tobacco was (A) Akbar (C) Jahangir	or who prohibited the use o (B) Babur (D) Aurangzeb
	(A) 320 (B) 480		(O) barrangii	(b) Adiangzeb
	(C) 400 (D) 520	80.		uestion, based on the giver
70.	Where was Azad Hind Fauj set up?			ne following assumption(s) is/are
	(A) Japan (B) Burma (C) Singapore (D) England		implicit. Statements: "Shoul parties in India"?	d there be only two politica
71.	If $x + \frac{1}{x} = 3$, then what is the value of $\frac{3x^2 - 4x + 3}{x^2 - x + 1}$?		there are only two pol	es, in many developed countries litical parties. corate is not mature to selec
	(A) $\frac{4}{3}$ (B) $\frac{3}{2}$		between only two poli (A) If only I is implicit (B) If only II is implicit	itical parties.
	(C) $\frac{5}{2}$ (D) $\frac{5}{3}$		(C) Both I and II are in (D) Neither I nor II are	mplicit

(D) Neither I nor II are implicit What is the Highest Common Factor of $\frac{1}{2}$, $\frac{3}{4}$ and $\frac{4}{5}$? 81. (A) $\frac{1}{20}$ **(B)** $\frac{1}{40}$ (C) 20 **(D)** 15

(A) Mul Shankar (C) Gauri Shankar

The original name of Swami Dayanand Saraswati was

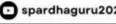
(B) Abhi Shankar (D) Daya Shankar

72.



82.	Humayun Tomb was d		92.	Life of red blood cells in the	
	(A) Mirak Mirza Ghiyat			(A) 60 days	(B) 120 days
	(C) Malik Altunia	(D) Haji Begham		(C) 365 days	(D) 465 days
83.		constitution is related to money	93.		f a rhombus of side 5 cm
	bill?				s the area (in cm2) of the
	(A) Article 115	(B) Article 121		rhombus?	Carrier of
	(C) Article 120	(D) Article 110		(A) 16	(B) 24
				(C) 20	(D) 32
84.		person and his son is 30 years.			
		is 4: 1 respectively. What the	94.		ed India's growth forecast for
	age of son?			FY25 to what percent?	
	(A) 12 years	(B) 14 years		(A) 7.0%	(B) 8.0%
	(C) 16 years	(D) 24 years		(C) 9.0%	(D) 6.0%
85.		Guru to be slaughtered by	95.		he largest unit of storage?
	Aurangzeb?			(A) GB	(B) KB
	(A) Ramdas	(B) Teg Bahadur		(C) MB	(D) TB
	(C) Arjundev	(D) Gobind Singh			
			96.		e 2023 edition of the Global
86.		beat the time taken is		Innovation Index?	
	(A) 1 second	(B) 1 minute		(A) 39 th	(B) 45 th
	(C) 1.5 seconds	(D) 0.8 second		(C) 40 th	(D) 52 th
87.	Ranji Trophy is associa	ated with	97.	In context with the Indian	
	(A) Hockey	(B) Football		(A) Train passenger Warr	
	(C) Cricket	(D) None of these		(B) Train Protection Warn	
				(C) Train Protection Warn	
88.		y amounts to ₹ 2613 in 6 years		(D) Transmission Protection	on Warning Stopper
		le interest. What is the sum?			
	(A) 2010	(B) 2080	98.		embly passed the anti-rape
	(C) 1890	(D) 1760		"Aparajita" bill?	
				(A) Maharashtra	(B) Jharkhand
89.	Comptroller and Audit and guide of	or-General of India is a friend		(C) West Bengal	(D) Karnataka
	(A) Select Committee		99.	Who became the first I	ndian male para-athlete to
	(B) Estimate Committe	e	1111		alympics by winning the gold
	(C) Prime Minister				in throw F64 class at Paris
	(D) Public Accounts Co	ommittee		2024?	
	Anna Soll consideration of the particle of the			(A) Sundar Singh Gurjar	(B) Sumit Antil
90.	Who was the first Gupt	a ruler?		(C) Devendra Jhajharia	(D) Sharad Kumar
	(A) Srigupta	(B) Chandragupta I		,	, ,
	(C) Ghatotakacha	(D) Kumargupta I	100.	How many languages ha	ive been recognised by the
				Indian Constitution?	
91.	In $\triangle ABC$, $\angle B = 60^{\circ}$ and	$d \angle C = 40^{\circ}$; AD and AE are the		(A) 15	(B) 18
	bisector of ∠A and per	rpendicular on BC respectively.		(C) 22	(D) 24
	What is the measure o				
	(A) 9°	(B) 11°			
	(C) 10°	(D) 12°			

Space for rough work





	ROLL	NO.				-	мовіі	LE N	UMBI	ER					Impo	rtant Ir	าร	truct	ions									
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2	A	B	C	D		22	A	B	C	0		42	A	B	C	D		62	A	B	C	D		82 A	0 (В	C	D
3	A	B	C	D		23	A	B	C	D		43	A	B	C	D		63	A	B	C	D		83 A	0	В	C	D
4	A	B	C	D		24	A	B	C	0		44	A	B	C	D		64	A	B	C	D	1	84 A	0	В	C	D
5	A	B	C	D		25	A	B	C	0		45	A	B	C	D		65	A	B	C	D	1	85 A	0	B	©	D
6	A	B	C	0		26	A	B	C	D		46	A	B	C	D	V	66	A	B	0	D	1	86 A	0	В	0	0
7	A	B	C	0		27	A	B	C	D		47	A	B	0	D		67	A	B	C	0	1	87 A	0 (В	C	0
8	A	B	C	0		28	A	B	C	D	1	48	A	B	C	D		68	A	B	C	D		88 A	0	В	C	0
9	A	B	C	0		29	A	B	C	D		49	A	B	C	D		69	A	B	C	D	1	89 (A	0	В	C	D
10	A	B	C	0		30	A	B	0	D		50	A	B	0	D	1	70	A	B	C	D	9	90 A	0	B	C	0
11	A	B	C	0	-	31	A	B	C	0		51	A	B	C	D		71	A	B	C	D		91 (A) (В	C	D
12	A	B	C	0		32	A	B	C	0	P	52	A	B	C	D		72	A	B	C	D	1	92 A) (B	C	D
13	A	B	C	0		33	A	B	0	0	3	53	A	B	C	D		73	A	B	C	0	1	93 A) (В	C	D
14	A	B	C	0		34	A	B	0	0		54	A	B	C	D		74	A	B	C	D	1	94 (A) (B	C	0
15	A	B	C	D	1	35	A	B	C	D		55	A	B	C	D		75	A	B	C	D	1	95 A) (В	0	D
16	A	B	C	0		36	A	B	C	D		56	A	B	C	0		76	A	B	C	D		96 A) (В	C	0
17	A	B	C	D		37	A	B	C	D		57	A	B	C	D		77	A	B	C	D	1	97 A) (В	C	D
18	A	B	C	0		38	A	B	C	0		58	A	B	C	D		78	A	B	C	D	1	98 A) (В	C	0
19	A	B	C	0		39	A	B	C	D		59	A	B	C	D		79	A	B	C	D	1	99 A) (В	C	D
20	A	B	C	D		40	A	B	C	D		60	A	B	C	0		80	A	B	C	D	10	00 (A) (В	C	0
Cor	rect					Cor	rect					Cor	rect					Corr	ect				(Correct				
Inco	orrect					Inco	orrect					Inco	orrect					Inco	rrect				1	ncorrec	et			
Mar	ks					Mar	ks					Mar	ks					Mari	ks					Marks				
S	tuden	's Si	gnat	ure			Maxir	num	Mark	s	1		Mark	s Ob	taine	d			Ma	rks i	n %				Ren	narl	ks	

