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

- This booklet contains 100 Questions. (1)
 - 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.
- Failure to comply with any of the above Instructions will make a candidate liable to such action/penalty as may be (6)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. (10)

NAME OF CANDIDAT	E:
DATE :	. CENTRE CODE :
ROLL No	

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

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

1. The Bull taming sport Jallikattu is typically practiced in

(A) Tamil Nadu

(B) Karnataka

(C) Andhra Pradesh

- (D) Kerala
- 2. Which of the following cities will focus on Al and machine learning as part of Chief Minister Yogi Adityanath's \$4 billion investment plan to develop global technology hubs?
 - (A) Noida
- (B) Lucknow
- (C) Ghaziabad
- (D) Varanasi
- Direction 3 and 4: In the following question, which of the following argument(s) follows based on the given statement.

Give answer:

- (A) None follows
- (B) Both follows
- (C) Only I follows
- (D) Only II follows
- 3. Statements: In one of the accidents on a railway crossing, fifty people died when a bus carrying them collided with a running train.

Cause of action: I. The train driver should immediately be suspended.

II. The railway authorities should be deputed man to all railway crossing.

Statements: Majority of the students have failed in one subject in the first semester examination.

Cause of action: I. All those students who failed should be asked to drop out of the course.

II. The faculty teaching the paper should be asked to resign.

Direction 5 and 6: In the following question, based on the given statement which of the following conclusion(s) is/are follow.

Give answer:

- (A) Only conclusion (I) follows
- (B) Only conclusion (II) follows
- (C) Both conclusions (I) and (II) follow
- (D) Neither conclusion (I) nor conclusion (II) follows
- 5. Statements: I. Some red are yellow.

II. No yellow is green.

Conclusions: I. Some green are not red.

II. Some red are not green.

6. Statements: I. Some years are decade.

II. All centuries are decades.

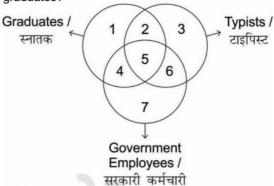
Conclusions: I. Some centuries are a year

II. No centuries is a year.

7. Who is the author of "The Golden House"?

- (A) Ram Kamal Mukherjee (B) Salman Rushdie
- (C) Jaswant Singh
- (D) Hema Malini
- 8. Which of the following is folk dance of Rajasthan?
 - (A) Garba
- (B) Ghoomar
- (C) Jatra
- (D) Bihu

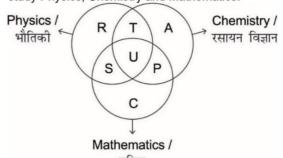
- 9. Teachers Day is observed on which date?
 - (A) 5 September
- (B) 15 September
- (C) 20 September
- (D) 14 November
- 10. Which number represents the typist who are only graduates?



(A) 2

(C) 6

- (B) 5 (D) 3
- 11. Singer cup is related to which game?
 - (A) Football
- (B) Hockey
- (C) Cricket
- (D) Chess
- 12. Who had estimated National Income in India first?
 - (A) Dadabhai Naoroji
- (B) R. C. Dutt
- (C) V. K. R. Y. Rao
- (D) D. R. Gadgil
- 13. A piece of ice has a stone in it and floats in a vessel containing water. When the ice melts, the level of water in the vessel would
 - (A) Remain unchanged
- (B) Fall
- (C) Rise
- (D) None of these
- 14. Rajan can row 30 km downstream and 18 km upstream, taking 10 hours each time. What is the speed of the current?
 - (A) 0.4 km/hr
- (B) 0.6 km/hr
- (C) 0.8 km/hr
- (D) 0.9 km/hr
- 15. The diagram below represents the students who study Physics, Chemistry and Mathematics.



गणित Study the diagram and identify the region which represents students who study both Physics and Chemistry but not Mathematics?

- (A) T + S + U + P
- (B) C
- (C) R + T + A + U + P + S
- (D) T



16.	The tropic of cancer doe (A) Madhya Pradesh (C) Rajasthan	es not pass through (B) West Bengal (D) Odisha	27.	building. Ashwini is 15th shifted six places to the r	n a row facing the school from the left end. If he is ight, what is his position from
17.	If $3x - \frac{1}{3x} = 9$, then wha	at is the value of $x^2 + \frac{1}{81x^2}$?		the right end? (A) 16 th (C) 18 th	(B) 17 th (D) 15 th
	(A) 7	(B) $\frac{83}{9}$	28.	What approximate value question mark (?) in the f $(15.01)^2 \times \sqrt{730} = ?$	should come in place of the ollowing question?
	(C) 11	(D) $\frac{121}{9}$		(A) 6125 (C) 6200	(B) 6225 (D) 6075
18.	India's first Jan Shatabe Goa was commenced or (A) April 16, 2002 (C) June 20, 2002	di Express between Mumbai- n (B) April 20, 2002 (D) June 16, 2002	29.	Who defeated Harshavar (A) Prabhakara vardhana (C) Narasimha varmana	dhana? a (B) Pulkesin II
19.		a certain sum for 2 year is ₹ rest is ₹ 129. What is the rate (B) 14% (D) 12.5%	30.	If 'P' means '+', 'Q' mea means '', then 44 Q 9 R (A) 36 (C) 25	ns '×', 'R' means '÷', and 'S' 12 S 6 Q 4 P 16 = ? (B) 124 (D) 112
20.	Which was the first capit (A) Pataliputra (C) Girivarja (Rajgriha)	tal of Magadha? (B) Vaishali	31.	Raju sold an article for ₹ is the cost price of article (A) ₹ 7500 (C) ₹ 8000	6000 at a loss of 25%. What ? (B) ₹ 8650 (D) ₹ 8500
21.	A floating body always own (A) Mass (C) Weight	displaces liquid equal to its (B) Volume (D) None of these	32.	Malik Kafur was whose G (A) Balban (B) Alauddin Khalji (C) Mohammad-bin-Tugh	
Directi	ion 22 to 24: Select the re the given alternatives.	elated word/letter/number from	33.	(D) Firoz shah Tughlaq Main function of white blo	ood corpuscles is
22.	Ganga : River : : Kanche (A) Plateau (C) Mountain	enjunga : ? (B) Ocean (D) Bird		(A) Transport of CO₂(B) Transport of oxygen(C) To protect from disea(D) None of the above	
23.	FIRST : RIFTS :: GHOS (A) OGHST (C) OHGTS	ST: ? (B) OHGST (D) OGHTS	34.	the area of the rectang what is the length of the r	
24.	11 : 1331 : : ? (A) 17 : 341 (C) 15 : 235	(B) 7 : 343 (D) 14 : 192		(A) 36 metre (C) 72 metre	(B) 39 metre (D) 76 metre
25.	Which of the following	diagram best represents a inal, thief and pick pocket?	35.	SONAR is based on the p (A) Echo (C) Reverberation	(B) Resonance (D) None of these
	(A) (())	(B) () ()	36.	What is the value of $(0.\overline{1})^{-1}$,
		(1, (3) 3		(A) $\frac{1}{2}$ (C) 2	(B) $\frac{1}{3}$ (D) 10
	(c) (D)	(D)	37.	Who among the following for the first time? (A) Mohammad-bin-Tuqh	has issued the coin / rupee
26.	consumption increases	is diminished by 20% and its by 15%. What is the percent		(B) Alauddin Khalji (C) SherShah Suri (D) Akbar	
	change in revenue? (A) 16% decrease (C) 12% increase	(B) 5% increase (D) 8% decrease	38.	The fuel in atomic pile is (A) carbon	(B) sodium

(A) carbon (C) petroleum

(D) uranium



39.	If 'sky' is called 'sea', 'sea' is called 'water' 'water' is												
	called 'air', 'air' is called 'cloud' and 'cloud' is called												
	'river', then what do we drink when thirsty?												

- (A) sky
- (B) air
- (C) water
- (D) sea

- (A) Aluminium
- (B) Tungsten
- (C) Nichrome
- (D) None of these

41. Out of the fractions,
$$\frac{5}{7}$$
, $\frac{7}{13}$, $\frac{4}{7}$, $\frac{4}{15}$ and $\frac{9}{14}$, which is

the third highest?

- (A) $\frac{5}{12}$
- (B) $\frac{7}{13}$
- (C) $\frac{4}{7}$

- (A) Shah Beghum
- (B) Haji Beghum
- (C) Mumtaj Mahal Beghum
- (D) Noorjahan Beghum

- (A) base
- (B) acid
- (C) salt
- (D) None of these

- (A) 35
- (B) 24 (D) 45
- (C) 36

- (A) Lokmanya Tilak
- (B) Swami Vivekanand
- (C) Swami Dayanand
- (D) Rabindra Nath Tagore

- (A) 32
- (B) 41
- (C) 23
- (D) 30

- (A) $4\sqrt{6}$
- **(B)** $4\sqrt{3}$
- (C) $4\sqrt{2}$
- (D) $3\sqrt{6}$

- (A) Metals
- (B) Metalloids
- (C) Non-metals
- (D) Transition elements

- (A) 4298331
- (B) 4298313
- (C) 4298133
- (D) 4928313

- (A) Cell sap
- (B) Cytoplasm
- (C) Nucleoplasm
- (D) Hydrolytic enzyme

51. Which one is greatest out of
$$\sqrt{2}$$
, $\sqrt[6]{3}$, $\sqrt[3]{4}$ and $\sqrt[4]{5}$?

- (A) ³/₄
- (B) 4/5
- (C) $\sqrt{2}$
- (D) ⁶/₃

- (A) 20th
- (B) 21st
- (C) 20th or 21st
- (D) 22nd

- DHL, PTX, BFJ, ? 53.
 - (A) NRV
- (B) RVZ
- (C) CGK
- (D) KOS

- (A) 46
- (B) 48 (D) 52
- (C) 50

55.

- 2, 5, 8, 11, 14, ? (**A**) 17
- (C) 15
- (B) 16 (D) 18

- (A) Colloidal silver bromite (B) Colloidal gold
- (C) Colloidal silver
- (D) Colloidal sulphur

- (A) 10 hours
- (B) 8 hours
- (C) 12 hours
- (D) 14 hours

- (A) Complete independence
- (B) Self government
- (C) Economic independence
- (D) Political independence

- (A) Mother
- (B) Aunt
- (C) Mother-in-law
- (D) Sister

60. If
$$\frac{x^2 + 1}{x} = 4\frac{1}{4}$$
, then what is the value of $x^3 + \frac{1}{x^3}$?

- (C) $\frac{4913}{64}$
- (D) $\frac{4097}{64}$

In the following question, based on the given 61. statement which of the following assumptions(s) is/are implicit.



Statement: The company has decided to increase the price of all its products to tackle the precarious financial position.

Assumptions: I. The buyer may continue to buy its products even after the increase.

II. The company has adequate resources to continue production for few more months.

- (A) Only I is implicit
- (B) Only II is implicit
- (C) Both I and II are implicit
- (D) Neither I nor II implicit
- 62. If a:b = 5: 9 and b:c = 4:7, what is the value of a:b

: c?

(A) 20:36:63

(B) 15:32:58

(C) 2:20:53

(D) 20:35:63

In which year the Indian National Congress was 63. established?

(A) 1888

(B) 1887

(C) 1886

(D) 1885

Direction 64 to 66: Select the odd word/letter from given alternatives.

- 64. (A) Root
- (B) Flower
- (C) Tree
- (D) Bud
- (A) BCGK 65.
- (B) MNRV
- (C) RSVZ
- (D) EFJN
- (A) CBCD 66.
- (B) IHIJ
- (C) ONOP
- (D) UTUW
- 67. A walked 30 metre towards South, took a left turn and walked 15 m. He then took a right turn and walked 20 metre. He again took a right turn and walked 15 m. Now how far is he from the starting point?

(A) 50 meter

(B) 90 meter

(C) 100 meter

(D) 45 meter

Direction 68 to 69: Read the following information carefully and answer the question given below.

> A, B, C, D and E are five members of a family. There are two father, two sons, two wives, three males and two females in the family. Teacher is the wife of a lawyer who is the son of a doctor. E is not a male, neither also wife of a professional. C is the youngest in the family while D is the eldest in the family. B is a

68. How is D related to E?

(A) Husband

(B) Son

(C) Father

(D) Wife

Who's wife is a teacher? 69.

(B) D

(A) C (C) A

(D) B

70. Two trains leaves Delhi for Patna at 10 am and 10:30 am, respectively and travel at 120 km/hr and 150 km/hr, respectively. How many kilometres from Delhi will the two trains meet?

(A) 180 km

(B) 300 km

(C) 240 km

(D) 320 km

Direction 71 to 73: Read the following information carefully to answer the question that follow.

> A, B, C, D, E and F stay at the different floor of a building. Ground floor is number 1, first floor is number 2 and so on. A stays at even number floor. There are two floors between the floor on which D and F stay. F stays on the floor above D. D does not live on the 2 floor. B does not live on odd number floor. C does not live on any floor under F. E stays neither immediately above B nor immediately under

71. Who live exactly in between D and F?

(A) E, B

(B) C, B

(C) E, C

(D) A, E

72. On which floors does B stay?

(A) 6th

(B) 4th

(C) 2nd

(D) 5th

73. How many persons live between A and F?

(A) One

(B) Two

(C) Three

(D) None

In the Indian Constitution, the Right to Equality is 74. granted by five Articles. They are

- (A) Article 13 to Article 17
- (B) Article 14 to Article 18
- (C) Article 15 to Article 19
- (D) Article 16 to Article 20

75. A can do a work in 15 days and B alone can do that work in 25 days. They both started work together. If B after doing 5 days leaves the job. In how many days A will do the remaining work?

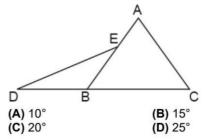
(A) 10 days

(B) 7 days

(C) 14 days

(D) 16 days

76. In the given figure, ∠BAC = 70°, ∠ACB = 45° and \angle DEA = 140°. What is the value of \angle BDE?



77. A milkman buys some milk. If he sells it at ₹ 5 a litre, he loses ₹ 200, but when he sells it at ₹ 6 a litre, he gains ₹ 150. How much milk did he purchase?

(A) 320 litres

(B) 350 litres

(C) 400 litres

(D) 480 litres

78. The average of 50 numbers is 38. If the two numbers 45 and 55 are not considered, then what will be the average of remaining numbers?

(A) 36.5

(B) 37

(C) 37.5

(D) 37.8





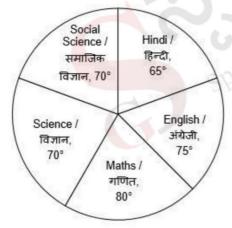




79. If
$$\left(x + \frac{1}{x}\right)^2 = 5$$
 and $x > 0$, then what is the value of $x^3 + \frac{1}{x^3}$?

- (A) 2√5
- **(B)** 3√5
- (C) 4√5
- (D) 5√5
- 80. What is the difference between compound interest and simple interest on ₹ 1500 at 10% per annum for 2
 - (A) 11
- (C) 14
- (B) 12 (D) 15
- If $\sqrt{0.08 \times 0.8 \times a} = 0.8 \times 0.8 \times \sqrt{b}$, then what is the 81. value of $\frac{a}{b}$?
 - (A) 0.8
- (B) 0.64
- (C) 6.4
- Part IV of Constitution of India deals with ___ 82.
 - (A) Fundamental Rights
 - (B) Citizenship
 - (C) Directive Principles of State Policy
 - (D) Union executive
- Direction 83 to 85: Study the following pie chart carefully and answer the questions based on it.

The following pie chart shows the marks obtained (in degrees) by a student in different subjects. The total marks obtained by the student in the examination is 432.



- 83. What is the total of marks obtained in Hindi and Maths?
 - (A) 178
- (B) 172
- (C) 174
- (D) 182
- 84. The marks obtained in science is what percentage of the total marks?
 - (A) 20.14
- (B) 18.12
- (C) 17.16
- (D) 19.44
- 85. The marks obtained in Maths is how much percent more than the marks obtained in Social Science?
 - (A) 7.14
- (B) 14.28
- (C) 9.13
- (D) 10.41

- 86. The Preamble to the constitution declares India as
 - (A) A Sovereign Democratic Republic
 - (B) A Socialist Democratic Republic
 - (C) A Sovereign Socialist Secular Democratic Republic
 - (D) A Federal Democratic Republic
- 87. Who has assumed the role of Chairman and Managing Director (Additional Charge) of Hindustan Aeronautics Limited (HAL), succeeding Ananthakrishnan?
 - (A) Dr. Rajiv Kumar
- (B) Dr. Sushil Kumar
- (C) Dr. Arun Kumar
- (D) Dr. DK Sunil
- 88. The marked price of a radio is ₹ 3840. The shopkeeper allows a discount of 10% and gains 8%. If no discount is allowed, his gain percent would be
 - (A) 25%
- (B) 20%
- (C) 35%
- (D) 40%
- 89. PQR is an isosceles triangle with sides PQ = PR = 45 cm and QR = 72 cm. PN is a median to base QR. What will be the length (in cm) of PN?
 - (A) 36
- (B) 24
- (C) 27
- (D) 32
- 90. The average of 20 numbers is 15 and the average of first five is 12. What is the average of remaining number?
 - (A) 16
- (B) 15
- (C) 14
- (D) 13
- The provision of the concurrent list has been 91. borrowed from which country?
 - (A) Canada
 - (B) Australia
 - (C) Ireland
 - (D) United States of America
- 92. The ratio of the number of boys and girls in a school is 3: 2. If 20% of the boys and 25% of the girls are scholarship holders, then what is the percentage of the students who do not get the scholarship?
 - (A) 78%
- (B) 60%
- (C) 55%
- (D) 75%
- 93. Which athlete secured the Silver medal in the Women's 63-kg event at the Asian Cadet and Junior Judo Championships in Mungyeong, South Korea?
 - (A) Sakshi Malik
- (B) Himanshi Tokas
- (C) Vinesh Phogat
- (D) Pooja Gehlot
- 94. is a permanent storage device.
- - (A) Mouse (C) RAM
- (B) Monitor (D) Hard disk
- Which of the following cups/trophies is associated 95. with football?
 - (A) Davis Cup
- (B) Deodhar Trophy
- (C) Champions Trophy
- (D) Santosh Trophy
- 96. Which Indian company has achieved a historic milestone by recording a consolidated turnover of ₹10,00,122 crore for FY 2023-24, becoming the first to surpass ₹10 lakh crore in annual revenue?



- (A) Tata Consultancy Services (TCS)
- (B) Infosys Limited
- (C) Reliance Industries Limited (RIL)
- (D) HDFC Bank
- 97. Who has recently been appointed as the Deputy Chief of the Air Staff?
 - (A) Air Marshal R. K. Sharma
 - (B) Air Marshal A. K. Gupta
 - (C) Air Marshal S. K. Verma
 - (D) Air Marshal Tejinder Singh
- 98. Who is the author of the book 'India and the Netherlands _ Past, Present and Future'?
 - (A) Navtej Sarna

- (B) Venu Rajamony
- (C) Harsh Vardhan Shrigea
- (D) PC Chagla
- 99. Which of the following receive the highest annual rainfall in India?
 - (A) Mawsynram
 - (B) Patna
 - (C) Allahabad (now Prayagraj)
 - (D) Cherrapunji
- 100. World coconut day is observed on which day?
 - (A) 2 September
- (B) 2 October
- (C) 2 November
- (D) 2 December

Space for rough work







	ne:	-	+	+	_	+	+	+								+			_	_	+	+	+	+	+	+	+	+
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2	A	B	C	(22	A	B	C	D		42	A	B	C	D		62	A	B	C	D	8	12 (A	B	C	D
3	A	B	C	0		23	A	B	C	D		43	A	B	C	D		63	A	B	C	0	8	3 (A	B	C	(D)
4	A	B	0	(0	24	A	B	C	D		44	A	B	C	D		64	A	B	C	D	8	4 (A	B	C	D
5	A	B	C	0	0	25	A	B	C	0		45	A	B	C	D		65	A	B	C	D	8	5	A	B	C	D
6	A	B	C	0	0	26	A	B	C	D		46	A	B	C	0	1	66	A	B	C	D	8	6	A	B	C	0
7	A	B	C	0	0	27	A	B	C	D		47	A	B	0	D		67	A	B	C	0	8	37 (A	B	C	(D)
8	A	B	C	0	0	28	A	B	C	D		48	A	B	C	D		68	A	B	C	D	8	88	A	B	C	0
9	A	B	C	(0	29	A	B	C	D		49	A	B	C	D	ŀ	69	A	B	C	D	8	19 (A	B	C	(D)
10	A	B	C	0	0	30	A	B	0	0	ı	50	A	B	0	0	1	70	A	B	C	0	9	0 (A	B	C	0
11	A	B	C	0	0	31	A	B	C	0	M	51	A	B	C	D		71	A	B	C	D	9	91 (A	B	C	D
12	A	B	C	0	0	32	A	B	C	0		52	A	B	0	D		72	A	B	C	D	9	2 (A	B	C	D
13	A	B	0	0	0	33	A	B	0	0	38	53	A	B	C	D		73	A	B	C	D	9	3 (A	B	C	D
14	A	B	C	0	0	34	A	B	C	0		54	A	B	C	D		74	A	B	C	D	9		A	B	C	0
15	A	B	C	0		35	A	B	C	0		55	A	B	C	D		75	A	B	C	D	9	5 (A	B	C	D
16	A	B	0	0		36	A	B	0	D		56	A	B	0	D		76	A	B	C	D	9	6 (A	B	0	0
17	A	B	0	0		37	A	B	0	(D)	Ш	57	A	B	0	0		77	A	B	0	(D)			A	B	0	0
18	A	B	0	0		38	A	B	0	0	Ш	58		B	0	0		78	A	B	0	0			A	B	0	0
19	(A)	B	0	0		39	(A)	(B)	0	0	Ш	59		B	0	0		79	(A)	B	0	0			A	(B)	0	(D)
20	A	B	0	0	<i>y</i>	40	(A)	В	C	D	1	60	(A)	B	C	0		80	(A)	(B)	C	D	10	00 (A)	B	C	0
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