QUESTION BOOKLET

Suitability Test for NTPC/Skilled Artisan Category Under Compassionate Grounds Appointment

Date of Examination: 10/05/2023

Time : 10:00 hrs. to 12:00 hrs
Marks : 100

INSTRUCTIONS TO CANDIDATES:

1. Candidates should write their name, roll number etc., only in the space provided in the fly leaf and NOT in any other sheet.

2. The Question paper contains 100 questions:

    Part I   – General Knowledge

    Part II – General English

    Part III – Mathematics

3. All questions are compulsory.

4. Each question carries 1 mark.

5. There shall be no negative mark for wrong answers.

6. Think well before you write your choice of answer. No corrections/Over writings are permitted. If found, the same will not be evaluated.

7. The question paper consists of 8 pages. Candidates should check whether all pages are available before answering.

8. Any unattended page in the answer sheet must be clearly striked out.

9. Choice of answer should be written in capital letter. For example, A, B, C, D etc

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PART – I (GENERAL KNOWLEDGE)

1.	The India Pakistan Border is known as…						
	A.	Durand line	B.	Radcliffe line	C.	Mc Mohan line	D.	Curson line

2.	Candela(cd) is the SI unit of which of the following?						
	A.	Mass	B.	Electric Current	C.	Luminous intensity	D.	Temperature

3.	The element common to all acids is						
	A.	Carbon	B.	Hydrogen	C.	Sulphur	D.	Nitrogen

4.	Which article deals with abolition of untouchability?						
	A.	18	B.	17	C.	16	D.	15

5.	Which ~~country~~ state is the leading producer of Mica?						
	A.	Uttar Pradesh	B.	odisha	C.	Rajasthan	D.	Jharkand

6.	Which of the following is not a source of carbohydrate?						
	A.	Potato	B.	Butter	C.	Fish	D.	Cheese

7.	Girna river is in which state of India?						
	A.	Maharastra	B.	Gujarat	C.	Punjab	D.	Uttarpradesh

8.	Capital of Ukraine is…						
	A.	Kyiv	B.	Odesa	C.	Dnipro	D.	Lviv

9.	Number of chromosomes in Human body is …..						
	A.	23	B.	46	C.	24	D.	48

10.	Defeciency of Niacin(Vitamin B3) causes which disease?						
	A.	Ricket	B.	Haemophillia	C.	Pellagra	D.	Anaemia

11.	Which vitamin is easily lost while cooking or storing food?						
	A.	Vitamin C	B.	Vitamin A	C.	Vitamin B	D.	Vitamin D

12.	Velocity of sound in vaccum is ………						
	A.	3^8 m/sec	B.	0	C.	∞	D.	330 m/s

13.	The time taken by sunlight to reach earth is …..						
	A.	10.6 minutes	B.	5 minutes	C.	8.3 minutes	D.	9 minutes

14.	Which is the only organ in the body that can regrow and regenerate?						
	A.	Kidneys	B.	Liver	C.	Spleen	D.	Pancreas

15.	If your weight is 38 kg on earth. Then how much would you weigh on the planet mercury?						
	A.	19kg	B.	760 kg	C.	10kg	D.	14.3 kg

16.	Who was the first to discover that electricity and magnetism are intimately connected?							
	A.	Newton	B.	Edison	C.	Faraday	D.	Maxwell
17.	Dr.A.P.J Abdul Kalam the former president of India received the prestigious Bharat Ratna award in the year							
	A.	1992	B.	1995	C.	1997	D.	1998
18.	Transistor is a combination of two....							
	A.	Resistors	B.	Capacitors	C.	Diodes	D.	IC
19.	13 chambered heart occurs in ...							
	A.	Leech	B.	Earth	C.	Snail	D.	Cockroach
20.	The two elements that are in liquid state at room temperature is							
	A.	Bromine, Iodine	B.	Hafnium, mercury	C.	Bromine,mercury	D.	Hafnium,Bromine
21.	Rh factor is related to							
	A.	Blood transfusion	B.	Atmospheric Pressure	C.	Blood pressure	D.	Space
22.	The chemical name of Vitamin C is ...							
	A.	Citric Acid	B.	Ascorbic Acid	C.	Oxalic Acid	D.	Nitric Acid
23.	R in VIRUS stands for							
	A.	Rare	B.	Resources	C.	Rate	D.	Raise
24.	Reaction of which of the following metal is fastest with oxygen?							
	A.	Magnesium	B.	Copper	C.	Iron	D.	Zinc
25.	What type of mirror is used in a view finding mirror of a vehicle?							
	A.	Convex	B.	Concave	C.	Plane	D.	Paraboloidal
26.	In which year was the Election Commission of India was formed?							
	A.	1949	B.	1950	C.	1951	D.	1952
27.	The term bullseye is used in which game?							
	A.	Archery	B.	Boxing	C.	Tennis	D.	Ludo
28.	The area of arid topography with sand dunes in the Aravali are known as by which of the following name?							
	A.	Blizzard	B.	Barkhans	C.	Badland	D.	Maidan
29.	Which among the following type of soil is internationally known as Tropical Chernozems?							
	A.	Alluvial soil	B.	Red soil	C.	Black soil	D.	Desert soil
30.	The position of indian railway network in the world is							
	A.	Second	B.	Third	C.	Fourth	D.	Fifth

PART – II (GENERAL ENGLISH)

31.	Which of the following word is spelt correctly?							
	A.	Accomplish	B.	Acomplise	C.	Accompolish	D.	Accompolise

32.	Which of the following word is spelt correctly?							
	A.	Accquire	B.	Acquire	C.	Aquire	D.	Acquaire

33.	Which of the following word is spelt correctly?							
	A.	Consience	B.	Consciance	C.	Conscience	D.	Consience

34.	He is'nt here.							
	A.	Is he ?	B.	Isn't he?	C.	Did he ?	D.	Haven't he ?

35.	I was born ..... May							
	A.	In	B.	On	C.	At	D.	To

36.	They climbed .... the highest hill they found							
	A.	In	B.	Up	C.	From	D.	On

37.	The farmer wakes up .... Sunrise							
	A.	On	B.	At	C.	In	D.	of

38.	She borrowed a saw .... the farmer.							
	A.	With	B.	On	C.	From	D.	In

Select the English word which is nearer to the meaning - Synonym

39.	Admire							
	A.	Respect	B.	Humiliate	C.	Offend	D.	Disgrace

40.	Revenge							
	A.	forgive	B.	attack	C.	Pardon	D.	Comfort

41.	incredible							
	A.	Believe	B.	absurd	C.	Like	D.	unspectacular

42.	Magnificient							
	A.	graceful	B.	Dull	C.	Normal	D.	Boring

43.	Elegant							
	A.	Rough	B.	Unskillfull	C.	Classic	D.	Determine

44.	Apparent							
	A.	Evident	B.	Unclear	C.	Genuine	D.	Harm

Select the English word which is opposite to the meaning – Antonym

45.	Obvious							
	A.	Empty	B.	Hidden	C.	Add	D.	Brief

46.	Strange							
	A.	Normal	B.	Surprising	C.	Alien	D.	unusual

47.	Brave							
	A.	Confident	B.	Courage	C.	Cowardly	D.	daring
48.	Entry							
	A.	Way	B.	Path	C.	Exit	D.	Open
49.	Poverty							
	A.	Rich	B.	Poor	C.	Inferior	D.	insufficient
50.	Defeat							
	A.	Victory	B.	Destroy	C.	Decrease	D.	Defy
	Fill in the blanks with appropriate options.							
51.	Sita manages to do things by............							
	A.	Himself	B.	Herself	C.	Myself	D.	Ourselves
52.	She .... Last night							
	A.	Write	B.	Written	C.	Wrote	D.	Is writing
53.	Jim .... to the gym daily.							
	A.	Went	B.	Goes	C.	Is going	D.	go
54.	My mother .... a dress for me							
	A.	Buy	B.	Brought	C.	Bought	D.	None
55.	She put a blanket .... the sleeping child.							
	A.	Through	B.	Over	C.	On	D.	in

PART – III (ARITHMETIC)

56.	Two students appeared at an examination. One of them secured 9 marks more than the other and his marks was 56% of the sum of their marks. The marks obtained by them are:							
	A.	39,30	B.	41, 32	C.	42,33	D.	43,34
57.	Find the number of all one-one functions from set A = {1, 2, 3} to itself.							
	A.	5	B.	6	C.	8	D.	10
58.	Find the value of $\sin^{-1}(\sin (3\pi/5)$							
	A.	$3\pi/5$	B.	$\pi/5$	C.	$2\pi/5$	D.	Π
59.	Find the rate of change of the area of a circle per second with respect to its radius r when r = 5 cm.							
	A.	$10 \pi cm^2/s$	B.	$15 \pi cm^2/s$	C.	$8 \pi cm^2/s$	D.	$25 \pi cm^2/s$
60.	What is the value of $d/dx(\tan x)$							
	A.	Sin x	B.	Sec^2x	C.	Cos x	D.	Cot x
61.	A man walks 30 meters towards South. Then turning to his right he walks 30 meters. Then turn to his left and walks 20 meters. Again takes a turn to his left and walks 30 meters. How far is he from his initial position?							

	A.	20 m	B.	50 m	C.	60 m	D.	80 m

62.	Mean weight of m boys is 43 kg. If the teacher who weighs 63kg is included the mean becomes 45 kg. What is the value of m?							
	A.	6	B.	7	C.	8	D.	9

63.	If $|3x-10|>5$ then:							
	A.	$x \leq 5, x \geq 5/3$	B.	$x \geq 5, x \leq 5/3$	C.	$x \leq -5, x \geq 5/3$	D.	$x \leq -5, x \geq -5/3$

64.	Two poles of heights 10 m and 15m stand on a plane ground. If the distance between their feet is 12m the distance between their top is:							
	A.	5 m	B.	12 m	C.	12.5 m	D.	13 m

65.	A metal block having sides 10 cm, 15 cm, 30 cm has cut into equal cubes. If the block is exhausted completely what will be the least possible number of cubes?							
	A.	12	B.	24	C.	30	D.	36

66.	Mini tore out several successive pages from a book.Number of the first page she tore out is 385. It is known that the number of the last page which she tore out is with the same digits in some other order. How many pages did she remove from the book?							
	A.	154	B.	253	C.	469	D.	451

67.	Find a if, $16/a = 1/\sqrt{0.25}$							
	A.	8	B.	7	C.	6	D.	5

68.	A dealer sells two chairs for Rs. 462. On one he gains 12% and on the other he loses 12%. Which of the following is true							
	A.	He gains Rs.110	B.	He gains Rs.13.50	C.	He neither gains nor loses	D.	He loses Rs.13.50

69.	Three candidates contested an election and received 1136, 7636 and 11628 votes respectively. What percentage of the total votes did the winning candidate get?							
	A.	57%	B.	67%	C.	65%	D.	90%

70.	Rs.3900 is divided into 3 parts A,B & C. How much A is more than C if their ratio is 1/2 : 1/3 : 1/4 ?							
	A.	Rs.300	B.	Rs.600	C.	Rs.900	D.	Rs.1800

71.	Out of the total income, a person spends 15% on house rent and 65% of the rest on house hold expenditure. If he saves Rs.8925, What is his total income?							
	A.	Rs.44,625	B.	Rs.30,000	C.	Rs.20,000	D.	Rs.25,000

72.	P & Q can do one work in 40 days. P alone can do 1/5 of the work in 10 days. In how many days Q alone can complete that work?							
	A.	100 days	B.	50 days	C.	200 days	D.	250 days

73.	A person travelled with a speed of 50 KMPH for 1 hour and with 20 KMPH for next 2 hours. Find the average speed of the whole journey.							
	A.	25 KMPH	B.	30 KMPH	C.	35 KMPH	D.	40 KMPH

74.	A stone was dropped freely in a river flowing down a bridge. The stone takes 2 seconds in touching the water surface. The height of the bridge is ….							

A.	9.8 m	B.	19.6 m	C.	39.2m	D.	Data inadequate

75.	1 micron is equal to ……						
	A.	0.1 mm	B.	0.01mm	C.	0.001 mm	D.	0.0001 mm

76.	A two digit number is 7 times the sum of its two digits. The number that is formed by reversing its digits is 18 less than the original number. What is the number?						
	A.	52	B.	42	C.	62	D.	27

77.	"PICO" means…						
	A.	10^{-7}	B.	10^{-8}	C.	10^{-9}	D.	10^{-10}

78.	Find the sum of fraction which becomes 1/2 when denominator is increased by 4; the same factor becomes 1/8 if the numerator is reduced by 5.						
	A.	3/5	B.	5/8	C.	6/8	D.	8/12

79.	The next term of the sequence 3,14,39,………						
	A.	42	B.	53	C.	65	D.	84

80.	Two trains of equal length are running on parallel lines in the same direction at 46 km/hr and 36 km/hr. The faster train passes the slower train in 36 seconds. The length of each train is:						
	A.	50 m	B.	72 m	C.	80 m	D.	82 m

81.	A man can row at 5 kmph in still water. If the velocity of current is 1 kmph and it takes him 1 hour to row to a place and come back, how far is the place?						
	A.	2.4 km	B.	2.3 km	C.	3 km	D.	3.5 km

82.	Two, trains, one from Howrah to Patna and the other from Patna to Howrah, start simultaneously. After they meet, the trains reach their destinations after 9 hours and 16 hours respectively. The ratio of their speeds is:						
	A.	2:3	B.	4:3	C.	6:7	D.	9:16

83.	Find the value of $x^3 + y^3 - 12xy + 64$, when $x + y = -4$.						
	A.	1	B.	2	C.	0	D.	4

84.	Evaluate $\cos(-870^\circ)$						
	A.	$1/\sqrt2$	B.	$-\sqrt3/2$	C.	$\sqrt3/2$	D.	$\sqrt3$

85.	A rectangular carpet has an area of 120 Sq metres and a perimeter of 46 metres. The length of its diagonal is ….						
	A.	15 m	B.	16 m	C.	17 m	D.	20 m

86.	A alone can do a piece of work in 6 days and B alone in 8 days. A and B undertook to do it for Rs. 3200. With the help of C, they completed the work in 3 days. How much is to be paid to C?						
	A.	Rs.375	B.	Rs.400	C.	Rs.600	D.	Rs.800

87.	Find the number of bricks to be laid in a square path of side 18 cm, if the side of each brick is 3 cm.						
	A.	36	B.	30	C.	35	D.	32

88.	Two trains of equal length are moving in same direction on parallel tracks at speed of 92 km/hr and 72 km/hr respectively. The faster train crosses the slower train in 18 seconds. Find the length of each train.							
	A.	65 m	B.	60 m	C.	55 m	D.	50 m
89.	A man can row a boat at a speed of 20 km/hr in still water. If the speed of the stream is 5 km/hr, in what time he can row a distance of 75 km downstream?							
	A.	1.5 hr	B.	3 hr	C.	2.5	D.	2 hr
90.	Find the next term of the arithmetic sequence 177, 173, 169, 165,…							
	A.	161	B.	160	C.	168	D.	150
91.	Daku and Tamatar can do a piece of work in 70 and 60 days respectively. They began the work together, but Daku leaves after some days and Tamatar finished the remaining work in 47 days. After how many days did Daku leave?							
	A.	14 days	B.	18 days	C.	6 days	D.	7 days
92.	The length of the longest rod that can be placed in a room 30 m long, 24 m broad and 18 m high, is							
	A.	30 m	B.	30 √2 m	C.	15 √2 m	D.	60 m
93.	Ten years ago, the sum of ages of a father and his son was 34 years. If the ratio of present ages of the father and son is 7:2, find the present age of the son.							
	A.	12 years	B.	11 years	C.	10 years	D.	8 years
94.	Suresh bought a cell phone from a shop. If he sells it at Rs. 8400 to Mahesh and earns a profit of 12%, find the price at which Suresh bought the cell phone.							
	A.	Rs.7100	B.	Rs.7250	C.	Rs.7350	D.	Rs.7500
95.	If $(2^p + 1)$ is a prime number, which one of the following digits could be the value of p?							
	A.	3	B.	4	C.	5	D.	6
96.	If January 1, 1996, was Monday, what day of the week was January 1, 1997?							
	A.	Thursday	B.	Wednesday	C.	Friday	D.	Sunday
97.	Two pipes can fill a tank in 10 and 14 minutes respectively. A third pipe can empty the tank at the rate of 10 liters/minute. If all the pipes working together can fill the empty tank in 8 minutes, what is the capacity of the tank?							
	A.	210 litres	B.	215.4 litres	C.	220 litres	D.	225.4 litres
98.	If m and n are whole numbers such that, $m^n = 121$, then the value of $(m-1)^{n+1}$ is							
	A.	1	B.	10	C.	1000	D.	121
99.	If the equation $4x^2+x(p+1)+1=0$ has exactly two equal roots, one of the value of p is							
	A.	5	B.	-3	C.	0	D.	3
100.	How many times the hands of a clock coincide in a day?							
	A.	24	B.	22	C.	23	D.	21

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Date of Exam: 10.05.2023

No.	Ans	No.	Ans	No.	Ans	No.	Ans	No.	Ans	No.	Ans	No.	Ans
1	B	16	D	31	A	46	A	61	B	76	B	91	D
2	C	17	C	32	B	47	C	62	D	77	A	92	B
3	B	18	C	33	C	48	C	63	A	78	C	93	A
4	B	19	D	34	A	49	A	64	D	79	D	94	D
5	C	20	C	35	A	50	A	65	D	80	A	95	B
6	B	21	A	36	B	51	B	66	D	81	A	96	B
7	A	22	B	37	B	52	C	67	A	82	B	97	B
8	A	23	B	38	C	53	B	68	C	83	C	98	C
9	B	24	A	39	A	54	C	69	A	84	B	99	D
10	C	25	A	40	B	55	B	70	C	85	B	100	B
11	A	26	B	41	B	56	C	71	A	86	B		
12	B	27	A	42	A	57	B	72	C	87	A		
13	C	28	B	43	C	58	C	73	B	88	D		
14	B	29	C	44	A	59	A	74	B	89	B		
15	D	30	C	45	B	60	B	75	C	90	A		

DEE/TRD/TPJ