

CII – iPATE 2.0 (2021)

Computer Based PAN India Examination

Category: GRADUATE ENGINEER (ENTRY LEVEL)

Engineering Discipline: PRODUCTION ENGINEERING

Questions & Answers

(Reviewed, Revised & Published dtd. 26.11.2021)

Paper Structure

Question Nos.	Sections & Topics		Marks
1 to 20	Section I : Cognitive Abilities	<ul style="list-style-type: none">Quantitative AptitudeAnalytical ReasoningData InterpretationEnglish Communication	20
21 to 40	Section II : Professional Abilities	<ul style="list-style-type: none">Project ManagementHealth, Safety & Risk ManagementEnvironmental LawsSocial Responsibility & EthicsFinance & AccountsLegal, Contracts & Arbitration	20
41 to 50	Section III (A) : Technical Abilities	Physics & Chemistry (10+2 level)	10
51 to 100	Section III (B) : Technical Abilities	Engineering Discipline	50
TOTAL			100

NOTE:

- Exam Duration: 3 Hours
- Total 100 no. of Questions of 1 Mark each with Negative Marking of ½ Mark for every wrong answer
- Questions (Section wise) and respective Answer Options shuffled at Candidates' terminal

Question No. 1	Discriminant of a second-degree polynomial with integer coefficients cannot be:			
Answer Options	A)	B)	C)	D)
	43	33	68	25
Right Answer	A			

Question No. 2	How many subsets A of {1, 2, 3, 4, 5, 6, 7, 8, 9, and 10} have the property that no two elements of A sum to 11?			
Answer Options	A)	B)	C)	D)
	1024	512	343	243
Right Answer	C			

Question No. 3	Viru and Aarti started a car journey from Chandigarh to Delhi, which are 288 km apart. Viru took 12 hours more than Aarti to complete the journey. Had Viru travelled at double his actual speed, he would have taken 4 hours less than Aarti to complete the journey. Find the respective speeds (in km/hr) at which Viru and Aarti travelled.			
Answer Options	A)	B)	C)	D)
	14.4 and 9	14.5 and 28.5	9 and 14.4	15 and 20
Right Answer	C			

Question No. 4	The height of a trapezoid whose diagonals are mutually perpendicular is equal to 4. Find the area of the trapezoid if it is known that the length of one of its diagonals is equal to 5.			
Answer Options	A)	B)	C)	D)
	50/3 square units	100/3 square units	16/6 square units	None of these
Right Answer	A			

Question No. 5	A polyhedron has faces that are all either triangles or squares. No two square-faces share an edge, and no two triangular-faces share an edge. What is the ratio of triangular-faces to the number of square-faces?			
Answer Options	A)	B)	C)	D)
	03:04	04:03	01:02	04:05
Right Answer	B			

Question No. 6	Your mind likes reading and it actually has a number of important health affects you can't get in any other way. Reading gives you a unique "pause button" for comprehension. Typically, when you read, you have more time to think. When you watch a film or listen to a tape, you don't press that pause button. Reading requires a great deal of concentration, which calls your intelligence to action. The author of this passage would agree that:			
Answer Options	A)	B)	C)	D)
	Reading is a good way to relax, since it doesn't require that much thinking.	Watching a movie has the same effect on the intelligence as reading.	Reading develops your intelligence.	Both A and C
Right Answer	C			

Question No. 7	Read the following information carefully and answer the question given below. P stands 5m west of R. T stands 5m south of Q. T stands 6m east of U. V stands 2m west of Q. A stands 2m south of U. V stands 3m north of R. If G stands 7m east of P, then in which direction does G stands with respect to T?			
Answer Options	A)	B)	C)	D)
	West	East	South	North
Right Answer	D			

Question No. 8	The French Revolution began in 1789 and ended in the late 1790s with the ascent of Napoleon Bonaparte. During this period, French citizens razed and redesigned their country's political landscape, uprooting centuries-old institutions such as absolute monarchy and the feudal system. Like the American Revolution before it, the French Revolution was influenced by Enlightenment ideals, particularly the concepts of popular sovereignty and inalienable rights. From this passage it can be concluded that:			
Answer Options	A)	B)	C)	D)
	The French revolution began before the Russian Revolution.	In the French Revolution their monarch was killed.	The American Revolution happened before the French Revolution.	Napoleon initiated the French Revolution.
Right Answer	C			

Question No. 9	A, B, C, D and E are sitting on a bench. A is sitting next to B, C is sitting next to D, D is not sitting with E who is on the left end of the bench. C is on the second position from the right. A is to the right of B and E. A and C are sitting together. In which position A is sitting?			
Answer Options	A)	B)	C)	D)
	Between B and C	Between E and D	Between B and D	Between C and E
Right Answer	A			

Question No. 10	A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P?			
Answer Options	A)	B)	C)	D)
	X	Z	S	A
Right Answer	A			

Question No. 11	In the following question choose the word which is the exact OPPOSITE of the given word. STRINGENT			
Answer Options	A)	B)	C)	D)
	Magnanimous	Vehement	General	Lenient
Right Answer	D			

Question No. 12	Some proverbs/idioms are given below together with their meanings. Choose the correct meaning of proverb/idiom. To catch a tartar			
Answer Options	A)	B)	C)	D)
	To trap wanted criminal with great difficulty	To catch a dangerous person	To meet with disaster	To deal with a person who is more than one's match
Right Answer	D			

Question No. 13	Which of the phrases A), B), C) and D) given below each sentence should replace the word/phrase printed in bold in the sentence to make it grammatically correct? If the sentence is correct as it is given and no correction is required, mark (E) as the answer. Since the girl did not want to be disturbed while studying, she left the phone off hooks.			
Answer Options	A)	B)	C)	D)
	of hook	for the hook	off hooking	off the hook
Right Answer	D			

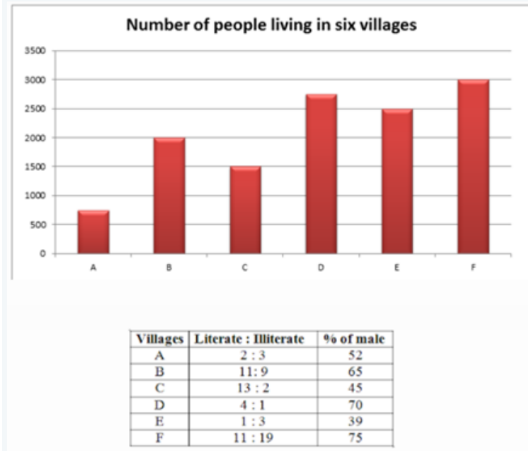
Question No. 14	In the following question choose the word which is the exact OPPOSITE of the given word. FICKLE			
Answer Options	A)	B)	C)	D)
	Courageous	Sincere	Steadfast	Humble
Right Answer	C			

Question No. 15	<p>In question below, the passage consists of six sentences. The first and sixth sentence are given in the correct places. The middle four sentences in each have been removed and jumbled up. These are labelled as P, Q, R and S. Find out the proper order for the four sentences.</p> <p>S1: In the middle of one side of the square sits the Chairman of the committee, the most important person in the room.</p> <p>P: For a committee is not just a mere collection of individuals.</p> <p>Q: On him rests much of the responsibility for the success or failure of the committee.</p> <p>R: While this is happening, we have an opportunity to get the 'feel' of this committee.</p> <p>S: As the meeting opens, he runs briskly through a number of formalities.</p> <p>S6: From the moment its members meet, it begins to have a sort nebulous life of its own.</p> <p>The Proper sequence should be:</p>			
Answer Options	A)	B)	C)	D)
	RSQP	QSRP	SQPR	PQRS
Right Answer	B			

Question
No. 16

Question nos. 16 to 20:

Following bar chart represents the number of people in 6 different villages (A, B, C, D, E and F) and the tabular column depicts the ratio of literate to illiterate people and percentage of male living in those villages.



If 40% of the female from village B is literate, then what is the percentage of male, who is illiterate from village B?

Answer Options	A) 38%	B) 35%	C) 37%	D) cannot be determined
Right Answer	C			

Question
No. 17

What is the percentage of literate people in all the six villages together?

Answer Options	A) 55%	B) 53%	C) 51%	D) cannot be determined
Right Answer	B			

Question
No. 18

What is the ratio between numbers of illiterate people from villages B, C & D to number of females from villages A, E & F?

Answer Options	A) 320:527	B) 527:330	C) 330:527	D) 527:320
Right Answer	C			

Question
No. 19

If 3% of female from village D & 5% of female from village E are literate then what is the total number of literate males from D & F together?

Answer Options	A) 1823	B) 1723	C) 1623	D) cannot be determined
Right Answer	D			

Question
No. 20

The number of females from villages A & C is how much percentage more or less than number of females from villages D & F?

Answer Options	A) 25.72%	B) 25.76%	C) 24.76%	D) 24.72%
Right Answer	C			

Question No. 21	A project plan results in a project schedule seems to be too long. If the project network diagram cannot change but extra personnel resources is available, what is the best thing to do?			
Answer Options	A)	B)	C)	D)
	Fast track the project	Level the resources	Crash the project	Any other option
Right Answer	C			

Question No. 22	Which of the following is not Project Management's goal			
Answer Options	A)	B)	C)	D)
	Keeping overall cost within the budget	Delivering the project/goods to the client at agreed time	Maintaining a satisfactory and well-functioning development	Avoiding customer/client complaints
Right Answer	D			

Question No. 23	You have recently been named as Project Manager of a new project under a Contract. The Project Management Unit (PMU) gave you the contract signed by the Customer and a Statement of Work and asked you to go on with initiation. Which document should you develop next?			
Answer Options	A)	B)	C)	D)
	Project Manager Plan	Milestone Schedule	Project Charter	Scope Statement
Right Answer	C			

Question No. 24	The analysis tool for a quality problem that involves selecting the problem, identifying major categories of potential causes and associating likely specific causes is			
Answer Options	A)	B)	C)	D)
	Pareto chart	Fishbone diagram	Scatter diagram	Check list
Right Answer	B			

Question No. 25	The Occupational Safety & Health Administration requires employers to have Hearing Conservation Plans if the average 8-hour noise exposure is more than			
Answer Options	A)	B)	C)	D)
	1000 dB	500 dB	105 dB	85 dB
Right Answer	D			

Question No. 26	Ammonia becomes an immediate danger to your life and health when it is present at the following level or greater			
Answer Options	A)	B)	C)	D)
	10 ppm	30 ppm	300 ppm	1000 ppm
Right Answer	C			

Question No. 27	Exposure to high levels of noise can lead to which of the following:			
Answer Options	A)	B)	C)	D)
	High blood pressure	Gastrointestinal problems	Chronic fatigue	All of the above
Right Answer	D			

Question No. 28	Which type of fire extinguishing system is most commonly used to protect areas containing valuable equipment such as data processing rooms, telecommunications switches, and process control rooms?			
Answer Options	A)	B)	C)	D)
	Fixed extinguishing systems	Portable extinguishing systems	Hose extinguishing systems	It's up to the discretion the employer
Right Answer	A			

Question No. 29	If you need to wear glasses with your eye or face protection, which of the following options is acceptable			
Answer Options	A)	B)	C)	D)
	Wearing prescription spectacles with side shields and protective lenses that meet safety requirements and also correct your vision	Wearing goggles that fit comfortably over your glasses	Wearing goggles that have corrective lenses mounted behind the protective lenses	All of the above
Right Answer	D			

Question No. 30	Under which Section of Environment Pollution Act, the CPCB can issue the directions directly to industries			
Answer Options	A)	B)	C)	D)
	Section 16	Section 18	Section 11	Section 5
Right Answer	D			

Question No. 31	Which of these divisions of Pollution Control Implementation deals with Air Polluting Industries			
Answer Options	A)	B)	C)	D)
	PCI - I	PCI - II	PCI - III	SSI & Law
Right Answer	B			

Question No. 32	The Kyoto Protocol is an international treaty which extends the United Nations Framework Convention on Climate Change (UNFCCC). In which year the convention held?			
Answer Options	A)	B)	C)	D)
	1987	1995	1992	1997
Right Answer	C			

Question No. 33	What is the harm from manipulation of Earth's Ozone layer?			
Answer Options	A)	B)	C)	D)
	The average temperature of Earth's surface will increase gradually	The Oxygen content of the atmosphere will decrease	Increased amount of Ultraviolet radiation will reach earth's surface	Sea level will rise as the polar ice caps will gradually melt
Right Answer	C			

Question No. 34	Which of the following would not represent the cash outflows for the business?			
Answer Options	A)	B)	C)	D)
	Purchase of building for cash	The sale of land for cash	Retirement of long-term debt	The payment of cash for dividends
Right Answer	B			

Question No. 35	Which one of the following tangible fixed assets would not normally be depreciated?			
Answer Options	A)	B)	C)	D)
	Buildings	Machinery	Land	Equipment
Right Answer	C			

Question No. 36	A Profit is earned if?			
Answer Options	A)	B)	C)	D)
	Assets exceed Expenditure	Income exceeds Expenditure	Cash Inflow exceeds Cash Outflow	Income exceeds Liabilities
Right Answer	B			

Question No. 37	Which of the following budgets is normally prepared first?			
Answer Options	A)	B)	C)	D)
	Cash budget	Sales budget	Merchandise purchases budget	Selling expense budget
Right Answer	B			

Question No. 38	What is the correct sequence in the formation of a contract?			
Answer Options	A)	B)	C)	D)
	Offer, acceptance, agreement, consideration.	Agreement, consideration, offer, acceptance.	Offer, agreement, consideration, acceptance.	Offer, acceptance, consideration, agreement.
Right Answer	D			

Question No. 39	Which of the following answers is most accurate description of arbitration?			
Answer Options	A)	B)	C)	D)
	An informal meeting between the parties involving a discussion to sort out the dispute	An adjudicative process where the parties submit their disputes for a binding decision to an impartial tribunal	A meeting between the parties where an impartial third party gives decision	An impartial umpire selected to decide after hearing the dispute from parties
Right Answer	B			

Question No. 40	Which of the following answers is not type of alternative dispute resolution?			
Answer Options	A)	B)	C)	D)
	Arbitration	Court proceedings	Conciliation	Mediation
Right Answer	B			

Question No. 41	The equation of state for n moles of an ideal gas is $PV = nRT$, where R is the universal gas constant and all other quantities have their usual meanings. What are the dimensions of R?			
Answer Options	A)	B)	C)	D)
	$M^0L^{-2}K^{-1}mol^{-1}$	$M^0L^2T^{-2}K^{-1}mol^{-1}$	$ML^2T^{-2}K^{-1}mol^{-1}$	$ML^{-2}T^{-2}K^{-1}mol^{-1}$
Right Answer	C			

Question No. 42	A cylindrical tube open at both ends has fundamental frequency n. If one of the ends is closed, the fundamental frequency will become			
Answer Options	A)	B)	C)	D)
	$n/2$	$2n$	$4n$	n
Right Answer	A			

Question No. 43	The speed of sound in a gas is V and the root mean square speed of the gas molecules is V_{rms} . If the ratio of the specific heats of the gas is 1.5, then the ratio of V: V_{rms} will be			
Answer Options	A)	B)	C)	D)
	1:2	1:3	$1:\sqrt{2}$	$1:\sqrt{3}$
Right Answer	C			

Question No. 44	Which of the following phenomena gives evidence of the molecular structure of the matter?			
Answer Options	A)	B)	C)	D)
	Brownian motion	Diffusion	Evaporation	All of these
Right Answer	D			

Question No. 45	Starting with the same initial conditions, an ideal gas expands from volume V_1 to V_2 in three different ways. The work done by the gas is W_1 if the process is purely isobaric, W_2 if the process is purely isochoric and W_3 if the process is purely adiabatic. Then			
Answer Options	A)	B)	C)	D)
	$W_1 > W_2 > W_3$	$W_2 > W_1 > W_3$	$W_1 > W_3 > W_2$	$W_3 > W_1 > W_2$
Right Answer	C			

Question No. 46	A vessel contains a mixture of 1 mole of oxygen and two moles of nitrogen at 300K. The ratio of the rotational kinetic energy per O_2 molecule to that per N_2 molecule is			
Answer Options	A)	B)	C)	D)
	1:1	1:2	2:1	Depends on the moment of inertia of the two molecules
Right Answer	A			

Question No. 47	In a test experiment on a model aeroplane in a wind tunnel, the flow speeds on the lower and upper surfaces of the wing are v and $\sqrt{2}v$ respectively. If the density of air is ρ and the surface area of the wing is A , the dynamic lift on the wing is given by			
Answer Options	A)	B)	C)	D)
	$(\rho v^2 A)/\sqrt{2}$	$(\rho v^2 A)/2$	$2\rho v^2 A$	$\sqrt{2}\rho v^2 A$
Right Answer	B			

Question No. 48	A boy whirls a stone in a horizontal circle 2m above the ground by means of a string 1.25m long. The string breaks and the stone flies off horizontally, striking the ground 10m away. What is the magnitude of the centripetal acceleration during circular motion? (Take $g=10\text{m/s}^2$)			
Answer Options	A)	B)	C)	D)
	400m/s^2	300m/s^2	200m/s^2	100m/s^2
Right Answer	C			

Question No. 49	Radium (with Atomic no. = 87, Mass No. = 221) undergoes radioactive decay with a half-life of 4 days. The probability that a Ra nucleus will disintegrate in 8 days is			
Answer Options	A)	B)	C)	D)
	1/4	3/4	1/2	1
Right Answer	B			

Question No. 50	A tunnel is dug along the diameter of the earth. An object is held in the tunnel at a distance x from the centre of the earth. The magnitude of the gravitational force on the object is proportional to			
Answer Options	A)	B)	C)	D)
	$1/x$	$1/x^2$	x	x^2
Right Answer	C			

Question No. 51	Hardness is the mechanical property related to strength and is a strong function of the _____ content of a metal.			
Answer Options	A)	B)	C)	D)
	Manganese	Chromium	Carbon	Iron
Right Answer	C			

Question No. 52	Activity sampling (L H C Tippet ,1934) is used in			
Answer Options	A)	B)	C)	D)
	CAD	FMS	Robotics	Work study
Right Answer	D			

Question No. 53	A critical path has _____ float.			
Answer Options	A)	B)	C)	D)
	Infinite	Zero	maximum	average
Right Answer	B			

Question No. 54	A critical path consumes _____ resources.			
Answer Options	A)	B)	C)	D)
	zero	minimum	maximum	Average
Right Answer	C			

Question No. 55	Fulkerson's rule is used in			
Answer Options	A)	B)	C)	D)
	Line of Balance (LOB)	Line Balancing	Project network	Linear Programming
Right Answer	C			

Question No. 56	Delphi method is associated with			
Answer Options	A)	B)	C)	D)
	Forecasting	Sequencing	MRP	MRP II
Right Answer	A			

Question No. 57	MAD (Mean Absolute Deviation) is involved in			
Answer Options	A)	B)	C)	D)
	Integer programming	Layout Design	Material handling	Forecasting
Right Answer	D			

Question No. 58	Travel chart is found application in			
Answer Options	A)	B)	C)	D)
	Dynamic Programming	Reliability	CAD (Computer Aided Design)	Plant layout
Right Answer	D			

Question No. 59	Smoothing constant finds application in			
Answer Options	A)	B)	C)	D)
	Forecasting	Work Study	Method Study	TQM (Total Quality Management)
Right Answer	A			

Question No. 60	Quick return ratio is associated with			
Answer Options	A)	B)	C)	D)
	Inventory Turnover ratio	Welding	Grinding machine	Shaping machine
Right Answer	D			

Question No. 61	Therbligs were suggested by			
Answer Options	A)	B)	C)	D)
	Abraham Maslow	F.W. Taylor	Gilbreth	Richard Bellman
Right Answer	C			

Question No. 62	PMTS stands for			
Answer Options	A)	B)	C)	D)
	Predetermined motion time standard	Project management total system	Production management Taylorian system	Post module time series
Right Answer	A			

Question No. 63	Slack variable represents			
Answer Options	A)	B)	C)	D)
	Dual variable	Basic variable	Used resource	Unused resource
Right Answer	D			

Question No. 64	Shadow price is associated with			
Answer Options	A)	B)	C)	D)
	Network analysis	Post optimality analysis	Replacement analysis	Break even analysis
Right Answer	B			

Question No. 65	Vogel's method finds application in			
Answer Options	A)	B)	C)	D)
	Ergonomics	Queuing problem	Transportation problem	Reliability problem
Right Answer	C			

Question No. 66	CRAFT is associated with			
Answer Options	A)	B)	C)	D)
	Quality planning	Cost control	Inventory control	Layout Planning
Right Answer	D			

Question No. 67	Degeneracy in an LPP occurs when one or more of basic variables assumes a value of			
Answer Options	A)	B)	C)	D)
	Zero	Negative sum	Positive sum	Infinity
Right Answer	A			

Question No. 68	A basic feasible solution of a transportation problem is obtained when number of occupied cells are: (where, m represents no. of sources, & n indicates no. of destinations)			
Answer Options	A)	B)	C)	D)
	$m+n-1$	$m+n+1$	$m-n+1$	$m-n-1$
Right Answer	A			

Question No. 69	Saddle point is found in			
Answer Options	A)	B)	C)	D)
	Scheduling theory	Game theory	Triple point	Breakdown Maintenance
Right Answer	B			

Question No. 70	Permeability test is done in			
Answer Options	A)	B)	C)	D)
	Welding	Forming	Extrusion	Foundry
Right Answer	D			

Question No. 71	Slip-stick phenomenon is primarily and predominantly found in			
Answer Options	A)	B)	C)	D)
	Sand casting phenomenon	Machine tools	Engineering materials	Bath tub curve
Right Answer	B			

Question No. 72	The usual ratio of forward stroke and return stroke is of the order of			
Answer Options	A)	B)	C)	D)
	1:2	2:3	3:2	3:5
Right Answer	C			

Question No. 73	What is Thermit welding?			
Answer Options	A)	B)	C)	D)
	It is the only welding process employing an exothermal chemical reaction for the purpose of developing a high temperature	It is the only LASER welding.	It is the only friction welding	It is the only Electron Beam Welding (EBM)
Right Answer	A			

Question No. 74	Wheel truing and dressing is done in			
Answer Options	A)	B)	C)	D)
	Single point turning tool	End milling cutter	Grinding wheel	Reaming wheel
Right Answer	C			

Question No. 75	The Young's modulus of Cemented carbide is nearly _____ times than that of steel.			
Answer Options	A)	B)	C)	D)
	Two	Three	Four	five
Right Answer	B			

Question No. 76	Element redundancy is always _____ to unit redundancy.			
Answer Options	A)	B)	C)	D)
	Inferior	Superior	Injurious	Fatal
Right Answer	B			

Question No. 77	Balance delay finds applications in			
Answer Options	A)	B)	C)	D)
	Line of Balance (LOB)	Line Balancing	Straight line depreciation	Group Technology (GT)
Right Answer	B			

Question No. 78	Silver-Meal heuristic is found in			
Answer Options	A)	B)	C)	D)
	Cost control	Inventory Control	Quality Control	Life testing
Right Answer	B			

Question No. 79	Floyd's algorithm finds application in			
Answer Options	A)	B)	C)	D)
	Preventive maintenance	Sales Volume & Revenue analysis	Shortest route problem	Longest route problem
Right Answer	C			

Question No. 80	Dijkstra's algorithm is associated with			
Answer Options	A)	B)	C)	D)
	Replacement analysis	Break even analysis	Mixed strategy	Shortest path problem
Right Answer	D			

Question No. 81	Context of organization clause is part of			
Answer Options	A)	B)	C)	D)
	ISO 9001:2015	ISO 9001:2016	ISO 9001:2014	ISO 9001:2017
Right Answer	A			

Question No. 82	What is MTBF?			
Answer Options	A)	B)	C)	D)
	Mean Time between Failure	Maintenance time between failure	Maintenance activity time between failure	Mode Time between Failure
Right Answer	A			

Question No. 83	If a machine planned to operate for 11 hrs, whereas there is 5 nos of breakdown, total time consume in breakdown is 1 hr, what is MTTR?			
Answer Options	A)	B)	C)	D)
	0.20 hrs	0.25 Hrs	0.30 Hrs	0.22 hrs
Right Answer	A			

Question No. 84	Return on Investment is calculated as			
Answer Options	A)	B)	C)	D)
	Return on Investment is calculated as	$(\text{Income} / \text{cost}) \times 100\%$	$(\text{Income} - \text{loss} / \text{cost}) \times 100\%$	$(\text{Income} / (\text{cost} - \text{value})) \times 100\%$
Right Answer	B			

Question No. 85	Cause and effect diagram was developed by			
Answer Options	A)	B)	C)	D)
	Kaoru Ishikawa	Dr. J M Juran	Dr. Genichi Taguchi	Prof P C Mahalanobis
Right Answer	A			

Question No. 86	What are assumption in theory of pure bending?			
Answer Options	A)	B)	C)	D)
	The value of Young's modulus is the same for the beam material in tension as well as compression.	The resultant pull or thrust on a transverse section of the beam is zero.	Both A & B	None of these
Right Answer	C			

Question No. 87	A riveted joint in which one plate overlap the other and the two plates are then riveted together is a			
Answer Options	A)	B)	C)	D)
	Riveted lap joint	Butt Joint	Single butt joint	Double lap joint
Right Answer	A			

Question No. 88	Stress concentration factor for reinforced butt weld is			
Answer Options	A)	B)	C)	D)
	1.2	1.3	1.22	1.32
Right Answer	A			

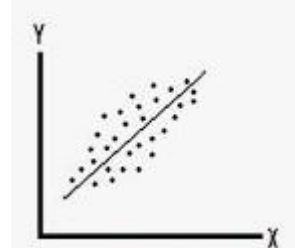
Question No. 89	Who gave the 14 points for Quality improvement to the top management?			
Answer Options	A)	B)	C)	D)
	Dr. W E Deming	Dr.K Ishikawa	Prof P C Mahalanobis	Dr.J M Juran
Right Answer	A			

Question No. 90	Who is known as father of Quality Control Circle?			
Answer Options	A)	B)	C)	D)
	Dr. Shigeo Shingo	Dr. Genichi Taguchi	Dr. Junji Noguchi	Dr. K Ishikawa
Right Answer	D			

Question No. 91	Brain Storming was developed and popularized by:			
Answer Options	A)	B)	C)	D)
	Vilfredo Pareto	Henry Ford	Alex Osborn	Dr. W A Shewhart
Right Answer	C			

Question No. 92	On a control chart, how far the control limits set from the mean?			
Answer Options	A)	B)	C)	D)
	+/- 1σ	+/- 3σ	+/- 6σ	None of above
Right Answer	B			

Question No. 93	The purpose of Pareto Analysis is to			
Answer Options	A)	B)	C)	D)
	Identify Root Cause	Distinguish between vital few and useful many	Distinguish between vital many and useful few	None of above
Right Answer	B			

Question No. 94	What does the scatter diagram indicate as shown in the figure?			
				
Answer Options	A)	B)	C)	D)
	Possibility of positive correlation	Positive Correlation	Negative Correlation	Not clear correlation
Right Answer	B			

Question No. 95	Steam is not considered as perfect gas as			
Answer Options	A)	B)	C)	D)
	It is a mixture of steam and moisture	It is a mixture of dry steam and moisture	It is a mixture of dry steam(gas) and moisture(water)	Both C) and D)
Right Answer	D			

Question No. 96	The Isothermal process is a hyperbolic process of superheated state of steam that is,			
Answer Options	A)	B)	C)	D)
	Product of pressure and volume remain constant	Summation of pressure and volume remain constant	Product of temperature and volume remain constant	Product of pressure and temperature remain constant
Right Answer	A			

Question No. 97	A microscopically homogeneous mixture of the atoms of two or more elements, one of which is essentially a metal and mixture exhibits all metallic properties is a			
Answer Options	A)	B)	C)	D)
	Liquid Solution	Solid Solution	Solution	None of these
Right Answer	B			

Question No. 98	Hardening or quenching of steel is carried out to produce ----- to harden the steel.			
Answer Options	A)	B)	C)	D)
	Austenitic Structure	Critical structure	Perlite Structure	Martensitic Structure
Right Answer	D			

Question No. 99	In India we are following Indian standard ----- for system of limits and fits.			
Answer Options	A)	B)	C)	D)
	IS 818	IS 11919	IS 9199	IS 919
Right Answer	D			

Question No. 100	The parallelism of the working surface of ----- optical flat can be tested by Fizeau Interferometer method.			
Answer Options	A)	B)	C)	D)
	Type A	Type B	Type C	Type D
Right Answer	A			