

CII – iPATE 2.0 (2021)

Computer Based PAN India Examination

Category: GRADUATE ENGINEER (ENTRY LEVEL)

Engineering Discipline: TEXTILE TECHNOLOGY

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	Virus and Aarti started a car journey from Chandigarh to Delhi, which are 288 km apart. Virus took 12 hours more than Aarti to complete the journey. Had Virus 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 Virus 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			

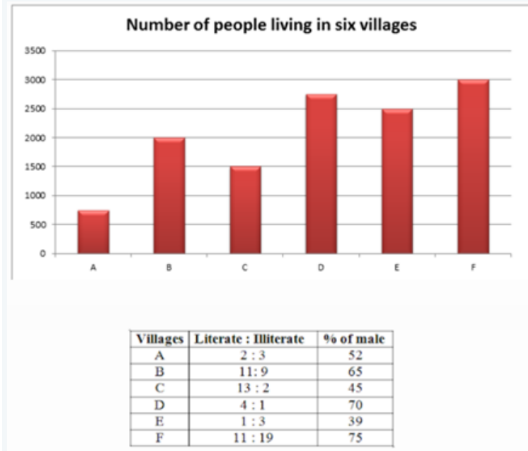
Question No. 14	In the following question choose the word which is the exact OPPOSITE of the given word. FICKLE			
Answer Options	A)	B)	C)	D)
	Courageous	Sincere	Steadfast	Humble
Right Answer	C			

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)	B)	C)	D)
38%	35%	37%	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)	B)	C)	D)
55%	53%	51%	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)	B)	C)	D)
320:527	527:330	330:527	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)	B)	C)	D)
1823	1723	1623	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)	B)	C)	D)
25.72%	25.76%	24.76%	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)
	$M^0L^2T^{-2}K^{-1}mol^{-1}$	$M^0L^2T^{-2}K^{-1}mol^{-1}$	$ML^2T^{-2}K^{-1}mol^{-1}$	$ML^{-2}T^{-2}K^{-1}mol^{-1}$
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) $W_1 > W_2 > W_3$	B) $W_2 > W_1 > W_3$	C) $W_1 > W_3 > W_2$	D) $W_3 > W_1 > W_2$
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) 1:1	B) 1:2	C) 2:1	D) 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) $(\rho v^2 A)/\sqrt{2}$	B) $(\rho v^2 A)/2$	C) $2\rho v^2 A$	D) $\sqrt{2}\rho v^2 A$
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) 400m/s^2	B) 300m/s^2	C) 200m/s^2	D) 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) 1/4	B) 3/4	C) 1/2	D) 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) $1/x$	B) $1/x^2$	C) x	D) x^2
Right Answer	C			

Question No. 51	According to British standard (B.S. 2010:1953), 8- or 16-unit packages randomly to be selected and few skeins from each unit to be taken for checking the yarn count. What should be the sample size of skeins?			
Answer Options	A)	B)	C)	D)
	1	5	16	None of these
Right Answer	C			

Question No. 52	In the given comb sorter diagram of cotton, find the effective length if $OR=0.5 OQ$, $OT=0.25 OS$, $TR'=0.5 TT'$, $OV=0.25 OU$.			
Answer Options	A)	B)	C)	D)
	UU'	SS'	VV'	TT'
Right Answer	C			

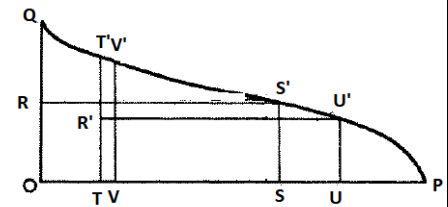


Figure : Geometrical analysis of comb sorter diagram

Question No. 53	A Digital Fibrograph recorded the 2.5% span length of 26.5 mm. The Uniformity Ratio is calculated as 41.5%. Find the 50% span length in mm?			
Answer Options	A)	B)	C)	D)
	6	11	22	26
Right Answer	B			

Question No. 54	Peirce's 'The heart-loop test' is used to measure fabric _____?			
Answer Options	A)	B)	C)	D)
	Drape	Crease recovery angle	Abrasion	Bending length
Right Answer	D			

Question No. 55	Find the cover factor of the fabric from the given data. Ends per inch – 143 Warp count – 44s Picks per inch – 36 Weft count – 50s			
Answer Options	A)	B)	C)	D)
	24.73	22.73	26.73	28.00
Right Answer	B			

Question No. 56	A customer needs to test a fabric sample for its load-bearing capacity in multiple directions. Which test will you recommend?			
Answer Options	A)	B)	C)	D)
	Abrasion	Tensile	Tearing	Bursting
Right Answer	D			

Question No. 57	A filling used in a piece of fabric was having 15% C.V. without any periodic variations. After finding some defect in the fabric, it was analyzed that there was a periodic variation with 8% amplitude. What would be the actual C.V. in the yarn to the nearest value?			
Answer Options	A)	B)	C)	D)
	15%	16%	23%	11.5%
Right Answer	B			

Question No. 58	A garment house received the fabric for apparel manufacturing. The manager instructed the lab technician to check whether the fabric orientation is suitable for a graceful appearance. What fabric property should be reported by the lab technician?			
Answer Options	A)	B)	C)	D)
	Crease recovery angle	Pilling	Abrasion	Drape coefficient
Right Answer	D			

Question No. 59	Which of these tests will measure the wettability of a fabric?			
Answer Options	A)	B)	C)	D)
	Crease recovery angle	Contact angle	Bending length	Shrinkage test
Right Answer	B			

Question No. 60	Which type of periodic variation can be considered for a yarn, if the wavelength is 10 to 100 times the length of the fibre?			
Answer Options	A)	B)	C)	D)
	Short-term variation	Medium-term variation	Long-term variation	All of these
Right Answer	B			

Question No. 61	Kapok, Kevlar, Asbestos, Nettle are few examples of available fibres. Which of these fibres is a natural fibre having resistance to heat and burning?			
Answer Options	A)	B)	C)	D)
	Kapok	Kevlar	Asbestos	Nettle
Right Answer	C			

Question No. 62	You are asked to purchase biodegradable fibre for specific use. The available fibres with the supplier are Polyester, Polypropylene, Glass, and Linen. Choose the correct option for a bio-degradable fibre.			
Answer Options	A)	B)	C)	D)
	Polyester	Polypropylene	Glass	Linen
Right Answer	D			

Question No. 63	What is the value of moisture regain in percentage for Viscose fibre at 65% R.H.?			
Answer Options	A)	B)	C)	D)
	11-13	0.04-0.01	14-16	7-8
Right Answer	A			

Question No. 64	<p>Choose the right option for the given structure of a fibre?</p>			
Answer Options	A)	B)	C)	D)
	Nylon	PET	PAN	PVC
Right Answer	B			

Question No. 65	<p>'R' is the reason for assertion 'A' in the following question.</p> <p>[A]- In melt spinning, the degradation temperature must be lower than the melting temperature.</p> <p>[R]- Polyethylene terephthalate is suitable for melt spinning.</p>			
Answer Options	A)	B)	C)	D)
	[A] correct, [R] wrong	[A] correct, [R] correct	[A] wrong, [R] wrong	[A] wrong, [R] correct
Right Answer	D			

Question No. 66	Why does texturizing plant require air conditioning though the process is carried out at an elevated temperature?			
Answer Options	A)	B)	C)	D)
	For the comfort of operators.	For the safety of the machine.	For uniform texturizing.	None of these.
Right Answer	C			

Question No. 67	Which of these characterization techniques is used to find the degradation temperature of a fibre?			
Answer Options	A)	B)	C)	D)
	SEM	IR spectroscopy	X-ray diffraction	TGA
Right Answer	D			

Question No. 68	<p>Choose the correct option from the given characterization techniques for the above curve?</p>			
Answer Options	A)	B)	C)	D)
	DSC	IR spectroscopy	X-ray spectroscopy	TGA
Right Answer	A			

Question No. 69	Which fibre is suitable for replacing steel in manufacturing the body of aircraft?			
Answer Options	A)	B)	C)	D)
	Cotton	Silk	Carbon	Nylon
Right Answer	C			

Question No. 70	Which of these fibres is not considered as a polymer?			
Answer Options	A)	B)	C)	D)
	Cotton	Viscose	Nylon	Wool
Right Answer	D			

Question No. 71	How many strikers should a beater have, running with 750 rpm and producing 180 kg/h of tuft with an opening intensity of 200 mg?			
Answer Options	A)	B)	C)	D)
	10	20	30	200
Right Answer	B			

Question No. 72	What type of feeding system has been used to replace conventional lap feeding with carding machines?			
Answer Options	A)	B)	C)	D)
	Chhute feed	Cute feed	Chute feed	Tuche feed
Right Answer	C			

Question No. 73	Tandem cards produce better quality fibres than single cards. What is the reason for very few commercial use of tandem cards?			
Answer Options	A)	B)	C)	D)
	High cost	More fibre breakage	More waste generation	None of these
Right Answer	A			

Question No. 74	Following machines are used in the short-staple spinning process to convert the fibre to yarn. Kindly arrange them in a sequence as per process flow. (a) Speed frame, (b) Carding, (c) Draw frame, (d) Blow room, (e) Ring frame			
Answer Options	A)	B)	C)	D)
	d, b, c, a, e	a, b, c, d, e	b, c, d, e, a	c, d, e, a, b
Right Answer	A			

Question No. 75	'R' is the reason for assertion 'A' in the following question. [A]- Bottom rollers are directly driven in the drafting system, and top rollers add pressure to the fibre beards. [R]- Generally, roller slip is associated with the input of higher mass per unit length.			
Answer Options	A)	B)	C)	D)
	[A] correct, [R] wrong	[A] correct, [R] correct	[A] wrong, [R] wrong	[A] wrong, [R] correct
Right Answer	B			

Question No. 76	For a combing process, 580kg/h of sliver with a linear density of 70 ktex is fed. One comber with 8 heads runs at 80% efficiency with 350 nips per minute and a 7.5 mm/nip feeding rate. For 18% noil removal, how many such combers per hour is required to consume the feedstock?			
Answer Options	A) 5	B) 10	C) 15	D) 20
Right Answer	B			

Question No. 77	What does cause the winding of the roving into the bobbin in a speed frame?			
Answer Options	A) Spindle lead	B) Bobbin lead	C) Both	D) None of these
Right Answer	B			

Question No. 78	What is the relation of a traveler mass to ring diameter in a ring spinning with a given constant balloon height and yarn count?			
Answer Options	A) No relation	B) Equal to	C) Directly proportional	D) Inversely proportional
Right Answer	D			

Question No. 79	Which spinning method deals with 'Periloc' and 'Bobtex' processes?			
Answer Options	A) Ring spinning	B) Open-end spinning	C) Twistless spinning	D) Core spinning
Right Answer	C			

Question No. 80	Two types of yarn with English counts, 'X' and 'Y,' are fed to a TFO machine. What will be the resultant count of TFO yarn?			
Answer Options	A) $\frac{XY}{X+Y}$	B) $\frac{X+Y}{2}$	C) \sqrt{XY}	D) $\frac{X+Y}{XY}$
Right Answer	A			

Question No. 81	Select the correct winding machine, which must have an auto doffing system rather than auto creeling?			
Answer Options	A) Cone Winding	B) Cheese Winding	C) Beam Winding	D) Pirn Winding
Right Answer	D			

Question No. 82	Which yarns are suitable for draw warping?			
Answer Options	A) Cotton	B) Linen	C) Polyester staple	D) Polyester filament
Right Answer	D			

Question No. 83	Which one of these materials is not used in slashing?			
Answer Options	A)	B)	C)	D)
	Starch	PVA	CMC	NaOH
Right Answer	D			

Question No. 84	Which of these weaving motions use a torsion rod?			
Answer Options	A)	B)	C)	D)
	Shedding	Picking	Beating	Let off
Right Answer	B			

Question No. 85	Unlimited patterning possibilities were obtained on Jacquard weaving. How did the term "Jacquard" come?			
Answer Options	A)	B)	C)	D)
	Name of Inventor	Name of invented region	Name of invented organization	No history
Right Answer	A			

Question No. 86	<p>'R' is the reason for assertion 'A' in the following question.</p> <p>[A]- Monofilament yarns are most suitable for Airjet weaving.</p> <p>[R]- A low friction obtained between the air and smooth surface of monofilament.</p>			
Answer Options	A)	B)	C)	D)
	[A] correct, [R] wrong	[A] correct, [R] correct	[A] wrong, [R] wrong	[A] wrong, [R] correct
Right Answer	D			

Question No. 87	How is the tractive force in a water jet loom getting affected?			
Answer Options	A)	B)	C)	D)
	Viscosity of water	The roughness of filling yarn	Length of filling yarn	All of these
Right Answer	D			

Question No. 88	Which will be the correct knitting machine to manufacture a Rib fabric?			
Answer Options	A)	B)	C)	D)
	Only on Rib knitting	Only on Interlock knitting	Both rib knitting and interlock knitting	None of these
Right Answer	C			

Question No. 89	Find the areal density of cotton fabric in g/m ² with given data. Warp count = 25 tex, end/cm = 40, warp crimp = 6% Weft count = 15 tex, picks/cm = 28, weft crimp = 8%.			
Answer Options	A) 151.36	B) 131.36	C) 121.36	D) 101.36
Right Answer	A			

Question No. 90	Select the end-use of a huck a back weave from the given options.			
Answer Options	A) Plain fabric	B) Satin fabric	C) Twill fabric	D) Toweling fabric
Right Answer	D			

Question No. 91	What would be the byproduct of a silk processing industry?			
Answer Options	A) Sericin	B) Fibroin	C) Keratin	D) Lignin
Right Answer	A			

Question No. 92	Which processing industry uses 'Carbonization as a pretreatment process?			
Answer Options	A) Silk	B) Jute	C) Cotton	D) Wool
Right Answer	D			

Question No. 93	Wash fastness of which dyes is superior on cotton fabric?			
Answer Options	A) Direct	B) Reactive	C) Vat	D) Acid
Right Answer	C			

Question No. 94	Which of these chemicals are not used as a bleaching agent for cotton?			
Answer Options	A) NaOCl	B) H ₂ O ₂	C) NaClO ₂	D) NaCl
Right Answer	D			

Question No. 95	What would be the concentration of caustic soda solution for mercerizing cotton?			
Answer Options	A) 0.02	B) 0.20	C) 2.00	D) 20.00
Right Answer	D			

Question No. 96	Which of these printing machines will be your suggestion for a higher rate of production?			
Answer Options	A)	B)	C)	D)
	Hand block	Flat bed	Rotary	Digital
Right Answer	C			

Question No. 97	Which of these colorants in printing produce poor rubbing fastness?			
Answer Options	A)	B)	C)	D)
	Reactive	Disperse	Vat	Pigment
Right Answer	D			

Question No. 98	Which of these fabrics is inherently more fire retardant?			
Answer Options	A)	B)	C)	D)
	Cotton	Jute	Wool	Silk
Right Answer	C			

Question No. 99	If you are asked to use cellulase enzyme during the wet processing of cotton fabric, where will its correct application be?			
Answer Options	A)	B)	C)	D)
	Desizing	Scouring	Bleaching	Bio-polishing
Right Answer	D			

Question No. 100	A two-fold yarn is made of the component yarns with the same linear density. If the component yarn radius is 0.0585 mm, find the two-fold yarn count in Ne (English system).			
Answer Options	A)	B)	C)	D)
	20	30	40	60
Right Answer	B			