CII – iPATE 1.0 (2020)

Computer Based PAN India Examination

Category: GRADUATE ENGINEER (ENTRY LEVEL)

Engineering Discipline: TEXTILE ENGINEERING

Questions & Answers

(Reviewed, Revised & Published dtd. 20.01.2021)

Paper Structure

Question Nos.	Sections & Topics		Marks
1 to 20	Section I : Cognitive Abilities	• Quantitative Aptitude • Analytical Reasoning • Data Interpretation • English Communication	20
21 to 40	Section II : Professional Abilities	• Project Management • Health, Safety & Risk Management • Environmental Laws • Social Responsibility & Ethics • Finance & Accounts • Legal, 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	Neha goes for a walk between 4 am and 5 am. After coming back, she found that the hour hand and the minute hand of her watch had exchanged their positions. How much time(approx.) did she spend on her walk?			
Answer Options	A)	B)	C)	D)
	55 min	55:38 min	55:54 min	55:46 min
Right Answer	B			

Question No. 2	4 red, 6 green and 5 white flowers are in a bag. 3 flowers are taken together. What is the probability of getting 1 white and 2 green flowers?			
Answer Options	A)	B)	C)	D)
	1/5	15/91	3/91	3/11
Right Answer	B			

Question No. 3	Tony, Monu and James completed a work together in 36 days and received a total payment of Rs. 54000. Tony took half of the total money, Monu took one third and James took remaining. In how many days, Tony and James would have finished the work if Monu was not working?			
Answer Options	A)	B)	C)	D)
	72 days	54 days	96 days	64 days
Right Answer	B			

Question No. 4	A shopkeeper purchased 15 kg of variety A rice at Rs. X per kg and 10 kg of variety B rice at Rs. (X + 5) per kg. The shopkeeper sold the whole quantity of variety A rice at 10% profit and that of variety B rice at 20% profit. The total selling price of variety A rice was Rs. 30 more than that of variety B rice. Had the two varieties been mixed and sold at an overall profit of 20%, what would have been the selling price (per kg)?			
Answer Options	A)	B)	C)	D)
	Rs. 26.40	Rs. 23.20	Rs. 24.20	Rs. 25.00
Right Answer	A			

Question No. 5	A club has 256 members of whom 144 can play football, 123 can play tennis, and 132 can play cricket. Moreover, 58 members can play both football and tennis, 25 can play both cricket and tennis, while 63 can play both football and cricket. If every member can play at least one game, then the number of members who can play only tennis is			
Answer Options	A)	B)	C)	D)
	32	43	38	45
Right Answer	B			

Question No. 6	Fill up the following series: 5, 25, 7,_____, 9, 19			
Answer Options	A)	B)	C)	D)
	23	22	25	32
Right Answer	B			

Question No. 7	**The question is followed by three statements I, II, and III. Read the question and the statements carefully and choose your answer according to which set of the statement(s) is/are sufficient to answer the question.** What is the area of the rectangle? I. The ratio of length to breadth of the rectangle is 35 : 12. II. The perimeter of the rectangle is 188 cm. III. The length of diagonal of the rectangle is 74 cm			
Answer Options	A)	B)	C)	D)
	I and II only	I and III only	(I and II) or (II and III)	Any two of the three
Right Answer	D			

Question No. 8	**The question below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and give answer:** What is the sum of the age of Ram and Mohan? Statement I : The age of Ram is 6 years more than the age of Mohan. Statement II : 40% of the age of Mohan is equal to 30% of the age of Ram. Statement III : The ratio between half of the age of Ram and one third of the age of Mohan is 2 : 1.			
Answer Options	A)	B)	C)	D)
	Either statement III alone or statements I and II together are sufficient.	Only statement III is sufficient	Only statement I and II are sufficient	Only statement I, II, and III are sufficient
Right Answer	C			

Question No. 9	Mohan is the Son of Arun's Father's sister. Prakash is the son of Reva, who is the mother of Vikas and Grandmother of Arun. Pranab is the father of Neela and the grandfather of Mohan. Reva is the wife of Pranab. How is the wife of Vikas related to the neela?			
Answer Options	A)	B)	C)	D)
	Sister	Sister - In - Law	Niece	None of The Above
Right Answer	B			

Question No. 10	**In the following question, there is a certain relationship between two given words on one side of:: and one word is given on another side of:: while another word is to be found from the given alternatives having the same relationship with this word as the words of the given pair bear. Choose the correct alternative.** _____ : trail :: grain : grail			
Answer Options	A)	B)	C)	D)
	train	path	wheat	holy
Right Answer	A			

Question No. 11	**Given below are four jumbled sentences. Out of the given options pick the one that gives their correct order.** A: Only natural dyes are used in Kalamkari and it involves several steps. B: There are two distinctive styles of Kalamkari in India. C: They are the Sri kalahasti style and the Machlipatnam style. D: Kalamkari is a type of hand-painted or block-printed cotton textile, produced in the Indian States of Andhra Pradesh and Telangana.			
Answer Options	A)	B)	C)	D)
	CBDA	DABC	ACBD	DCBA
Right Answer	B			

Question No. 12	What is the antonym of MOROSE			
Answer Options	A)	B)	C)	D)
	overawed	agitated	cherubic	cheerful
Right Answer	D			

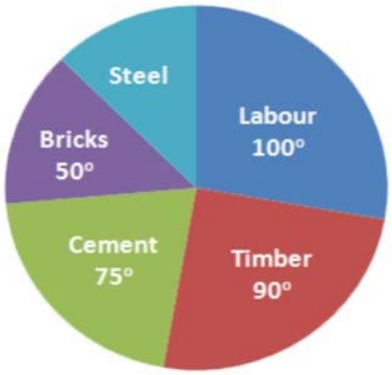
Question No. 13	What is the synonym of ERRONEOUS			
Answer Options	A)	B)	C)	D)
	Enormous	Wrong	Erased	Weak
Right Answer	B			

Question No. 14	A frustrated old man, Bandi thakur was never tried of (1)_____ the exploits of his ancestors, with a little (2) _____ he would lapse into a reminiscent mood, push back the loosely tied turban from his close-cropped grizzled hair and start a familiar story, improvising (3)_____ details which, to the mirth of his audience, always kept changing with every recounting.			
Answer Options	A)	B)	C)	D)
	(1) criticizing, (2) prompting, (3) sincere	(1) extolling, (2) advising, (3) rational	(1) invoking, (2) arguing, (3) fanciful	(1) extolling, (2) prompting, (3) fanciful
Right Answer	D			

Question No. 15	Even my goalies and the policemen, who have arrested me or (1)_____ me as a prisoner from place to place have been kind to me, and much of the (2) _____ of conflict and the sting of goal-life has been (3) _____ because of this human touch.			
Answer Options	A)	B)	C)	D)
	(1) safeguarded, (2) kindness, (3) egged on	(1) escorted, (2) affinity, (3) toned down	(1) abandoned, (2) bitterness, (3) pumped up	(1) escorted, (2) bitterness, (3) toned down
Right Answer	D			

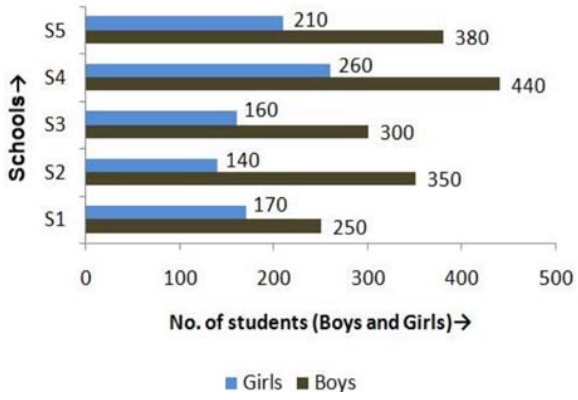
<table>
<tr><td>Question No. 16</td><td colspan="4">The pie chart shows the total expense of Rs 450000 to construct a house.

The cost of steel is

 
</td></tr>
<tr><td rowspan="2">Answer Options</td><td>A)</td><td>B)</td><td>C)</td><td>D)</td></tr>
<tr><td>Rs 55000</td><td>Rs 56250</td><td>Rs 60000</td><td>Rs 62500</td></tr>
<tr><td>Right Answer</td><td colspan="4">B</td></tr>
</table>

<table>
<tr><td>Question No. 17</td><td colspan="4">The following bar graph shows the number of boys and girls of class X of 5 different schools.

Find the difference between the number of boys and girls of schools S2 and S3 together

 
</td></tr>
<tr><td rowspan="2">Answer Options</td><td>A)</td><td>B)</td><td>C)</td><td>D)</td></tr>
<tr><td>300</td><td>350</td><td>400</td><td>450</td></tr>
<tr><td>Right Answer</td><td colspan="4">B</td></tr>
</table>

<table>
<tr><td>Question No. 18</td><td colspan="4">Study the tables carefully and answer the question that follow: Number of candidates (in lakhs) appearing in an entrance examination from six different states and the ratio of male candidates and female candidates in the same

The number of male candidates from Andhra Pradesh and Haryana together is what percent of the total number of female candidates from Bihar?
<table><tr><th rowspan="2">State</th><th rowspan="2">Number of candidates</th><th colspan="2">Ratio</th></tr><tr><th>Male</th><th>Female</th></tr><tr><td>Andhra Pradesh</td><td>1.85</td><td>3</td><td>2</td></tr><tr><td>Assam</td><td>2.73</td><td>7</td><td>5</td></tr><tr><td>Telangana</td><td>1.25</td><td>7</td><td>3</td></tr><tr><td>Odisha</td><td>3.14</td><td>5</td><td>3</td></tr><tr><td>Haryana</td><td>1.08</td><td>4</td><td>5</td></tr><tr><td>Bihar</td><td>2.27</td><td>1</td><td>3</td></tr></table></td></tr>
<tr><td rowspan="2">Answer Options</td><td>A)</td><td>B)</td><td>C)</td><td>D)</td></tr>
<tr><td>98.41%</td><td>48.45%</td><td>95.49%</td><td>93.39%</td></tr>
<tr><td>Right Answer</td><td colspan="4">D</td></tr>
<tr><td>NOTE</td><td colspan="4">Question was displayed incorrectly at candidates' terminals. Hence '1' mark has been given to all candidates, who attempted or not.</td></tr>
</table>

<table>
<tr><td>Question No. 19</td><td colspan="4">Read the following information carefully and answer the given question.

i. Rajesh, Raju and Pijush are intelligent.
ii. Rajesh, Shib and Hari are hard-working.
iii. Shib, Pijush and Hari are honest.
iv. Rajesh, Raju and Hari are ambitious.

Which of the following person is neither honest nor hard-working but is ambitious?</td></tr>
<tr><td rowspan="2">Answer Options</td><td>A)</td><td>B)</td><td>C)</td><td>D)</td></tr>
<tr><td>Shib</td><td>Pijush</td><td>Raju</td><td>Hari</td></tr>
<tr><td>Right Answer</td><td colspan="4">C</td></tr>
</table>

<table>
<tr><td>Question No. 20</td><td colspan="4">Read the following information carefully and answer the following question.

'A + B' means 'A is the father of B'; 'A - B' means 'A is the wife of B'; 'A x B' means 'A is the brother of B'; 'A ÷ B' means 'A is the daughter of B'.

If P ÷ R + S + Q, which of the following is true?</td></tr>
<tr><td rowspan="2">Answer Options</td><td>A)</td><td>B)</td><td>C)</td><td>D)</td></tr>
<tr><td>P is the daughter of Q</td><td>Q is the aunt of P</td><td>P is the aunt of Q</td><td>P is the mother of Q</td></tr>
<tr><td>Right Answer</td><td colspan="4">C</td></tr>
</table>

Question No. 21	A management point in a Work Breakdown Structure (WBS) used to consolidate and process work package data and forward the result to the project management is called _____			
Answer Options	A)	B)	C)	D)
	Control account	Chart of the account	Control limit	Account limit
Right Answer	A			
NOTE	Question was displayed incorrectly at candidates' terminals. Hence '1' mark has been given to all candidates, who attempted or not.			

Question No. 22	Various activities of a project are shown on a Bar Chart by _____			
Answer Options	A)	B)	C)	D)
	Vertical line	Horizontal line	Dots	Crosses
Right Answer	B			

Question No. 23	The difference between the time avail to do a job and time required to do the job is known as _____			
Answer Options	A)	B)	C)	D)
	Event	Float	Duration	Constraints
Right Answer	B			

Question No. 24	Gantt Chart is commonly used for _____			
Answer Options	A)	B)	C)	D)
	Routing	Scheduling	Follow up	Inspection and quality control
Right Answer	B			

Question No. 25	The following symbol is used when something in your workplace is 			
Answer Options	A)	B)	C)	D)
	Chemical Weapon	Biohazard	Toxic Substance	Radiation Danger
Right Answer	B			

Question No. 26	What is the leading cause of death on construction sites?			
Answer Options	A)	B)	C)	D)
	Struck by object	Falls	Caught-in or -between	Electrocutions Hazardous Materials
Right Answer	B			

Question No. 27	What violations are most commonly cited by OSHA?			
Answer Options	A)	B)	C)	D)
	Hazard communications	Scaffolding	Fall protection	Respiratory protection
Right Answer	C			

Question No. 28	_____ is best suited to extinguishing oil or flammable liquid fire			
Answer Options	A)	B)	C)	D)
	Soda acid	Vaporizing liquid	Foam	Dry chemical
Right Answer	C			

Question No. 29	Out of the 37 countries, which country still not ratified the second commitment known as the Doha amendment to the Kyoto Protocol?			
Answer Options	A)	B)	C)	D)
	USA	Canada	Norway	Ukraine
Right Answer	A			

Question No. 30	The Ministry also serves as the nodal agency in the country for the which of these organisations?			
Answer Options	A)	B)	C)	D)
	United Nations Environment Programme (UNEP)	South Asia Co-operative Environment Programme (SACEP)	International Centre for Integrated Mountain Development (ICIMOD)	All of the above
Right Answer	D			

Question No. 31	There are many benefits to implementing an EMS. These include a potential for			
Answer Options	A)	B)	C)	D)
	Reduction in waste production	The avoidance in use, and costly disposal of, other hazardous or potentially polluting materials	A planned approach to compliance with regulations and the consequential reduced risk of prosecutions and fines.	All of the above
Right Answer	D			

Question No. 32	Which of the following does not contribute to the development of a manager's standard of ethics?			
Answer Options	A)	B)	C)	D)
	competitor behaviours	society's norms and values	individual life experiences	environmental situations
Right Answer	A			

Question No. 33	Which is the approach to corporate planning?			
Answer Options	A)	B)	C)	D)
	Customers and workers satisfaction	Planning skills	Optimising	All of the above
Right Answer	D			

Question No. 34	Which one of the following is not principle business ethics?			
Answer Options	A)	B)	C)	D)
	Principle of universality	Principle of humanity	Principle of autonomy	Principle of dissatisfaction
Right Answer	D			

Question No. 35	Which of the following is a definition for variable costs?			
Answer Options	A)	B)	C)	D)
	Costs that remain the same whatever the level of output	Costs that contain a fixed and variable element	Costs that vary directly with the number of units produced	Costs that will remain fixed as output increases until the activity reaches a level where the costs have to increase sharply
Right Answer	C			

Question No. 36	Which of the following is a definition of break-even point?			
Answer Options	A)	B)	C)	D)
	The difference between the selling price of a product and the variable costs incurred in producing that product	The fixed plus variable costs of the business	The situation where neither a profit nor a loss is made	The situation where a profit is made
Right Answer	C			

Question No. 37	Which of the following is not a benefit of budgeting?			
Answer Options	A)	B)	C)	D)
	It promotes study, research, and a focus on the future	It is a source of motivation	It will prevent net losses from occurring	It is a mean of coordinating business activities
Right Answer	C			

Question No. 38	What is the obligation of the peaceful settlement of dispute?			
Answer Options	A)	B)	C)	D)
	It is an obligation of result i.e. States are under a strict obligation to resolve the disputes at the earliest	It is an obligation of conduct i.e. States have an obligation to try to resolve the disputes via peaceful mean. That does not entail an obligation to resolve the dispute	It is an intention to act immediately as per norms of International Law and all States have a legal interest to safeguard its application in any dispute	It is an obligation which concerns solely International courts and tribunal.
Right Answer	B			

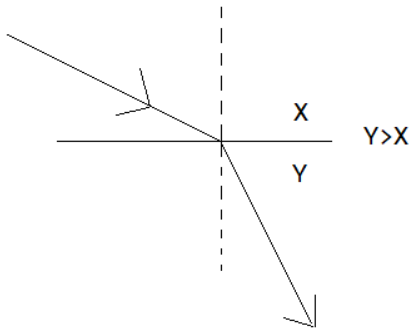
Question No. 39	What is the primary function of the Law of Tort?			
Answer Options	A)	B)	C)	D)
	Punishment of a wrong motivator	Clarification of the human rights of the parties	Compensating the claimant	Spreading of losses throughout the parties
Right Answer	C			

Question No. 40	FIDIC published a completely new suite of contracts in various coloured books which contain different conditions. What condition is mentioned in Red Book?			
Answer Options	A)	B)	C)	D)
	Conditions of contract for Construction project.	Conditions of contract for EPC/ Turnkey project.	Conditions of contract for Plant & Design.	Conditions of contract for DBO (Design, Build & Operate) project.
Right Answer	A			
NOTE	Question was displayed incorrectly at candidates' terminals. Hence '1' mark has been given to all candidates, who attempted or not.			

Question No. 41	The center of mass of the system consisting of Earth, the Sun, and the planet Mars is:			
Answer Options	A)	B)	C)	D)
	Closer to Earth than to either of the other bodies	Closer to the Sun than to either of the other bodies	Closer to Mars than to either of the other bodies	At the geometric center of the triangle formed by the three bodies
Right Answer	B			

Question No. 42	At the same instant that a 0.50-kg ball is dropped from 25m above Earth, a second ball, with a mass of 0.25 kg, is thrown straight upward from Earth's surface with an initial speed of 15m/s. They move along nearby lines and pass without colliding. At the end of 2 sec the magnitude of the acceleration of the center of mass of the two-ball system is:			
Answer Options	A)	B)	C)	D)
	0.25g	0.50g	0.75g	g
Right Answer	D			

Question No. 43	The rainbow seen after a rain shower is caused by:			
Answer Options	A)	B)	C)	D)
	diffraction	interference	refraction	polarization
Right Answer	C			

Question No. 44	When light travels from medium X to medium Y as shown: 			
Answer Options	A)	B)	C)	D)
	both the speed and the frequency decrease	both the speed and the frequency increase	both the speed and the wavelength decrease	both the speed and the wavelength increase
Right Answer	C			
NOTE	Question was displayed incorrectly at candidates' terminals. Hence '1' mark has been given to all candidates, who attempted or not.			

Question No. 45	An object rests on a horizontal frictionless surface. A horizontal force of magnitude F is applied. This force produces an acceleration:			
Answer Options	A)	B)	C)	D)
	only if F is larger than the weight of the object	only while the object suddenly changes from rest to motion	always	only if the inertia of the object decreases
Right Answer	C			

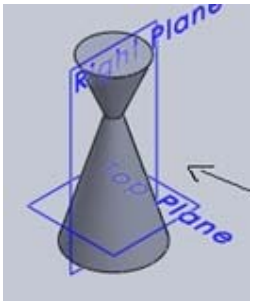
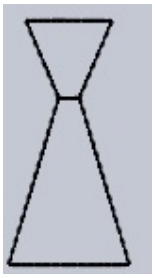
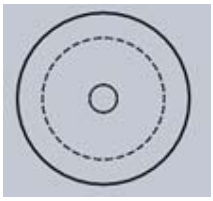
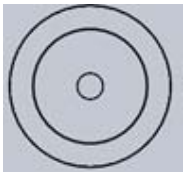
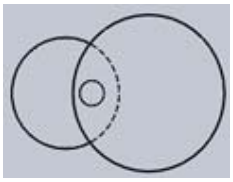
Question No. 46	Which statement is incorrect?			
Answer Options	A)	B)	C)	D)
	All the metals are good conductor of electricity.	All the metals are good conductor of heat	All the metals form positive ions	All the metals form acidic oxides
Right Answer	D			

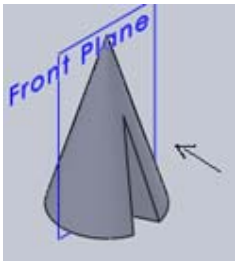
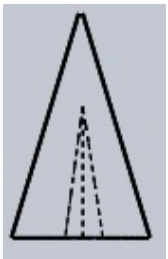
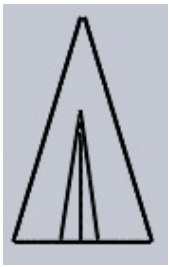
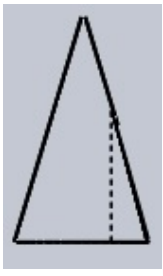
Question No. 47	Based on the first law of thermodynamics, which one of the following is correct?			
Answer Options	A)	B)	C)	D)
	For an isothermal process, q = +w	For an isochoric process, $\Delta U = -q$	For an adiabatic process, $\Delta U = -w$	For a cyclic process, q = -w
Right Answer	D			

Question No. 48	Among the electrolytes Na_2SO_4, $CaCl_2$, $Al_2(SO_4)_3$ and NH_4Cl, the most effective coagulating agent for Sb_2S_3 sol is			
Answer Options	A)	B)	C)	D)
	Na_2SO_4	$CaCl_2$	$Al_2(SO_4)_3$	NH_4Cl
Right Answer	C			

Question No. 49	Of the following which one is classified as polyester polymer?			
Answer Options	A)	B)	C)	D)
	Nylon-66	Terylene	Backelite	Melamine
Right Answer	B			

Question No. 50	In order to increase the volume of a gas by 10%, the pressure of the gas should be			
Answer Options	A)	B)	C)	D)
	increased by 10%	increased by 1%	decreased by 10%	decreased by 1%
Right Answer	C			

Question No. 51	Identify the top view for the below-given cone. 			
Answer Options	A) 	B) 	C) 	D) 
Right Answer	C			

Question No. 52	Identify the front view of the following cone. 			
Answer Options	A) 	B) 	C) 	D) 
Right Answer	B			

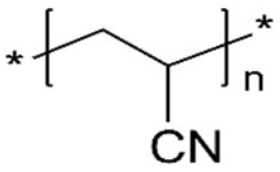
Question No. 53	Curve of any shape can be drawn in perspective by enclosing it in a _____			
Answer Options	A)	B)	C)	D)
	rectangle	cube	cylinder	square
Right Answer	A			

Question No. 54	A prism and cone got intersected at 90 degrees the line of intersection will be _____ and parallel to axis of _____			
Answer Options	A)	B)	C)	D)
	straight line, prism	curve, prism	straight line, cone	curve, cone
Right Answer	B			

Question No. 55	The plane surfaces intersect in a _____ the line of intersection between two curved surfaces is _____ and between a plane surface and curved surfaces is a _____			
Answer Options	A)	B)	C)	D)
	straight line, curve, curve	straight line, straight line, curve	straight line, curve, straight line	curve, curve, curve
Right Answer	A			

Question No. 56	Which fibre is suitable to replace wool?			
Answer Options	A)	B)	C)	D)
	Nylon 6	Polyester	Polypropylene	Acrylic
Right Answer	D			

Question No. 57	Which fibre generates a more static charge?			
Answer Options	A)	B)	C)	D)
	Cotton	Silk	Jute	PET
Right Answer	D			

Question No. 58	Choose the correct fibre for chemical structure, as shown in the figure. 			
Answer Options	A)	B)	C)	D)
	PBT	PAN	Nylon 66	Silk
Right Answer	B			

Question No. 59	Which fibre is associated with Degumming process?			
Answer Options	A)	B)	C)	D)
	Jute	Wool	Silk	Cotton
Right Answer	C			

Question No. 60	5g P/C blend fabric treated with 70% sulphuric acid to get 3g of bone-dry residue fibre. What would be the blend ratio of the fabric?			
Answer Options	A)	B)	C)	D)
	60:40 P/C	50:50 P/C	30:70 P/C	40:60 P/C
Right Answer	A			

Question No. 61	A) Cotton, B) Acrylic, C) Nylon, D) Jute are four different fibres used for various end products as 1) Tyre cord, 2) Undergarments, 3) Doormats, 4) Sweater. Choose the right combination.			
Answer Options	A)	B)	C)	D)
	A1, B3, C2, D4	A2, B4, C1, D3	A3, B2, C4, D1	A4, B1, C3, D2
Right Answer	B			

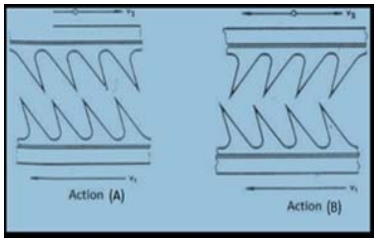
Question No. 62	The L.D. ratio (length: diameter) of textile fibre should be_____?			
Answer Options	A)	B)	C)	D)
	100:1	1:100	1:10	10:1
Right Answer	A			

Question No. 63	Which of these fibre needs a 'Retting' process?			
Answer Options	A)	B)	C)	D)
	Cotton	Wool	Jute	Silk
Right Answer	C			

Question No. 64	Which spinning method is suitable for Ultrahigh molecular weight Polyethylene (UHMWPE)?			
Answer Options	A)	B)	C)	D)
	Melt spinning	Gel Spinning	Wet spinning	Dry spinning
Right Answer	B			

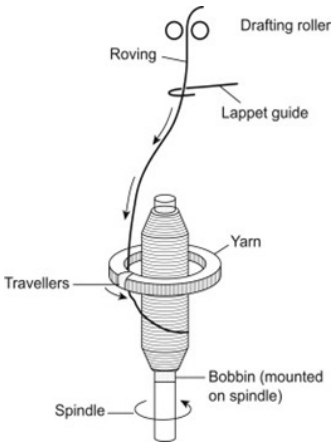
Question No. 65	What should be the suitable polymer dope concentration for PAN (Polyacrylonitrile) in Dry Spinning?			
Answer Options	A)	B)	C)	D)
	5.00%	2.50%	25.00%	50.00%
Right Answer	C			

Question No. 66	'R' is the reason for assertion 'A' in the following question. [A]- Mixing of different fibres takes place in various forms which can be arranged sequentially as Tuft blending, Lap blending, Sliver blending, and Roving blending. [R]- Roving blending technique results in the most homogeneous mixing as it occurs in the last sage of spinning.			
Answer Options	A)	B)	C)	D)
	[A] correct, [R] wrong	[A] correct, [R] correct	[A] wrong, [R] wrong	[A] wrong, [R] correct
Right Answer	A			

Question No. 67	In the given figure, mention the right answer for action (A) and action(B).  			
Answer Options	A)	B)	C)	D)
	(A) carding action, (B) stripping action	(A) carding action, (B) carding action	(A) stripping action, (B) stripping action	The figure is not related to carding
Right Answer	A			

Question No. 68	How many carded slivers are required for feeding a draw frame to produce the same hank with a draft of 6.0?			
Answer Options	A)	B)	C)	D)
	12	8	6	None of these
Right Answer	C			

Question No. 69	What is the product of a TFO machine?			
Answer Options	A)	B)	C)	D)
	Lap	Roving	Doubled yarn	Sliver
Right Answer	C			

Question No. 70	Which area is prone to have maximum yarn tension in a spinning frame?  			
Answer Options	A)	B)	C)	D)
	Below the lappet guide	Between lappet guide and front roller	In feeding zone	In winding zone
Right Answer	D			

Question No. 71	Choose the correct answer for the pilling resistance of different yarns.			
Answer Options	A)	B)	C)	D)
	Ring-spun yarn > Open-end rotor yarn > Air vortex yarn	Ring-spun yarn < Open-end rotor yarn < Air vortex yarn	Ring-spun yarn < Open-end rotor yarn > Air vortex yarn	Ring-spun yarn > Open-end rotor yarn < Air vortex yarn
Right Answer	B			

Question No. 72	One hundred boxes of yarn supplied to a factory with linear density printed as (Ne) in the English system at a cost price of Rs.200/- per kg. The distributor billed the yarn linear density in Denier instead of Ne with the same numerical value and the same price. What should be the nearest numerical value of the linear density if the business is not affected at all due to wrong billing?			
Answer Options	A)	B)	C)	D)
	24	48	73	100
Right Answer	C			

Question No. 73	Two rovings each having same mass CV% fed to a ring frame. If the ring frame added another 18% of mass CV to produce the mass CV of 25% in the yarn what would be the mass CV% in the roving to the nearest value?			
Answer Options	A)	B)	C)	D)
	0.07	0.035	0.245	0.123
Right Answer	C			

Question No. 74	Which spinning technique generates only real twist and no false twist while spinning?			
Answer Options	A)	B)	C)	D)
	Dref3 spinning	Ring spinning	Airjet spinning	Rotor spinning
Right Answer	B			

Question No. 75	What would be the range of TM for a P/V spun yarn?			
Answer Options	A)	B)	C)	D)
	0.30-0.35	3.00-3.50	30.00-35.00	None of these
Right Answer	B			

Question No. 76	A twill construction fabric was analysed to find both warp and weft of 360 Denier, 40 ends per centimeter, 30 picks per centimeter. Choose the correct fabric GSM if the crimp is neglected.			
Answer Options	A)	B)	C)	D)
	200	240	280	320
Right Answer	C			

Question No. 77	A textile mill has four different manufacturing units. If a ball warping machine is ordered by the owner and asked the textile engineer to allocate it in the right unit, which unit would be the right one to allocate the machine? A textile mill has four different manufacturing units. Suppose a ball warping machine is ordered by the owner and asked you as a textile engineer to allocate it in the right unit. Which unit would be the right one for you to allocate the machine?			
Answer Options	A)	B)	C)	D)
	Knitted fabric unit	Terry towel fabric unit	3D fabric unit	Denim fabric unit
Right Answer	D			

Question No. 78	Which fabric manufacturing mostly deals with sizing?			
Answer Options	A)	B)	C)	D)
	T-shirt fabric	Cotton shirting fabric	Nonwoven fabric	All of these
Right Answer	B			

Question No. 79	Suppose you are asked to suggest the right shuttle less loom for a weaving unit to produce a fabric with maximum possible width. What would be your suggestion?			
Answer Options	A)	B)	C)	D)
	Waterjet loom	Projectile loom	Air jet loom	Rapier loom
Right Answer	B			

Question No. 80	What is the main feature of an automatic loom?			
Answer Options	A)	B)	C)	D)
	Automatically repairs warp and weft breakage	Automatically replenishment of the shuttle	Automatically replenishment of warp beam	All of these
Right Answer	B			

Question No. 81	The yarn Tension during winding from bobbin varies with the unwinding speed. If the balloon height and package radius parameters are ignored, and unwinding speed is doubled, what will be the Tension on yarn?			
Answer Options	A)	B)	C)	D)
	Doubled	Four times	Half	No change
Right Answer	B			

Question No. 82	Which technology is used to manufacture a Tricot fabric?			
Answer Options	A)	B)	C)	D)
	Weaving	Knitting	Nonwoven	None of these
Right Answer	B			

Question No. 83	Which type of selvage is formed on a fabric produced by a projectile loom?			
Answer Options	A)	B)	C)	D)
	Traditional / Conventional selvage	Tucked in selvage	Sealed selvage	Fringe selvage
Right Answer	B			

Question No. 84	Match the correct objects related to different types of looms, as mentioned below. Looms: A) Projectile loom, B) Water jet loom, C) Rapier loom, D) Air jet loom Related objects: 1) Torsion bar, 2) Filament weft, 3) Relay nozzle, 4) Gabler			
Answer Options	A)	B)	C)	D)
	A1, B2, C4, D3	A1, B4, C2, D3	A3, B4, C2, D1	A4, B3, C1, D2
Right Answer	A			

Question No. 85	The repeat of design is 60 cm in length and 40 cm in width of the fabric to weave in a jacquard weave loom. What would be the capacity of jacquard with 40 ends per cm and 30 picks per cm			
Answer Options	A)	B)	C)	D)
	2400	1600	1800	1200
Right Answer	B			

Question No. 86	Which modern technology is used for measuring overall fabric aesthetic qualities?			
Answer Options	A)	B)	C)	D)
	AFIS	HVI	KES	Uster
Right Answer	C			

Question No. 87	What is the standard atmosphere for a textile testing laboratory?			
Answer Options	A)	B)	C)	D)
	20±2 °C, 65±2 % R.H.	10±2 °C, 40±2 % R.H.	40±2 °C, 65±2 % R.H.	35±2 °C, 55±2 % R.H.
Right Answer	A			

Question No. 88	Two hundred bobbins are selected to test yarn strength. The mean strength and CV% are found as 210 g and 12.6%, respectively. Find the standard deviation in gram.			
Answer Options	A)	B)	C)	D)
	4.08	5.14	16.66	26.46
Right Answer	D			

Question No. 89	Which principle is used in Elmendorf tearing tester to find out the tearing strength of fabric?			
Answer Options	A)	B)	C)	D)
	Pendulum lever principle	Principle of moments	Strain gauge principle	Ballistic or impact principle
Right Answer	D			

Question No. 90	What type of testing would you suggest for testing the strength of a knitted fabric?			
Answer Options	A)	B)	C)	D)
	Tearing	Tensile	Bursting	Abrasion resistance
Right Answer	C			

Question No. 91	Which machine is preferred to dye a Polyester/cotton blended knitted fabric?			
Answer Options	A)	B)	C)	D)
	Winch	HTHP soft flow	Cold pad batch	Decatizing
Right Answer	B			

Question No. 92	What is the recommended temperature for dyeing polyester/wool blended suiting fabric?			
Answer Options	A)	B)	C)	D)
	130 °C	150 °C	100 °C	60 °C
Right Answer	C			

Question No. 93	Which Dye is suitable for sublimation transfer printing?			
Answer Options	A)	B)	C)	D)
	Direct dye	Reactive dye	Sulphur dye	Disperse dye
Right Answer	D			

Question No. 94	A process house is regularly purchasing a caustic lye tanker. You are working as a quality controller in the process house. What would you like to suggest the method of testing for the purity of above chemical before receiving? A process house is regularly purchasing a caustic lye tanker. Suppose you are working as a quality controller in the process house. What would you like to suggest the method of testing for the purity of the above chemical before accepting?			
Answer Options	A)	B)	C)	D)
	Twaddle meter test	Acid-base titration test	Trial on goods	Litmus paper test
Right Answer	B			

Question No. 95	Where do you find the application of a 'Gray scale'?			
Answer Options	A)	B)	C)	D)
	Shrinkage test	Wettability test	Tensile Strength test	Color fastness test
Right Answer	D			

Question No. 96	Carbonizing is a process to remove vegetable wastes during pre-treatment. Where is this process applicable?			
Answer Options	A)	B)	C)	D)
	Pre-treatment of cotton	Pre-treatment of polyester	Pre-treatment of wool	Pre-treatment of nylon
Right Answer	C			

Question No. 97	What is the limit for COD in ppm for discharging textile effluent to inland surface water after treatment as per BIS?			
Answer Options	A)	B)	C)	D)
	25	250	2500	25000
Right Answer	B			

Question No. 98	What concentration of DAP would be enough to make a cotton fabric flame retardant?			
Answer Options	A)	B)	C)	D)
	0.15%	1.5%	15%	150%
Right Answer	C			
NOTE	Question was displayed incorrectly at candidates' terminals. Hence '1' mark has been given to all candidates, who attempted or not.			

Question No. 99	Sodium sulfoxylate formaldehyde is used as a _____in printing?			
Answer Options	A)	B)	C)	D)
	Wetting agent	Oxidizing agent	Reducing agent	Lubricating agent
Right Answer	C			

Question No. 100	5% add-on is required on a fabric to be finished with a stiffener. If the wet pick up of the fabric during padding is 80% find the concentration of stiffener required in g/L			
Answer Options	A)	B)	C)	D)
	40	50	52.5	62.5
Right Answer	D			