

# CII – iPATE 1.0 (2020)

Computer Based PAN India Examination

Category: GRADUATE ENGINEER (ENTRY LEVEL)

Engineering Discipline: MINING ENGINEERING

Questions & Answers

(Reviewed, Revised & Published dtd. 20.01.2021)

## Paper Structure

Question Nos.	Sections & Topics		Marks
1 to 20	Section I : Cognitive Abilities	<ul style="list-style-type: none"><li>Quantitative Aptitude</li><li>Analytical Reasoning</li><li>Data Interpretation</li><li>English Communication</li></ul>	20
21 to 40	Section II : Professional Abilities	<ul style="list-style-type: none"><li>Project Management</li><li>Health, Safety &amp; Risk Management</li><li>Environmental Laws</li><li>Social Responsibility &amp; Ethics</li><li>Finance &amp; Accounts</li><li>Legal, Contracts &amp; Arbitration</li></ul>	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
<b>TOTAL</b>			<b>100</b>

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	<p>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.</p> <p>What is the area of the rectangle?</p> <p>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</p>			
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	<p>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:</p> <p>What is the sum of the age of Ram and Mohan?</p> <p>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.</p>			
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	<p>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?</p>			
Answer Options	A)	B)	C)	D)
	Sister	Sister - In - Law	Niece	None of The Above
Right Answer	B			

Question No. 10	<p>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.</p> <p>_____ : trail :: grain : grail</p>			
Answer Options	A)	B)	C)	D)
	train	path	wheat	holy
Right Answer	A			

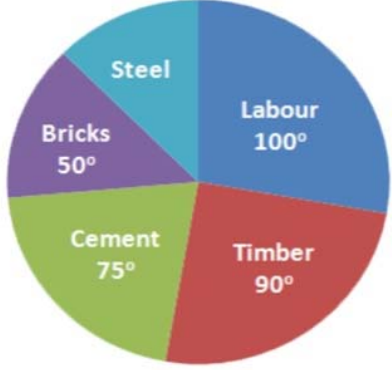
Question No. 11	<b>Given below are four jumbled sentences. Out of the given options pick the one that gives their correct order.</b>			
	A: Only natural dyes are used in Kalamkari and it involves several steps. B: There are two distinctive styles of Kalamkari in India. C: They are the Sri kalahasti style 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) CBDA	B) DABC	C) ACBD	D) DCBA
Right Answer	B			

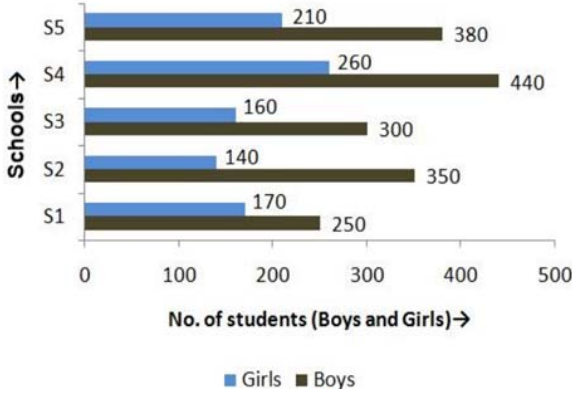
Question No. 12	What is the antonym of MOROSE			
Answer Options	A) overawed	B) agitated	C) cherubic	D) cheerful
Right Answer	D			

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

Question No. 14	A frustrated old man, Bandi thakur was never tired 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) (1) criticizing, (2) prompting, (3) sincere	B) (1) extolling, (2) advising, (3) rational	C) (1) invoking, (2) arguing, (3) fanciful	D) (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) (1) safeguarded, (2) kindness, (3) egged on	B) (1) escorted, (2) affinity, (3) toned down	C) (1) abandoned, (2) bitterness, (3) pumped up	D) (1) escorted, (2) bitterness, (3) toned down
Right Answer	D			

<p>Question No. 16</p>	<p>The pie chart shows the total expense of Rs 450000 to construct a house.</p> <p>The cost of steel is</p> 			
<p>Answer Options</p>	<p>A) Rs 55000</p>	<p>B) Rs 56250</p>	<p>C) Rs 60000</p>	<p>D) Rs 62500</p>
<p>Right Answer</p>	<p>B</p>			

<p>Question No. 17</p>	<p>The following bar graph shows the number of boys and girls of class X of 5 different schools.</p> <p>Find the difference between the number of boys and girls of schools S2 and S3 together</p> 			
<p>Answer Options</p>	<p>A) 300</p>	<p>B) 350</p>	<p>C) 400</p>	<p>D) 450</p>
<p>Right Answer</p>	<p>B</p>			

Question No. 18	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 border="1"> <thead> <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> </thead> <tbody> <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> </tbody> </table>				State	Number of candidates	Ratio		Male	Female	Andhra Pradesh	1.85	3	2	Assam	2.73	7	5	Telangana	1.25	7	3	Odisha	3.14	5	3	Haryana	1.08	4	5	Bihar	2.27	1	3
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Odisha	3.14	5	3																															
Haryana	1.08	4	5																															
Bihar	2.27	1	3																															
Answer Options	A) 98.41%	B) 48.45%	C) 95.49%	D) 93.39%																														
Right Answer	D																																	
NOTE	Question was displayed incorrectly at candidates' terminals. Hence '1' mark has been given to all candidates, who attempted or not.																																	

Question No. 19	Read the following information carefully and answer the given question.			
	<p>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.</p> <p>Which of the following person is neither honest nor hard-working but is ambitious?</p>			
Answer Options	A) Shib	B) Pijush	C) Raju	D) Hari
Right Answer	C			


Question No. 20	Read the following information carefully and answer the following question.			
	<p>'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'.</p> <p>If <math>P \div R + S + Q</math>, which of the following is true?</p>			
Answer Options	A) P is the daughter of Q	B) Q is the aunt of P	C) P is the aunt of Q	D) P is the mother of Q
Right Answer	C			

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			

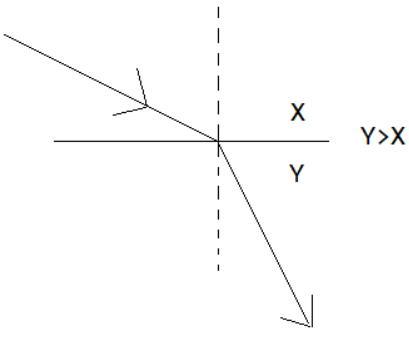
Question No. 39	What is the primary function of the Law of Tort?			
Answer Options	A)	B)	C)	D)
	Punishment of a wrong motivator	Clarification of the human rights of the parties	Compensating the claimant	Spreading of losses throughout the parties
Right Answer	C			

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			

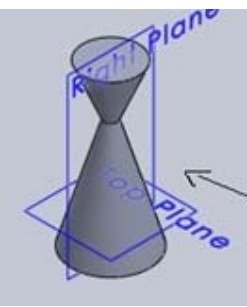

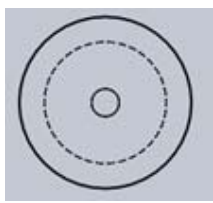
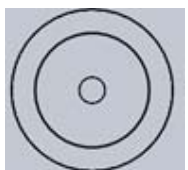
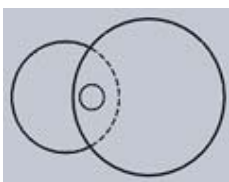
Question No. 46	Which statement is incorrect?			
Answer Options	A)	B)	C)	D)
	All the metals are good conductor of electricity.	All the metals are good conductor of heat	All the metals form positive ions	All the metals form acidic oxides
Right Answer	D			

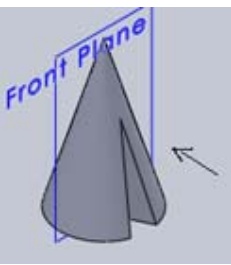
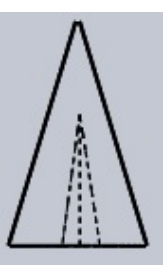


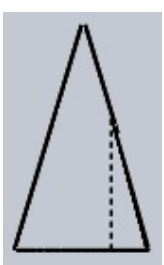
Question No. 47	Based on the first law of thermodynamics, which one of the following is correct?			
Answer Options	A)	B)	C)	D)
	For an isothermal process, $q = +w$	For an isochoric process, $\Delta U = -q$	For an adiabatic process, $\Delta U = -w$	For a cyclic process, $q = -w$
Right Answer	D			

Question No. 48	Among the electrolytes $\text{Na}_2\text{SO}_4$ , $\text{CaCl}_2$ , $\text{Al}_2(\text{SO}_4)_3$ and $\text{NH}_4\text{Cl}$ , the most effective coagulating agent for $\text{Sb}_2\text{S}_3$ sol is			
Answer Options	A)	B)	C)	D)
	$\text{Na}_2\text{SO}_4$	$\text{CaCl}_2$	$\text{Al}_2(\text{SO}_4)_3$	$\text{NH}_4\text{Cl}$
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			

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

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

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	The Walling is done in a shaft by cement concreting. The minimum thickness of walling is			
Answer Options	A)	B)	C)	D)
	0.03	0.4	0.5	0.6
Right Answer	A			

Question No. 57	Drilling for Blasting in shaft Sinking is done in			
Answer Options	A)	B)	C)	D)
	Triangular Pattern	Square Pattern	Concentric circular Pattern	Random
Right Answer	C			

Question No. 58	In a heavy-duty Long wall face production is 2500 Ton/day. Height of the seam is 3 m, the length of the face will be  Hint: face length = Production (ton per day)/5.4*working thickness of the seam			
Answer Options	A)	B)	C)	D)
	100 m	125 m	150 m	175 m
Right Answer	C			

Question No. 59	A Seam laying at a depth of 300 m, Seam Thickness is 3m, Gradient 1in10, desired production 2500 T/day with heavy duty long wall face, the face length will be			
Answer Options	A)	B)	C)	D)
	115 m	135 m	155 m	175 m
Right Answer	C			

Question No. 60	For planning of an open cast mine			
Answer Options	A)	B)	C)	D)
	Decision has to be taken for method of mining	The matching equipment has to be proposed	Geometry of the benches has to be decided	planning has to be done accordingly considering all the above
Right Answer	D			

Question No. 61	While dealing with a misfired shot the relieving hole shall be drilled in such a way that at no point shall it be nearer than _____ cm from the misfired hole.			
Answer Options	A)	B)	C)	D)
	15	20	25	30
Right Answer	D			

Question No. 62	The sheath of the metal-seat bed cables shall be of thickness as prescribed in			
Answer Options	A)	B)	C)	D)
	DGMS Standards	BIS Standards	Central Electricity Authority	Manual of the manufacturer
Right Answer	B			

Question No. 63	What instrument is used for determining the sagging of roof			
Answer Options	A)	B)	C)	D)
	Tale-Tell	Roof Sagging Meter	Borehole Extensometer	None of them
Right Answer	C			

Question No. 64	In long wall caving at which point total stress of roof load comes			
Answer Options	A)	B)	C)	D)
	Center line of the goaf edge	End line of the goaf edge	On a vertical line to the goaf edge	None of Above.
Right Answer	A			

Question No. 65	Lining, freezing, concreting are the terms used for			
Answer Options	A)	B)	C)	D)
	Shaft sinking	Drifting	Incline Drivage	None of above
Right Answer	A			

Question No. 66	In which direction of the seam the deposited overburden will have minimum angle of repose?			
Answer Options	A)	B)	C)	D)
	Dip direction	Rise direction	Strick direction	None of above
Right Answer	B			

Question No. 67	Smooth Blasting is known as			
Answer Options	A)	B)	C)	D)
	Crest Blasting	Deck Blasting	Controlled Blasting	None of above
Right Answer	C			

Question No. 68	Gate Road is Supported up to 30 m for			
Answer Options	A)	B)	C)	D)
	Back Abatement Pressure	Front Abatement Pressure	Smooth Travel	B&C are correct.
Right Answer	D			

Question No. 69	Triangular failure in connection with bench failure is Known as			
Answer Options	A)	B)	C)	D)
	Angular Failure	Wedge Failure	Trough failure	Circular Failure
Right Answer	B			

Question No. 70	While Hammering on a core what type of force is acting?			
Answer Options	A)	B)	C)	D)
	Shear Force	Uniaxial Force	Breaking Force	Bending Force
Right Answer	B			



Question No. 71	In connection with bench failure which one is incorrect?			
Answer Options	A)	B)	C)	D)
	Shear Failure	Rotational Failure	Plan Failure	Angular Failure
Right Answer	B			

Question No. 72	The auxiliary fan shall be _____ with the switchgear controlling power supply to the in-bye face equipment			
Answer Options	A)	B)	C)	D)
	Independent	Interlocked	dependent	All the Options
Right Answer	B			

Question No. 73	A 1m wide belt runs at a speed of 1.5 m/sec carrying, coal of density 1.4 T/M <sup>3</sup> space utilization factor 15%.the capacity of belt is tonne/hour is Hint: Belt capacity in ton per hour= $1 \times 1.5 \times 60 \times 60 \times 1.4 \times 0.15 = 1134$			
Answer Options	A)	B)	C)	D)
	900	1000	1100	1300
Right Answer	C			

Question No. 74	Which of the following is/are the example of gaseous fuel?			
Answer Options	A)	B)	C)	D)
	Cock Oven Gas	Produce Gas	Water Gas	only B&C
Right Answer	D			

Question No. 75	Which of the following constituent of coal has a dull Experience?			
Answer Options	A)	B)	C)	D)
	Vitrain	Durain	Fusain	All of them
Right Answer	C			

Question No. 76	The best method of mining a coal seam 8.5 m thick is by			
Answer Options	A)	B)	C)	D)
	B&P method	Long wall sublevel caving method	Long wall in lifts	None Of them
Right Answer	B			

Question No. 77	On the face means working with the line of face			
Answer Options	A)	B)	C)	D)
	Parallel to the main cleat	perpendicular to the main cleat	At 30° to the main cleat	None of the Above
Right Answer	A			

Question No. 78	A person is said to be not employed in the mine			
Answer Options	A)	B)	C)	D)
	who works as a manager	who works under appointment by the Manager	who works in any office of the mine	who works as a pump operator in a residential colony belonging to the mine.
Right Answer	D			

Question No. 79	For every mine where in more than _____ persons are ordinarily employed, the owner, agent or manager shall constitute a safety committee.			
Answer Options	A)	B)	C)	D)
	100	300	500	1000
Right Answer	A			

Question No. 80	For every mine employing more than _____ persons ordinarily there shall be provided a suitable shelter.			
Answer Options	A)	B)	C)	D)
	50	75	100	150
Right Answer	A			

Question No. 81	For every mine where in _____ or more persons are ordinarily employed, the owner, agent or manager shall appoint a suitable qualified person as Welfare officer			
Answer Options	A)	B)	C)	D)
	150	200	500	600
Right Answer	C			

Question No. 82	The floor area of the rest shelter shall not be less than _____ sq. mts.			
Answer Options	A)	B)	C)	D)
	10	14	15	20
Right Answer	B			

Question No. 83	Registers of daily attendance of persons employed in below ground workings shall be maintained in			
Answer Options	A)	B)	C)	D)
	Form-C	Form-D	Form-E	Form-B
Right Answer	B			

Question No. 84	Persons of _____ years age shall not be deployed as apprentices or trainees except under supervision			
Answer Options	A)	B)	C)	D)
	14-16	16-18	15-18	14-18
Right Answer	B			

Question No. 85	Registers of leave with wages of every employee shall be maintained in			
Answer Options	A)	B)	C)	D)
	Form-I	Form-D	Form-A	Form-B
Right Answer	D			

Question No. 86	Notice of commencement of any mining operation shall be given so as to reach the persons concerned at least _____ months before commencement of mining operations			
Answer Options	A)	B)	C)	D)
	3	1	6	2
Right Answer	B			

Question No. 87	Notice of abandonment shall be given when it is intended to abandon the mine for a period exceeding _____ days			
Answer Options	A)	B)	C)	D)
	10	20	30	60
Right Answer	D			

Question No. 88	Notice of accident shall be submitted to the concerned authorities within _____ of any such occurrence			
Answer Options	A)	B)	C)	D)
	15 days	24 hours	48 hours	1 month
Right Answer	B			

Question No. 89	Every application for competency examinations shall be accompanied by the following certificates/ documents except			
Answer Options	A)	B)	C)	D)
	Certificate of Age	Certificate of Fitness	Character Certificate	Domicile Certificate
Right Answer	D			

Question No. 90	Authorization to act as a Manager of a mine shall have effect for a period not exceeding _____ except with previous consent in writing of CIM			
Answer Options	A)	B)	C)	D)
	60 days	30 days	90 days	1 year
Right Answer	B			

Question No. 91	Which of one of the following statements is incorrect: In case of a fatal accident in a mine, the Manager must			
Answer Options	A)	B)	C)	D)
	inspect the site of accident	notify to RIM	conduct investigation himself	ensure that the place of accident is not disturbed
Right Answer	C			

Question No. 92	The Electrical Supervisor shall be appointed by			
Answer Options	A)	B)	C)	D)
	Manager	CMD of the company	Engineer	Director Personnel of the Company
Right Answer	A			

Question No. 93	A mine or part thereof may be treated as naturally wet if the roadway dust sample contain _____ or more of moisture by weight.			
Answer Options	A)	B)	C)	D)
	0.1	0.15	0.05	0.3
Right Answer	D			

Question No. 94	The thickness of ventilation stopping constructed of masonry or brickwork shall be _____ cms in thickness			
Answer Options	A)	B)	C)	D)
	20 cm	15 cm	25 cm	10 cm
Right Answer	C			

Question No. 95	M.V.T. Rules 1966 shall not apply to the following persons			
Answer Options	A)	B)	C)	D)
	Timber man	Coal driller	Track Layers	Mine Managers
Right Answer	D			

Question No. 96	The following items are not considered as a part of personal protective equipment			
Answer Options	A)	B)	C)	D)
	Safety goggles	reusable ear plugs	visible harness	mobile phones
Right Answer	D			

Question No. 97	As per M.V.T. Rules 1966 every person holding a gast testing certificate shall once in _____ undergo a course of training as detailed in 8th schedule of M V T Rules 1966.			
Answer Options	A)	B)	C)	D)
	5 years	1 year	2 years	3 years
Right Answer	B			

Question No. 98	Main Mechanical Ventilator of a mine shall be installed on the surface at a distance of not less than _____ from the opening of the shaft or incline			
Answer Options	A)	B)	C)	D)
	10 m	8 m	7 m	5 m
Right Answer	A			

Question No. 99	_____ days' prior notice of installation of a booster fan shall be sent to _____			
Answer Options	A)	B)	C)	D)
	15 & RIM	15 & CIM	7 & RIM	7 & CIM
Right Answer	C			

Question No. 100	Auxiliary fan shall not be installed at a location unless the quantity of air available at that location is at least _____ the capacity of the auxiliary fan			
Answer Options	A)	B)	C)	D)
	double	equal	half	one and half
Right Answer	A			