



**OFFICE OF THE MUNICIPAL COUNCIL
PORT BLAIR**

PRESS NOTE

The Port Blair Municipal Council conducted recruitment exam through Computed Based Test (CBT) for 03 posts of Junior Engineer (Civil) on 04.09.2023 at DBRAIT, Dollygunj, Port Blair in a transparent manner.

On receipt of Answer Key from CDAC, the PBMC had published the Answer Key in the online portal <https://erecruitment.andaman.gov.in/crap/> and <https://andaman.gov.in> inviting claims and objections from the candidates who have appeared in the CBT Examination up to 05.10.2023.

The claims and objections received within the time period from the candidates were forwarded to the CDAC through DBRAIT for its scrutiny. Now the DBRAIT has forwarded the Answer Key scrutinized by the CDAC.

Accordingly, the Answer Key scrutinized by CDAC has been uploaded in the online portal of <https://erecruitment.andaman.gov.in/crap/> and <https://andaman.gov.in> purely for the information of candidates.

Signed by Santhi Jeevaraj
Date: 17-11-2023 10:36:03
Reason: Approved
Administrative Officer
Municipal Council

Copy forwarded for information and necessary action to:-

1. The Manager, Govt. Press, Port Blair with the request to publish above Press Note for 01 day on 19-11-2023 in the 'the Daily Telegram'.
2. The Director, Doordarshan Kendra, Port Blair with the request to broadcast the gist of the Note through DDK, Port Blair for 01 day on 19-11-2023.
3. The Program Officer, All India Radio, Port Blair with the request to broadcast the gist of the note in the news bulletin for 01 day on 19-11-2023.

PORTBLAIR MUNICIPAL COUNCIL
A & N, ADMINISTRATION, PORT BLAIR

Claims & Objections of the candidates against the examination held on 04.09.2023 for the posts of Junior Engineer (Civil).

Sl. No.	Name of the Candidate / Hall Ticket No. or Roll No.	Q. Set No.	Question and Answer Key	Claims/ Objection	Post Review correct Answer	Remarks
1	Name : SABID P Registration No : 352023008514	JC1	<p>Question 8.</p> <p>Peter walked 8 kms. west and turned right and walked 3 kms. The again he turned right and walked 12 kms. How far is he from the starting point?</p> <p>(A)7 (B)9 (C)4 (D)8</p> <p>Answer: (D) 8</p>	Answer: The correct answer is 5 which is not given in the option	None of the alternative is correct.	The Question will be deleted/notconsidered for assessment and hence no marks will be awarded
			<p>Question 63.</p> <p>The minimum clear cover for R.C.C. columns shall be</p> <p>(A)Greater of 40 mm or diameter (B)Smaller of 40 mm or diameter (C)Greater of 25 mm or diameter (D)Smaller of 25 mm or</p>	Answer: Correct answer is option A but in answer key it is given as C	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks

			diameter Answer: (C) Greater of 25 mm or diameter			
			Question 80. The detention period for plain sedimentation water tanks, is usually (A)4 to 8 hours (B)8 to 16 hours (C)16 to 24 hours (D)24 to 36 hours Answer: (D) 24 to 36 hours	Answer: Correct answer is option A but in answer key it is given as D	Alternative “A” is the correct answer	Hence the candidates who have selected Option “A” will get full marks
2	SAFRINA SADIQUE Reg. No. 352023002704	JC1	Question no. 23 Which of the following is/are the classification of building materials? (A) Inorganic materials and Organic materials (B) Waterproofing compounds (C) Binders (D) All of these Answer: (A) Inorganic materials and Organic materials	Due to the diversity of the building materials it is not feasible to broadly classify it in organic and inorganic materials. The sources provided show that classification of building material based on material composition is organic, inorganic and metallic. But if it is classified on the basis of chemical composition it is organic, inorganic and composite. Similarly, waterproofing compound and binders are classified on the basis of function. There are other bases to classify the building materials as well. They are: Structural composition, Production, Dimensions and Load-bearing. So the option should be D. All of these	Alternative “A” is the correct answer	Hence the candidates who have selected Option “A” will get full marks
			Question no. 31	The correct answer to this	Alternative “A” is the correct	Hence the candidates

		<p>Who is the father of concrete technology?</p> <p>(A) William Aspdin (B) Royston Saint John (C) Joseph Aspdin (D) None</p> <p>Answer: (A) William Aspdin</p>	<p>question is Joseph Aspdin. Option C. It is a controversial question whether William Aspdin, son of Joseph Aspdin who improvised his father's solutions is the father of concrete technology. Even Chat GPT answers this question as Joseph Aspdin</p>	<p>answer</p>	<p>who have selected Option "A" will get full marks</p>
		<p>Question no. 34</p> <p>What is the importance of the Standard Consistency Test?</p> <p>(A) It is used to determine the quality of water (B) It is used to determine the quality of aggregates (C) It is used to determine the quality of cement (D) None</p> <p>Answer: (A) It is used to determine the quality of water</p>	<p>The correct answer is to determine the quality of cement. Option C. It is a test for cement. One search in Google is enough to produce various websites for this. The questions from Sanfoundry website, a blog with no material source whatsoever and contradictory questions, was used in this question paper. A website run by the technologist specialising in C and other computer fields</p>	<p>Alternative "A" is the correct answer</p>	<p>Hence the candidates who have selected Option "A" will get full marks</p>

Sl. No.	Name of the Candidate / Hall Ticket No. or Roll No.	Q. Set No.	Question and Answer Key	Claims/ Objection	Post Review correct Answer	Remarks
1	Name : RANJITA ROY Registration No : 352023003191	JC2	Question no. 04 In each of the following questions find the odd word/ letters/number/figure from the given responses (A) RNMP (B) HDCF (C) RPOQ (D) HDCF Answer: (C) RPOQ	There was a repetition of answer options leading to confusion in the question. It is therefore requested to cancel the question to make the question paper justified	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks
			Question.06 Writer : Pen : : ? (A) Needle (B) Artist : : Tailor Brush (C) Painter (D) Teacher : Canvas : Class Answer: (C) Painter	It appears there were typographical errors in the options provided thus creating confusion to attempt the question. It is therefore requested to cancel the question to make the question paper justified.	None of the alternative is correct.	The Question will be deleted/notconsidered for assessment and hence no marks will be awarded
2	Name : M SRIDHAR Registration No : 352023007767	JC2	Question.06 Writer : Pen : : ? (A) Needle (B) Artist : : Tailor Brush (C) Painter (D) Teacher : Canvas : Class Answer: (C) Painter	It appears there were typographical errors in the options provided thus creating confusion to attempt the question. It is therefore requested to cancel the question to make the question paper justified.	None of the alternative is correct.	The Question will be deleted/notconsidered for assessment and hence no marks will be awarded
			Question 75.	The right answer will be at	Alternative "C" is the correct	Hence the candidates

			<p>The resultant of all normal pressure's acts</p> <p>(A) at e.g. of body (B) at center of pressure (C) vertically upwards (D) at metacentre</p> <p>Answer: (C) vertically upward</p>	centre of pressure	answer	who have selected Option "C" will get full marks
		JC2	<p>Question 76.</p> <p>A bucket of water is hanging from a spring balance. An iron piece is suspended into water without touching sides of bucket from another support. The spring balance reading will</p> <p>(A) increase (B) decrease (C) remain same (D) increase/decrease depending on depth of immersion</p> <p>Answer: (C) remain same</p>	The right answer will be - Increase	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks
3	Name : C. YASMEEN SHABNAM Registration No : 352023007938	JC2	<p>Question.06</p> <p>Writer : Pen : : ?</p> <p>(A) Needle</p>	It appears there were typographical errors in the options provided thus creating confusion to attempt the question.	None of the alternative is correct.	The Question will be deleted/notconsidered for assessment and hence no marks will be awarded

			(B) Artist : : Tailor Brush (C) Painter (D) Teacher : Canvas : Class Answer: (C) Painter	It is therefore requested to cancel the question to make the question paper justified.		
		JC2	Question 22. Which of the following is defined at the uppermost part of the building which is constructed in the form of a framework to give protection to the building against rain, heat, snow, wind etc? (A) Lintels (B) Roof (C) Chajja (D) Truss Answer: (B) Roof	Q. No. 22 it is given constructed in the form of a Framework	Alternative "B" is the correct answer	Hence the candidates who have selected Option "B" will get full marks
		JC2	Question 27. Which of the following term in the buildings is used to mean the coming out of water from components like walls and floors of the buildings? (A) Water proofing (B) Dampness (C) Termite proofing	There is no option in the answer as "Seepage", so next most relevant answer is Dampness	Alternative "A" is the correct answer	Hence the candidates who have selected Option "A" will get full marks

			(D) Damp proofing Answer: (A) Water proofing			
4	Name : RANKU BISWAS Registration No : 352023000394	JC2	Question.06 Writer : Pen : : ? (A) Needle (B) Artist : : Tailor Brush (C) Painter (D) Teacher : Canvas : Class Answer: (C) Painter	It appears there were typographical errors in the options provided thus creating confusion to attempt the question. It is therefore requested to cancel the question to make the question paper justified.	None of the alternative is correct.	The Question will be deleted/notconsidered for assessment and hence no marks will be awarded
		JC2	Question 21. In old times, the construction of superstructure was done by using which of the following building material? (A) Rubber (B) Timber (C) Bamboo (D) Mud Answer: (B) Timber	Correct Answer is option (B), (C), and (D) As you are not specific about the time period all three options are possible timber, bamboo and mud. Mud: Mud or adobe was widely used for construction in ancient civilizations such as Mesopotamia, where it was formed into bricks and sun-dried or baked. This technique dates back to around 4000 BCE. Timber: Timber was commonly used for superstructures in many ancient cultures, including the Egyptians, Greeks, and Romans. These civilizations used timber to create impressive structures, including temples and palaces. This	Alternative "B" is the correct answer	Hence the candidates who have selected Option "B" will get full marks

				<p>practice dates back to at least 3000 BCE.</p> <p>Bamboo: In various parts of Asia, particularly in countries like China and Japan, bamboo was a key building material for superstructures. Its use dates back over a thousand years, with bamboo's strength and flexibility making it suitable for constructing houses, bridges, and scaffolding.</p>		
		JC2	<p>Question 27.</p> <p>Which of the following term in the buildings is used to mean the coming out of water from components like walls and floors of the buildings?</p> <p>(A) Water proofing (B) Dampness (C) Termite proofing (D) Damp proofing</p> <p>Answer: (A) Water proofing</p>	<p>Correct Answer is option (B) dampness</p> <p>According to the question you want to know the term used to mean the coming out of water from components like walls and floors of the buildings its called dampness.</p> <p>Water proofing is the technique to prevent dampness.</p> <p>Damp proofing in building construction is a set of measures and techniques employed to prevent moisture from penetrating into the building's structure</p> <p>Dampness: Dampness in building construction refers to the presence of excessive moisture or water infiltration within the structural elements or interior spaces of a building</p> <p>Waterproofing in building construction is a crucial process to protect structures from</p>	<p>Alternative "A" is the correct answer</p>	<p>Hence the candidates who have selected Option "A" will get full marks</p>

				<p>water damage, moisture infiltration, and other related problems.</p> <p>Proper waterproofing helps maintain the integrity and longevity of a building.</p> <p>Water proofing is more advanced and permanent solution while damp proofing is a temporary solution</p>		
		JC2	<p>Question 75.</p> <p>The resultant of all normal pressure's acts</p> <p>(A) at e.g. of body (B) at center of pressure (C) vertically upwards (D) at metacentre</p> <p>Answer: (C) vertically upward</p>	<p>Correct Answer is option (B) at centre of pressure</p> <p>The Centre of pressure is the point of application of the resultant total pressure force on the surface. It can be found by applying the principle of moments i.e. the sum of the moments of the resultant force about an axis is equal to the sum of the moments of the component force about the same axis.</p> <p>Also, the center of pressure is the point where the total sum of a pressure field acts on the surface of a body, causing a force to act through that point whereas the buoyancy force is the resultant force for the entire body.</p>	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks
		JC2	<p>Question 76.</p> <p>A bucket of water is hanging from a spring balance. An iron piece is suspended into water</p>	<p>Correct Answer is option (A)increase</p> <p>When the iron piece is suspended and submerged into the water by any support</p>	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks

			<p>without touching sides of bucket from another support. The spring balance reading will</p> <p>(A) increase (B) decrease (C) remain same (D) increase/decrease depending on depth of immersion</p> <p>Answer: (C) remain same</p>	<p>without touching the side of the bucket, then a buoyancy force (thrust) will act upward on the iron piece and there will be equal and opposite reaction force (downward) which will act on water and bucket system which is hanged by the spring balance. Thus, this results in an increase in the reading of the spring balance.</p>		
		JC2	<p>Question 92</p> <p>Which is the most preferred type of transition curve by IRC for highways?</p> <p>(A) Parabola (B) Lemniscate (C) Cubic parabola (D) Spiral</p> <p>Answer: (A) Parabola</p>	<p>Correct Answer is option (D)Spiral</p> <p>Transition curve is a curve in plan which is provided to change the horizontal alignment from straight to circular curve gradually means the radius of transition curve varies between infinity to R or R to infinity.</p> <p>IRC recommends Spiral or clothoid as the ideal transition curve due to following reasons:</p> <p>i) It satisfies that rate of change of centrifugal acceleration is constant i.e., $L_s.R = \text{constant}$.</p> <p>Where L_s = length of transition curve R = radius of</p>	<p>Alternative “D” is the correct answer</p>	<p>Hence the candidates who have selected Option “D” will get full marks</p>

				<p>curve.</p> <p>ii) The calculation and field implementation of spiral curve is simple and easy.</p> <p>iii) It enhances aesthetics also</p>		
5	Name : T HARI BABU Registration No : 352023005475	JC2	<p>Question 92</p> <p>Which is the most preferred type of transition curve by IRC for highways?</p> <p>(A) Parabola (B) Lemniscate (C) Cubic parabola (D) Spiral</p> <p>Answer: (A) Parabola</p>	<p>Answer is given as option (A) Parabola. Which I found wrong as per the reference given below:</p> <p>Reference I: As per the SK KHANNA & CEG JUSTO Book in the Chapter no.4 Highway Geometric Design, under the topic 4.4.7 Horizontal Transitional Curve at page no. 126 it is given as: "The Indian Road Congress recommends the use of the spiral as transition curve in the horizontal alignment of highways" (reference copy is attached).</p> <p>Reference II: As per the IRC 38-1988 Guidelines for design of horizontal curves for highway and design tables- under the topic no. 7 Transition Curve under the sub head 7.2 Types of Transition- 7.2.1-Essential requirement of transition curves at page no. 29 : it is mentioned that " Spiral satisfies the requirement of ideal transition curve" (reference copy is attached)</p> <p>In this regard, the correct answer for question no. 19</p>	Alternative "D" is the correct answer	Hence the candidates who have selected Option "D" will get full marks

6	Name: SPRIYAKARPPAN Registration No: 352023003974	JC2	<p>Question.06</p> <p>Writer : Pen : : ?</p> <p>(A) Needle (B) Artist : : Tailor Brush (C) Painter (D) Teacher : Canvas : Class Answer: (C) Painter</p>	<p>will be option D) Spiral.</p> <p>Answer: (C) Painter (Incorrect question) Explanation : This question is printed incorrect in the CBT exam as above, the correct form of question is given as follows, so it may be consider as incorrect question. Q. Writer: Pen::? a) Needle : Tailor b) Artist : Brush c) Painter: Canvas d)Teacher : Class</p>	None of the alternative is correct.	The Question will be deleted/notconsidered for assessment and hence no marks will be awarded
		JC2	<p>Question 27.</p> <p>Which of the following term in the buildings is used to mean the coming out of water from components like walls and floors of the buildings?</p> <p>(A) Water proofing (B) Dampness (C) Termite proofing (D) Damp proofing Answer: (A) Water proofing</p>	<p>Answer: (A) Water proofing (Wrong) Correct Answer is option (B)Dampness Explanations:- In Question they asked the term in the buildings is used to mean the coming out of water from components like walls and floors of the buildings, So the correct technical answer is DAMPNESS. The treatment used for is Water proofingstructure Dampness: Dampness in building construction refers to the presence of excessive moisture or water infiltration within the structural elements or interior spaces of a building Waterproofing in building construction is a crucial process to protect structures from water damage,</p>	Alternative "A" is the correct answer	Hence the candidates who have selected Option "A" will get full marks

				moisture infiltration, and other related problems. Proper waterproofing helps maintain the integrity and longevity of a building. Water proofing is more advanced and permanent solution while damp proofing is a temporary solution		
			<p>Question 31.</p> <p>How many layers of concrete are needed to fill a slump cone?</p> <p>(A) 5 layers by volume (B) 3 equal layers by height (C) 3 equal layers by volume (D) 5 layers</p> <p>Answer: (C) 3 equal layers by volume</p>	<p>Answer: (C) 3 equal layers by volume (Wrong) Correct Answer is option (B) 3 equal layers by height Explanation: Slump Test: The procedure of the Concrete Slump test: 1. The mold for the concrete slump test is a frustum of a cone, 300 mm (12 inches) of height. The base is 200 mm (8 inches) in diameter and it has a smaller opening at the top of 100 mm (4 inches). 2. The base is placed on a smooth surface and the container is filled with concrete in three layers (each approximately 1/3rd of the height of the mould), whose workability is to be tested.</p>	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks
		JC2	<p>Question 94</p> <p>Carpet area does not include the area of</p> <p>(A) The walls along with doors and other openings (B) Bath room and</p>	<p>Answer: (D) None (Wrong) Correct Answer is option (A) The walls along with doors and other openings Concept:- 5. MEASUREMENT OF CARPET AREA (as per IS code 3861 (2002)</p>	Alternative "A" is the correct answer	Hence the candidates who have selected Option "A" will get full marks

			<p>lavatory (C) Kitchen and pantry (D) None</p> <p>Answer: (D) None</p>	<p>5. I From the plinth area as worked out in 4, the area of the wall shall be deducted The carpet area would include the areas of the bedroom, living room, kitchen, bathrooms, balconies & staircases within the house/flat. It does not include the external and internal walls, terraces, common areas, lifts, corridors, utility ducts, etc. Carpet area = (area of bedroom + living room + kitchen + balconies + toilets) – the thickness of the inner walls.</p>		
			<p>Question 95.</p> <p>While estimating the quantities for the construction of a building, the correct metric unit is</p> <p>(A) Meter for length (B) Cubic meter for area (C) Square meters for volume (D) Liter for capacity</p> <p>Answer: (D) Liter for capacity</p>	<p>Correct Answer is option (A) & (D) Explanation :- The metric unit for estimating the quantities are measured in METERS for length as well as in Liters in capacity as cubical measurement, So both the answer are correct.</p>	<p>Alternative “D” is the correct answer</p>	<p>Hence the candidates who have selected Option “D” will get full marks</p>

7	G. DURGA PRASAD Reg No: 352023008024	JC2	<p>Question.06</p> <p>Writer : Pen : : ?</p> <p>(A) Needle (B) Artist : : Tailor Brush (C) Painter (D) Teacher : Canvas : Class Answer: (C) Painter</p>	<p>Answer: (C) Painter (Incorrect question) Explanation : This question is printed incorrect in the CBT exam as above, the correct form of question is given as follows, so it may be consider as incorrect question. Q.Writer: Pen::? a) Needle : Tailor b) Artist : Brush c) Painter: Canvas d)Teacher : Class</p>	None of the alternative is correct.	The Question will be deleted/not considered for assessment and hence no marks will be awarded
			<p>Question 27.</p> <p>Which of the following term in the buildings is used to mean the coming out of water from components like walls and floors of the buildings?</p> <p>(A) Water proofing (B) Dampness (C) Termite proofing (D) Damp proofing Answer: (A) Water proofing</p>	<p>Answer: (A) Water proofing (Wrong) Correct Answer is option (B)Dampness Explanations:- In Question they asked the term in the buildings is used to mean the coming out of water from components like walls and floors of the buildings, So the correct technical answer is DAMPNESS. The treatment used for is Water proofing</p>	Alternative "A" is the correct answer	Hence the candidates who have selected Option "A" will get full marks
			<p>Question 31.</p> <p>How many layers of concrete are needed to fill a slump cone?</p> <p>(A) 5 layers by volume</p>	<p>Answer: (C) 3 equal layers by volume (Wrong) Correct Answer is option (B) 3 equal layers by height Explanation: Slump Test: The procedure of the Concrete Slump test: 1. The mold for the concrete slump test is</p>	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks

			<p>(B) 3 equal layers by height (C) 3 equal layers by volume (D) 5 layers</p> <p>Answer: (C) 3 equal layers by volume</p>	<p>a frustum of a cone, 300 mm (12 inches) of height. The base is 200 mm (8 inches) in diameter and it has a smaller opening at the top of 100 mm (4 inches). 2. The base is placed on a smooth surface and the container is filled with concrete in three layers (each approximately 1/3rd of the height of the mould), whose workability is to be tested.</p>		
8	K KALAI SELVI Reg. No. 352023005276		<p>Question 20.</p> <p>Which of the given states or U.T(Union Territories) has the least number of females per 1000 males as per the Census 2011?</p> <p>(A) Daman and Diu (B) Meghalaya (C) Andaman Nicobar (D) Haryana</p> <p>Answer: (A) Daman and Diu</p>	<p>Claim: The answer could be both option (D) Haryana and option (A) Daman and Diu. Proof: Reference : Census 2011 Explanation : According to census 2011 the state with the lowest sex ratio is Haryana (877) and the union territory with the lowest sex ratio is Daman and Diu (618). Hence the answer could be both option (D) Haryana and option (A) Daman and Diu. Moreover the question is confusing and lacks clarity</p>	Alternative "A" is the correct answer	Hence the candidates who have selected Option "A" will get full marks

		JC2	<p>Question 27.</p> <p>Which of the following term in the buildings is used to mean the coming out of water from components like walls and floors of the buildings?</p> <p>(A) Water proofing (B) Dampness (C) Termite proofing (D) Damp proofing Answer: (A) Water proofing</p>	<p>Claim : The answer should be (B) Dampness Proof: IS (Indian Standard) : IS 13182 :1991 Topic : Waterproofing and Damp proofing of wet areas in building – recommendations Explanation : The term which in the buildings is used to mean the coming out of water from components like walls and floors of the buildings should be dampness or water leakages instead of water proofing. So the answer should be Option (B) Dampness.</p>	Alternative “A” is the correct answer	Hence the candidates who have selected Option “A” will get full marks
		JC2	<p>Question 32.</p> <p>What is the total percentage of aggregates in concrete in terms of volume?</p> <p>(A) 65-80% (B) 0.9 (C) 60-75% (D) 0.4 Answer: (C) 60-75%</p>	<p>Claim : The answer should be option (A) 65-80% Proof: Book name : Concrete Technology Theory and practice Author Name : M. S. Shetty Publication : S. CHAND & COMPANY LTD. (An ISO 9001 : 2000 Company) ISBN : 81-219-0003-4 Year of publication : revised edition 2005</p>	Alternative “C” is the correct answer	Hence the candidates who have selected Option “C” will get full marks

				<p>Chapter No : 3 . Aggregate and testing of aggregate Page no. 66 Explanation: According to the above reference the percentage of volume of aggregate is 70-80%since no option is given; as such the most closest answer should be Option (A) 65-80%</p>		
		JC2	<p>Question 41. Which of the following doesn't describe the use of hydrographic surveying? (A) Nautical charts for navigation (B) Establishing mean sea level (C) Laying an Alignment (D)Making underground investigations Answer: (B) Establishing mean sea level</p>	<p>Claim : The answer should be (D) Making underground investigation Proof: Book name : Surveying Vol 1 Author Name : Dr. B.C. Punmia, Ashok K Jain, Arun K. Jain Publication :Laxmi Publication (P) ltd. ISBN : 81-7008-054-1 Year of publication : Sixteenth edition July 2005 Chapter No :1. Fundamental Definition and Concepts Page no. 3 Explanation : According to the above reference the marine or Hydrographic survey deals with bodiesof water for purpose of navigation, water supply, harbour works or for the</p>	Alternative "B" is the correct answer	Hence the candidates who have selected Option "B" will get full marks

				<p>determination of mean sea level. The work consists in measurement of discharge of streams, making topographic survey of shores and banks, taking and locating soundings to determine the depth of water and observing the fluctuation of the ocean tide.</p> <p>So the correct option should be Option (D) Making underground investigation</p>		
		JC2	<p>Question 75.</p> <p>The resultant of all normal pressure's acts</p> <p>(A) at e.g. of body (B) at center of pressure (C) vertically upwards (D) at metacentre</p> <p>Answer: (C) vertically upward</p>	<p>Claim : The answer should be (B) Center of pressure</p> <p>Proof: Book name : Fluid Mechanics and Hydraulic Machines Author Name : Dr. R.K. Bansal Publication : Laxmi Publications (P) LTD. ISBN : 9788170083115 Year of publication : Ninth edition 2005 Chapter No : 3 . Hydrostatic Forces on surfaces Page no. 67</p> <p>Explanation : According to the above reference " The Center of pressure is defined as the point of application of the total pressure on the surface." So the most accurate answer of the question should be Option (B) Center of Pressure</p>	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks

		JC2	<p>Question 76.</p> <p>A bucket of water is hanging from a spring balance. An iron piece is suspended into water without touching sides of bucket from another support. The spring balance reading will</p> <p>(A) increase (B) decrease (C) remain same (D) increase/decrease depending on depth of immersion</p> <p>Answer: (C) remain same</p>	<p>Claim : The answer should be (A) increase</p> <p>Proof: Book name : Fluid Mechanics and Hydraulic Machines (ESE/IES mechanical engineering Previous Years Objective Questions Papers with detailed multi coloured solutions.) Author Name :ShivkumarRaghuwanshi Publication : S. Auspicious Digital publications Format : E-book Year of publication : 6 March 2022 Page no. 20 Question Asked ESE (IES) 2012 Paper (I) Explanation : Since from the given reference it is clear that the when the iron piece is suspended intothe water by any surface without touching the side of the bucket, then a buoyancy force (thrust) willact upward on the iron piece and there will be equal and opposite reaction force (downward) whichwill act on water and bucket system which is hanged by the spring balance. Thus, this results in anincrease in the reading of the spring balance. So the answer should be option (A) increases.</p>	<p>Alternative “C” is the correct answer</p>	<p>Hence the candidates who have selected Option “C” will get full marks</p>
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		JC2	<p>Question 92</p> <p>Which is the most preferred type of transition curve by IRC for highways?</p> <p>(A) Parabola (B) Lemniscate (C) Cubic parabola (D) Spiral</p> <p>Answer: (A) Parabola</p>	<p>Claim : The answer should be (D) Spiral</p> <p>Proof: IRC (Indian Road Congress) : IRC : 38-1988 (Clause No. :7.2.4) Topic : Guidelines for design of horizontal curves for highways and design tables Page no. 30 Explanation :According to IRC the theoretical requirements and facility of setting out in the field, thespiral is specified for the use as transition curves for roads in India. So the answer should be option (D) Spiral.</p>	<p>Alternative “D” is the correct answer</p>	<p>Hence the candidates who have selected Option “D” will get full marks</p>
		JC2	<p>Question 94</p> <p>Carpet area does not include the area of</p> <p>(A) The walls along with doors and other openings (B) Bath room and lavatory (C) Kitchen and pantry (D) None</p> <p>Answer: (D) None</p>	<p>Claim : The answer should be all of these</p> <p>Proof: IS (Indian Standard) :IS 3861 2002 (Clause No. :5.1.2 and 5.2) Topic : Method of Measurement of plinth, Carpet and Rentable Areas of buildings Page no. 2 Explanation : According to Indian Standard the Carpet area shall be the area excluding the areawalls along with doors and other openings, Bathrooms and Lavatory and kitchen and Pantry. So the answer should be All of these which was not given in the option</p>	<p>Alternative “A” is the correct answer</p>	<p>Hence the candidates who have selected Option “A” will get full marks</p>

9	B PERMILA Reg. No. 352023001938	JC2	<p>Question 41.</p> <p>Which of the following doesn't describe the use of hydrographic surveying?</p> <p>(A) Nautical charts for navigation (B) Establishing mean sea level (C) Laying an Alignment (D) Making underground investigations</p> <p>Answer: (B) Establishing mean sea level</p>	<p>Claim/Objection: The Answer key lists option (B) Establishing MSL; however, the correct answer is option (C) Laying an alignment. Since MSL Establishment is one of the uses of hydrographic survey, the question asked which of the following doesn't describe hydrographic survey. Thus, option B cannot be the answer. Hence, most appropriate answer is option C. Please refer to the attached pdf (Annexure 1).</p>	Alternative "B" is the correct answer	Hence the candidates who have selected Option "B" will get full marks
		JC2	<p>Question no. 56</p> <p>A steel rod of sectional area 250 sq. mm connects two parallel walls 5 m apart. The nuts at the ends were tightened when the rod was heated to 100°C. If $\alpha_{\text{steel}} = 0.000012/\text{C}^\circ$, $E_{\text{steel}} = 0.2 \text{ MN/mm}^2$, the tensile force developed at temperature of 50°C, is</p> <p>(A) 80 N/mm² (B) 100 N/mm² (C) 120 N/mm² (D) 150 N/mm²</p>	<p>Claim/Objection: The options to the above question all refer to units of stress rather than a unit of force. The question should have been about tensile stress instead of tensile force. As a result, the application of the formula became unclear and I couldn't figure out how to approach the question. Therefore, please disregard the question.</p>	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks

			Answer: (C) 120 N/mm²			
		JC2	<p>Question 75.</p> <p>The resultant of all normal pressure's acts</p> <p>(A) at e.g. of body (B) at center of pressure (C) vertically upwards (D) at metacentre</p> <p>Answer: (C) vertically upward</p>	<p>Claim/Objection: According to the answer key, it is given as option (C) Vertically upwards but it should be option (B) Center of pressure. The center of pressure is the point of application of the resultant pressure, which causes a force to act through that point. Some books, NPTEL and even Testbook.com have also said the same thing. Kindly consider this option. Please refer to the attached pdf (Annexure 2)</p>	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks
		JC2	<p>Question 77.</p> <p>Turbidity for domestic water is undesirable because it's</p> <p>(A) Is unaesthetic (B) Causes change of taste (C) Give apparent colour (D)Prevents light penetration & hence photosynthesis</p> <p>Answer: (A) Is unaesthetic</p>	<p>Claim/Objection: The turbidity of water is undesirable because the dissolved colloidal particles present in it give it an apparent color, making it look unaesthetic. It appears unaesthetic due to the apparent color, so how can it be option A alone? Additionally, it causes undesirable tastes and odors. Since there are multiple right answers to this question, any choice from the list of options can be considered.</p>	None of the alternative is correct.	The Question will be deleted/notconsidered for assessment and hence no marks will be awarded

			<p>Question 85.</p> <p>Design of road intersections is a part of _____</p> <p>(A) Harbour engineering (B) Highway engineering (C) Railway engineering (D) Traffic engineering</p> <p>Answer: (B) Highway engineering</p>	<p>Claim/Objection: In this question, both B) Highway Engineering and D) Traffic Engineering could be the answers. Hence, any of the two options must be taken into consideration. Kindly refer to the attached pdf (Annexure 3).</p>	<p>Alternative "D" is the correct answer</p>	<p>Hence the candidates who have selected Option "D" will get full marks</p>
10	A. JOHN GNANAOLIVU Reg. No. 352023009102		<p>Question 21.</p> <p>In old times, the construction of superstructure was done by using which of the following building material?</p> <p>(A) Rubber (B) Timber (C) Bamboo (D) Mud</p> <p>Answer: (B) Timber</p>	<p>Bamboo also used in superstructure in olden days</p>	<p>Alternative "B" is the correct answer</p>	<p>Hence the candidates who have selected Option "B" will get full marks</p>
			<p>Question 27.</p> <p>Which of the following term in the buildings is used to mean the coming out of water from components like walls and floors of the buildings?</p>	<p>Dampness is responsible for water passage</p>	<p>Alternative "A" is the correct answer</p>	<p>Hence the candidates who have selected Option "A" will get full marks</p>

		<p>(A) Water proofing (B) Dampness (C) Termite proofing (D) Damp proofing</p> <p>Answer: (A) Water proofing</p>			
		<p>Question no. 23</p> <p>Which of the following tools is used for cutting softbricks?</p> <p>(A) Jointer (B) Scutch (C) Spirit level (D) Trowel</p> <p>Answer: (B) Scutch</p>	Trowel also used stone dressing at site minor cutting	Alternative "B" is the correct answer	Hence the candidates who have selected Option "B" will get full marks
		<p>Question 14.</p> <p>Which of the given is a disease caused by protozoa?</p> <p>(A) Cancer (B) Typhoid (C) Kala-azar (D) Chicken Pox</p> <p>Answer: (C) Kala-azar</p>	Typhoid chickenpox are considered	Alternative "C" is the correct answer	Hence the candidates who have selected Option "C" will get full marks

		<p>Question.06</p> <p>Writer : Pen : : ?</p> <p>(A) Needle (B) Artist : : Tailor Brush (C) Painter (D) Teacher : Canvas : Class</p> <p>Answer: (C) Painter</p>	<p>Option not clear other answer has option Painter has no option in that</p>	<p>None of the alternative is correct.</p>	<p>The Question will be deleted/not considered for assessment and hence no marks will be awarded</p>
		<p>Question 31.</p> <p>How many layers of concrete are needed to fill a slump cone?</p> <p>(A) 5 layers by volume (B) 3 equal layers by height (C) 3 equal layers by volume (D) 5 layers</p> <p>Answer: (C) 3 equal layers by volume</p>	<p>Slump cone filled with in layer height also according instrument height.</p>	<p>Alternative "C" is the correct answer</p>	<p>Hence the candidates who have selected Option "C" will get full marks</p>