

No.Admn/AM(C)/Rectt/2026

Date: 12.05.2026

**NOTIFICATION**

**Subject: Invitation for representation(s), if any, on the Questions and the Answer Keys of the written test, held for the post of Associate Manager (Civil)**

With reference to Advt. No. Admn/Rectt/2026/09 dated 18 Feb 2026 for the position of Associate Manager (Civil).

Please find below the **Question** (Annexure-I) and the **Answer Keys** (Annexure-II) of the Written Test for the post of position of Associate Manager (Civil) held on 11.05.2026.

Representation(s), if any, is/are invited from the candidates regarding the correctness of the answer(s) to any question(s), on the email id career@iimmumbai.ac.in latest by **14.05.2026, 01:30 p.m.** To register your representation, an applicable fee of Rs 100 /- per question, has to be paid to the following account.

**ACCOUNT NAME: IIM MUMBAI MISC RECEIPTS**

**BANK NAME : CANARA BANK**

**BRANCH NAME : IIT POWAI**

**ACCOUNT NO : 120037475430**

**IFSC CODE : CNRB0002724**

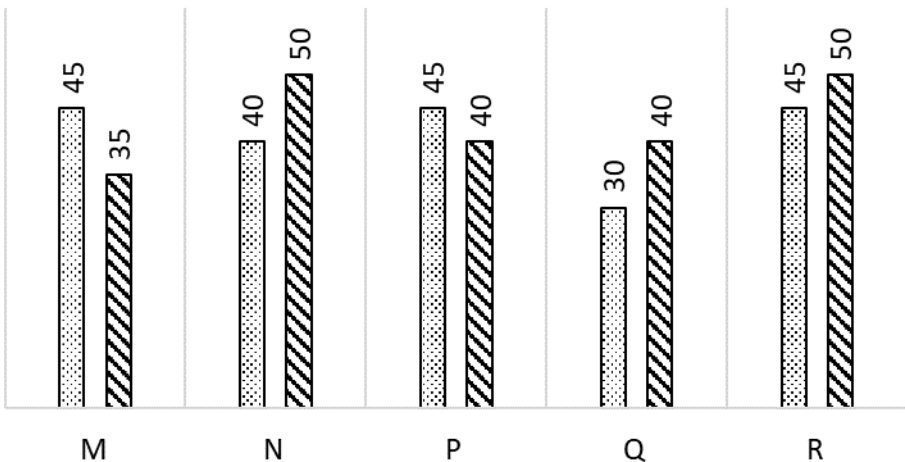
UTR information for payment has to be shared along with the representation. If your representation is found to be correct, the amount paid shall be refunded.

BY ORDER

SECTION A

1	Quartzite is a rock.	
	(A) metamorphic	(B) argillaceous
	(C) calcareous	(D) silicious
2	The highest amount of carbon is present in	
	(A) cast iron	(B) wrought iron
	(C) mild steel	(D) stainless steel
3	Dado is usually provided in	
	(A) dining halls	(B) bathrooms
	(C) living rooms	(D) verandah
4	A moving load of 5 kN travels over a beam of span 10m. Maximum shear (in kN) and moment (in kN-m) in the beam is	
	(A) 5, 12.5	(B) 2.5, 12.5
	(C) 5, 50	(D) 2.5, 25
5	With increase in the grade of concrete of a beam,	
	(A) moment capacity remains unaffected	(B) requirement for shear reinforcement increases
	(C) requirement for corrosion protection increases	(D) distance between compression fibre and neutral axis decreases
6	Separation of water or slurry from fresh concrete is known as	
	(A) creeping	(B) bleeding
	(C) segregation	(D) flooding
7	Which of the following is an advantage of using flaky aggregates in concrete?	
	(A) they reduce workability of concrete	(B) they tend to segregate
	(C) they consume more moisture from the concrete mix	(D) None of these
8	Concrete mixed partially at the batching plant and mixed complete during the journey between the plant and the site is referred to as	
	(A) ready mixed concrete	(B) transit mixed concrete
	(C) shrink mixed concrete	(D) All of these
9	M30 grade concrete refers to	
	(A) maximum strength of 30 MPa	(B) characteristic strength of 30 MPa
	(C) minimum strength of 30 MPa	(D) mean strength of 30 MPa

10	For a fixed-fixed beam of span L with a load P applied at its mid-span, the magnitude of the moment at the support and at the mid-span will be	
	(A) $PL/8$ and $PL/8$	(B) $PL/8$ and $PL/16$
	(C) $PL/16$ and $PL/16$	(D) $PL/4$ and $PL/8$
11	The maximum construction height of a brick wall in a day should be limited to	
	(A) 28-30 layers	(B) 38-40 layers
	(C) 12-14 layers	(D) no such limit required
12	Hygrometer is used to measure	
	(A) temperature	(B) pressure
	(C) relative density	(D) humidity
13	The chemical commonly added to increase the rate of sedimentation of sewage is	
	(A) sulphuric acid	(B) copper sulphate
	(C) lime	(D) sodium permanganate
14	The correct relation between Theoretical Oxygen Demand (TOD), Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) is given by	
	(A) $TOD > BOD > COD$	(B) $TOD > COD > BOD$
	(C) $BOD > COD > TOD$	(D) $COD > BOD > TOD$
15	The maximum deflection due to a moment M applied at the free end of a cantilever beam of length L and bending rigidity EI is	
	(A) $ML^2/EI$	(B) $2ML^2/EI$
	(C) $ML^2/2EI$	(D) $ML^2/4EI$
16-19	<p>Following are some details about Daniel Bernoulli (after whom Bernoulli's principle is named). Answer the questions 16-19 based on the description below:</p> <p>Daniel Bernoulli was born in Groningen, in the Netherlands, into a family of distinguished mathematicians. The Bernoulli family came originally from Antwerp, at that time in the Spanish Netherlands, but emigrated to escape the Spanish persecution of the Protestants. After a brief period in Frankfurt the family moved to Basel, in Switzerland.</p> <p>He was a contemporary and close friend of Leonhard Euler. He went to St. Petersburg in 1724 as professor of mathematics but was very unhappy there. A temporary illness together with the censorship by the Russian Orthodox Church and disagreements over his salary gave him an excuse for leaving St. Petersburg in 1733. He returned to the University of Basel, where he successively held the chairs of medicine, metaphysics, and natural philosophy until his death.</p>	
16	Daniel Bernoulli was a distant relative of Leonhard Euler.	
	(A) True	(B) False
	(C) Most likely	(D) Can't say
17	Daniel Bernoulli lived in _____ cities in his life.	
	(A) 4	(B) 5

	(C) 3	(D) 2																		
18	The most likely place from where Daniel Bernoulli published the now famous Bernoulli's principle is																			
	(A) Groningen	(B) Frankfurt																		
	(C) Basel	(D) Antwerp																		
19	Daniel Bernoulli was unhappy in St. Petersburg due to																			
	(A) censorship by the Church	(B) issues with salary																		
	(C) sickness	(D) All of these																		
20	If two forces acting at a joint are not along a straight line, then for equilibrium of the joint,																			
	(A) one of the forces must be zero	(B) both the forces must be zero																		
	(C) forces must be equal and of same sign	(D) forces must be equal in magnitude but opposite in sign																		
21	The slenderness ratio of a column of a square cross-section of 2.5cm sides and 3m length is																			
	(A) $120\sqrt{12}$	(B) $1.2\sqrt{12}$																		
	(C) 120	(D) 1.2																		
22-26	As part of a bid evaluation, the income/expenditure data (in Rs. Crore) of five contractors, M, N, P, Q and R for the year 2022 is given below. Answer questions 22-26 based on this data																			
	<p style="text-align: center;"> <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></span> Expenditure    <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; background: repeating-linear-gradient(-45deg, transparent, transparent 2px, black 2px, black 4px);"></span> Income </p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Contractor</th> <th>Expenditure (Rs. Crore)</th> <th>Income (Rs. Crore)</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>45</td> <td>35</td> </tr> <tr> <td>N</td> <td>40</td> <td>50</td> </tr> <tr> <td>P</td> <td>45</td> <td>40</td> </tr> <tr> <td>Q</td> <td>30</td> <td>40</td> </tr> <tr> <td>R</td> <td>45</td> <td>50</td> </tr> </tbody> </table>		Contractor	Expenditure (Rs. Crore)	Income (Rs. Crore)	M	45	35	N	40	50	P	45	40	Q	30	40	R	45	50
Contractor	Expenditure (Rs. Crore)	Income (Rs. Crore)																		
M	45	35																		
N	40	50																		
P	45	40																		
Q	30	40																		
R	45	50																		
22	The contractor that earned the maximum percentage of profit is																			
	(A) Q	(B) N																		
	(C) M	(D) P																		
23	The number of loss-making contractors is																			
	(A) 0	(B) 1																		
	(C) 2	(D) 3																		

24	For contractor R, if the expenditure had increased by 20% in 2022 from 2021 and the company had earned profit of 10% in 2021, R's income in 2022 was approximately (in Rs. Crore)	
	(A) 41	(B) 35
	(C) 37	(D) 39
25	Contractors M and N together had a percent profit/loss of	
	(A) 12% loss	(B) 8% loss
	(C) 8% profit	(D) No profit no loss
26	What is the ratio of expenditure to income of contractors N and Q?	
	(A) 3:4 and 4:5	(B) 4:3 and 5:4
	(C) 4:5 and 3:4	(D) None of the above
27	The design self-cleansing velocity of a sewer line located in cold climate compared to a sewer line located in warm climate can be	
	(A) higher	(B) lower
	(C) same	(D) there will be no effect of climate
28	'Surface runoff' is the quantity of water	
	(A) absorbed by the soil	(B) intercepted by buildings
	(C) that reaches the stream channels	(D) required to fill surface depressions
29	A pitot tube is used to measure	
	(A) pressure	(B) velocity of flow
	(C) difference in pressure	(D) None of these
30	When a body is partially immersed in a fluid, it is buoyed up by a force equal to	
	(A) weight of the body	(B) weight of the fluid displaced by the body
	(C) sum of the weights of the body and the fluid displaced by it	(D) difference of the weights of the body and the fluid displaced by it
31	Out of all the two-digit integers between 1 and 100, a two-digit number is selected at random. What is the probability that the selected number is not divisible by 7?	
	(A) 13/70	(B) 12/90
	(C) 78/90	(D) 77/90
32	'A' alone can do a piece of work in 6 days and 'B' alone in 8 days. 'A' and 'B' undertook to do it for Rs. 3200. With the help of 'C', they completed the work in 3 days. How much should be paid to 'C'?	
	(A) Rs. 375	(B) Rs. 400
	(C) Rs. 600	(D) Rs. 800

33	The angle of elevation of the Sun, when the length of the shadow of a tree is $\sqrt{3}$ times the height of the tree, is	
	(A) 30°	(B) 60°
	(C) 45°	(D) 90°
34	The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?	
	(A) 10 years	(B) 8 years
	(C) 4 years	(D) None of these
35	6 bells commence ringing together at ringing intervals of 2, 4, 6, 8, 10 and 12 seconds, respectively. In a 30 minute interval, how many times do all of them ring together?	
	(A) 16	(B) 15
	(C) 10	(D) 4
36	He could not understand the judges awarding her the first prize, because he thought that her performance was quite _____.	
	(A) superb	(B) medium
	(C) mediocre	(D) average
37	I saw a _____ of cows in the field.	
	(A) group	(B) herd
	(C) swarm	(D) flock
38	Synonym of 'brief' is	
	(A) limited	(B) small
	(C) little	(D) short
39	Synonym of 'august' is	
	(A) common	(B) ridiculous
	(C) dignified	(D) a month of calendar
40	The idiom "to keep one's temper" means	
	(A) to become hungry	(B) to be in good mood
	(C) to become angry	(D) to preserve one's energy
41	Value of Performance Bank Guarantee should be _____ % of tendered value as per CPWD manual	
	(A) 2	(B) 4
	(C) 5	(D) 6
42	If total cost of a building is Rs. 200 Crore, the contingencies shall be taken as per CPWD manual as----- of the cost.	
	(A) 2%	(B) 3%
	(C) 4%	(D) 5%

43	As per CPWD PAR 2021, the component of Third Party Quality Assurance (TPQA) should be	
	(A) 2%	(B) 1.5%
	(C) 1%	(D) 0.5%
44	As per GFR Rule 154, purchase of goods without quotation can be made up to a value of	
	(A) Rs. 15,000	(B) Rs. 20,000
	(C) Rs. 25,000	(D) Rs. 30,000
45	Engineering, Procurement and Construction (EPC) contract methodology is mandatory for construction project of value or more.	
	(A) Rs. 50 Crore	(B) Rs. 100 Crore
	(C) Rs. 150 Crore	(D) Rs. 200 Crore
46	Which of the following is not a maintenance work?	
	(A) special repair work	(B) minor work that adds capital value to existing asset without creating new assets
	(C) addition/alteration work	(D) aesthetic improvement in existing asset
47	Rate of Earnest Money as per CPWD manual is	
	(A) 1% of tendered cost	(B) 2% of tendered cost
	(C) 1% of estimated cost put to tender	(D) 2% of estimated cost put to tender
48	Which of the following is not an emergent work?	
	(A) restoration of essential services in case of accident/breakdown	(B) sewer and water supply
	(C) works required for law and order	(D) None of these
49	“Every contract is an agreement but every agreement may not be a contract.” – this statement is	
	(A) False	(B) True
	(C) Both	(D) No relation between the two
50	The minimum yield strength of Fe 500 grade steel in mega Pascals will be	
	(A) 415	(B) 550
	(C) 600	(D) 500

## SECTION B

### All Questions are Compulsory to Attend

51. During renovation of an academic building, it is found that the contractor is not maintaining the required quality of concrete and finishing works. Describe how you would monitor quality control, enforce contract conditions, and ensure the work meets required standards before approval. (5 Marks)

52. An institute plans to construct a two-storey classroom block. Explain the procedure for preparing the Bill of Quantities (BOQ) from drawings and specifications. Discuss quantity take-off, rate analysis, inclusion of GST, contingencies, non-schedule items, and precautions to avoid quantity and costing errors during tender preparation. (5 Marks).

ANSWER KEY

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	A	11	C	21	A	31	D	41	C
2	A	12	D	22	A	32	B	42	B
3	B	13	C	23	C	33	A	43	C
4	A	14	B	24	A	34	C	44	C
5	D	15	C	25	D	35	A	45	B
6	B	16	B	26	C	36	C	46	B
7	D	17	A	27	B	37	B	47	D
8	C	18	C	28	C	38	D	48	D
9	B	19	D	29	B	39	C	49	B
10	A	20	B	30	B	40	B	50	D