

No.Admn/Asst.M(E)/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 Assistant Manager (Civil)

With reference to Advt. No. Admn/Rectt/2026/09 dated 18 Feb 2026 for the position of Assistant 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 Assistant 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

| | | |
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| 1 | Nominal mix ratio of M20 grade concrete is | |
| | (A) 1:3:6 | (B) 1:1:2 |
| | (C) 1:1.5:3 | (D) 1:2:4 |
| 2 | The unit weight of reinforced concrete, in kN/m^3 , is | |
| | (A) 24 | (B) 25 |
| | (C) 21 | (D) 20 |
| 3 | A steel rod of 100 mm^2 cross-sectional area and 2 m in height is subjected to a force of 40 kN. If Young's modulus is 200 GPa, the elongation of the rod will be | |
| | (A) 1 mm | (B) 2 mm |
| | (C) 3 mm | (D) 4 mm |
| 4 | A shear stress of 50 MPa is acting at a point, while the tensile stress on all four surfaces is 100 MPa. The maximum principal stress at the point is | |
| | (A) 150 MPa | (B) 50 MPa |
| | (C) 112 MPa | (D) 122 MPa |
| 5 | A 6 m long cantilevered beam is to be designed for gravity loads. Where will the main longitudinal reinforcements be? | |
| | (A) Near the top fibre | (B) Near the bottom fibre |
| | (C) It will depend on the depth of the beam | (D) All of these |
| 6 | Which one of the following is used as a carrier in paint? | |
| | (A) almond oil | (B) linseed oil |
| | (C) mustard oil | (D) olive oil |
| 7 | Seasoning of timber entails | |
| | (A) tar coating | (B) heating |
| | (C) painting | (D) process to reduce moisture content |
| 8 | The main principle of field surveying is working from | |
| | (A) whole to part | (B) higher level to lower level |
| | (C) lower level to higher level | (D) part to whole |
| 9 | When 1cm on a map represents 10m on the ground, the representative fraction of the scale is | |
| | (A) 1:10 | (B) 10:1 |
| | (C) 1:1000 | (D) 1000:1 |
| 10 | Closed contour lines with one or more lower level contour lines inside and higher ones outside may represent | |
| | (A) lake | (B) hill |
| | (C) vegetation | (D) slope |

| | | |
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| 11 | 'Initial setting time' of cement corresponds to | |
| | (A) loss of plasticity of cement paste | (B) loss of plasticity of mortar mix |
| | (C) hardening of cement paste | (D) loss of workability of concrete |
| 12 | California Bearing Ratio is a measure of | |
| | (A) subgrade drainage | (B) subgrade strength |
| | (C) subgrade depth | (D) width/depth ratio of road |
| 13 | The plasticity index of the following will be zero | |
| | (A) clay | (B) silt |
| | (C) sand | (D) silty sand |
| 14 | Chlorine is added to water meant for drinking supply to | |
| | (A) reduce TDS | (B) remove turbidity |
| | (C) reduce pH | (D) remove pathogens |
| 15 | Quantity of earth removed during the excavation of a pit of size 500cm x 400 cm x 300 cm in cubic metre is | |
| | (A) 6,00,00,000 | (B) 60 |
| | (C) 60,000 | (D) 6,00,000 |
| 16 | The minimum yield strength of Fe 500 grade steel in mega Pascals will be | |
| | (A) 415 | (B) 550 |
| | (C) 600 | (D) 500 |
| 17 | A plumb line or plumb bob provides | |
| | (A) means to transport material at a height in a construction site | (B) vertical reference line |
| | (C) horizontal reference line | (D) diagonal reference line |
| 18 | When bricks are to be used at a site, a 'fall test' is a quick way to assess the strength of the bricks. In this test, the brick should not break when it is dropped on hard ground from a height of: | |
| | (A) 1 m | (B) 2 m |
| | (C) 2 feet | (D) 1 foot |
| 19 | The cost of constructing a masonry wall of a given thickness is usually specified as Rupees per _____. | |
| | (A) kilogram | (B) square metre |
| | (C) running metre | (D) cubic metre |
| 20 | Water-cement ratio in concrete refers to the ratio of | |
| | (A) mass of water to mass of cement | (B) volume of water to volume of cement |
| | (C) mass of water to volume of cement | (D) volume of water to mass of cement |

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| 21 | Mason 'A' can complete 150 sq.m of floor tiling work in 15 days while mason 'B' can complete the same work in 20 days. If both the masons are deployed for this work for 4 days, how much floor area still remains to be tiled? | | | | | |
| | (A) 37.50 sq.m | | | (B) 15 sq.m | | |
| | (C) 80 sq.m | | | (D) 70 sq.m | | |
| 22-26 | Study the following table on maintenance expenditures of a hypothetical campus and answer the questions based on it | | | | | |
| Annual expenditure on maintenance | | | | | | |
| Expenditure of items in Rs. Lakh | | | | | | |
| Year | Civil maintenance | Electrical maintenance | Electricity bill | Minor works | Taxes | |
| 2019 | 288 | 98 | 3.00 | 23.4 | 83 | |
| 2020 | 342 | 112 | 2.52 | 32.5 | 108 | |
| 2021 | 324 | 101 | 3.84 | 41.6 | 74 | |
| 2022 | 336 | 133 | 3.68 | 36.4 | 88 | |
| 2023 | 420 | 142 | 3.96 | 49.4 | 98 | |
| | | | | | | |
| | | | | | | |
| 22 | What is the average amount of expenditure on minor works during this period? | | | | | |
| | (A) Rs. 32.43 lakh | | | (B) Rs. 33.72 lakh | | |
| | (C) Rs. 34.18 lakh | | | (D) Rs. 36.66 lakh | | |
| 23 | The total amount of electricity bill paid by the company is approximately what percent of the total expenditure on civil and electrical maintenance? | | | | | |
| | (A) 1% | | | (B) 2.90% | | |
| | (C) 0.74% | | | (D) None of these | | |
| 24 | The total expenditure in 2019 was what percent of the total expenditure in 2023? | | | | | |
| | (A) 62% | | | (B) 69% | | |
| | (C) 66% | | | (D) 71% | | |
| 25 | In 2022, what was the approximate ratio of the expenditure on taxes to the remainder of the expenses in that year? | | | | | |
| | (A) 1:6 | | | (B) 1:7 | | |
| | (C) 1:5 | | | (D) None of these | | |
| 26 | What is the overall approximate ratio of expenditure on electrical maintenance to civil maintenance during this period? | | | | | |
| | (A) 1:2 | | | (B) 1:1 | | |
| | (C) 1:3 | | | (D) None of the above | | |
| 27 | Ends of the shear stirrups in beams and columns should be bent at | | | | | |
| | (A) 45° | | | (B) 90° | | |
| | (C) 135° | | | (D) It is of no consequence | | |

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| 28 | The actual cost of construction of a project is Rs. 100 Crore (say, A). For budgeting purpose, a 1% water charge is applicable on A and 18% GST is applicable on the overall cost including water charges. Finally, a 15% contractor's profit is to be added. What should be the total amount to be budgeted for this project? | |
| | (A) Rs. 137 Crore | (B) Rs. 119.18 Crore |
| | (C) Rs. 116.15 Crore | (D) Rs. 135.70 Crore |
| 29 | Slenderness ratio of a column is the ratio of its effective length to | |
| | (A) actual length | (B) least radius of gyration |
| | (C) least cross-sectional dimension | (D) factor of safety |
| 30 | The silt content of a batch of fine aggregate received at a site is found to be 10%. This sand: | |
| | (A) can be used for concreting | (B) cannot be used for concreting but be used for plastering |
| | (C) can be used for masonry walls | (D) cannot be used for construction |
| 31 | What is the number of triangles in the figure shown. | |
| |  | |
| | (A) 22 | (B) 24 |
| | (C) 26 | (D) 28 |
| 32 | 'A' delivers newspapers in his neighbourhood. Each morning, he delivers 43 papers to customers in his neighbourhood in a span of about 50 minutes. If 'A' is sick, his friend 'B', who lives on the same street, will sometimes deliver the papers for him. | |
| | Based on the above information, which of the following statements must be true? | |
| | (A) 'A' and 'B' live in the same neighbourhood | (B) It takes 'B' more than 50 minutes to deliver newspapers |
| | (C) It is dark outside when 'A' delivers newspapers | (D) 'A' is sick very often |
| 33 | Which patten will fill the blank in the following series? SCD, TEF, UGH, _____, WKL | |
| | (A) CMN | (B) UJI |
| | (C) VIJ | (D) IJT |
| 34 | A bank offers 5% compound interest calculated on half-yearly basis. A customer deposits Rs. 1600 each on 1st January and 1st July of a year. At the end of the year, the amount he would have gained by way of interest is Rs.: | |
| | (A) 120 | (B) 121 |
| | (C) 122 | (D) None of these |

| | | |
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| 35 | Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5? | |
| | (A) 1/2 | (B) 1/4 |
| | (C) 8/15 | (D) 9/20 |
| 36 | I am unwell and we will have to _____ the meeting for a few days. | |
| | (A) put on | (B) put off |
| | (C) put of | (D) put away |
| 37 | The cat and the dog have a _____ enemy in the rat. | |
| | (A) common | (B) same |
| | (C) mutual | (D) similar |
| 38 | He is very good _____ making stories. | |
| | (A) in | (B) about |
| | (C) at | (D) for |
| 39 | Antonym of 'plausible' is | |
| | (A) inplausible | (B) implausible |
| | (C) displausible | (D) None of these |
| 40 | Antonym of 'frailty' is | |
| | (A) energy | (B) intensity |
| | (C) vehemence | (D) strength |
| 41 | I am not older than you, _____ ? | |
| | (A) aren't I | (B) amn't I |
| | (C) weren't I | (D) am I |
| 42 | The adverb of 'sincere' is | |
| | (A) sincerely | (B) sincerity |
| | (C) sincere | (D) None of these |
| 43 | The length of each side of an equilateral triangle having an area of $4\sqrt{3}$ is | |
| | (A) 4/3 | (B) 3/4 |
| | (C) 3 | (D) 4 |
| 44 | How much water must be added to a bucket which contains 40 litres of milk at the cost of Rs. 55 per litre so that the cost of milk reduces to Rs. 40 per litre? | |
| | (A) 15 litres | (B) 20 litres |
| | (C) 25 litres | (D) None of these |
| 45 | At what rate percent on simple interest will Rs. 750 amount to Rs. 900 in 5 years? | |
| | (A) 5% | (B) 3.5% |

| | | |
|----|---|--|
| | (C) 4% | (D) 5.5% |
| 46 | Two pipes A and B can separately fill a tank in 12 minutes and 15 minutes respectively. Both the pipes are opened together but 4 minutes after the start the pipe A is turned off. How much time will it take to fill the tank? | |
| | (A) 9 min | (B) 10 min |
| | (C) 11 min | (D) 12 min |
| 47 | Full form of GFR is | |
| | (A) General Financial Rules | (B) Government Financial Rules |
| | (C) Government Funding Rules | (D) General Funding Rules |
| 48 | '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 |
| 49 | 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 |
| 50 | 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 |

SECTION B

51. A multistorey building project is facing issues such as honeycombing in concrete, reinforcement congestion, and delay in slab casting during the monsoon season. Explain how you would identify the root causes and implement corrective measures to maintain project quality and schedule. (5 Marks)

52. An IIM campus plans to construct a sustainable academic building with minimum environmental impact. Discuss the planning, design, construction materials, water management system, and energy-efficient techniques you would recommend for the project.(5 Marks)

ANNEXURE-II

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