Indian Institute of Infrastructure & Construction

ATE iiic (Aptitude Test in Engineering iiic) 2026

IIIC will be conducting ATE iiic 2026 as part of the admission process for various training programs offered by IIIC. Moreover, select companies will consider the results of this examination as part of their recruitment criteria. The exam will be administered in partnership with **L&T EduTech**.

Examination Details

- **Mode of Examination:** Online
- **Exam Duration:** 75 minutes
- **Total Number of Questions:** 50
- **Total Marks:** 100
- **Marking Scheme:**
  - All questions carry equal marks
  - **No negative marks** for wrong answers
- L&T EduTech will share the **login credentials** and **test instructions** with registered candidates prior to the exam.
- These details will be sent via **Email and SMS** to the contact information provided during registration.
- Candidates are advised to regularly check their email inbox (including spam/junk folder) and SMS for updates.

Sections	Assessment Type	Question (Nos.)	Marks	Duration (Minutes)
Section 1	Domain	30	60	75
Section 2	Aptitude	20	40	
Total		**50**	**100**	

Previous year sample questions (ATE iiic 2025)

Section: Domain

Stream: Civil Engineering

1. You are asked to design and supervise a wooden truss for a factory, which is to have spans of 6 m to 9 m. The type of the truss you will use is _____.

   (A) Mansard truss

   (B) Queen post truss

   (C) King post truss

   (D) Collar truss

2. The time by which a task can be delayed without affecting the start of succeeding activities is called _____.

   (A) Duration

   (B) Total float

   (C) Free float

   (D) Interfering float

3. A level is set up at a point 150 m from A and 100 m from B. The observed staff reading at A and B are 2.525 m and 1.755 m respectively. The combined corrections for curvature and refraction to the staff reading at A and B are 0.0015 m and 0.0007 m respectively. What is the true difference of the level between A and B?

   (A) 2.5325 m

   (B) 2.1257 m

   (C) 1.7543 m

   (D) 0.7692 m

4. The correct match between the physical states of the soil given in group I and the governing conditions given in group II are _____.

Group I	Group II
1. Normally consolidated soil	P. Sensitivity greater than 16
2. Quick clay	Q. Dilation angle=0
3. Sand in critical state	R. Liquid limit greater than 50
4. Clay in high plasticity	S. Over consolidation ratio =1

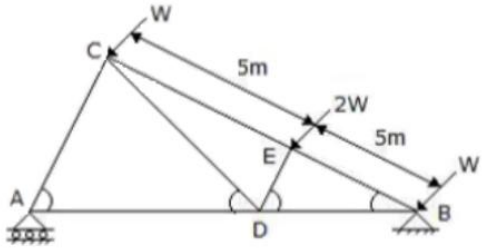
(A) 1-S, 2-P, 3-Q, 4-R

(B) 1-Q, 2-S, 3-P, 4-R

(C) 1-Q, 2-P, 3-R, 4-S

(D) 1-S, 2-Q, 3-P, 4-R

5. The nature of the stress in horizontal members of the truss shown in below figure may be _____.



(A) Compressive

(B) Tensile

(C) Shear

(D) Zero

6. Two statements associated with concrete workability are given. Select the correct option with regard to these statements.

Statement 1: As the compaction factor increases, slump decreases.

Statement 2: Slump test helps in qualitatively understanding the setting time of concrete.

(A) Statement 1 is false, and Statement 2 is true

(B) Statement 1 is true, and Statement 2 is false

(C) Statements 1 and 2 are true

(D) Statements 1 and 2 are false

7. Pick the incorrect statement from the following:

   (A) D.P.C. is provided at a plinth level in internal walls and external walls.

   (B) D.P.C. is provided under doors and verandah openings only.

   (C) Vertical D.P.C is not provided on internal walls.

   (D) Cement concrete is a rigid damp-proofing material.

8. The following five activities are associated with construction contracts management. Choose the option showing the correct progressive sequence of the activities.

   P-Opening of Bid

   Q-Submission of Security deposit

   R-Publication of Notice Inviting Tender (NIT)

   S-Issue of Letter of Intent (LOI)

   T-Submission of Earnest Money Deposit (EMD)

   (A) R-Q-P-T-S

   (B) S-P-R-T-Q

   (C) R-T-P-S-Q

   (D) S-T-P-R-Q

9. What is the adjustment done to place the vertical axis exactly over the station?

   (A) Setting up

   (B) Centering

   (C) Levelling

   (D) Focusing

10. Match the following Evapotranspiration concepts with their accurate descriptions.

LIST-I	LIST-II
1. Potential Evapotranspiration	a. Estimation of Evapotranspiration from a reference surface
2. Reference Crop Evapotranspiration	b. Refers to the maximum water loss from the crop field
3. Actual Crop Evapotranspiration	c. Calculated by using a water stress coefficient Ks and /or by adjusting crop coefficient Kc for other stresses and environmental constraints
4. Crop Evaporation under Non-Standard Condition	d. The rate of evapotranspiration by a particular crop in a given period under prevailing soil water and atmospheric conditions

(A) 1-a, 2-d, 3-c, 4-b

(B) 1-b, 2-a, 3-d, 4-c

(C) 1-d, 2-a, 3-c, 4-b

(D) 1-c, 2-d, 3-b, 4-a

Stream: Mechanical Engineering

1. Find the shear yield stress (in MPa) of the material according to Von Mises criterion. Consider the uniaxial yield stress of a material is 375 MPa.

   (A) 216.51

   (B) 266.51

   (C) 316.51

   (D) 366.51

2. In technical drawings, what type of line is commonly used to represent the visible outlines of objects?

   (A) Dashed line

   (B) Center line

   (C) Solid line

   (D) Hidden line

3. The dimensionless number in mass transfer operations, which is analogous to the Nusslet number in heat transfer, is known as _____.

(A) Schmidt number

(B) Sherwood number

(C) Peclet number

(D) Lewis number

4. Match the List 1 (Failure Theory) with List 2 (Graphical Representation).

	Theory		Graphical Representation
A	Rankines Theory	1	Rectangular
B	St. venant's Theory	2	Rhombus
C	Guest & Tresca's Theory	3	Hexagon
D	Haigh & Beltrami Theory	4	Ellipse

(A) A-1, B-2, C-3, D-4

(B) A-2, B-3, C-4, D-1

(C) A-3, B-2, C-4, D-1

(D) A-4, B-3, C-2, D-1

5. Which of the following factors are necessary for fatigue failure?

    1. Maximum tensile stress of sufficiently high value.
    2. Enough variation of applied stress.
    3. A large number of cycles of applied stress.

(A)1 & 2 only

(B) 2 & 3 only

(C) 1 & 3 only

(D) 1, 2 & 3

6. In stainless steel, which alloying element is primarily responsible for enhancing corrosion resistance and forming a passive oxide layer on the surface?

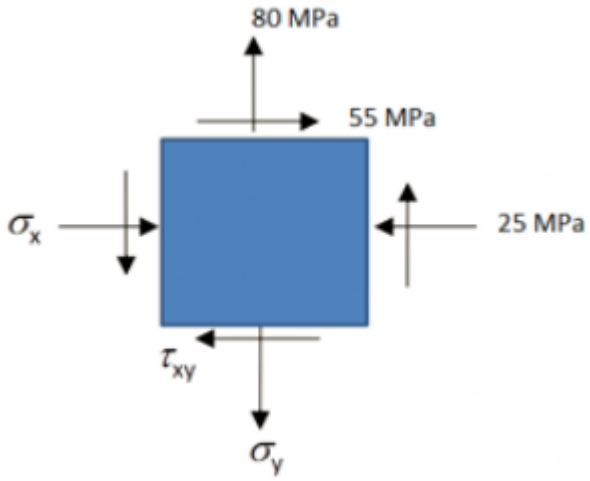
(A) Nickel

(B) Manganese

(C) Chromium

(D) Titanium

7. Calculate the maximum in-plane shear stress of the combined stress condition below.



(A) τ_{max} =81.40 MPa

(B) τ_{max} = ± 35.67 MPa

(C) τ_{max} = ± 76.03 MPa

(D) τ_{max} = ± 41.63 MPa

8. Which method is applied to tasks where the length of time required for completion is already known?

(A) Linear Programming Problem (LPP)

(B) Critical Path Method (CPM)

(C) Program Evaluation and Review Technique (PERT)

(D) Statistical Quality Management (SQM)

9. Identify the position of the front view in the second quadrant of the projection.

(A) Below the reference line

(B) Above the reference line

(C) In the profile plane

(D) None of the above

10. What will be the other name for residual stresses?

    (A) Load stresses

    (B) Locked-in stresses

    (C) Behavioural stresses

    (D) Chronic stresses

Stream: Electrical Engineering

1. A circuit breaker is rated as 1200 A,1500 MVA, 33 kV, 3 second, 3 phase oil CB. The rated symmetrical breaking current is _____.

    (A) 17496 A

    (B) 26243 A

    (C) 44614 A

    (D) 66920 A

2. Convert the given gray number $(101110)_2$ to binary.

    (A) 101111

    (B) 111111

    (C) 110100

    (D) 001100

3. Determine the type number and order of a system represented by the given transfer function T(s) = (s+2) (s+3) / [s^2(s+1)].

    (A) Type no = 2, Order = 3

    (B) Type no = 3, Order = 2

    (C) Type no = 1, Order = 2

    (D) Type no = 0, Order = 3

4. Which one of the following statements about interpoles is NOT true in a DC machine?

    (A) The air gap under the interpoles is less than the air gap under the main field poles to avoid saturation.

    (B) The interpole windings are connected in series with armature winding.

(C) The interpoles produce the flux in the opposite direction to cross the magnetizing flux of the armature.

(D) The interpoles in the DC Machine make commutation spark-free.

5. Damper bars are embedded in the _____ of a synchronous motor for starting the motor.

(A) armature core

(B) yoke

(C) pole shoes

(D)field core

6. What is the standard voltage level for power generation in India?

(A) 22 kV

(B) 11 kV

(C) 33 kV

(D) 110 kV

7. A differential amplifier has a differential gain of 100, CMRR= 240. The common mode gain is given by _____.

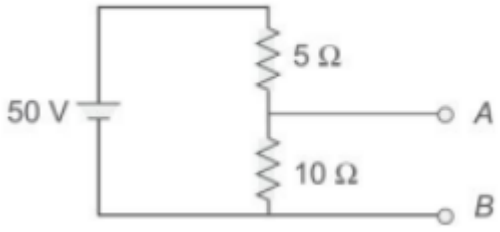
(A) 0.265

(B) 2.336

(C) 0.417

(D) 5.123

8. What is the voltage across the 10 Ω resistor in the circuit.



(A) 50.33 V

(B) 25.89 V

(C) 33.3 V

(D) 16.6 V

9. A DC shunt generator has an induced voltage of 119 V on an open circuit. When the machine is on load, the terminal voltage is 110 V. Find the load current if the field resistance is 9 Ω and the armature resistance is 0.05 Ω. Ignore armature reaction.

    (A) 189.5 A

    (B) 120.4 A

    (C) 167.8 A

    (D) 234.6 A

10. What is the ratio between the rectification ratios of half- and full-wave diode rectifiers?

    (A) 1:2

    (B) 2:1

    (C) 1: √2

    (D) √2:1

Section: Aptitude

1. Water: Convection **::** Space : _____.

    (A) Conduction

    (B) Transference

    (C) Vacuum

    (D) Radiation

2. Read the sentence to find out if there is any error in it. The error, if any, will be in one part of the sentence. The number of that part will be the answer. Ignore error in punctuation if any.

    Less people have (1) / ever had the courage to (2) / ride an angry bull (3) / let alone a matador (4).

    (A) 1

    (B) 2

    (C) 3

    (D) 4

3. Vigilant: Alert **::** Viable_____.

    (A) Active

    (B) Gentle

    (C) Hopeless

    (D) Feasible

    (E) Useful

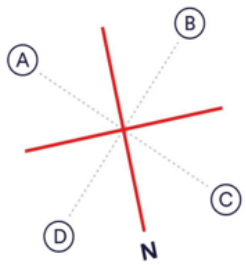
4. The police arrested four criminals – P, Q, R and S. The criminals knew each other. They made the following statements:

   P says, “Q committed the crime.”
   Q says, “S committed the crime.”
   R says, “I did not do it.”
   S says, “What Q said about me is false.”
   Assume only one of the arrested four committed the crime and only one of the statements made above is true. Who committed the crime?
   (A) P
   (B) R
   (C) S
   (D) Q

5. In the question below, some statements are given followed by some conclusions. Taking the given statements to be true even if they seem to be at variance from commonly known facts, read all the conclusions and then decide which of the given conclusions logically follows the given statements.

   Statements: All rooms are doors. Only a few doors are villas. Some houses are villas.
   Conclusions:
   I. Some rooms are villas.
   II. All rooms being house is a possibility.
   (A) Both I & II follow
   (B) Only II follow
   (C) Either I or II follow
   (D) Only I follow
   (E) None follow

6. Which letter represents the Northeast?



(A) A

(B) B

(C) C

(D) D

7. P is the sister of Q, Q is the husband of R, R is the mother of S, T is the husband of P. Based on the above information, T is _____ of S.

   (A) the grandfather

   (B) an uncle

   (C) the father

   (D) a brother

8. A group of soldiers can completely destroy an enemy bunker in 7 days. However, 12 soldiers fell ill. The remaining now can do the job in 10 days. Find the original group strength.

   (A) 30

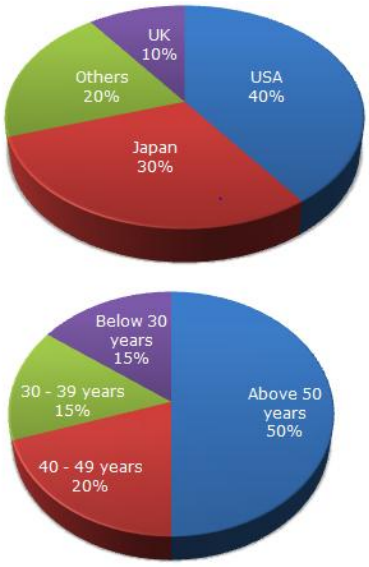
   (B) 40

   (C) 50

   (D) 60

9. The following pie charts exhibit the distribution of the overseas tourist traffic from India. The two charts shows the tourist distribution by country and the age profiles of the tourists respectively.

   Distribution of Overseas Tourist Traffic from India.



The ratio of the number of Indian tourists that went to USA to the number of Indian tourists who were below 30 years of age is_____.

(A) 2:1

(B) 8:3

(C) 3:8

(D) Cannot be determined

10. The average marks of 15 students in a class is 145, maximum marks being 150. If the lowest scores are removed, the average increases by 5. Also, two lowest scores are consecutive multiples of 9. The lowest score in the class is_____.

(A) 108

(B) 100

(C) 95

(D) 98