



राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली

NATIONAL INSTITUTE OF TECHNOLOGY DELHI

(शिक्षा मंत्रालय, भारत सरकार के अधीन एक स्वायत्त संस्थान)

(An autonomous Institute under the aegis of Ministry of Education (Shiksha Mantralaya), Govt. of India)

Plot No. FA7, Zone P1, GT Karnal Road, Delhi-110036, INDIA

दूरभाष/Tele: +9111-33861000, 1001, 1005, वेबसाइट/Website: www.nitdelhi.ac.in

QUESTION PAPER FOR THE POST OF (Technician Aerospace Engineering)

(PAY LEVEL-3, as per the 7th CPC)

Maximum Marks : 100

Time: 150 Minutes

Name of Candidate : _____

Roll No. : _____

INSTRUCTIONS TO CANDIDATES

- The Written Examination shall consist of one paper with Part A, Part B, and Part C, carrying 100 marks in total.
- Part A contains 20 Objective Type questions on General Knowledge, carrying 01 mark each (20 marks).
- Part B contains 60 Objective Type questions on Domain Knowledge, carrying 01 mark each (60 marks).
- Part C contains 05 Descriptive Type questions, each carrying 04 marks (20 marks).
- For Objective Type questions (Part A & B), four options (A, B, C, D) shall be provided and only one correct answer is to be chosen.
- One (01) mark shall be awarded for each correct answer in Part A and Part B.
- Negative marking of 0.25 mark shall be applicable for each incorrect answer in Part A and Part B.
- Unattempted questions in Part A and Part B shall not attract negative marking.
- No negative marking shall be applicable for Part C (Descriptive questions).
- The total duration of the Written Examination (Part A, B & C) shall be 2 hours and 30 minutes (150 minutes).
- Candidates must write their Name, Roll Number and Signature on each page of the

Question Paper / Answer Booklet.

- l) Candidates must ensure that the Question Paper / Answer Booklet is complete and free from defects before the examination begins.
- m) Mobile phones, electronic watches, calculators and all electronic gadgets are strictly prohibited in the examination hall.
- n) Cutting, overwriting or use of correction fluid in answers is not permitted.
- o) The Question Paper, Answer Sheet(s) and Admit Card must be returned to the Invigilator after completion of the examination.
- p) Use of unfair means or misconduct during the examination shall lead to cancellation of candidature.
- q) The decision of the Institute authorities shall be final and binding in all matters related to the examination.
- r) In case of any discrepancies, the English Version of the Question shall prevail.

अभ्यर्थियों के लिए निर्देश

- a) लिखित परीक्षा एक प्रश्न पत्र की होगी, जिसमें भाग-A, भाग-B तथा भाग-C सम्मिलित होंगे, तथा कुल 100 अंक होंगे।
- b) भाग-A में सामान्य ज्ञान से संबंधित 20 वस्तुनिष्ठ प्रकार के प्रश्न होंगे, जिनमें प्रत्येक प्रश्न 01 अंक का होगा (कुल 20 अंक)।
- c) भाग-B में विषय/डोमेन ज्ञान से संबंधित 60 वस्तुनिष्ठ प्रकार के प्रश्न होंगे, जिनमें प्रत्येक प्रश्न 01 अंक का होगा (कुल 60 अंक)।
- d) भाग-C में 05 वर्णनात्मक प्रकार के प्रश्न होंगे, जिनमें प्रत्येक प्रश्न 04 अंक का होगा (कुल 20 अंक)।
- e) वस्तुनिष्ठ प्रकार के प्रश्नों (भाग-A एवं भाग-B) के लिए चार विकल्प (A, B, C, D) दिए जाएंगे तथा केवल एक सही उत्तर का चयन करना होगा।
- f) भाग-A एवं भाग-B में प्रत्येक सही उत्तर के लिए एक (01) अंक प्रदान किया जाएगा।
- g) भाग-A एवं भाग-B में प्रत्येक गलत उत्तर के लिए 0.25 अंक की नकारात्मक अंकन किया जाएगा।
- h) भाग-A एवं भाग-B में अनुत्तरित (Unattempted) प्रश्नों पर कोई नकारात्मक अंकन नहीं होगा।
- i) भाग-C (वर्णनात्मक प्रश्नों) में नकारात्मक अंकन लागू नहीं होगा।
- j) लिखित परीक्षा (भाग-A, भाग-B एवं भाग-C) की कुल अवधि 2 घंटे 30 मिनट (150 मिनट) होगी।
- k) अभ्यर्थियों को प्रश्न पत्र / उत्तर पुस्तिका के प्रत्येक पृष्ठ पर अपना नाम, रोल नंबर एवं हस्ताक्षर करना अनिवार्य होगा।
- l) अभ्यर्थियों को यह सुनिश्चित करना होगा कि प्रश्न पत्र / उत्तर पुस्तिका पूर्ण एवं किसी भी प्रकार की त्रुटि से मुक्त हो, परीक्षा प्रारंभ होने से पूर्व।

- m) परीक्षा कक्ष में मोबाइल फोन, इलेक्ट्रॉनिक घड़ियाँ, कैलकुलेटर तथा सभी प्रकार के इलेक्ट्रॉनिक उपकरण सख्त रूप से वर्जित हैं।
- n) उत्तरों में कटिंग, ओवरराइटिंग या करेक्शन फ्लूड का प्रयोग वर्जित है।
- o) परीक्षा समाप्ति के पश्चात प्रश्न पत्र, उत्तर पत्रक(ों) तथा प्रवेश पत्र (एडमिट कार्ड) पर्यवेक्षक को वापस करना अनिवार्य होगा।
- p) परीक्षा के दौरान अनुचित साधनों का प्रयोग या कदाचार पाए जाने पर अभ्यर्थी की उम्मीदवारी निरस्त कर दी जाएगी।
- q) परीक्षा से संबंधित सभी मामलों में संस्थान प्राधिकरणों का निर्णय अंतिम एवं बाध्यकारी होगा।
- r) किसी भी प्रकार की विसंगति की स्थिति में, प्रश्न का अंग्रेज़ी संस्करण मान्य होगा।

Part-A

Q. No.	Question	Answer
1	Which is the largest cricket ground in the world, by capacity? A. Narendra Modi Stadium B. Shaheed Veer Narayan Singh International Cricket Stadium C. Rajiv Gandhi International Cricket Stadium D. Bharat Ratna Shri Atal Bihari Vajpayee Ekana Cricket Stadium	A
2	Which among the following is the correct designation of Hindi in India? A. National language B. Language of communication between states & centre C. The Official Language of the Union of India D. Official and National Language of India	C
3	There is no provision in the Constitution for the impeachment of the A. Chief Justice of India B. Chief Justice of a High Court C. Vice President D. Governor	D
4	Raigad Fort is located in which state? A. Rajasthan B. Maharashtra C. Kerala D. Tamil Nadu	B
5	International Labour Day is observed every year on which day? A. April 29 B. April 30 C. May 1 D. May 2	C
6	Select the correct option for the sentence below- When the teacher entered the class, a student..... on the blackboard. A. Is writing B. Was writing C. Wrote D. Writes	B
7	Find the correctly spelt word- A. Jurisdiction B. Juresdiction C. Jurisdection D. Juriesdiction	A

8	<p>Rearrange the given phrases to form a meaningful sentence-</p> <ol style="list-style-type: none"> 1. Reading books is a habit 2. But also enlarges the mind 3. Because it not only increases knowledge 4. Which must be cultivated by everybody <p>Please select the correct sequence-</p> <ol style="list-style-type: none"> A. 1, 2, 3, 4 B. 4, 1, 3, 2 C. 1, 2, 4, 3 D. 1, 4, 3, 2 	D
9	<p>Synonym of Installed is-</p> <ol style="list-style-type: none"> A. Established B. Started C. Settled D. Manufactured 	A
10	<p>Antonym of Arrogant is-</p> <ol style="list-style-type: none"> A. Coward B. Humble C. Rude D. Egotistic 	B
11	<p>B's brother is A, D's father is C, B's mother is E. A and D are brothers. How is E related to C?</p> <ol style="list-style-type: none"> A. Sister B. Sister-in-law C. Niece D. Wife 	D
12	<p>A person walks from a point towards North-East direction. After walking 500 m he turns towards South and covers a distance of 400 m. At last, he reaches-</p> <ol style="list-style-type: none"> A. 100 m North-East from the starting point B. 100 m North from the starting point C. 300 m East from the starting point D. 300 m North-East from the starting point 	C
13	<p>Arrange the following words in a meaningful order-</p> <ol style="list-style-type: none"> 1. Consultation 2. Disease 3. Doctor 4. Treatment 5. Recovery <p>Select the correct option-</p> <ol style="list-style-type: none"> A. 2, 3, 1, 4, 5 B. 4, 3, 2, 1, 5 C. 2, 3, 4, 1, 5 D. 5, 1, 4, 3, 2 	A

14	Find the wrong term in the given series- 4, 7, 12, 22, 38, 71 A. 7 B. 12 C. 22 D. 38	C
15	Choose the number that will complete the second pair in the same way as first pair- 3. : 27 :: 4 : ? A. 24 B. 64 C. 40 D. 44	B
16	If 'TEACHER' is coded as 'VGCEJGT' then what will be code for 'CHILDREN'? A. EJKNFTGP B. EJKNFHTP C. EJKNFGTO D. EJKNEGTP	A
17	The age of Ram is twice the age of Shyam and half the age of Sohan. Shyam is elder than Mohan. Who is the eldest? A. Mohan B. Ram C. Sohan D. Shyam	C
18	The average age of A, B and C is 26 years. If the average age of A and C is 29 years, then what is the age of B? A. 26 years B. 20 years C. 29 years D. 23 years	B
19	A man travelled 30% of his journey at a speed of 85 kmph and the rest of his journey at a speed of 33 kmph. Find his average speed throughout the journey. A. 46.6 kmph B. 48.6 kmph C. 42.6 kmph D. 44.6 kmph	B
20	What does the "Page Layout" tab allow you to adjust? A. Inserting hyperlinks B. Text color C. Fonts and paragraphs D. Margins, orientation, and size	D
<u>Part-B</u>		

1	If $A = \{1, 2, 3, 4\}$ and $B = \{3, 4, 5\}$, then $A \cup B$ is: A) $\{1, 2, 3, 4\}$ B) $\{3, 4\}$ C) $\{1, 2, 3, 4, 5\}$ D) $\{5\}$	C
2	If $f(x) = x^2 + 2x$, then $f(-1)$ is: A) -1 B) 0 C) 1 D) 2	B
3	The solution of equation $x^2 - 9 = 0$ is: A) 3 only B) -3 only C) ± 3 D) 0	C
4	The slope of the line joining $(2,3)$ and $(4,7)$ is: A) 1 B) 2 C) 3 D) 4	B
5	If $y = \sin x$, then dy/dx is: A) $\sin x$ B) $-\sin x$ C) $\cos x$ D) $-\cos x$	C
6	Mean of first 10 natural numbers is: A) 4.5 B) 5 C) 5.5 D) 6	C
7	Probability of getting an even number on a dice is: A) $1/6$ B) $1/3$ C) $1/2$ D) $2/3$	C
8	Magnitude of vector $2i + 3j$ is: A) $\sqrt{5}$ B) $\sqrt{13}$ C) $\sqrt{9}$ D) $\sqrt{7}$	B

9	<p>Direction cosines of x-axis are:</p> <p>A) (0,1,0) B) (1,0,0) C) (0,0,1) D) (1,1,1)</p>	B
10	<p>In Linear Programming, the objective function is:</p> <p>A) Linear inequality B) Linear equation C) Non-linear equation D) Quadratic equation</p>	B
11	<p>The graph of $x + y \leq 5$ represents:</p> <p>A) A line B) A point C) A curve D) A region</p>	D
12	<p>If $A \subseteq B$ and $B \subseteq A$, then:</p> <p>A) $A \neq B$ B) $A = B$ C) A is empty D) B is empty</p>	B
13	<p>Least count of a Vernier calipers is:</p> <p>A) 0.01 cm B) 0.02 cm C) 0.1 cm D) 1 cm</p>	B
14	<p>Area under velocity–time graph gives:</p> <p>A) Speed B) Acceleration C) Distance D) Displacement</p>	D
15	<p>Newton's third law states:</p> <p>A) $F = ma$ B) Action = Reaction C) Energy conserved D) Momentum conserved</p>	B
16	<p>Kinetic energy of a body is given by:</p> <p>A) mv B) mgh C) $\frac{1}{2}mv^2$ D) mv^2</p>	C

17	Moment of inertia depends on: A) Mass only B) Shape only C) Axis of rotation D) Temperature	C
18	Acceleration due to gravity on Earth is approximately: A) 8.9 m/s ² B) 9.8 m/s ² C) 10.8 m/s ² D) 11.8 m/s ²	B
19	Bulk modulus is related to: A) Shape change B) Volume change C) Length change D) Area change	B
20	At constant temperature, PV = constant is known as: A) Charles law B) Boyle's law C) Gay-Lussac law D) Avogadro law	B
21	Unit of electric field is: A) V/m B) A/m C) C/m D) Ω	A
22	Resistance of a conductor depends on: A) Length B) Area C) Material D) All of these	D
23	Fleming's left hand rule is used for: A) Generator B) Motor C) Transformer D) Battery	B
24	Faraday's law is related to: A) Electrostatics B) Magnetism C) Electromagnetic induction D) AC circuits	C

25	The nature of electromagnetic waves is: A) Longitudinal B) Transverse C) Mechanical D) Stationary	B
26	Photoelectric effect proves: A) Wave nature of light B) Particle nature of light C) Dual nature of matter D) Nuclear structure	B
27	Atomic number represents number of: A) Neutrons B) Protons C) Electrons + neutrons D) Nucleons	B
28	1 mole of any substance contains: A) 6.022×10^{22} particles B) 6.022×10^{23} particles C) 3.011×10^{23} particles D) 1.6×10^{-19} particles	B
29	Maximum electrons in M-shell is: A) 8 B) 16 C) 18 D) 32	C
30	Periodic table is arranged according to increasing: A) Atomic mass B) Atomic number C) Density D) Valency	B
31	Ionic bond is formed by: A) Sharing electrons B) Transfer of electrons C) Sharing protons D) Transfer of neutrons	B
32	First law of thermodynamics is based on: A) Entropy B) Conservation of mass C) Conservation of energy D) Chemical equilibrium	C

33	pH < 7 indicates: A) Neutral solution B) Basic solution C) Acidic solution D) Salt solution	C
34	Oxidizing agent: A) Loses electrons B) Gains electrons C) Gives protons D) Gains neutrons	B
35	Functional group of alkenes is: A) -OH B) -COOH C) C=C D) C≡C	C
36	Solubility of gases in liquids increases with: A) Temperature B) Pressure C) Volume D) Density	B
37	Electrolytic conductance depends on: A) Nature of electrolyte B) Concentration C) Temperature D) All of these	D
38	Rate constant of a reaction depends on: A) Concentration B) Temperature C) Catalyst D) Pressure	B
39	Lanthanides belong to: A) s-block B) p-block C) d-block D) f-block	D
40	Coordination number indicates: A) Oxidation state B) Valency C) Number of ligands attached D) Atomic number	C

41	Lift is generated mainly due to: A) Gravity B) Pressure difference C) Thrust D) Drag	B
42	Continuity equation is based on conservation of: A) Energy B) Momentum C) Mass D) Pressure	C
43	Surface tension is due to: A) Gravity B) Molecular attraction C) Pressure D) Temperature	B
44	Turbulent flow occurs at: A) Low Reynolds number B) Zero velocity C) High Reynolds number D) Low pressure	C
45	Pascal's law is related to: A) Solids B) Gases only C) Fluids D) Vacuum	C
46	Zeroth law of thermodynamics defines: A) Energy B) Temperature C) Entropy D) Work	B
47	Which cycle is used in petrol engines? A) Diesel B) Brayton C) Otto D) Rankine	C
48	Heat transfer by electromagnetic waves is: A) Conduction B) Convection C) Radiation D) Diffusion	C

49	<p>Stress =</p> <p>A) Load × Area</p> <p>B) Area / Load</p> <p>C) Load / Area</p> <p>D) Load × Length</p>	C
50	<p>Young's modulus is ratio of:</p> <p>A) Stress to strain</p> <p>B) Load to area</p> <p>C) Force to mass</p> <p>D) Strain to stress</p>	A
51	<p>Thermal expansion increases with:</p> <p>A) Decrease in temperature</p> <p>B) Increase in temperature</p> <p>C) Pressure</p> <p>D) Density</p>	B
52	<p>Machining is a process of:</p> <p>A) Joining</p> <p>B) Casting</p> <p>C) Material removal</p> <p>D) Forming</p>	C
53	<p>Computer hardware refers to:</p> <p>A) Programs</p> <p>B) Physical components</p> <p>C) Data</p> <p>D) Users</p>	B
54	<p>Which is NOT an input device?</p> <p>A) Mouse</p> <p>B) Keyboard</p> <p>C) Scanner</p> <p>D) Monitor</p>	D
55	<p>MS Word is used for:</p> <p>A) Calculations</p> <p>B) Data analysis</p> <p>C) Document preparation</p> <p>D) Presentations</p>	C
56	<p>Which Excel function finds average?</p> <p>A) SUM</p> <p>B) COUNT</p> <p>C) AVG</p> <p>D) AVERAGE</p>	D

57	Operating system acts as interface between: A) User and hardware B) Software and software C) Hardware and hardware D) User and internet	A
58	Internet is best described as: A) LAN B) MAN C) WAN D) PAN	C
59	Digital signature ensures: A) Speed B) Authentication and integrity C) Storage D) Compression	B
60	e-Governance means use of IT for: A) Education only B) Banking only C) Government services D) Entertainment	C

PART C

1. Describe the process of air speed measurement in a wind tunnel, write the equations used.
2. What is Brayton cycle? Draw and label it properly.
3. What are the SOPs for maintenance of laboratory equipment?
4. What is the use of Vernier calliper and screw gauge? What are the least count of various measuring instruments?
5. How will you create CAD model of an airplane?



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F. No.: NITD/01/Admn/606/2025-26/TEAE

Dated: 10.03.2026

NOTICE

Subject: Provisional Result of the Written Test/Examination held on 10.03.2026 for the post of Technician in the Department/Discipline of Aerospace Engineering, NIT Delhi (01 OBC), advertised vide Advt. No.: 08/2025 – reg.

S. No.	Roll No.	Form No	Part A (20 Marks)	Part B (60 Marks)	Part C (20 Marks)	Marks Obtained in written Test/Examination (100 Marks)
1.	25081105	CNDN11320	15.00	31.25	02.00	48.25
2.	25081107	CNDN12053	12.50	50.50	07.00	70.00
3.	25081111	CNDN8810	18.75	33.00	09.00	60.75
4.	25081112	CNDN9367	11.75	30.75	08.00	50.50

Note:

Minimum Qualifying percentage is 55% i.e. 55 marks out of 100.

The result of the candidates who appeared for the aforementioned post is provisional in nature and may be subject to change upon receipt and examination of representations, if any, against the provisional answer key.

Further, it is hereby informed that only the candidates who are finally shortlisted, as specified at Point No. 2 under (A) of the document dated 12.12.2025, shall be called to appear for the Proficiency Test for the said post (Ref. F. No. NITD/01/Admn/606/2025-26 dated 12.12.2025).

The selection of candidates shall be subject to meeting all the eligibility criteria and successful verification of documents.

Candidates are requested to regularly visit the Institute website for further updates and notifications.

This issues with the approval of the Competent Authority.

Sd/-
(Registrar, NIT Delhi)



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F. No.: NITD/01/Admn/606/2025-26/TEAE

Dated: 10.03.2026

NOTICE

Subject: Provisionally shortlisted candidate for the Proficient Test for the post of Technician in the Department/Discipline of Aerospace Engineering, NIT Delhi (01 OBC), advertised vide Advt.

No.: 08/2025 – reg.

S. No.	Roll No.	Form No	Part A (20 Marks)	Part B (60 Marks)	Part C (20 Marks)	Marks Obtained in written Test/Examination (100 Marks)
1.	25081107	CNDN12053	12.50	50.50	07.00	70.00
2.	25081111	CNDN8810	18.75	33.00	09.00	60.75

Note:

The minimum qualifying percentage for the said post in the OBC category is 55%, i.e., 55 marks out of 100, therefore, only 02 candidates have been provisionally shortlisted against the one (01) advertised post, as specified at Point No. 2 under (A) of the document F. No. NITD/01/Admn/606/2025–26 dated 12.12.2025. Accordingly, the above-mentioned candidates have been provisionally shortlisted for the Proficiency Test scheduled to be held on 16.03.2026 (FN).

The above list is provisional in nature and may be subject to change upon receipt and examination of representations, if any, against the provisional answer key.

The selection of candidates shall be subject to meeting all the eligibility criteria and successful verification of documents.

Candidates are requested to regularly visit the Institute website for further updates and notifications.

This issues with the approval of the Competent Authority.

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