



राष्ट्रीय प्रौद्योगिकी संस्थान मिजोरम
NATIONAL INSTITUTE OF TECHNOLOGY MIZORAM
(An Institute of National Importance under Ministry of Education, Govt. of India)
CHALTLANG, AIZAWL, MIZORAM - 796012

COMPETITIVE WRITTEN EXAMINATION FOR THE POST OF

TECHNICIAN

QUESTION & ANSWER BOOK

PAPER-I

PART-A: GENERAL APTITUDE & REASONING (30 MARKS)

PART-B: GENERAL SCIENCE (30 MARKS)

PART-C: GENERAL KNOWLEDGE (40 MARKS)

Roll No. of the Candidate: _____

Checked by:

Invigilator's signature with date:

1. _____ 2. _____

Name: _____ **Name:** _____

Centre Superintendent:

Signature with date: _____

Name: _____



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Not to be filled up by Invigilators /Candidates
EVALUATION OF THE QUESTION & ANSWER BOOK

| Qn. No | Score of Evaluators (Part-A) | | | Qn. No | Score of Evaluators (Part-B) | | | Qn. No | Score of Evaluators (Part-C) | | |
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Name & Signature of Evaluators:

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Total Marks: 100 (Part A + B + C)

Duration: 2 Hours

Qualifying Marks: 30

PART-A: GENERAL APTITUDE & REASONING (15 X 2 = 30 MARKS)

Tick the answers in a blue ball pen

Tick the Correct Choice with a blue ball pen. Selecting more than one choice will result in a ZERO mark.

| | | |
|-----------|---|-----|
| Qn. No. 1 | In a examination, 65 % students passed in Physics and 60 % in Chemistry, 40 % in both Physics and Chemistry. If 90 students failed physics and chemistry both, then what is the total number of students? | |
| | a) | 600 |
| | b) | 650 |
| | c) | 700 |
| | d) | 750 |

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|-----------|--|-----------|
| Qn. No. 2 | A mixture contains milk and water in the ratio. If the 5 litres of water is added to the mixture, the ratio becomes 4:5. Find the quantity of milk in the given mixture. | |
| | a) | 10 litres |
| | b) | 15 litres |
| | c) | 20 litres |
| | d) | 25 litres |



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| | | |
|-----------|---|-------|
| Qn. No. 3 | Zinc and copper are melted to form an alloy in the ratio 9:11. If 28.8 kg of Zinc is consumed in it, what is the weight of the alloy? | |
| | a) | 58 kg |
| | b) | 60 kg |
| | c) | 64 kg |
| | d) | 70 kg |

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|-----------|---|--------|
| Qn. No. 4 | If 36 men can do a work in 25 hrs. In how many hours will 15 men do it? | |
| | a) | 40 hrs |
| | b) | 50 hrs |
| | c) | 60 hrs |
| | d) | 70 hrs |

| | | |
|-----------|--|------|
| Qn. No. 5 | If 12 carpenters, working 6 hrs a day make 460 chairs in 24 days, how many chairs will 18 carpenters make in 36 hrs, each working 8 hrs a day? | |
| | a) | 920 |
| | b) | 1260 |
| | c) | 1320 |
| | d) | 1380 |



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| | | |
|-----------|---|--------|
| Qn. No. 6 | Two pipes A and B can fill a tank in 36 hrs and 45 hrs respectively. If both pipes are opened simultaneously, how much time will be taken to fill the tank? | |
| | a) | 20 hrs |
| | b) | 24 hrs |
| | c) | 28 hrs |
| | d) | 32 hrs |

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|-----------|---|---------|
| Qn. No. 7 | A and B are two stations 390 km apart. A train starts from A at 10 AM and travels towards B at 65 kmph. Another train starts from B at 11 AM and travels towards A at 35 kmph. At what time do they meet? | |
| | a) | 2:15 pm |
| | b) | 3:15 pm |
| | c) | 4:15 pm |
| | d) | 5:15 pm |

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|-----------|--|--------|
| Qn. No. 8 | Two trains 100 meters and 120 meters in length are running in the same direction with the speed of 72 kmph and 54 kmph respectively. In how much time, the first train crosses the second? | |
| | a) | 40 sec |
| | b) | 44 sec |
| | c) | 48 sec |
| | d) | 52 sec |



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| | | |
|-----------|---|---------|
| Qn. No. 9 | A man takes 3 hours and 45 minutes to row a boat 15 km downstream of a river and 2 hours and 30 minutes to cover a distance of 5 km upstream. Find the speed of the river current in km/hr. | |
| | a) | 1 km/hr |
| | b) | 2 km/hr |
| | c) | 3 km/hr |
| | d) | 4 km/hr |

| | | |
|------------|---|----------|
| Qn. No. 10 | A sum of Rs. 800 amounts to Rs 920 in 3 years at simple interest. If the interest rate is increased by 3%, how much would that amount to? | |
| | a) | Rs. 992 |
| | b) | Rs. 1000 |
| | c) | Rs. 920 |
| | d) | Rs. 800 |

| | | |
|------------|---|---------|
| Qn. No. 11 | Find the compound interest of Rs 7500 at 4% per annum for 2 years, compounded annually. | |
| | a) | Rs. 600 |
| | b) | Rs. 612 |
| | c) | Rs. 624 |
| | d) | Rs. 632 |



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| | | |
|------------|---|----------|
| Qn. No. 12 | A sum of money doubles itself at compound interest in 15 years. In how many years will it become eight times? | |
| | a) | 30 years |
| | b) | 45 years |
| | c) | 60 years |
| | d) | 75 years |

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|------------|----------------------------|--|----|--|
| Qn. No. 13 | Find the missing sequence: | | | |
| | | | | |
| | a) | | b) | |
| | c) | | d) | |



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| | | |
|------------|---|-----|
| Qn. No. 14 | Find the missing number in this sequence: 1, 2, 6, 24, 120, ? | |
| | a) | 240 |
| | b) | 360 |
| | c) | 480 |
| | d) | 720 |

| | | |
|------------|--|-------|
| Qn. No. 15 | The perimeters of two squares are 40 cm and 32 cm. Find the perimeter of a third square whose area is equal to the difference of the areas of the two squares. | |
| | a) | 24 cm |
| | b) | 36 cm |
| | c) | 40 cm |
| | d) | 54 cm |



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PART-B: GENERAL SCIENCE (15 X 2 = 30 MARKS)

Tick the Correct Choice with a blue ball pen. Selecting more than one choice will result in a ZERO mark.

| | | |
|-----------|-----------------------------------|-----------------------|
| Qn. No. 1 | Earth's Core is mainly made up of | |
| | a) | Aluminum and Nickel |
| | b) | Copper and Iron |
| | c) | Nickel and Iron |
| | d) | Alumina and Magnesium |

| | | |
|-----------|-------------------------|--------------------------------------|
| Qn. No. 2 | RADAR is an acronym for | |
| | a) | Radio and digital amplifier recorder |
| | b) | Radio detection and ranging |
| | c) | Range detection and ranging |
| | d) | Reliable digital amplifier recorder |

| | | |
|-----------|---------------|---|
| Qn. No. 3 | Primates are: | |
| | a) | Mammals with five fingers in their hands. |
| | b) | Family of tigers. |
| | c) | One class of animals living only in Antarctica. |
| | d) | Family of Reptiles. |



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| | | |
|-----------|---|----------------|
| Qn. No. 4 | The greenhouse effect is primarily due to | |
| | a) | Methane |
| | b) | Nitrogen |
| | c) | Ozone |
| | d) | Carbon dioxide |

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|-----------|--------------------|--|
| Qn. No. 5 | Super-tankers are: | |
| | a) | 20 tonne good carrying trucks |
| | b) | Water tanks storing a high volume of water |
| | c) | Giant ships carrying automobile items |
| | d) | Giant ships carrying crude oil |

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|-----------|------------------------------|---------------------|
| Qn. No. 6 | Sound cannot travel through: | |
| | a) | Water |
| | b) | Concrete structures |
| | c) | Vacuum |
| | d) | Iron blocks |

| | | |
|-----------|--------------------|-------------------|
| Qn. No. 7 | Pancreas helps in: | |
| | a) | Reproduction |
| | b) | Digestion |
| | c) | Oxygenating blood |
| | d) | Creating neurons |



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|-----------|--|----------------------------|
| Qn. No. 8 | Water dissolves many substances because: | |
| | a) | Water has ionic bonds. |
| | b) | Cost of water is less. |
| | c) | Water is a polar molecule. |
| | d) | Water has minerals. |

| | | |
|-----------|---|---------------|
| Qn. No. 9 | Conversion of a solid directly into the vapour state is called: | |
| | a) | Sublimation |
| | b) | Vapourization |
| | c) | Evaporation |
| | d) | Condensation |

| | | |
|------------|---------------------------------|----------------------------------|
| Qn. No. 10 | The nucleus of an atom contains | |
| | a) | Electrons and Protons |
| | b) | Electrons and Neutrons |
| | c) | Neutrons and Protons |
| | d) | Electrons, Protons and Neutrons. |

| | | |
|------------|---|------------------|
| Qn. No. 11 | Ozone Layer in the atmosphere prevents: | |
| | a) | Visible rays |
| | b) | Ultraviolet Rays |
| | c) | X-rays |
| | d) | Gamma Rays |



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|------------|-----------------------|------------|
| Qn. No. 12 | Malaria is caused by: | |
| | a) | A bacteria |
| | b) | A virus |
| | c) | A protozoa |
| | d) | A fungus |

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|------------|--|--------------|
| Qn. No. 13 | Which of the following is NOT a clean energy source? | |
| | a) | Hydropower |
| | b) | Fossil Fuel |
| | c) | Wind Energy |
| | d) | Solar Energy |

| | | |
|------------|--|--------------|
| Qn. No. 14 | What atmospheric layer has most of the clouds? | |
| | a) | Troposphere |
| | b) | Mesosphere |
| | c) | Thermosphere |
| | d) | Exosphere |

| | | |
|------------|---|---|
| Qn. No. 15 | You are traveling in a lift from a higher floor to a lower floor, holding a ball. Assume the lift comes down under gravity. Now you release the ball. Select the choice that indicates how you would notice the movement of the ball. | |
| | a) | The ball falls down. |
| | b) | The ball goes up with acceleration equal to the acceleration due to gravity. |
| | c) | The ball remains stationary |
| | d) | The ball goes up with acceleration higher than the acceleration due to gravity. |



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PART-C: GENERAL KNOWLEDGE (20 X 2 = 40 MARKS)

Tick the Correct Choice with a blue ball pen. Selecting more than one choice will result in a ZERO mark.

| | | |
|-----------|---|--------------------|
| Qn. No. 1 | Which protocol is specifically aimed at reducing substances that deplete the ozone layer? | |
| | a) | Kyoto Protocol. |
| | b) | Paris Agreement. |
| | c) | Montreal Protocol. |
| | d) | Rio Declaration. |

| | | |
|-----------|--|---------------------|
| Qn. No. 2 | When plastic waste is burned in a backyard fire or open dump, it releases highly toxic chemicals known as: | |
| | a) | Water vapor |
| | b) | Helium and Neon |
| | c) | Dioxins and Furans |
| | d) | Oxygen and Nitrogen |

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|-----------|--|--|
| Qn. No. 3 | A person plants trees in their neighborhood. How does this help the environment? | |
| | a) | Reduces oxygen |
| | b) | Blocks sunlight only |
| | c) | Increases pollution |
| | d) | Improves air quality and reduces pollution |



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| | | |
|-----------|---|----------------------|
| Qn. No. 4 | What was the theme for Earth Day, observed on April 22, 2026? | |
| | a) | Planet vs. Plastics |
| | b) | Restore Our Earth |
| | c) | Our Planet, Our Home |
| | d) | Invest in Our Planet |

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|-----------|--|--------------------------------|
| Qn. No. 5 | Which three nations are the joint hosts for the FIFA World Cup 2026, scheduled to begin in June? | |
| | a) | USA, Canada, and Mexico |
| | b) | Spain, Portugal, and Morocco |
| | c) | Qatar, UAE, and Saudi Arabia |
| | d) | Brazil, Argentina, and Uruguay |

| | | |
|-----------|--|--------------------|
| Qn. No. 6 | Which concept encourages designing products for reuse, recycling, and minimal waste? | |
| | a) | Circular economy |
| | b) | Linear economy |
| | c) | Service economy |
| | d) | Industrial economy |

| | | |
|-----------|--|---|
| Qn. No. 7 | The concept of “carbon neutrality” is best described as: | |
| | a) | Eliminating all emissions completely |
| | b) | Avoiding renewable energy |
| | c) | Balancing carbon emissions with carbon removal or offsets |
| | d) | Increasing industrial output |



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|-----------|---|--|
| Qn. No. 8 | Why does an iron nail rust faster in sea water than in tap water? | |
| | a) | Iron does not react in fresh water. |
| | b) | Tap water contains protective minerals. |
| | c) | Sea water is always warmer than tap water. |
| | d) | Sea water contains more dissolved salts that speed up corrosion. |

| | | |
|-----------|--|----------------------|
| Qn. No. 9 | Which process is primarily responsible for long-term carbon sequestration in the Earth system? | |
| | a) | Photosynthesis. |
| | b) | Volcanic eruptions. |
| | c) | Combustion. |
| | d) | Weathering of rocks. |

| | | |
|------------|-----------------------------------|---|
| Qn. No. 10 | Why do mirrors reflect our image? | |
| | a) | Light passes through the mirror. |
| | b) | Mirror produces light. |
| | c) | Light bounces back from the mirror surface. |
| | d) | Mirror absorbs light. |



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|------------|---|---|
| Qn. No. 11 | Which of the following best explains why ice floats on water? | |
| | a) | The hydrogen bonds in ice create a rigid, open lattice structure that increases the volume. |
| | b) | Ice has higher density than water. |
| | c) | Liquid water molecules are larger and heavier than those in ice. |
| | d) | Ice molecules have less mass than liquid water molecules. |

| | | |
|------------|---|--------|
| Qn. No. 12 | At which temperature does water attain its highest density? | |
| | a) | 10 °C. |
| | b) | 0 °C. |
| | c) | 2 °C. |
| | d) | 4 °C. |

| | | |
|------------|---|------------|
| Qn. No. 13 | Which of the following hormones regulates blood sugar levels? | |
| | a) | Thyroxine |
| | b) | Estrogen |
| | c) | Insulin |
| | d) | Adrenaline |



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|------------|--|-----------------------|
| Qn. No. 14 | What is the main function of haemoglobin in the blood? | |
| | a) | Fight infections. |
| | b) | Help in clotting. |
| | c) | Regulate temperature. |
| | d) | Transport oxygen. |

| | | |
|------------|---|-----------------------------|
| Qn. No. 15 | The main purpose of environmental conservation is to: | |
| | a) | Increase industrial growth. |
| | b) | Protect natural resources. |
| | c) | Increase pollution. |
| | d) | Reduce population. |

| | | |
|------------|--|------|
| Qn. No. 16 | National Institute of Technology Mizoram was established in: | |
| | a) | 2005 |
| | b) | 2008 |
| | c) | 2010 |
| | d) | 2015 |

| | | |
|------------|--|-----------|
| Qn. No. 17 | Jampui Hills is located in which Indian state? | |
| | a) | Mizoram |
| | b) | Assam |
| | c) | Tripura |
| | d) | Meghalaya |



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|------------|---|----------------------------------|
| Qn. No. 18 | Which following pairs is correctly matched? | |
| | a) | Mizoram – Garia |
| | b) | Meghalaya – Cheraw |
| | c) | Arunachal Pradesh – Pang Lhabsol |
| | d) | Manipur – Chavang Kut |

| | | |
|------------|--|-----------|
| Qn. No. 19 | Inbuan Wrestling is a traditional sport associated with: | |
| | a) | Assam |
| | b) | Nagaland |
| | c) | Mizoram |
| | d) | Meghalaya |

| | | |
|------------|---|------------------------|
| Qn. No. 20 | What is the literal meaning of Arunachal Pradesh? | |
| | a) | Land of Blue Mountains |
| | b) | Land of the Rising Sun |
| | c) | Land of Rivers |
| | d) | Land of Peace |