Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: English

1. Active and Passive Voice (Focusing on Assertive Sentence)
2. Simple Complex and Compound Sentence.
3. Conditional Sentences (Zero and First Conditional)
4. Conditional Sentences (2nd and 3rd Conditional)
5. Participles (Present, Past and Perfect Participle)
6. Uses of Gerund and Infinitive.
7. Tense Identification (Focusing on the classification of Present Tense)
8. Uses of Prefixes and Suffixes to form words.
9. Transformation (Assertive to Negative and Vice Versa)
10. Modifiers.

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: Bangla (Lecturer)

১। সোনার তরী- রবীন্দ্রনাথ ঠাকুর

২। সাম্যবাদী- কাজী নজরুল ইসলাম

৩। পদ্মা- ফররুখ আহমেদ

৪। প্রতিদান- জসীম উদ্দিন

৫। আমি কিংবদন্তীর কথা বলছি- আবু জাফর ওবায়দুল্লাহ

৬। বিলাসী- শরৎচন্দ্র চট্টোপাধ্যায়

৭। তাজমহল-বনফুল

৮। জীবন ও বৃক্ষ- মোহাহের হোসেন চৌধুরী

৯। যৌবনের গান- কাজী নজরুল ইসলাম

১০। সাহিত্যের খেলা- প্রমথ চৌধুরী

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: Bangla (Assistant Teacher)

১। ফুলের বিবাহ (বঙ্কিমচন্দ্র চট্টোপাধ্যায়)

২। লাইব্রেরী (রবীন্দ্রনাথ ঠাকুর)

৩। নিরীহ বাঙ্গালী (রোকেয়া শাখাওয়াত হোসেন)

৪। একুশের গল্প (জহির রায়হান)

৫। কপোতাক্ষ নদ (মাইকেল মধুসূদন দত্ত)

৬। যাব আমি তোমার দেশে (জসীম উদ্দিন)

৭। বই পড়া (প্রমথ চৌধুরী)

৮। মানুষ (কাজী নজরুল ইসলাম)

৯। অবাক সূর্যোদয় (হাসান হাফিজুর রহমান)

১০। মমতাদি (মানিক বন্দোপাধ্যায়)

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: Science (Assistant Teacher)

Ser	Topic
1.	i. Parallel and series circuit. ii. Octet and duet rule. iii. Limiting reactant. iv. Pollination. v. Properties of periodic table. vi. Redox reaction. vii. Rate of reaction. viii. Hydrocarbon. ix. Phytohormone. x. Cell division.

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: Biology (Assistant Teacher)

Ser	Topic
1.	i. Cell Division. ii. Binomial Nomenclature. iii. Pollination. iv. Neuron and nervous system. v. Mutual interaction in living organisms. vi. Aerobic Respiration. vii. Blood and Blood circulatory system. viii. Genetic engineering and it's steps. ix. Co-ordination in plants. x. Heredity materials.

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: Physics (Assistant Teacher)

Ser	Topic
1.	**Explain:** i. Waves, Sound & Echo. ii. Gravitation & Gravity. iii. Work, Energy & Power. iv. Pressure & Density.

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: ICT (Lecturer)

1. Data Encryption.
2. Kinds of data base relation.
3. Register.
4. Data transmission method.
5. Conversion of number system.
6. De Morgan’s theorems.
7. Implementation of full adder using half adder.
8. Recursive function.
9. Artificial intelligence.
10. HTML Hyperlink.

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: Mathematics (Assistant Teacher)

1. Prove that $a + ar + ar^2 + \cdots + ar^{n-1} = \frac{a(1-r^n)}{1-r}; r < 1$
2. Find the domain the range of (i) $\frac{1}{\sqrt{2x-3}}$ (ii) $In\frac{3+x}{3-x}$
3. Fatorize: $9a^2 + \frac{1}{9a^2} - 2 + 9a - \frac{1}{a}$
4. Prove that $a^3 + b^3 + c^3 - 3abc = \frac{1}{2}(a+b+c)\{(a-b)^2 + (b-c)^2 + (c-a)^2\}$
5. Prove that $log1 = 0$
6. Find the value of $sin30^0$
7. Prove that Area of triangle $= \sqrt{s(s-a)(s-b)(s-c)}$ where a, b, c are sides of the triangle.
8. Prove that diameter is the greatest chord of a circle.
9. If $\frac{a^3+b^3}{a-b+c} = a(a+b)$ then show that a, b, c are continued proportion.
10. Solve: $ax^2 + bx + c = 0$
11. Find angle between hour hand and minute hand of the clock when it is 9:45
12. Describe about position vector.
13. Discuss about slope of straight line.
14. Explain pascal's triangle/ Binomial theorem for expansions of Binomials.
15. Define probability and prove that $0 \leq P(A) \leq 1$.

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: Hindu Religion Studies (Assistant Teacher)

1. Avatarism
2. Origin of Hinduism
3. Religious Rites
4. Concept of Ausangya Yoga
5. Mahabharat

Mainamati English School & College

Lecturer, Asst Teacher & Demonstrator Recruitment Test October-2025

Topic For Demo Class

Subject: Physics (Demonstrator)

Ser	Topic
1.	Determination of radius of curvature of Spherometer.