SYLLABUS

Indian Airforce - Group X

English

1. Passage:

A short passage followed by four questions to test comprehension (understanding of the passage, drawing inference, understanding of vocabulary).

2. Grammar I:

Verb concord, Forms of verbs and errors in the use of verbs, Sequence of tenses and errors in the use of tenses, Transformation of sentences – Compound, Complex, Simple, Negative, Affirmative, Comparative degree, Positive degree, Superlative degree etc.

3. Grammar II:

a. Formation of words – Nouns from verbs and adjectives, Adjectives from nouns and verbs, Adverbs from adjectives

b. Determiners

c. The Preposition

d. Nouns and Pronouns

e. The Adjective

f. The Adverb

g. The Conjunction

h. The Modals

i. Clauses – Noun clauses, Adverb clauses of condition and time and Relative clauses

4. Vocabulary

a. Synonyms and Synonyms in context

b. Antonyms and Antonyms in context

c. One word substitution

d. Spelling pitfalls

e. Simple Idioms/phrases

f. Words often confused/Selecting the correct word fitting in a sentence

5. Narration (Direct and Indirect)

a. Commands and requests

b. Statements (Various tenses)

c. Questions (Various forms of questions, tenses, etc.)

6. Voice (Active and Passive)

a. Changes required under each tense.

b. Other conditions for transforming Active into Passive: The Preposition, Modal auxiliaries, Infinitive, Participles

7. Jumbled Sentences

Arrangement of jumbled sentences into meaningful ones.

Physics

1. Physical World and Measurement

2. Kinematics

3. Laws of Motion

4. Work, Energy and Power

5. Motion of System of Particles and Rigid Body.

6. Gravitation

7. Properties of Bulk Matter

8. Thermodynamics

9. Behaviour of Perfect Gases and Kinetic Theory of Gases.

10. Oscillations and Waves

11. Electrostatics

12. Current Electricity

13. Magnetic Effects of Current and Magnetism

14. Electromagnetic Induction and Alternating Current

15. Electro Magnetic Waves

16. Optics

17. Dual Nature of Matter and Radiation

18. Atoms and Nuclei

19. Electronic Devices

20. Communication Systems

Mathematics

1. Sets, Relations and functions

2. Trigonometric Functions

3. Inverse Trigonometric Functions

4. Complex Number and Quadratic Equations

5. Linear Inequalities

6. Mathematical Induction

7. Permutations and Combinations

8. Binomial Theorem

9. Sequences and Series

10. Cartesian system of rectangular co-ordinates

11. Straight lines and family of lines

12. Circles and family of circles

13. Conic sections

14. Three-dimensional Geometry

15. Matrices and Determinants

16. Limit and Continuity

17. Differentiation

18. Applications of Derivatives

19. Indefinite integrals

20. Definite Integrals

21. Applications of the Integrals

22. Differential Equations

23. Mathematical Reasoning

24. Linear Programming

25. Vector

26. Probability

27. Statistics

Confidence and Hard-work is the best medicine to kill the disease called failure. It will make u a successful person