Mid-term syllabus

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| Subjects | Syllabus |
| PF (programming fundamentals) | Compiler Working, Basic Programming Constructs, Input/Outputs, cout, manipulators, relational & logical operators, Selection statements (simple if, if-else, and nested if), Nested if-else and switch-statements switch statement, Loop (while loop), counter control loop (for and while) Nested Loops, continue and break statements, Functions |
| Functional English | Subject Verb Agreement  Error Analysis: Fragments, Run-Ons, Misplaced/Dangling Modifiers, Fused Sentences, Comma Splices  Creative Writing: A Descriptive Writing Paragraph Analysis, (finding out grammatical, vocabulary, or punctuation mistakes in a Descriptive paragraph)  Composition on the following topics, no more than 150- 250 words:  1. A nightmare that I experienced  2. A memorable visit  3. Why I love to eat so much  4. My hobbies |
| Islamiat | Introduction and importance of religion  Purpose of life   * Reality of worship and tests of life * Concept of happiness   Fundamental Islamic beliefs and practices in the light of hadith Jibraeel  Islam, Iman and Ihsan  Islam   * Five pillars (purpose and wisdom)   Iman   * Concept of Tawheed (oneness of Allah), shirk, effects of the doctrine of Tawheed on human life * Prophethood, its nature and necessity, the finality of prophethood, and some of the distinguished qualities of the prophethood of Muhammad (PBUH). * Belief in the day of judgment.   Chapter 2: Sets, Functions and groups  Pre-calculus  Union, Intersection, Complement, Distributive Property, Associative Property, Commutative Property, De Morgan’s Law  Truth Tables  Chapter 3: Matrices and Determinants  Algebra of Matrices (Addition, Subtraction, Multiplication, Echelon Form  Reduced Echelon Form, The inverse of Matrices (Order 4 and 5×5)  , Inversion Method, Determinants (Order 4 and 5×5), Cramer’s Rule, Homogeneous Equations. |
| Applied Physics | Chapter no: 21 (Coulomb’s Law)  Chapter no: 22 (Electric fields)  Chapter no: 23 (Electric flux) |
| ICT (Applications of information and communication technologies) | Chapter 1 Introduction to the World of Technology  Chapter 2 The System Unit, Processing, and Memory  Chapter 3 Storage  Chapter 4 Input and Output  Chapter 5 System Software: Operating Systems and Utility  Programs (Lec 5 till slide 9)  Chapter 6 Application Software: Desktop and Mobile Apps (Lec 6 till slide 20)  Chapter 7 Networks and Communication Devices (Lec 7 full)  Chapter 8 The Internet (Lec 8 till slide 12) |