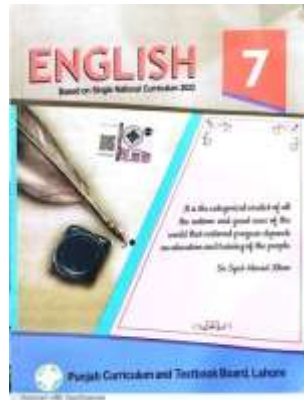


CADET COLLEGE OKARA
ENTRANCE EXAM CLASS VIII
SYLLABUS AND TEST DESCRIPTION

PART- I ENGLISH

Suggested Textbook: English for Grade VII (Punjab Curriculum and Textbook Board, Lahore) Based on Single National Curriculum 2022, Authors: Shaukat Abbas & Amir Mehmood Awan

OBJECTIVE PART- (20 Marks) MCQs, Fill in the Blanks, Do as directed)	SUBJECTIVE PART-(30 Marks)
Synonyms / Antonyms : 10	Essay / Pic Story : 10
Preposition / Corrections : 10	Active voice, Passive voice / Narration : 10
	Translation Urdu to English : 10 / English to Urdu



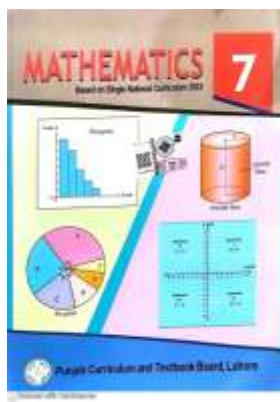
CADET COLLEGE OKARA
ENTRANCE EXAM CLASS VIII
SYLLABUS AND TEST DESCRIPTION
PART-II MATHEMATICS

Suggested Textbook: Mathematics for Grade VII (Punjab Curriculum and Textbook Board, Lahore) Based on Single National Curriculum 2022, Authors: Muhammad Akhtar Shirani & Madiha Mehmood

OBJECTIVE PART- (15 Marks)	SUBJECTIVE PART-(35 Marks)
MCQS : 15 x 01 = 15	Shorts Questions. : 10x02 = 20
	Long Questions. : 03x05 =15

Contents

Sr No.	Domain / Chapters	Sub-domain/Description
1.	Numbers and Operations	i. Rational Numbers and Decimal Numbers ii. Simplification iii. Sets iv. Rate, Ratio and Proportion v. Squares and Square Roots
2.	Algebra	i. Number Sequence and Patterns ii. Algebraic Expressions iii. Linear Equation
3.	Measurements	i. Perimeter and Area
4.	Geometry	i. Practical Geometry



CADET COLLEGE OKARA
ENTRANCE EXAM CLASS VIII
SYLLABUS AND TEST DESCRIPTION
PART-III GENERAL SCIENCE

Suggested Textbook: Mathematics for Grade VII (Punjab Curriculum and Textbook Board, Lahore) Based on Single National Curriculum 2022, Authors: Atta Dastgeer

OBJECTIVE PART- (15 Marks)		SUBJECTIVE PART-(35 Marks)	
MCQS : 15 x 01 = 15		Shorts Questions. : 10x02 = 20	
		Long Questions. : 03x05 =15	
Portion	Units	Topics	
Biology	1	Plant Systems	
	2	Human Respiratory and Circulatory Systems	
Chemistry	4	Structure of an Atom	
	5	Physical and Chemical Changes	
	6	Chemical Bonds	
Physics	8	Force and Motion	
	9	Waves and Energy	
Space and Technology	11	Technology in Everyday Life	
	12	Earth and Space	



CADET COLLEGE OKARA
PART-IV URDU & ISLAMIYAT

سلیبس اُردو برائے داخلہ جماعت ہشتم

کل نمبر (50) حصہ اُردو: 35 نمبرز

مجوزہ کتاب: (اُردو کتاب ہفتم، یکساں قومی نصاب 2022ء کے مطابق، پنجاب کریمولم اینڈ ٹیکسٹ بک بورڈ، لاہور

مصنف: نسیم عباس

حصہ معروضی: کل نمبر (10)	حصہ انشائیہ: کل نمبر (25)
الفاظ متضاد، مترادف الفاظ، واحد جمع، مذکر مؤنث، اعراب	جملوں کا استعمال، جملوں کی درستی، اشعار کی تشریح، مختصر سوالات کے جوابات، مضمون
حصہ نثر: (اسباق مع مشقی سوالات) آداب معاشرت سیرت طیبہ ﷺ کی روشنی، ملکی ترقی میں خواتین کا کردار، ٹریفک کے قوانین اور ہماری ذمہ داریاں، چچا چھکن نے تصویر ٹانگی، مذہب نہیں سکھاتا آپس میں بیر رکھنا، پھر ان شاہیں بچوں کو بال و پردے، محسن پاکستان، دہشت گردی اور ہماری ذمہ داریاں، کرپشن اور اس کا خاتمہ، شجر کاری اور ہمارے موسم حصہ نظم: (نظمیں مع مشقی سوالات) حمد، نعت، وطن کے لیے، بارش کا پہلا قطرہ، زندگی ہے مختلف جذبوں کی ہمواری کا نام، اتحاد، دُعا	



کل نمبر (15)

مجوزہ کتاب: (اسلامیات) (لازمی) جماعت ہفتم، یکساں قومی نصاب 2022ء کے مطابق، پنجاب کریکولم اینڈ ٹیکسٹ بک بورڈ، لاہور

نوٹ: (1) غیر مسلم طلباء حصہ اسلامیات کو چھوڑ سکتے ہیں۔

(2) حصہ اسلامیات انگلش میں بھی حل کیا جاسکتا ہے۔

مصنفین: مجید الرحمان ملک، پروفیسر رانا خدابخش

فہرست

باب	عنوانات
اول	قرآن مجید و حدیث نبوی ﷺ حفظ قرآن مجید، حدیث نبوی ﷺ، دعائیں (زبانی)، نوٹ:- درج بالا سورتوں، آیات اور دعاؤں کا صرف ترجمہ یاد کرنا ہے۔
دوم	ایمانیات و عبادات عقیدہ ختم نبوت، فرشتوں پر ایمان، آسمانی کتابوں پر ایمان، روزہ اور اس کی فضیلت، نماز جنازہ اور دیگر نمازیں، دعا کی اہمیت و فضیلت
سوم	سیرت طیبہ ﷺ نبی کریم ﷺ اور مدنی معاشرے کا استحکام، غزوہ خندق، غزوہ بنو قریظہ، صلح حدیبیہ، رسول اللہ ﷺ کی تعلیمی سرگرمیاں، نبی کریم ﷺ بطور داعی امن
چہارم	اخلاق آداب میانہ روی، تعلیم اور تعلم کے آداب
ششم	ہدایت کے سرچشمے اور مشاہیر اسلام امہات المؤمنین (حضرت حفصہ، حضرت زینب بنت خزیمہ، حضرت ام سلمہ اور حضرت زینب بنت جحش رضی اللہ تعالیٰ عنہ، صحابہ کرام: حضرت عبد اللہ بن عباس، حضرت ابی بن کعب، حضرت زید بن ثابت، حضرت ابو ہریرہ، حضرت عبد اللہ بن عمر رضی اللہ تعالیٰ عنہ)



CADET COLLEGE OKARA

REVISED SYLLABUS FOR CLASS 8/O-LEVELS W.E.F. SEPTEMBER 2024

There will be 4-compenets for the entry test of class 8/O levels w.e.f. September 2024. The revised syllabi of Mathematics, English + Islamiat, Urdu and General Science is appended below;

Mathematics syllabus

A. Syllabus Aim

The Mathematics syllabus for the entry test is revised & designed to provide candidates a target of preparation to acquire minimum of the foundation of Mathematics before getting admission in CCO. The foundation requires a balance between knowledge, understanding and skills to enable students to become effective learners to continue their educational journey.

B. Assessment Objectives

Candidates should be able to:

- Recognize the appropriate mathematical procedures for a given situation
- Perform calculations by suitable methods without a calculator
- Understand systems of measurement in everyday use and make use of them in the solution of Problems
- Estimate, approximate and work to degrees of accuracy appropriate to the context and convert between equivalent numerical forms
- Organize, interpret and present information accurately in written, tabular, graphical and diagrammatic forms
- Use mathematical instruments to measure and to draw figures in a given situation
- Interpret, transform and make appropriate use of mathematical statements expressed in words or symbols
- Recall, apply and interpret mathematical knowledge in the context of everyday situations.
- Analyze a problem, select a suitable strategy and apply an appropriate technique to obtain its solution
- Apply combinations of mathematical skills and techniques in problem solving
- Study and draw graphs and infer results

C. Syllabus:

Question, in the entry test, shall be Concept based, appropriate for Class 7 students of Cambridge Examination System.

1. Arithmetic:

- Numbers and operation
- fractions and simplification
- Ratio and Proportion
- Percentage
- Profit, loss, tax and discount etc.
- Variations – direct and inverse
- Time, distance and speed
- Conversion of units

2. Sets:

- Types of sets
- Forms of sets - descriptive, tabular & set builder and their usage in problem solving
- Operation and properties of sets – Union, Intersection, Difference & Complement
- Law of union, intersection and complement
- Venn diagram

3. Algebra:

- Expressions, equations and exponents
- Forming expression and equations from daily life problems
- Substitution of values & Manipulation of the subject in equation
- Algebraic fractions and operations between them
- Graphs of linear equations

4. Mensuration:

- Area, Perimeter and Volume of different figures/objects
- Similar figures and their areas.
- Concept of right prism, its surface area, volume and perimeter of any face
- Pythagoras Theorem
- Polygons: A polygon and its elements, Interior and Exterior angles, Sum of interior angles of a polygon

5. Geometric properties and Practical Geometry:

- Construction of plane figures
- Construction of medians, angle bisectors, right bisectors, altitude and diagonals
- Alternate and corresponding angles,
- Tangent, sectors, arc and chord etc.
- Cyclic quadrilateral and its properties
- Transformation - Reflect an object and find the line of reflection by construction; Translate an object, Identify and give precise description of transformation connecting given figures

6. Information handling:

- Frequency distribution
- Study and drawing to line graph, Bar graph, Pie graph
- Calculation of probability of simple events
- Mean, Median and Mode of Un-grouped data

Use of calculator, set-square, and protractor is NOT ALLOWED.

نصاب برائے داخلہ امتحان اُردو، جماعت ہشتم اور اولیول

اغراض و مقاصد:

اُردو ہماری قومی زبان ہے، یہ ہمارے نصاب کا لازمی حصہ ہے۔ داخلے کے تحریری امتحان کے اُردو نصاب میں طلبہ کی تخلیقی صلاحیتوں، ان کے ذخیرہ الفاظ، جملوں کی ساخت، املا، اندازِ تحریر اور اُردو زبان و قواعد سے ان کی آشنائی، درست املا کو جانچنا، شعر فہمی اور ذخیرہ الفاظ کے مناسب استعمال کے ذریعے طلبہ کی صلاحیتوں کو پرکھنا بنیادی مقاصد میں شامل ہے۔

سلیبس:

اُردو

- 1۔ مضمون نگاری: کسی علمی، معاشرتی، مہماتی، تاریخی، تشریحی، تجزیاتی، شخصی اور واقعاتی موضوع پر ایک مدلل اور جامع مضمون۔ یہ مضمون 250 سے چار سو الفاظ پر مشتمل ہونا چاہیے۔
- 2۔ تفہیم: دی گئی عبارت میں سے کچھ سوالات کے اپنے الفاظ میں جوابات یا عبارت میں سے محاورات اور ضرب الامثال کا انتخاب اور اپنے جملوں میں استعمال یا عبارت میں سے بنیادی قواعد کے سوالات مثلاً فعل، حرف، اسم کا انتخاب اور مختلف الفاظ کے قواعد کے مطابق شناخت
- 3۔ شعر کی تشریح: عام فہم اور مشہور اشعار میں سے کسی ایک کا انتخاب اور تشریح
- 4۔ جملوں کی بناوٹ، مختلف جملوں کی دی گئی ہدایت کے مطابق تبدیل کرنا۔ مثلاً فعل کی تبدیلی، تذکیر و تانیث کی تبدیلی، واحد و جمع کی تبدیلی، سوالیہ منفی اور بیانیہ تبدیلیاں، مترادف و متضاد الفاظ کی تبدیلیاں
- 5۔ خالی جگہیں پُر کرنا۔ ضرب الامثال، روزمرہ اور محاورات کے مطابق جملوں کی تکمیل
- 6۔ غلط فقرات پر مبنی عبارت کو درست کرنا
- 7۔ دی گئی عبارت کی تلخیص کرنا
- 8۔ ہم آواز الفاظ لکھنا

Syllabus of English

AIMS & OBJECTIVES: A candidate is supposed to express himself clearly and correctly in essay writing. He should be able to build up his essay coherently, using appropriate vocabulary along with correct use of grammar and spellings. Likewise, in comprehension passage, he is expected to handle a variety of comprehension questions from the given passage.

Syllabus:

- a. Essay Writing: Candidates will write on any ONE of the TWO given topics in English. One of the topics will be a Narrative essay and the other one Descriptive. Assessment objectives of essay writing are as under:
- Relevant content of the essay
 - Writing a well-connected essay having coherence and cohesion
 - Introducing characters and dialogue especially in Narrative Essay
 - Using types and variety of sentences
 - Developing paragraphs
 - Employing correct use of grammar/spellings/punctuation
 - In DESCRIPTIVE Essays, the candidates will focus on the description of the scene, sounds, feelings of character and the environment; it is encouraged to avoid narration (telling stories) if they choose to write descriptive essays.
- b) Reading Comprehension: Candidates will also read a passage of about 300-400 words and answer the questions. Assessment objectives of this task are as under:
- Showing understanding of explicit and implicit information
 - Effect and understanding of a specific word/phrase/sentence
 - Questions on synonyms and one word substitution
 - Handling analytical questions
 - Inferring meaning from the given text
- c) Grammar (DO as directed): Candidates will also be judged on their ability to use tenses, grammar, punctuation, articles, active and passive voice, the narration, pairs of words and the use of preposition etc.

General Science

Aim & Objectives:

- a. To Bridge Primary Science with Secondary Science education to help candidates obtain baseline scientific literacy and to equip them with a strong foundation to support their further studies.
- b. CCO requires proficiency in Pre Secondary General Science before students pursue the disciplinary subjects of Physics, Chemistry and Biology at O-levels. This approach will support students in making connections across disciplines and comprehend interdisciplinary problems.

Assessments:

- a. CCO entrance exam to contain MCQs for assessment of concepts and applications of basic sciences (Biology, Chemistry and Physics)
- b. Second stage evaluations (Interviews etc.) may also contain relevant questions of basic applied concepts of Every-day Science.

Syllabus:

- Model of Cell – The Basic Unit of Life
 - Human Digestive System
 - Transport systems in Living Things
 - Reproduction in Plants
 - Environment and Feeding Relationships

 - Model of Matter – The Particulate Nature of Matter
 - Model of Matter - Atom and Molecule
 - Exploring Diversity of Matter by its Chemical Composition
 - Chemical Changes
 - Exploring Diversity of Matter by its Physical Properties

 - Application of Forces and Transfer of Energy
 - Transmission of Heat Energy and its Effects
 - Sound and Light
 - Earth, Space and Oceans
 - Solar System
-

Islamiat (can be attempted in Urdu as well as in English)

Aims

The aims of the syllabus are to enable candidates to:

- acquire a knowledge of the biography of the Prophet (SAW) a source of Islam,
- develop an enquiring approach to the study of Islam
- identify and explore the religious, historical and moral questions raised in the material they study.

Assessment objectives

Candidates should be able to demonstrate that they have closely studied the topics set.

They should be able to:

Recall, select and present relevant facts from the main elements of the history of Islam, and Demonstrate understanding of their significance in the teachings of Islam and in the lives of Muslims.

Syllabus:

Questions will be set from the life story of the Prophet (PBUH).

- 1- Story of the 1st revelation
- 2- Persecution of the Prophet at the hands of the Quraish
- 3- Migration to Madinah
- 4- Battle of Badr
- 5- Battle of Uhad
- 6- Battle of Trench
- 7- Treaty of Hudaibiyah
- 8- Conquest of Makkah
- 9- Farewell Hajj and address
- 10- Four outstanding qualities of the Prophet: 1- humility 2-Truthfulness and honesty 3- fulfilment of promises
4- forgiveness