



PRAYAAG INTERNATIONAL SCHOOL, PANIPAT
TERM WISE SYLLABUS
GRADE XII Science

TERM-1 MCQ BASED QUESTION PAPER

SUBJECT: MATHEMATICS

UNIT	CHAPTERS	MARKS
RELATIONS AND FUNCTIONS	1. RELATIONS AND FUNCTIONS 2. 2. INVERSE TRIGONOMETRIC FUNCTIONS	8
ALGEBRA	3. MATRICES 4. 4. DETERMINANTS	10
CALCULUS	5. CONTINUITY AND DERIVATIVES 6. 6. APPLICATIONS OF DERIVATIVES	17
LINEAR PROGRAMMING	12. LINEAR PROGRAMMING PROBLEMS	5
INTERNAL ASSESSMENT		10

TERM –II SUBJECTIVE BASED QUESTION PAPER

UNIT	CHAPTERS	MARKS
CALCULUS	7. INTEGRALS 8. 8. APPLICATIONS OF DEFINITE INTEGRALS 9. DIFFERENTIAL EQUATIONS	18
VECTORS AND THREE DIMENSIONAL GEOMETRY	10. VECTORS 11. THREE DIMENSIONAL GEOMETRY	14
PROBABILITY	13 . PROBABILITY	8
INTERNAL ASSESSMENT		10

TERM-1 MCQ BASED QUESTION PAPER

APPLIED MATHEMATICS 241

UNIT	CHAPTERS	MARKS
NUMBERS, QUANTIFICATIONS AND NUMERICAL APPLICATIONS	1.1 NUMBER THEORY 1.2 QUANTIFICATIONS AND NUMERICAL APPLICATIONS	9
ALGEBRA	2.1 MATRICES 2.2 DETERMINANTS	10
CALCULUS	3.1 HIGHER ORDER DERIVATIVES 3.2 APPLICATIONS OF DERIVATIVES	6
PROBABILITY DISTRIBUTION	4.1 PROBABILITY DISTRIBUTION AND ITS MEAN AND VARIANCE 4.2 STANDARD PROBABILITY DISTRIBUTION	10
INDEX NUMBERS AND TIME BASED DATA	5.1 INDEX NUMBERS	5
INTERNAL ASSESSMENT		10

TERM –II SUBJECTIVE BASED QUESTION PAPER

APPLIED MATHEMATICS 241

UNIT	CHAPTERS	MARKS
CALCULUS (CONT)	1.1 INDEFINITE INTEGRALS 1.2 DEFINITE INTEGRALS 1.3 APPLICATIONS OF INTEGRALS 1.4 DIFFERENTIAL EQUATIONS	9
INFERENCEAL STATISTICS	2.1 INFERENCEAL STATISTICS	5
INDEX NUMBERS AND TIME SERIES(CONT)	3.1 TIME SERIES ANALYSIS	5
FINANCIAL MATHEMATICS	4.1 FINANCIAL MATHEMATICS	15
LINEAR PROGRAMMING	5.1 LINEAR PROGRAMMING	6
INTERNAL ASSESSMENT		10

ENGLISH- TERM 1

SECTION	TERM 1	Marks
A	Reading Comprehension: <ul style="list-style-type: none"> • Unseen passage (factual, descriptive or literary/ discursive or persuasive) • Case Based Unseen (Factual) Passage 	14 (8+6 Marks)
B	Creative Writing Skills : Short Writing Tasks <ul style="list-style-type: none"> • Notice Writing • Classified Advertisements Long Writing Tasks (One) <ul style="list-style-type: none"> • Letter to an Editor (giving suggestions or opinion on issues of public interest) • Article Writing 	3+5 marks Total=08
C	Literature: FLAMINGO: <ul style="list-style-type: none"> • The Last Lesson • Lost Spring • Deep Water Book-Flamingo (Poetry) • My Mother at Sixty-Six • An Elementary School Classroom in a Slum • Keeping Quiet VISTAS: <ul style="list-style-type: none"> • The Third Level 	11 Marks for Flamingo + 7 Marks for Vistas = 18 Marks

	• The Enemy	
	TOTAL	40
	ASL	10
	GRAND TOTAL	40 + 10 = 50

ENGLISH- TERM II

SECTION	TERM 1	WEIGHTAGE (IN MARKS)
A	Reading Comprehension: (Two Passages) • Unseen passage (factual, descriptive or literary/ discursive or persuasive) • Case Based Unseen (Factual) Passage	14 (8+6 Marks)
B	Creative Writing Skills : • Formal & Informal Invitation Cards or the Replies to Invitation/s Long Writing Tasks (One) • Letter of Application for a Job • Report Writing	3+5 Marks Total=08
C	Literature: Flamingo (Prose): • The Rattrap • Indigo Book Flamingo (Poetry): • A Thing of Beauty • Aunt Jennifer's Tigers Book-Vistas (Prose) • Should Wizard Hit Mommy? • On the Face of It • Evans Tries an O Level	11 Marks for Flamingo + 7 Marks for Vistas = 18 Marks
	TOTAL	40
	ASL	10
	GRAND TOTAL	40 + 10 = 50

TERM-1 MCQ BASED QUESTION PAPER

SUBJECT: PHYSICS

UNIT	CHAPTERS NAME	MARKS
ELECTROSTATICS	CH-1 ELECTRIC CHARGE & FIELD	

	CH-2 ELECTROSTATIC POTENTIAL & CAPACITANCE	17
CURRENT ELECTRICITY	CH-3 CURRENT ELECTRICITY	
MAGNETIC EFFECTS OF CURRENT & MAGNETISM	CH-4 MOVING CHARGES & MAGNETISM	18
	CH-5 MAGNETISM & MATTER	
ELECTROMAGNETIC INDUCTIONS & ALTERNATING CURRENT	CH-6 ELECTROMAGNETIC INDUCTION	
	CH-7 ALTERNATING CURRENTS	
TOTAL		35

TERM –II SUBJECTIVE BASED QUESTION PAPER

UNIT	CHAPTERS NAME	MARKS
ELECTROMAGNETIC WAVES	CH-8 ELECTROMAGNETIC WAVES	17
OPTICS	CH9 – RAY OPTICS	
		CH 10- WAVE OPTICS
DUAL NATURE OF MATTER & RADIATIONS	CH-11 DUAL NATURE OF MATTER & RADIATIONS	11
	ATOMS & NUCLEI	
ELECTRONIC DEVICES	CH-14 SEMICONDUCTOR DEVICES	7
TOTAL		35
PRACTICALS (TERM-I)		15
PRACTICALS(TERM – II)		15
GRAND TOTAL		100

TERM-1 MCQ BASED QUESTION PAPER

SUBJECT: CHEMISTRY

Sr. No.	Unit Name	Marks
1	Unit-1 Solid State	10
2	Unit-2 Solution	
3	Unit-7 p-block Elements	10
4	Unit-10 Haloalkanes and Haloarenes	15
5	Unit-11 Alcohols, Phenols and Ethers	
6	Unit-14 Biomolecules	
TOTAL		35

TERM –II SUBJECTIVE BASED QUESTION PAPER

SR NO.	UNITS	WEIGHTAGE
1	Unit-3 Electrochemistry	
2	Unit-4 Chemical Kinetics	

3	Unit-5 Surface Chemistry	13
4	Unit-8 d- and f- block Elements	9
5	Unit-9 Coordination Compounds	
6	Unit-12 Aldehydes, Ketones and Carboxylic Acid	13
7	Unit-13 Amines	
	TOTAL	35
	PRACTICAL (TERM I+II)	(15+15)
	GRAND TOTAL	100

SUBJECT: BIOLOGY
TERM -1 MCQ BASED QUESTION PAPER
THEORY : 40 MARKS

UNIT	CHAPTER NO.	CHAPTER NAME	MARKS
VI	CH-2 CH-3 CH-4	Sexual Reproduction in flowering plants Human Reproduction Reproductive Health	15
VII	CH-5 CH-6	Principles of inheritance and variation Molecular Basis of Inheritance	20
		Practicals Term-1	15
		Total	50

TERM II SUBJECTIVE BASED QUESTION PAPER
THEORY : 40 MARKS

UNIT	CHAPTER NO.	CHAPTER NAME	MARKS
VIII	CH-8- CH-10-	HUMAN HEALTH AND DISEASE MICOBES IN HUMAN WELFARE	14
IX	CH-11 CH-12-	BIOTECHNOLOGY- PINCIPLS AND PROCESSES BIOTECHNOLOGY AND ITS APPLICATION	11
X	CH-13 CH-15	ORGANISMS AND POPULATION BIODIVERSITY AND CONSEVATION	

			10
		PRACTICAL- TERM -II	15
		TOTAL	50

OPTIONAL SUBJECTS

PHYSICAL EDUCATION

SUBJECT: INFORMATICS PRACTICES

THEORY - 35 MARKS

PRACTICAL: 15 MARKS

TERM -1 MCQ BASED QUESTION PAPER

UNIT	CHAPTER NAME	MARKS
Unit 1: Data Handling using Pandas and Data Visualization	Chapter-2: Data Handling using Pandas-I Chapter-4:Plotting Data using Matplotlib	25
Unit 4: Societal Impacts	Chapter-6: Societal Impacts	10
Practical	Pandas program (pen and paper) + Practical File +Project Synopsis + Viva	8+3+2+2=15

TERM II SUBJECTIVE BASED QUESTION PAPER

UNIT	CHAPTER NAME	MARKS
Unit 2:Database Query using SQL	Chapter-1: Querying and SQL Functions	25
Unit 3:Introduction to	Chapter-5: Internet and Web	

Computer Networks		10
Practical	SQL Queries (pen and paper) + Practical File + Final Project Submission + Viva	7+2+3+3=15

SUBJECT- PSYCHOLOGY (037)

Term-1 MCQS BASED QUESTION PAPER

THEORY- 35 MARKS

PRACTICAL-15 MARKS

UNITS	TOPICS	MARKS
1	Variations in Psychological Attributes	12
2	Self and Personality	13
3	Meeting Life Challenges	10
	Total	35

PRACTICAL- TERM-1 (15 MARKS)

- A. In Term 1 , PRACTICAL FILE-Psychological Testing- Administration, scoring, interpretation & report writing of 2 psychological tests.
- B. In Practical examination of term 1, the student will be required to administer and interpret any one psychological test.

Distribution of Marks- Practical (Term 1)

1. Practical File-5 Marks
2. Viva Voce- 3 Marks
3. Administration of one test & report writing-7 marks

TERM 2 - SUBJECTIVE BASED QUESTION PAPER

UNITS	TOPICS	MARKS
4	PSYCHOLOGICAL DISORDERS	13
5	THERAPEUTIC APPROACHES	7
6	ATTITUDE AND SOCIAL COGNITION	8
7	SOCIAL INFLUENCE AND GROUP PROCESSES	7
	TOTAL	35 Marks

PRACTICAL TERM-2(15 MARKS)

- C. In term 2, Students are introduced to administration, scoring, interpretation & report writing of any one psychological test.
- D. In Practical examination of term 2, the students will be required to administer and interpret one psychological test.

Distribution of Marks:

1. Practical File- 5 Marks
2. Viva Voce- 3 Marks
3. Administration of one test & report writing- 7 marks

TERM 1 MCQ BASED QUESTIONS PAPER

SUBJECT - PHYSICAL EDUCATION

THEORY: 35 MARKS

PROJECT FILE: 15 MARKS

UNIT	CHAPTER NAME	MARKS
PART A (THEORY PART)	<u>Chapter 1</u> Planning in Sports <u>Chapter 2</u> Sports and Nutrition <u>Chapter 5</u> Children and women in Sports <u>Chapter 6</u> Test and Measurement in Sports <u>Chapter 8</u> Biomechanics and sports	35
PART B (PRACTICAL PART)	Project File (About one sport/ Game of Activity)	5
	Demonstration of Fitness Activity	5
	Viva voce (From project file ; Fitness)	5

TERM II SUBJECTIVE BASED QUESTIONS PAPER

SUBJECT - PHYSICAL EDUCATION

THEORY: 35 MARKS

PROJECT FILE: 15 MARKS

UNIT	CHAPTER NAME	MARKS
PART A (THEORY PART)	<u>Chapter 3</u> Yoga & Lifestyle <u>Chapter 4</u>	35

	Physical education and sports for CWSN(children with special needs-DIVYANG) Chapter 7 Physiology & injuries in Sports Chapter 9 Psychology & Sports Chapter 10 Training in Sports	
PART B (PRACTICAL PART)	Project File (Yoga and General motor fitness Test)	5
	Demonstration of Fitness Activity/Yoga	5
	Viva voce (From project file ; General motor Fitness;yoga)	5

Term 1 (Deleted Topic)

- Chapter 1 - Intramural and extramural- Meaning , objectives and its significance
- Specific sports programmes-(sports day, Health run, run for fun, run for specific cause and run for unity)
- Chapter 5 -special consideration (Menarche and Menstrual dysfunction)
-female Athletes Traid (Osteoporosis, Amenorrhea and eating disorder)
- Chapter 6 -General Motor Fitness-Barrow three itm general motor ability(standing broad jump, Zig Zag run, medicine ball put-for boys :03kg and for girls:01kg)
- Chapter 8 -Friction and sports

Term 2 (Deleted Topic)

- Chapter 3 - Back pain: Procedure, Benefits and contradiction for Tadasana, Ardha Matsyendrasana, Vakrasana, Shalbhasana, Bhujangasana
- Chapter 4 -Advantages of physical activities for children with special needs
- Chapter 7 -physiological changes due to ageing
- Chapter 9 -Exercise adherence, reason to exercise, benefits of exercise
-strategies for enhancing adherence to exercise
- Chapter 10 -Circuit Training-Introduction and its Importance

SUBJECT: PAINTING

THEORY - 15 MARKS

PRACTICAL: 35 MARKS

TERM -1 MCQ BASED QUESTION PAPER

UNIT	TOPIC NAME	MARKS
Unit 1 The Rajasthani and Pahari Schools of Miniature Painting	Maru-Ragini, Chaugan Players, Krishna on swing, Radha (Bani- Thani), Bharat Meets Rama at Chitrakuta, Krishna with Gopis, Nand, Yashoda and Krishna with Kinsmen Going to Vrindavana	8
Unit 2: The Mughal and Deccan Schools of Miniature Painting	Krishna Lifting Mount Govardhana, Falcon on a Bird-Rest, Kabir and Raidas, Marriage Procession of Dara Shukoh, Hazrat Nizamuddin Auliya and Amir Khusro, Chand Bibi Playing Polo (Chaugan)	7
Practical	Painting Composition + Portfolio Assessment	35

TERM II SUBJECTIVE BASED QUESTION PAPER

UNIT	TOPIC NAME	MARKS
Unit 3: The Bengal School of Painting	<ul style="list-style-type: none">* National Flag of India and the Symbolic significance of its forms and the colours.* Introduction to the Bengal School of Painting (i) Origin and development of the Bengal School of Painting (ii) Main features of the Bengal School of Painting* Appreciation of the following paintings of the Bengal school: (i) Journey's End – Abanindranath Tagore (ii) Shiv and Sati- Nandla Bose (iii) (Radhika - M.A.R.Chughtai (iv) Meghdoot - Ram Gopal Vijaivargiya Contribution of Indian artists in the struggle for National Freedom Movement.	8

<p>Unit 4: Indian National flag and the Modern Trends in Indian Art</p>	<p>Paintings: (i) Rama Vanquishing the Pride of the Ocean – Raja Ravi Varma (ii) Mother and child – Jamini Roy (iii) Haldi Grinders - Amrita Sher Gill (iv) Mother Teresa - M.F.Husain Graphic - prints: (i) Children – Somnath Hore (ii) Devi – Jyoti Bhatt (iii) Of Walls - Anupam Sud (iv) Man, Woman and Tree - K. Laxma Goud Sculptures: (i) Triumph of Labour - D. P. Roychowdhury (ii) Santhal Family - Ramkinkar Vajj (iii) Cries Un - heard – Amar Nath Sehgal (iv) Ganesha - P.V. Janaki Ram</p>	<p>7</p>
<p>Practical</p>	<p>Painting Composition + Portfolio Assessment</p>	<p>35</p>