



BIRLA PUBLIC SCHOOL GANGANAGAR

(A UNIT OF BIRLA EDUCATION TRUST PILANI)



CBSE AFFILIATION NO. 1730974

Session: 2025-26

Class -XII A (SCIENCE)

Syllabus cum Schedule for Mid-Term Examination

Sr. No.	Date & Day	Subject	Syllabus (Chapter No. & Chapter Name)	Typology of questions with marks
1.	12/09/2025 FRIDAY	BIOLOGY (PRACTICAL)	1. Prepare a temporary mount to observe pollen germination. 2. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, banana etc. 3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/ mice). 4. T.S. of blastula through permanent slides (Mammalian). 5. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness. 6. Flowers adapted to pollination by different agencies (wind, insects, birds). 7. Mendelian inheritance using seeds of different colour/ sizes of any plant.	Evaluation Scheme Marks One Major Experiment Part 5 Minor Experiment 4 Slide Preparation 5 Marks Spotting 7 Practical Record + Viva 4 Investigatory Project + Viva 5
		MATHEMATICS (PRACTICAL)	As part of the practical assessment, an MCQ-based Test will be conducted covering Chapters 1 to 6 from the prescribed syllabus. Type of Test: Multiple Choice Questions (MCQ) Chapters Covered: 1. Relations and Functions 2. Inverse Trigonometric Functions 3. Matrices 4. Determinants 5. Continuity and Differentiability 6. Applications of Derivatives	
2.	13/09/2025 SATURDAY	PHYSICS (PRACTICAL)	Practicals :- 1. To find resistance of a given wire / standard resistor using metre bridge. 2. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation. Activities :- 1. To assemble the components of a given electrical circuit. 2. To observe diffraction of light due to a thin slit.	
3.	15/09/2025 MONDAY	ENGLISH (PRACTICAL)	ASL	Marks (20)
4.	16/09/2025 TUESDAY	CHEMISTRY (PRACTICAL)	1. Tests for the functional groups present in organic compounds 2. Unsaturation, alcoholic, phenolic, aldehydic, ketonic, carboxylic group 3. Determination of concentration/ molarity of KMnO_4 solution by titrating it against a standard solution of: 1. Oxalic acid, 2. Ferrous Ammonium Sulphate 4. Preparation of one lyophilic and one lyophobic sol Determination of one anion and one cation in a given salt Cation - NH_4^+ Anions: CO_3^{2-} , S^{2-} , SO_3^{2-} , Cl^- , CH_3COO^-	Evaluation Scheme for Examination Marks Volumetric Analysis 8 Salt Analysis 8 Content Based Experiment 6 Project Work 4 Class record and viva 4

5.	17/09/2025 WEDNESDAY	COMPUTER SCIENCE (PRACTICAL)	Book Name: Kips Computer Science with Python Class 12 Practical: Ch. 1 - Python Review – I, Ch. 2 - Python Review – II, Ch. 3 - Python Functions, Ch. 4 – File handling	Practical Marks (30)
		PSYCHOLOGY (PRACTICAL)	Psychology Practical	Practical Marks (30)
		PUNJABI (PRACTICAL)	ASL	Marks (20)
6.	18/09/2025 THURSDAY	MUSIC (PRACTICAL)	<u>Theory</u> Unit 1 1.1 Brief study of the following Gram, Murchhana, Alankar, Alap, Tana. Brief study of the following Gamak, Meend, Kan, krintan, Zamzama, Ghaseet, Sut. Unit 2 2.1 Historical development of Time Theory of Ragas <u>Unit 3</u> 3.1 Detail study of the following Sangeet Ratnakar Sangeet Parijat <u>Unit 4</u> 4.1 Description of Prescribed Talas along with Tala Notation with Thah, Dugun, Tigun and Chaugun prescribed Talas: Jhaptala & Rupak <u>Unit 5</u> 5.1 Critical study of Prescribed Ragas along with Recognizing Ragas. Phrases of Swaras and elaborating them Bhairav & Bageshri <u>Practical</u> 1. Raag Bhairavi, Bihaag Gat or Composition 2. Taal Notation. • Teentaal • Ektaal 3. Parts and tuning of Instrument and questions regarding Instrument. 4. Practical file (10 marks) Identifying the Ragas	Theory (30 Marks) <u>Multiple Choice Questions</u> 1 Marks Each – Qs 8 8 Marks <u>Short Answer Questions</u> 5 Marks Each – Qs 2 10 Marks <u>Long Answer Questions</u> 6 Marks Each – Qs 2 12 Marks Practical (70 Marks) 1. <u>Raag Gat or Composition.</u> (25 marks) Bihaag & Bhairvi 2. <u>Taal Notation.</u> (15 marks) • Jhaptaal • Roopak 3. Parts and <u>Tuning of Instrument</u> and questions regarding Instrument. (10 marks) 4. <u>Practical file</u> (10 marks) <u>Identifying the Ragas</u> (10 marks)
		PAINTING THEORY AND PRACTICAL	<u>Theory</u> Unit 1. A. The Rajasthani and pahari Schools of miniature painting. B. Six limbs of Indian Art. Unit 2. The Mughal School of miniature painting Practical: Unit 1: Nature, and Object study	Theory Multiple Choice : Attempt any 08 Q. (8×1=8) Short Types Questions Attempt any 02 Q. (2×5=10) Long Type Questions Attempt any 02 Q. (2×6=12) Practical : 2×35=70
7.	20/09/2025 SATURDAY	BIOLOGY	Book Name: Biology Textbook For Class XII Ch.1 (Sexual Reproduction in Flowering Plants), Ch.2 (Human Reproduction), Ch.3 (Reproductive Health), Ch.4 (Principles of Inheritance and Variation), Ch.5 (Molecular Basis of Inheritance), Ch.6 (Evolution)	Theory(70 marks) + Practical (30 marks) 1. Question 1(12 Multiple choice & 04 Assertion reason) has 16 parts, each worth 1 mark, in Section A. 2. Question 2 (Very short) contains five questions, each worth 2 marks, in Section B. 3. Question 3(Short) contains 7 questions, each worth 3 marks, in Section C. 4. Question 4(case-based) contains two questions, each worth 4 marks, in Section Question 5 (Long answer type) contains three questions, each worth 5 marks, in Section E. ➤ Section A, Questions no. 1-18 are multiple choice questions (MCQs) and questions no. 19 and 20 are Assertion- Reason based questions of 1 mark each.
		MATHEMATICS	Book Name : NCERT Chapter 1 : Relations and Functions Chapter 2 : Inverse Trigonometric Functions	

			Chapter 3 : Matrices Chapter 4 : Determinant Chapter 5 : Continuity and Differentiability Chapter 6 : Application of Derivatives	<ul style="list-style-type: none"> ➤ In Section B, Questions no. 21-25 are very short answer (VSA) type questions, carrying 02 marks each. ➤ In Section C, Questions no. 26-31 are short answer (SA) type questions, carrying 03 marks each. ➤ In Section D, Questions no. 32-35 are long answer (LA) type questions, carrying 05 marks each. ➤ In Section E, Questions no. 36-38 are case study based questions carrying 4 marks each with sub parts of the values of 1, 1 and 2 marks each respectively. <p>All Questions are compulsory. However, an internal choice in 2 Question of Section B, 2 Questions of Section C and 2 Questions of Section D has been provided. An internal choice has been provided in all the 2 marks questions of Section E.</p>
8.	23/09/2025 TUESDAY	ENGLISH	I. Reading Comprehension through Unseen Passage <ol style="list-style-type: none"> 1) Discursive passage 2) Case-based factual passage Composition: Notice Making, Invitations and their Replies, Letter to Editor, Letters for Job Application, Letters to Institutes Literature- Book Name: Flamingo Proses: Ch.1 The Last Lesson Ch.2 Lost Spring (Stories of Stolen Childhood) Ch.3 Deep Water Ch.4 The Rattrap Poems: P.1 My Mother at Sixty-Six P.2 Keeping Quiet P.3 A Thing of Beauty Book Name: Vistas Ch.1 The Third Level Ch.2 The Tiger King Ch.3 Journey to the End of the Earth	Section A: Reading Skills (12+10 = 22 Marks) I Reading Comprehension through Unseen Passage <ol style="list-style-type: none"> 1. factual, descriptive or literary. 2. factual passage with verbal/visual inputs like statistical data, charts etc. Multiple Choice Questions / Objective Type Questions and Short Answer Type Questions Section B: Creative Writing Skills (18 marks) II. Creative Writing Skills <ol style="list-style-type: none"> 3. Notice, up to 50 words. One out of the two given questions to be answered. 4. Formal/Informal Invitation and Reply, up to 50 words. One out of the two given questions to be answered. 5. Letters based on verbal/visual input: Application for a job with bio data or resume. Letters to the editor. (One out of the two) 6. Article/ Report Writing, descriptive and analytical in nature, based on verbal inputs, (One out of the two) Section C: Literature (40 marks) <ol style="list-style-type: none"> 7. One Poetry extract out of two, from the book Flamingo (6x1=6 Marks) 8. One Prose extract out of two, from the book Vistas (4x1=4 Marks) 9. One prose extract out of two from the book Flamingo (6x1=6Marks) 10. Short answer type questions (from Prose and Poetry from the book Flamingo Five questions out of the six given, are to be answered. (5x2=10 Marks) 11. Short answer type questions, from Prose (Vistas) Any two out of three questions to be done. (2x2=4 Marks) 12. One Long answer type question, from Prose/Poetry (Flamingo). Any one out of two questions to be done. (1x5=5 Marks) 13. One Long answer type question, based on the chapters from the book Vistas. Any one out of two questions to be done. (1x5=5 Marks)
9.	25/09/2025 THURSDAY	CHEMISTRY	Book Name: Chemistry Textbook For Class XII Ch.1 (Solutions), Ch.2 (Electrochemistry), Ch.3 (Chemical Kinetics), Ch.4. (The d- and f-Block Elements), Ch.5 (Coordination Compounds)	Theory(70 marks) + Practical (30 marks) <ol style="list-style-type: none"> 5. Question 1(12 Multiple choice & 04 Assertion reason) has 16 parts, each worth 1 mark, in Section A. 6. Question 2 (Very short) contains five questions, each worth 2 marks, in Section B. 7. Question 3(Short) contains 7 questions, each worth 3 marks, in Section C. 8. Question 4(case-based) contains two questions, each worth 4 marks, in Section Question 5 (Long answer type)contains three questions, each worth 5 marks, in Section E.
10.	27/09/2025 SATURDAY	PSYCHOLOGY	Chapter -1 Variations in Psychological Attributes Chapter -2 Self and Personality	<ol style="list-style-type: none"> 1. All questions are compulsory except where internal choice has been given.

			Chapter -3 Meeting Life Challenges	<p>2. Question Nos.1-14 in Section A carry 1 mark each. You are expected to answer them as directed.</p> <p>3. Question Nos. 15-19 in Section B are very short answer type-I questions carrying 2 marks each. The answer to each question should not exceed 30 words.</p> <p>4. Question Nos. 20-23 in Section C are short answer type-II questions carrying 3 marks each. The answer to each question should not exceed 60 words.</p> <p>5. Question Nos. 24 - 27 in Section D are long answer type-I questions carrying 4 marks each. The answer to each question should not exceed 120 words.</p> <p>6. Question Nos. 28-29 in Section E are long answer type-II questions carrying 6 marks each. The answer to each question should not exceed 200 words.</p> <p>7. Question Nos.30-33 in Section F are based on two cases given. The answer to each one-mark question should not exceed 20 words. The answer to each two-mark question should not exceed 30 words.</p>
		COMPUTER SCIENCE	<p>Book Name: Kips Computer Science with Python Class 12</p> <p>Ch. 7 - Computer Networks - I</p> <p>Ch. 8 - Computer Networks - II</p> <p>Ch. 1 - Python Review - I</p> <p>Ch. 2 - Python Review - II</p> <p>Ch. 3 - Python Functions</p> <p>Ch. 4 - File handling</p>	<p>1. Section A consists of 21 questions (1 to 21). Each question carries 1 Mark.</p> <p>2. Section B consists of 7 questions (22 to 28). Each question carries 2 Marks.</p> <p>3. Section C consists of 3 questions (29 to 31). Each question carries 3 Marks.</p> <p>4. Section D consists of 4 questions (32 to 35). Each question carries 4 Marks.</p> <p>5. Section E consists of 2 questions (36 to 37). Each question carries 5 Marks.</p>
11.	29/09/2025 FRIDAY	PHYSICS	<p>Book Name: Physics Textbook for Class XII</p> <p>Ch.1 (Electric Charges and Fields), Ch.2 (Electrostatic Potential And Capacitance), Ch.3 (Current Electricity) , Ch.4 (Moving Charges And Magnetism), Ch.5 (Magnetism And Matter), Ch.6 (Electromagnetic Induction), Ch.7 (Alternating Current)</p>	<p>Theory (70 marks) + Practical (30 marks)</p> <p>1. Question 1(12 Multiple choices & 04 Assertion reason) has 16 parts, each worth 1 mark, in Section A.</p> <p>2. Question 2 (Very short) contains five questions, each worth 2 marks, in Section B.</p> <p>3. Question 3(Short) contains 7 questions, each worth 3 marks, in Section C.</p> <p>4. Question 4(case-based) contains two questions, each worth 4 marks, in Section</p> <p>5. Question 5 (Long answer type) contains three questions, each worth 5 marks, in Section E.</p>

Note: -

Students are required to wear the main uniform on all exam days. School reporting time will be 08:00 A.M from 20th September 2025. Reporting time will be 08:00 A.M. Attendance & fruit break - 08:00 A.M. to 08:15 A.M. by the Class Teacher, **Exam time** – 08:15 A.M to 08:30 A.M (Reading time),08:30 A.M. to 11:30 A.M. (Writing time), **Lunch** – 11:30 A.M. to 11:50 A.M. **Dispersal time will be 11:50 A.M.** ***There will be a preparatory holiday on the following days: 22.09.2025 (Navratana Sathapana),24.09.2025, 26.09.2025, 28.09.2025, There will be regular school on 29.09.2025,*** In case the child is medically unfit (fever, headache, stomachache, etc.), do not send your ward to the school for only giving an exam. Please send a medical certificate via WhatsApp or email to the class teacher, informing them only. Students will bring fruit, lunch, and water bottles. Only the answer should be written in the answer script with the correct no. of the question. No cardboard is allowed.

WISH YOU ALL THE BEST

Regards

BPSG