** ROYAL OAK INTERNATIONAL SCHOOL**

**Sr. Sec. C.B.S.E Affiliated**

**SESSION: 2018-19**

**Whole year syllabus of class XII (Science Stream)**

**SUBJECT -ENGLISH**

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| **MONTH** | **DAYS** | **TOPICS** | **ASSIGNMENT** |
| **MARCH** | 27 | **Flamingo:**1. The Last Lesson 2. Lost Spring 3. Deep water**Poem:**1. An Elementary School Classroom in a slum.2. My mother at sixty six. 3. Keeping quiet.Writing- Notice writing, Advertisement (classified), Formal Letter. | Assignment and worksheet will be provided every fortnight according to the requirement of the chapters. |
| **MAY** | 24 | **Flamingo:** 4. The Rattrap 5. Indigo**Vistas:** 1. The tiger King 2. The Enemy**Novel:** The Invisible Man chapter 1-6**Writing:**Debate , Article.**Reading:** Note Making and comprehension. |
| **JULY** | 22 | **Flamingo:**6. Going places**Poem:**4. Aunt Jennifer’s Tiger 5. Thing of Beauty**Novel:** The Invisible Man Ch 9-10. |
| **WRITTEN EVALUATION SYLLABUS UT- I M.M.( 50)****Flamingo:**1. The Last Lesson 2. Lost Spring 3. Deep water**Poem:** 1. An Elementary School Classroom in a slum. 2. My mother at sixty six. 3. Keeping quiet.**Vistas:** 1. The tiger King 2. The Enemy**Writing:**Notice writing, Advertisement (classified), Formal Letter.**Reading:**Note Making and comprehension. |
| **AUG.** | 21 | **Vistas:**3. Should wizard hit mommy? 4. On the face Of it.**Writing:** Speech , Invitations ( Formal & Informal ) |
| **SEPT.** | 8 | **Vistas:** 5. Evan tries o-level**Novel:** The invisible Man CHAPTER 11-12 |
| **WRITTEN EVALUATION SYLLABUS Half Yearly Exam M.M. (100)****Flamingo:**1. The Last Lesson 2. Lost Spring 3. Deep water 4. The Rattrap 5. Indigo**Poem:**1. An Elementary School Classroom in a slum.2. My mother at sixty six. 3. Keeping quiet.**Vistas:** 1. The tiger King 2. The Enemy 3. Should wizard hit mommy? 4. On the face Of it.**Writing:** Notice writing, Advertisement (classified), Formal Letter, Speech , Invitations ( Formal & Informal )**Reading:**Note Making and comprehension. |
| **OCT.**  | 20 | **Vistas**6. Memories of childhood**Novel** : The Invisible Man Chapter 13-21.**Writing**: Report , Poster Revision for Boards |
| **NOV.**  | 7 | Revision for BoardsPre Board- 1 |
| **DEC.** |  | Revision for BoardsPre Board- 1 |  |
| **JAN.** |  | Revision for BoardsPre Board- II |
| **WRITTEN EVALUATION SYLLABUS Pre-Board I & II M.M. (100)****Flamingo:**1. The Last Lesson 2. Lost Spring 3. Deep water 4. The Rattrap 5. Indigo 6. Going places**Poem:**1. An Elementary School Classroom in a slum. 2. My mother at sixty six. 3. Keeping quiet.4. Aunt Jennifer’s Tiger 5. Thing of Beauty**Vistas:** 1. The tiger King 2. The Enemy 3. Should wizard hit mommy? 4. On the face of it.5. Evan tries o-level 6. Memories of childhood**Writing:**Notice writing, Advertisement (classified), Formal Letter, Speech , Invitations ( Formal & Informal ), Debate, Article, Report , Poster**Reading:**Note Making and comprehension. |

**Physical Education**

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| **Month** |  **Days** | **Chapters To be covered** | **Activity** | **Worksheet** **Chapter wise** |
| April | 17 | Sports Injuries: - SoftTissue Injuries Award - Arjuna Award1. Planning in sports
2. Sports and Nutrition
3. Yoga and Lifestyle
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| May | 9 | 1. Physical education and sports for differently-abled
2. Children and sports
 |  |  |
| July  | 22 | REVISION |  |  |
| **WRITTEN EVALUATION SYLLABUS UT I M.M. (50)**Sports Injuries: - Soft Tissue Injuries Award - Arjuna Award1. Planning in sports 2) Sports and Nutrition 3) Yoga and Lifestyle

4) Physical education and sports for differently-abled |
| Aug. | 21 | 1. Woman and sports
2. Test and Measurement in sports
3. Physiology and sports
4. Sports Medicine
5. Kinesiology, biomechanics and sports
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| Sep | 17 | REVISION |  |  |
| **WRITTEN EVALUATION SYLLABUS Half Yearly Exam M.M. (100) (Theory + Practical)**Sports Injuries Award –Dronacharya Award1. Planning in sports 2) Sports and Nutrition 3) Yoga and Lifestyle

4) Physical education and sports for differently-abled 5) Children and sports1. Woman and sports
 |
| Oct.  | 20 | 9. Sports Medicine10. Kinesiology, biomechanics and sports11. Psychology and sports12. Training in sports |  |  |
| Nov. | 15 | REVISION |  |  |
| **WRITTEN EVALUATION SYLLABUS PRE- BOARD - I M.M. (100) (Theory + Practical)**Complete Syllabus  |
| Dec. | 21 | REVISION  |  |  |
| Jan. | 18 | REVISION |  |  |
| Feb. | 11 | REVISION |  |  |
| **WRITTEN EVALUATION SYLLABUS PRE- BOARD - II M.M. (100) (Theory + Practical)**Complete Syllabus |

**Maths**

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| **Month****and** **(day)** | **Exams** | **M.****Marks** | **Content** |
| **March Apr.****(27)** **+****May****(23)****+July (22)** | **UT I** | **50** | Ch : - 10 Vector (supplementary material) (7marks)Ch:-11Threedimensional geometry (10marks) Ch:- 12 Linear Programing (6marks)Ch: -13 Probability (10 mark)Ch:-2 Trigonometric function (4marks)Ch.3 Matrices (6marks)Ch.4 Determinant (7 marks ) |
| **WRITTEN EVALUATION SYLLABUS UT I M.M. (50)**Ch:-2 Trigonometric function Ch.3 Matrices Ch.4 DeterminantCh : - 10 Vector (supplementary material) Ch:-11Threedimensional geometry Ch:- 12 Linear Programing Ch: -13 Probability  |
| **Aug.****(21)** **+****Sept.****(17)** | **Half** **Yearly** | **100** | Ch:1Relation functions (6marks)Ch. 5.Continuity and differentiability (6 marks)Ch. 6. Application of derivative (10 marks)Revision of board question +Self prepare assignment cum revision worksheet as a class test |
| **WRITTEN EVALUATION SYLLABUS Half Yearly Exam M.M. (100)**Revision Ch:1 Relation functions Ch:-2 Trigonometric function Ch.3 Matrices Ch.4 Determinant Ch. 5.Continuity and differentiability Ch. 6. Application of derivativeCh : - 10 Vector (supplementary material) Ch:-11 Three dimensional geometry Ch:- 12 Linear Programming Ch: -13 Probability  |
| **Oct. 20** |  |  |  Ch. 7 Integral (8marks)Ch. 8 A.O.I (12marks)Ch. 9 Differ. equation (8 marks) |
|  **Nov.****(15)** | **Pre Board I** | **100** | All Chapters (1-13) |
| **WRITTEN EVALUATION SYLLABUS Pre Board- I M.M (100)**All the Chapters(Ch. no -1 to Ch .no 13) |
| **Dec.****(21)** |  |  | Revision test Chapter Wise pre-board 1 |
| **Jan (18)** **+****Feb.****(18)** |  |  |  Revision test pre-board 2 |
| **WRITTEN EVALUATION SYLLABUS Pre-Board -II M.M. (100)**All the Chapters (Ch .No -1 to Ch .no 13)Full syllabus (Revision for pre-board – 1 NCERT based. PRE –Board II CBSE sample paper ) |

**Physics**

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| Month | No. of days | Content | Units | Blue Print Unit |  Practical |
| March-April | 27 | Ch : 1 - Electric field and Charges Ch : 2 - Electric potential and capacitanceCh : 3 Current ElectricityCh : 4 Moving Charges and Magnetism Ch : 5 Earth's Magnetism | Unit- 1 Unit – 2Unit- 3 | 878 | A - 1 To determine resistance per cm of a given wire by plotting a graph of potential difference versus current. A - 2 To determine resistance of a given wire using metre bridge and hence determine the specific resistance of its material A - 3 To verify the laws of combination (series/parallel) of resistances using metre bridge |
| May | 24 | Ch : 6 Electromagnetic Induction  | Unit -4 | 8 | A - 4 To Compare the elecromotive force of two given primary cells using a potentiometer. A - 6 To determine the resistance of a moving Coil galvanometer by half-deflection method and to find its figure of merit. |
| July | 22 | Ch : 7 - Alternating Current | Unit \_ 4 | B - 1 To find the value of v for different values of u in case of a concave mirror and to find the focal length by plotting graphs between (i) u and v (ii) 1/u and 1/v. Activity B - 2 To identify a diode, anLEd, a transistor, an IC, a resistor and a capacitor from a mixed collection of these items. Activity B - 5 (i) To study the nature and size of the image formed by a convex lens using a candle and a screen. (ii) To study the nature and size of the image formed by a concave mirror using candle and a screen |
| **Written Evaluation Syllabus UT – I M.M. (50**)Ch : 1 - Electric field and Charges Ch : 2 - Electric potential and capacitance Ch : 3 Current Electricity Ch : 4 Moving Charges and Magnetism  Ch : 5 Earth's Magnetism |
| Aug. | 21 | Ch : 8 Electromagnetic Waves Ch : 9 Ray optics | Unit - 5 Unit -6 | 314 | B - 2 To find the focal length of a convex lens by plotting a graph between u and v or between 1/u and 1/v. B - 3 To find the focal length of a convex using a convex lens. |
| Sept. | 17 | Ch : 10 Wave Optics Ch : 11 Dual nature of matter and RadiationCh : 13 Nuclei | Unit -7 Unit -8  | 46 | B - 4 To find the focal length of a concave lens using a convex lens. B - 8 To draw the I-V characteristic curve of a pn junction diode in forward bias and reverse bias and to determine its static and dynamic resistances |
| **Written Evaluation Syllabus Half yearly Exam M.M. 100 (Theory + Practical)**Ch : 1 - Electric field and Charges Ch : 2 - Electric potential and capacitance Ch : 3 Current ElectricityCh : 4 Moving Charges and Magnetism Ch : 5 Earth's Magnetism Ch : 6 Electromagnetic Induction Ch : 7 - Alternating Current Ch : 8 Electromagnetic Waves Ch : 9 Ray optics  Ch : 10 Wave Optics  |
| Oct. | 20 | Ch : 14 Semiconductor Electronics | Unit - 9 | 7 | B - 9 To draw the I-V characteristics of the given zener diode in reverse bias |
| Nov. | 15 | Ch : 15 Principle of communication Revision | Unit - 10 | 5 | B - 10 To study the characteristics of a common emitter npn or pnp transistor and to find out the values of current and voltage gains |
| **Written Evaluation Syllabus Pre Board-I M.M. 100 (Theory + Practical)**Ch - 1 to 15 |
| Dec. | 21 | Revision |  |  |  |
| Jan. | 18 |  |  |  |  |
| **Written Evaluation Syllabus Pre Board- II M.M. 100 (Theory + Practical)**Complete Syllabus AISSCE Practical Examination |

**Chemistry**

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| **Month** | **No. of days**  | **Content** | **Unit** | **Blue print Unit wise** | **Practical** |
| March-April  | 27 | Solid StateHaloalkanes and HaloarenesAlcohols, Phenols and Ethers Aldehydes, Ketones and Carboxylic Acids | Unit IUnit XUnit XIUnit XII | 4446 | 1. To determine the molarity of KMnO4 by titrating it against standard solution of a) Oxalic acid b) Mohr`s salt. |
| May | 24 | Organic Compounds containing NitrogenBiomoleculesPolymersChemistry in Everyday Life  | Unit XIIIUnit XIV Unit XVUnit XVI | 4433 |  |
| July | 22 | SolutionsElectrochemistry | Unit IIUnit III | 55 | 2. To identify one Acidic and one Basic radical in the given inorganic compound. |
| **Written Evaluation Syllabus UTI M.M. (50)**Solid State Haloalkanes and Haloarenes Alcohols, Phenols and Ethers Aldehydes, Ketones and Carboxylic AcidsOrganic Compounds containing Nitrogen Biomolecules Polymers Chemistry in Everyday Life  |
| Aug. | 21 | Chemical KineticsSurface Chemistry | Unit IVUnit V | 54 |  |
| Sept. | 17 | General Principles and Process of Isolation of Elements | Unit VI | 3 |  |
| **Written Evaluation Syllabus Half Yearly Exam M.M. (100) (Theory + Practical)**Solid State Haloalkanes and Haloarenes Alcohols, Phenols and Ethers Aldehydes, Ketones and Carboxylic AcidsOrganic Compounds containing Nitrogen Biomolecules Polymers Chemistry in Everyday Life SolutionsElectrochemistry Chemical Kinetics Surface Chemistry |
| Oct. | 20 | p- Block Elementsd- and f- Block Elements  | Unit VIIUnit VIII | 85 | 3. To identify the functional group in the given organic compound. |
| Nov. | 15 | Coordination Compounds | Unit IX | 3 |  |
| **Written Evaluation Syllabus Pre Board-I M.M. (100)(Theory + Practical)**Solid State Haloalkanes and Haloarenes Alcohols, Phenols and Ethers Aldehydes, Ketones and Carboxylic AcidsOrganic Compounds containing Nitrogen Biomolecules Polymers Chemistry in Everyday Life SolutionsElectrochemistry Chemical Kinetics Surface Chemistry General Principles and Process of Isolation of Elementsp- Block Elements d- and f- Block Elements Coordination Compounds |
| Dec. | 21 | Revision |  |  |  |
| Jan. | 18 | Revision |  |  |  |
| **Written Evaluation syllabus Pre Board- II M.M. (100)(Theory + Practical)**Solid State Haloalkanes and Haloarenes Alcohols, Phenols and Ethers Aldehydes, Ketones and Carboxylic AcidsOrganic Compounds containing Nitrogen Biomolecules Polymers Chemistry in Everyday Life Solutions ElectrochemistryChemical Kinetics Surface Chemistry General Principles and Process of Isolation of Elements p- Block Elements d- and f- Block Elements Coordination Compounds |

**Biology**

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| **Month** | **No. of days**  | **Content** | **Unit** | **Blue print Unit wise** | **Practical** |
| March-April  | 27 | Ch 1. Reproduction in organismsCh 2. Sexual reproduction in flowering plantsCh 3. Human reproductionCh 4. Reproductive Health |  I | 14 | 1. Study pollen germination on a slide.**Spotting:** 1. Flowers adapted to pollination by different agencies2. Pollen germination on stigma through a permanent slide.3. Identification of stages of gamete development i.e. T.S. of testis and T.S. of ovary).4. Exercise on controlled pollination - emasculation, tagging and bagging. |
| May | 24 | Ch 5. Principles of inheritance and variationsCh 6. Molecular basis of inheritance |  **II** | 18 | 3. Mendelian Inheritance using seeds of different colour/size of any plant.2. Study of prepared Pedigree charts of genetic traits such as - widow’ s peak, colour blindness, Rolling of tongue, ear lobes & blood groups.3. Prepare temporary mount of onion root tip to study mitosis.4. Study of meiosis in onion bud cells or grasshopper testis through permanent slides. |
| July | 22 | Ch 7.EvolutionCh 8. Human health and diseasesCh 9.Strategies for Enhancement in food production |  **III** |  14 | 1. Common disease causing organisms like Plasmodium, Ascaris, Entamoeba and Roundworm through permanent slides or specimens. Comment on symptoms of disease that they cause.2. Two plants & two animals (model /virtual images) found in xeric conditions. Comment upon their morphological adaptations. |
| **Written Evaluation Syllabus UTI M.M. (50)**Ch 1. Reproduction in organisms Ch 2. Sexual reproduction in flowering plantsCh 3. Human reproduction Ch 4. Reproductive HealthCh 5. Principles of inheritance and variations |
| Aug. | 21 | Ch 10.Microbes in Human WelfareCh11.Biotechnology principles and processesCh 12. Biotechnology and its Application |  **IV** | 10 | Isolation of DNA from easily available plant material like spinach, pea, papaya etc. |
| Sept. | 17 | Revision Classes |  |  |  |
| **Written Evaluation Syllabus Half Yearly Exam M.M. (100)(Theory + Practical)**Ch 1. Reproduction in organisms Ch 2. Sexual reproduction in flowering plantsCh 3. Human reproduction Ch 4. Reproductive HealthCh 5. Principles of inheritance and variations Ch 6. Molecular basis of inheritanceCh 7.EvolutionCh 8. Human health and diseases Ch 9.Strategies for Enhancement in food productionCh 10.Microbes in Human Welfare |
| Oct. | 20 | Ch 13. Organisms and populationsCh 14. EcosystemCh 15. Environmental issuesCh 16. Biodiversity and its conservation |  **V** |  14 | Collect soil from at least two different sites & study them for texture, moisture content , pH & water holdingcapacity. Correlate with the kinds of plants found in them.2. Collect water from two different water bodies around you and study them for pH, clarity & presence of any living organisms. |
| Nov. | 15 |  |  |  |  |
| **Written Evaluation Syllabus Pre Board-I M.M.(100)(Theory + Practical)**Complete Syllabus |
| December | 21 | Remedial Classes  |  |  |  |
| January | 18 |  |  |  |  |
| **Written Evaluation Syllabus Pre Board-II M.M.(100)(Theory + Practical)**Complete Syllabus AISSCE Practical Examination |

**Information Practices**

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| **Month** | **M.M.** | **Contents (Theory)** | **PRACTICALS** |
| April | **17** | Ch 1 – Computer NetworkingCh 13 – MySQL Revison TourCh 14 – Database TransactionsCh 15 –More on SQL Grouping Records and Table joins | Practical of SQL  |
| May | **9** | Ch 16- Tables and Integrity ConstraintsCh 17 -IT Applications | Practical of SQL |
| July | **22** | Ch 2 -Open Source ConceptsCh 3 – Java GUI Programming RT- I Token, Data types, variable, constant, operators | Practical of SQLPractical of Java |
| **WRITTEN EVALUATION SYLLABUS UT –I M.M. (50)**Ch 1 – Computer Networking Ch 13 – My SQL Revision Tour Ch 14 – Database TransactionsCh 15 –More on SQL Grouping Records and Table joins Ch 16- Tables and Integrity Constraints |
| Aug. | **21** | Ch 4- Java GUI Prog. RT-IIFrams, Lables, Check Box, List, Password FieldCh 5- Java GUI Prog. RT- IIICh 6- More about Classes and Libraries | Practical of Java |
| Sept. | **9** | **Revision**  |  |
| **WRITTEN EVALUATION SYLLABUS Half Yearly Exam M.M (100**)Ch 2 -Open Source Concepts Ch 3 – Java GUI Programming RT- I Token, Data types, variable, constant, operatorsCh 4- Java GUI Prog. RT-IIFrams, Lables, Check Box, List, Password FieldCh 5- Java GUI Prog. RT- III Ch 6- More about Classes and Libraries  Ch 16- Tables and Integrity Constraints Ch 17 -IT Applications |
| Oct. | **19** | Ch 7- Concept of InheritanceCh 8 – Database Connectivity to MySQLCh 9- Web Application Development | Practical of Java |
| Nov. | **15** | Ch 10- HTML –I Basic HTML ElementsCh 11- HTML – II List, Tables and FormsCh 12- XML – extensible Language | Practical of HTML |
| **Written Examination Pre Board-I M.M. (100)**Complete Syllabus |
| Dec. | **18** | Revison | Project Work |
| Jan. | **18** | **Revision**  |  |
| Feb. | **18** |  |
| **WRITTEN EVALUATION SYLLABUS Pre Board-II M.M. (100)**Complete Syllabus |

**Computer Science**

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| **Month** | **No. of Days** | **Contents (Theory)** | **PRACTICALS** |
| April | **17** | **Computer Fundamentals**Ch – 1 C++ Revision Tour Operators, Flow of ControlCh – 11 Database Concepts Purpose , Data ModelsCh- 12 Structured Query Language  | Basis of c++Practical of SQL |
| May | **9** | Ch – 13 Boolean Algebra -Logic Gates, Theorems Boolean ExpressionCh – 14 Communication and Network | Practical of SQL |
| July | **22** | Ch – 2 OOPSCh- 3 Function Overloading | Practical of C++ |
| **WRITTEN EVALUATION SYLLABUS UT** I**M.M. (50)**Ch – 1 C++ Revision Tour Operators, Flow of Control Ch – 11 Database Concepts Purpose , Data ModelsCh- 12 Structured Query Language Ch – 14 Communication and Network |
| Aug. | **21** | Ch – 4 Classes and ObjectsCh – 5 Constructors and DestructorsCh –6 Inheritance | Programming in C++ |
| Sept. | **9** | **Revision** | Programming in C++  |
| **WRITTEN EVALUATION SYLLABUS Half yearly Exam M.M. (100)**Ch – 2 OOPS Ch- 3 Function Overloading Ch – 4 Classes and Objects Ch – 5 Constructors and Destructors Ch –6 Inheritance Ch- 12 Structured Query Language Ch – 13 Boolean Algebra Logic Gates, Theorems Boolean Expression |
| Oct. | **19** | Ch – 7 Data File HandlingCh – 8 Pointers | Programming in C++ |
| Nov. | **15** | Ch- 9 ArrayCh -10 Linked Lists, Stacks and Queues | Programming in C++ with Array  |
| **WRITTEN EVALUATION SYLLABUS Pre Board- I M.M. (100)****Complete Syllabus** |
| Dec. | **18** | **Revision** | Project Work,  |
| Jan. | **18** | **Revision** |  |
| Feb. | **18** | **Revision** |  |
| **WRITTEN EVALUATION SYLLABUS Pre Board- II M.M. (100)****Complete Syllabus** |