Project - 2017 - 2018
Class : X Sc./ Com.

Subject	Topic
English Language	**Aural Skills** A passage of about 300 words will be read aloud by the examiner twice, the first time at normal reading speed (about 110 words a minute) and the next time at a slower speed. Candidates may make brief notes during the readings. They will then answer an objective type test based on the passage on the paper provided.
	Oral Skills Each candidate will be required to make an oral presentation for about two minutes, which will be followed by a discussion on the subject with the examiners for about three minutes. Subjects for presentation may include the following.
	1. Narrating an experience. 2. Providing a description. 3. Giving a report. 4. Expressing an opinion. 5. Relating an anecdote or commenting on a current event.
English Literature	**Assignment - I** With reference to `The Merchant of Venice by Shakespeare do the given assignment. 1. Summary of the play (Act I to Act II) 750 words. **Assignment - II** With reference to the `Short Stories' do the given assignment. Write the summary and give the character analysis of any character from any of the chapter.

Subject	Topic
Hindi Language	Project I - संस्कृति का अर्थ स्पष्ट करते हुए भारतीय संस्कृति की प्रमुख विशेषताओं का उल्लेख कीजिए। यथा चित्रों का संयोजन करें। Project II - आज का युग विज्ञान का युग है। एक वरदान के रूप में विज्ञान की भूमिका असंदिग्ध है। संहारक एवं घातक अस्त्र – शस्त्रों के कारण विज्ञान एक अभिशाप भी बन गया है। **'विज्ञान : वरदान या अभिशाप'** – इस विषय पर अपने विचारों को तर्क संगत ढंग से प्रस्तुत कीजिए। यथा आवश्यकतानुसार चित्रों का संयोजन करें।
Hindi Literature	भारत भूषण अग्रवाल द्वारा 'महाभारत की एक साँझ' एकांकी का कथानक, उद्देश्य तथा शीर्षक की सार्थकता लिखिए और प्रमुख पात्रों का चरित्र – चित्रण करते हुए जीवन में सत्य व न्याय का महत्व बताइये। आवश्यकतानुसार यथा स्थान चित्रों का संयोजन करें।
History	Topic: Forward Bloc and the INA. 1. Introduction of Subhas Chandra Bose with pictures. 2. Rift with Gandhiji 3. Formation of Forward Bloc 4. Define the INA 5. Achievements of the INA 6. Impact of the INA 7. Where about of Subhas Chandra Bose's family.

Geography	Tourist Destinations and development of Tourism in India.
	Outline of the Project
	1. Introduction
	2. Growth and development of tourism in India.
	3. Factors responsible for development of tourism.
	4. Economic importance of tourism and its advantages.
	5. Eco-tourism in India.
	6. Places of tourist interested in India
	    i) Himalayas and Hill stations.
	    ii) Historical monements and archaeological sites.
	    iii) Santuaries and National parks.
	    iv) Pilgrimage centres.
	    v) Sea beaches

Subject	Topic

	7. Problems related to tourism in India.
	8. Future prospects in Tourism in India.
	<u>Guidelines</u>
	  a) Prepare a broad outline of the project.
	  b) Collect the data/ material from the various sources like reference books, magazines, newspapers, journals etc.
	  c) Analyses and organize the data as per the outline of the project.
	  d) Finally, prepare a comprehensive project report accompanied by suitable diagrams, sketches, map work clippings from newspapers and statistical.

Hindi Language	**Project I -** संस्कृति का अर्थ स्पष्ट करते हुए भारतीय संस्कृति की प्रमुख विशेषताओं का उल्लेख कीजिए। यथा चित्रों का संयोजन करें। **Project II -** आज का युग विज्ञान का युग है। एक वरदान के रूप में विज्ञान की भूमिका असंदिग्ध है। संहारक एवं घातक अस्त्र – शस्त्रों के कारण विज्ञान एक अभिशाप भी बन गया है। **'विज्ञान : वरदान या अभिशाप'** – इस विषय पर अपने विचारों को तर्क संगत ढंग से प्रस्तुत कीजिए। यथा आवश्यकतानुसार चित्रों का संयोजन करें।
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History	**Topic:- Forward Bloc and the INA.**
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Mathematics	**<u>Mathematics practicals.</u>** **<u>(Do any 3 projects out of the given ones)</u>** 1. To obtain the condition for lines of a system of linear equation in 2 variables to be intersecting parallel or coincident. 2. To find experimentally the positive square root of a quadratic equation of type $x^2 + Ax - B = 0$, A, B > 0, and also to find experientially the negative square root of a quadratic equation of the type $x^2 - Ax + B = 0$, A, B, > 0. 3. To verify Basic proportionality theorem. 4. To verify Pythagoras Theorem. 5. To verify Distance Formula and Section Formula. 6. To verify the Trigonometric ratios and Trigonometric identities in a right angled triangle. 7. To make & use a clinometer to measure the height of distant object.

Subject	Topic
	8. To verify that the tangents from external point are equal in length & radius is perpendicular to the tangent. 9. To obtain the formula that area of circle is half the product of circumference and radius. 10. To find the radius of a metallic sphere by immersing it in water. 11. To find the probability of an event through a double colour card experiment.
Physics (Practical)	1. To determine the mass of a meter scale using the spring balance or by balancing it on a knife edge at some point away from the middle and 50 gm weight on other side. 2. Comparing MA and VR for a set of meter rule balanced at different positions, adjusted Load (L) and effort (E), for different values of L, E, dL, dE. 3. Determine the effort (E) required to roll a roller up an inclined plane with uniform speed, applying effort (E) at other and. Calculate MA,VR Explanation. 4. Determine the VR and MA of a given pulley system. 5. Trace the course of different rays of light refracting through a glass slab at different angles of incidences. Measure the lateral displacement. 6. Determine the focal length of a convex lens by (a) distant object method (b) using needle & plane mirror. 7. For a triangular prism, trace the course of rays passing through it. Measure i_1, i_2, A & δ and verity $i_1 + i_2 = A + \delta$, $A = r_{1 +} r_2$. 8. Determine sp heat of a metal by method of mixture. 9. Verify Ohm's Law using a simple electric circuit and draw a graph (V-I) and obtain the slope.

Subject	Topic
	10. Set up a model of household using including the ring main system. Study the function of switches & fuses.
	11. Verify the formula for a set of resistors in series $(R_s = R_1 + R_2 + R_3)$ and in parallel $\frac{1}{Rp} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$.
Chemistry Practical's	(i) Identification and Recognition of gases. - H_2 gas - CO_2 gas - SO_2 gas - $H_2 S$ gas - HCl gas - NH_3 gas (ii) Identification of some unknown substances by physical examination. (iii) Flame test of different metals or different metal salts. (iv) Identification of cations by using NaoH solution. (v) Id Identification of cations by using NH_4oH solution. (vi) Detection of Anions - Carbonate ion. - Sulphate ion -Sulphide ion. (vii) Determination of PH values of different sample (milk), lemon juice, Tomato juice, vingar, common salt solution) using PH paper. (viii) To find whether the given substance is acidic or basic using different indicators. (ix) Use of PH in soil analysis. (x) To identify copper oxide and Manganese dioxide.

Subject	Topic
Biology	1. To study the various stages of mitosis in plant cell and draw the labeled sketches. 2. To show the roots of a plant absorb water. 3. To demonstrate the process of osmosis with the help of a potato osmoscope. 4. To show that plant carry out transpiration with the help of their leaves-Bell jar experiment. 5. To measure the water taken in by a plant because of transpiration with the help of Ganong's potometer. 6. To show that Carbon dioxide is necessary for photosynthesis. 7. To study the internal structure of the human heart with the help of a diagram. 8. To study the structure of the urinary system of human with the help of a diagram. 9. To identify different types of blood cells from a human blood smear when observed under the microscope. 10. a) To study the structure of the human eye with the help of a diagram & identify the various parts. b) To study the structure of the human ear with the help of a diagram and identify the various parts.
Computer Application	1. As assignment file will be submitted by the students having 50 Java programs coming all the topics of Java like classes, control structures, functions array. The file will carry 50 marks and will be produced to external examiner. 2. Written and practical assignments to Java programs will be given to students that will also include small applications simulating real world problems. The assignments will carry 50 marks in total and will be evaluated as internal assessment.

Subject	Topic
Commercial Studies	**Project - I** **Topic : Types of Communication** (Explaining different types of communication with their merits and demerits) **Project - II** **Topic: Advertising and the essentials of a good advertisement.** (Explaining the meaning of advertising and essentials of a good advertisement. Do the study of daily Newspaper which your family buys, select five advertisements and compare each of them with the essentials of a good advertisement) **Project - III** **Topic : meaning and Functions of commercial Banks.** (Write down the meaning and different functions of Commercial Bank. Search on internet and write about a commercial bank (either public sector or private sector commercial bank)

Economics	**Project - I**
	1. Prepare a project to understand the following concepts.
	    a) Law of Demand
	    b) Law of Supply
	Project - II
	2. Inflation - a) Meaning and its type
	             b) Demand pull and cost push inflation.
	Project - III
	3. Nationalization of Banks - Meaning, objectives, advantages and disadvantages.

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Physical Education	Topic: (i) Cricket - History, Rules & regulations, Batting & Bowling actions and terminologies related to the game. (ii) Basket Ball - History, Rules & regulations, passing & shooting skills and terminologies related to the game.

Note:- All Projects are to be submitted on June 26, 2017 between 9:00 a.m. & 1:00 p.m.

Principal