HOLIDAY HOME WORK | Class - XII 2017-18

Holiday H.W. has to be done in the H.W. copy in case no separate instructions are given.

English	Q.1 Do worksheets 1, 2 of Module 1 in bbc (Reading Comprehension page no. 8 -13). Q.2 Do worksheets 21, 22 of Module 2 in bbc (Note making page no. 82 -87)
Maths	Do the following questions 1. For x, y R, define a relation R by x R y if and only if 2x + 3y + $\sqrt{17}$ is an irrational number. (i) Is x, x . R x R (ii) Is x, y R y, x R x, y R. (iii) Is x, y R & y, z x, z R x, y, z R. Prove that R is neither reflexive nor symmetric and transitive. 2. If R_1 & R_2 are equivalence relation in a set A, then prove that R_1 R_2 need not be an equivalence relation in A. 3. If the real-valued function f(x) = px + sin x is a bijective function then find the set of possible values of p R. Ans: R – {0} 4. Consider functions f and g such that composite gof is defined and is one-one. Are f and g both necessarily one-one. Justify. 5. Are f and g both necessarily onto, if gof is onto? Justify. 6. In each of the following cases, state whether the function is bijective or not. Justify your answer. (i) $f : R$ R defined by f x log x $\sqrt{x^2}$ 1 (ii) $f : R$ R defined by f x $\frac{3^x \quad 3^{\ x}}{2}$ 7. On the set S = {(a, b): a, b R, a 0} a binary operation * is defined as (a, b) * (c, d) = (ac, bc + d), then a. Test associativity and commutativity, b. Find the identity element if it exists, c. Also find the invertible elements of R. $x, \quad x$ 1 8. Find the inverse of f x $x^2, \quad 1 \quad x \quad 4$. $8\sqrt{x}, x \quad 4$ 9. Let f: $R \rightarrow R$ be a function defined as f x $\frac{x \quad a}{x \quad b \quad x \quad c}$, $b \quad c$. If is an onto function, then prove that $a \quad b, c$ 10. Solve: $\cos^{\ 1} \frac{1}{2}x^2 \quad \sqrt{1 \quad x^2}\sqrt{1 \quad \frac{x^2}{4}} \quad \cos^{\ 1} \frac{x}{2} \quad \cos^{\ 1} x$. 11. Find the maximum value of f x $\tan^{\ 1} \frac{\sqrt{12} \quad 2 \ x^2}{x^4 \ 2x^2 \ 3}$.
Physics	Prepare one investigatory project or working model along with file.
Chemistry	Q1. Prepare an investigatory project for class 12 final Board practical. Instructions for the making of the project are as follows: a) It must be handwritten in your neat handwriting. b) It should include the main topic, certificate, acknowledgement followed by the index and main content. c) Project must be neat and clean. d) Make it more interesting by pasting pictures, photographs or samples wherever required. e) Last page includes conclusion of the experiment and then ends with bibliography. f) Selection of topic is as per the contents given in the syllabus (lab manual)or can search at cbse.nic.in g) Analyze your result of the experiment in proper observation table with proper data. h) you can take the help of reference books, lab manuals or go through CBSE site etc. i) submit the same in the first week of July.
Biology	Prepare a project on any specific topic of Biology.

Accountancy	Prepare a Comprehensive project of any sole proprietorship/partnership form of business. This may state with Journal entries and their ledgering, preparation of Trial balance, Trading and Profit and Loss Account and Balance Sheet. Expenses, incomes and profit (loss), assets and liabilities are to be depicted using pie chart / bar diagram. Also prepare a report on the performance of the business you have mentioned in your case study.
B.St	Based on your study of Ch-2 'Principles of Management' prepare a project by visiting any one of the following: 1. A departmental store. 2. An Industrial unit. 3. A fast food outlet. 4. Any other organisation (approved by the teacher). Observe the application of the general Principles of Management advocated by Fayol. **Fayol's Principles** 1. Division of work. 2. Unity of command. 3. Unity of direction. 4. Scalar chain 5. Espirit de corps 6. Fair remuneration to all. 7. Order. 8. Equity. 9. Discipline 10. Subordination of individual interest to general interest. 11. Initiative. 12. Centralisation and decentralisation. 13. Stability of tenure. OR Enquire into the application of scientific management techniques by F.W. Taylor in the unit visited. **Scientific Techniques of Management** 1. Functional foremanship. 2. Standardisation and simplification of work. 3. Method study. 4. Motion Study. 5. Time Study. 6. Fatigue Study 7. Differential piece rate plan. Essentials of submission: (a) The total project should be prepared in the file format and presented in a neat folder. (b) The project must be hand written. (c) The total length of the project must be 25-30 pages. (d) Students must make extra efforts to give proof of the research work done by them like photographs , written certificate of visit by the owner/manager etc. The student has to prove the authenticity of his project work.
Economics	Q.1 Use the concept of PPC to explain economic problems: What to produce, How to produce, For whom to produce? Q.2 Explain using Indifference curve analysis, how point of equilibrium will change in case (1) price of X changes (2) Income changes. Construct diagram. Q.3 Do numerical problems related to consumers e.g. given in text book (Page no.2.34_2.36) Q.4 Explain with the help of numerical examples how budget line will change in following cases: a) if income increases by 50% & prices of goods remain constant. b) Income remains constant ,prices of good x rises by 10 /- & price of good y falls by 5/- c) Income & price of good x is same & price of good y rises by 10%.
Informatics Practices	Q1. Write the Synopsis for the project you will make in Netbeans. The synopsis should contain the introduction, objective , structure of the MySQL database with tables and the various forms .
Physical Education	1. Write the Administration of AAHPERD Youth Fitness Test. 2. Write all the test of RIKLI AND JONES : SENIOR CITIZEN FITNESS TEST.