

Assignment Topics (2020-2021)

Class – XII

ENGLISH GRAMMAR

1. In about 500 words write the review of a story book of your choice. (Mention the name of story, main characters, language content, reasons for liking, age group it belongs to, year of publication etc.)

(Students should attach suitable handmade drawings to enhance their projects)

ENGLISH LITERATURE

1. In about 1000 words analyse the character of Prospero in 'The Tempest'. (Hint : His goodness as a brother of Antonio, father of Miranda and Ferdinand, master of Caliban and Ariel, his skill , nature of forgiveness etc.)

(Students should attach suitable handmade drawings to enhance their projects)

MATHEMATICS

Candidates will be expected to have completed two projects (One from Section A and other one from Section B/C of Theory).

Section A

1. Using graph to demonstrate a function which is invertible function.
2. Explore the principal value of the function $\sin^{-1} x$ (or any other inverse trigonometric function) using a unit circle.
3. For a dependent system (non-homogeneous) of three linear equations of three variables, identify infinite number of solutions.
4. Explain the concepts of increasing and decreasing functions, using geometrical significance of dy/dx . Illustrate with proper examples.

5. Illustrate the concept of definite integral $\int (x)dx$, expressing as the limit of a sum and verify it by actual integration.
6. Explain conditional probability, the theorem of total probability and the concept of Bayes theorem with suitable examples.

Section B

7. Using vector algebra, find the area of a parallelogram/triangle. Also derive the area analytically and verify the same.
8. Find the image of a line with respect to a given plane.
9. Find the area bounded by parabola and an oblique line.
(Any other pair of curves which are specified in the syllabus may also be taken.)

Section C

10. Draw a rough sketch of cost (C), Average Cost (AC) and marginal cost (MC) Or Revenue (R), average revenue (AR) and marginal revenue (MR).
11. For a given data, find regression equations by the method of least squares.
12. Using any suitable data, find the Optimum cost by formulating a linear programming problem (LPP).

Note: Illustrate your projects with suitable pictures and Newspaper / magazine clippings, Bibliography, Introduction, Acknowledgement and Conclusion should be given for each project

*All the projects are to be submitted on the given date to the respective class teachers.
Failure to submit the projects on time will incur loss of marks*



Fr. Jose Kokkandathil
Principal