



THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

MAT/MAS 1231/1452/1212/1201

Time: 2 hours

Mathematics for Life

Max marks: 60

Answer any FOUR Questions:

(4 × 15 = 60 marks)

1. Explain about History of Calendar and discuss about types of Calendar.
2. A brief explanation about History of Ancient Mathematics.
3. i. Gordon is twice as old as Tony was when Gordon was as old as Ton is now. The combined age of Gordon and Tony is 112 years. How old are Gordon and Tony now?
ii. In a party of 35 people there are twice as many women as children and twice as many children as men. How many of each are there?
iii. What number should replace the question mark?
16, 23, 19, 19, 22, 15, 25,?
iv. What goes into the empty brackets?

2[38]3

4[1524]5

6[3548]7

8[]9

- v. Every station on the railway system sells tickets to every other station. Some new stations were added. 46 sets of additional sets of tickets were required. How many new stations have been added? How many stations were there originally?
4. A brief explanation about Mathematical models in Nature.
5. Explain about:
 - i. Konigsberg Bridge Problem.
 - ii. Four Colour Problem.
 - iii. K_5 is non- Planar.
6. Explain about Successive Phases of Moon also discuss it using the formula.