## PEA306:ANALYTICAL SKILLS-II

L:2 T:1 P:0 Credits:3

**Course Outcomes:** Through this course students should be able to

CO1:: understand the concepts of time & work, pipes & tanks

 ${\sf CO2}:$  apply the techniques of time speed & distance to solve the problems on trains and boats & stream

CO3:: apply the concepts learnt to solve the questions related to Venn diagrams

CO4:: apply the concepts learnt to solve the problems based on clocks, calendar and mensuration

CO5:: apply the analytical reasoning concepts learnt to solve problems of linear and circular seating arrangements

CO6 :: understand the data to interpret and solve the given problems

#### Unit I

**Time and Work**: problems based on time and work, formulae, computation of work done together, efficiency based problems, men, women, and children based problems, wages based work problems **Pipes and Cisterns**: inlet-outlet, part of tank filled, time based problems

### Unit II

**Time, speed and distance**: concept of time, speed and distance, conversion of units and proportionality, average speed concept

Problem on trains: relative speed concept & application

Boats and Streams: downstream and upstream

#### **Unit III**

**Syllogism**: logical venn diagrams, ability to relate a certain given group diagrammatically, Possibility based questions

Arithmetical reasoning: venn diagrams based problems

Number ranking test: number test and ranking test problems

### **Unit IV**

**Mensuration**: problems on surface area and volume of cube, cuboid, problems on surface area and volume of sphere and hemisphere, problems on surface area and volume of cone and cylinder

Calendar: basic concept of calendar, date and days, finding the exact day

Clocks: concept of clock, facts and formulae, practice problems

#### Unit V

Height and distance: problem based on height and distance

Analytical Reasoning: Linear seating arrangement, circular seating arrangement, puzzle test

**Cubes and Dices**: basic 3-D structure of a cube., evaluation of Cube with 'n' sides painted, numbers on a die, classification of dice, constructed and deconstructed dice

### **Unit VI**

**Data interpretation**: basics of data interpretation and its types, tabulation, bar graph, pie chart, and line graph

Data sufficiency: check sufficiency of data

# **Text Books:**

- 1. A MODERN APPROACH TO VERBAL & NON-VERBAL REASONING by DR. R. S. AGGARWAL, S Chand Publishing
- 2. QUANTITATIVE APTITUDE by DR. R. S. AGGARWAL, S Chand Publishing

#### References:

- 1. ANALYTICAL REASONING by MK PANDAY, BANKING SERVICE CHRONICLE
- 2. MAGICAL BOOK ON QUICKER MATHS by M.TYRA, BANKING SERVICE CHRONICLE

Session 2023-24 Page:1/2