

# SYLLABUS FOR APTITUDE TEST-2024 Class-IV (PRIMARY SECTION)

# **ENGLISH**

#### Students must have understanding of:

- Fiction
- Non-fiction
- Historical fiction
- Implicit explicit
- Character profile
- Inference
- Quantifier
- Scanning
- Adverbs
- Adverbial phrases
- Apostrophes for omission and possession
- Wh question
- Features of news report
- Speech marks & commas
- Alliterations
- Poems
- Similes
- Rhyming words
- Riddles
- <u>Homophones</u>
- Fantasy fiction
- Root words
- Synonyms
- Explanation text
- Prefix
- Suffix Play script and its features
- Silent letters in spellings
- Freeze frame
- Alphabetical order
- <u>Dilemma</u>
- Phrases Connectives , Adjectives , Noun, Verbs
- Singular plural
- Spelling patterns Advertisement and its features
- Fact and opinion
- Degrees of adjectives
- Video adverts

**Note:** Concepts related to the above topics will be assessed.

## **URDU**

موضوعات: قواعد۔ ہم آوازالفاظ۔ مصوتے بدل کرنے الفاظ۔ واحد جمع۔ گنتی۔ حروف جار۔ زمانے کی اقسام۔۔۔ خط۔ فعل امر۔ فعل نہی منفی جملہ اور استفہامیہ جملے۔ سابقے۔ متر ادف الفاظ۔ اسم ضمیر۔۔ حروف ربط۔ علامت فاعل 'نے 'اور علامت مفعول اکو اکااستعال۔ غیر حقیقی اساء کے ذکر مونث۔ ہدایت بورڈ. استفہامیہ الفاظ، عربی کے قاعدے سے جمع بنانا۔ واحد جمع۔ علامت واوین۔۔ مہینوں کے نام کی ترتیب۔ تذکیر و تانیث، علامت واوین۔ اسم اور اس کی اقسام ۔ اسم صفت۔ جملوں کی اقسام۔ قوسین. محاورات۔ لاحقہ۔ اسم ضمیر اور اس کی حالتیں۔ حروف عطف۔ اکہ 'اور 'کے 'کااستعال، اسم معرفہ۔ اسم نکرہ۔۔ مرکب جملے۔ املاکی در تنگی .

نوٹ: مذکورہ موضوعات سے متعلق عمومی علم کے سوالات کا جائزہ لیاجائے گا۔

## **MATHEMATICS**

# **Topics:**

- Whole number and operation
  - 1. addition
  - 2. subtraction
  - 3. multiplication
  - 4. division
- Factors and multiples
  - 1. prime and composite number
  - 2. factorization
  - 3. higher common factors
  - 4. multiples
  - 5. least common multiples
- Fraction
  - 1. like and unlike fraction
  - 2. equivalent fraction
  - 3. Type of fraction
- Decimal
  - 1. decimal and fraction
  - 2. multiplication of decimal by whole number
  - 3. division of decimal by whole number
- Measurements
  - 1. measurement of length, mass, capacity
  - 2. conversion of unit of measurements
  - 3. conversion of unit of length
  - 4. addition and subtraction of unit of length
- Perimeters and area
  - 1. perimeter
  - 2. area
  - 3. comparison of area
  - 4. area of irregular
  - 5. unit of area
  - 6. area and perimeter
- Geometry
  - 1. looking at lines
  - 2. draw a line segment
  - 3. measurement of straight and curve lines
  - 4. horizontal and vertical lines

- 5. draw a vertical line
- 6. parallel and non-parallel lines
- 7. draw parallel lines
- 8. symmetry
- Angles
  - 1. types of angles
- Measuring angles
  - 1. using the protractor
- Drawing angles
- Circles
- Quadrilaterals

**Note:** General concepts of the mentioned topics will be assessed in aptitude test.

#### **SCIENCE**

**Topics:** These topics are included in aptitude test.

- <u>Life Cycle of Animals</u> (Types of reproduction in animal, stages of life cycle, names of egg lying and birth giving animals)
- <u>Introducing Habitats</u> ( Types of habitat, living and non-living factor of habitat)
- <u>Heat</u> (Source of heat, Uses of heat, It's effects on temperature)
- Measuring scale Matter (States of matter ,Non matter ,Shapes ,Volume ,Mass)
- <u>Electrical appliances</u> (Uses of different appliances)
- Good and bad conductors of heat and electricity
- Melting and freezing, (Conversion of solid into liquid, Conversion of liquid into solid)
- Magnets (Shapes ,Properties, Poles ,Uses)
- Sound (Pitch of sound, volume of sound, how sound travel, sound absorbing materials)

**Note:** General concepts of the mentioned topics will be assessed in aptitude test.

#### **COMPUTER**

#### **Topics:**

• Computer Who are you?

(Characteristics of the computer, Machines that have computers) Programming parties (The programmer, The Program and The end user, Popular languages around the world.

- Objects Around me (Objects, Actions, Properties)
- Welcome to Small Basic (definitions and codes (Turtle.Show(),Turtle.Move(any number),Turtle.TurnRight(),Turtle.TurnLeft(),Turtle.Speed=any number ,Turtle.PenUp(),Turtle.PenDown()
- Who is Who? Steve Jobs, Graphics Window is an object, (GraphicsWindow.Height= any number, GraphicsWindow.Width=any number)
- <u>Graphics Window is an object</u>, (GraphicsWindow.Height= any number, GraphicsWindow.Width=any number)
- Graphics Window is Colorful

GraphicsWindow.BackgroundColor= "any color"

GraphicsWindow.PenColor= "any color"

GraphicsWindow.BackgroundColor= GraphicsWindow.GetRandomColor()

My Colorful Shapes

Shapes.AddEllipse(width, height)

GraphicsWindow.BrushColor="any color"

Shapes. AddRectangle (width, height)

Shapes.AddLine(x1,y1,x2,y2)

- Animate My Shape
  - Shapes. Animate(ShapeName,x,y,duration)
- Who is Who Monis Rahman

- <u>Competency Level Topics:</u>
- Digital Literacy and Computer Skills:

What is CPU?

What is RAM?

What is hard drive?

What is motherboard?

What are inputs and outputs?

What is Operating System?

What are the Office Tools?

What are Music and Video Players?

What is keyboard?

What is Mouse?

What is printer?

What is Monitor or Screen?

What is hardware and software?

• Introduction to Computational Thinking:

What is Computational thinking?

• Digital Citizenship and Ethics:

What is digital citizenship?

• Introduction to AI (Artificial Intelligence), Robotics and Programming:

What is AI (Artificial Intelligence)?

What are Robotics?

Note: General knowledge question related to mentioned topics will be assessed in aptitude test.

#### **ISLAMIAT**

### **Topics:**

• Pillars of Islam, Namaz

(How many pillars are there?, Name the Pillars of Islam in sequence? ,What is Namaz? ,What is wuzu?, What is ghusl? ,How many Namaz are obligatory for muslims?, How many steps are involved in offering namaz?, What is rakat?, Difference between Farz, Sunnat and Nafl rakat?)

• Pillars of Islam, Zakat

(What is the meaning, purpose and significance of zakat?, When zakat becomes obligatory?, How much percentage is to be paid for zakat?, Who receives zakat?, How many times zakat mentioned in Quran and in which surahs?

• Articles of faith, Akhirat

(What does akhirat means in Islam?, What does Iman mean?, Name four major angles and their duties., What is the day of judgement?, What are the two main places people may go after the day of judgement?, Why it is important for muslims to believe in Akhirat?)

• Prophet Muhammad (PBUH) Early life

(The early years of Prophet's life, His helpful nature, and characteristics., How he treated others?, Journey to Syria, Hilf-ul-Fazzool, Hahr-e- Aswad, Marriage with Hazrat Khadija, Children of Hazrat Muhammad (SAW), Ibadat in the cave of Hira

• The character of our Prophet (SAW)

(His helpful nature, Characteristics (honesty, truthful, reliability, and trustworthy), How he treated others?, How the holy Prophet (SAW) was in business dealings)

• The life of the Prophet Muhammad (SAW)

(Where was Prophet Muhammad (SAW) born?, His helpful nature, Characteristics (honesty, truthful, reliability, and trustworthy), How he treated others?, How the holy Prophet (SAW) was in business dealings)

• Personalities of Islam

(Important events from the lives of Hazrat Abu Bakr and Hazrat Umar., Name the four Caliphs of Islam)

- Kinship
- Helping others
- Good manners

(From unit kinship till good manners general concepts are included.

- Stories from Quran (general Questions are included related to the topics
- <u>Islamic studies general knowledge questions are also included.</u>

**Note:** General knowledge question related to mentioned topics will be assessed in aptitude test.

# **SOCIAL STUDIES**

<u>Topics:</u> These topics are included in aptitude test.

- Lahore
- Water
- Where I live
- Our government
- The Indus Valley
- Road to independence
- Communication
- Rights and responsibilities
- Ideals of citizenship
- Understanding money
- Test paper will be based on conceptual questions.
- Reading comprehension and writing skills are required to attempt the paper.