

# SUN SHINE PUBLIC SCHOOL, NAJIBABAD

## Malti Agarwal Smriti Chatravriti Scholarship Test — 2026

### SAMPLE PRACTICE PAPER

CLASS 11 • Syllabus: Class 10 CBSE • Total: 120 Marks • Time: 60 Minutes

This is a **SAMPLE PAPER** for practice only. The actual test will have **ENTIRELY DIFFERENT** questions.

Roll No.: \_\_\_\_\_ Name: \_\_\_\_\_ School: \_\_\_\_\_

#### GENERAL INSTRUCTIONS:

- 60 questions, all compulsory. Paper is based on Class 10 CBSE syllabus.
- +2 marks for each correct answer.
- 0.25 marks for wrong answer in Maths / Science / English / SST only.
- NO negative marking in Section A (Mental Ability) and Section B (GK).
- Practise answering this paper honestly within 60 minutes.
- Answers are in the Answer Key on the last page of this booklet.

#### SECTION A — MENTAL ABILITY & REASONING (Q.1 to Q.10)

No Negative Marking

**Q.1.** If the 1st January 2025 was a Wednesday, what day of the week was 1st January 2026?

- Wednesday
- Friday
- Thursday
- Tuesday

**Q.2.** I am a 3-digit perfect square.

If you reverse my digits, I am still a perfect square.

I am greater than 100. What is the LARGER of the two numbers?

- 196
- 169
- 361
- 961

**Q.3.** A clock shows 9:00. What is the angle between the minute and hour hands?

- 270°
- 90°
- 180°
- 120°

**Q.4.** A, B, C invest in ratio 2:3:5 in a business.

Total profit at year end = ₹75,000.

B's share of profit:

- ₹20,000
- ₹22,500
- ₹25,000
- ₹30,000

**Q.5.** 3 workers can complete a job in 10 days.

After 4 days, 2 workers leave.

How many MORE days does the remaining 1 worker need to finish the job?

- 15 days
- 12 days
- 18 days
- 20 days

**Q.6.** 5 friends Aman, Bina, Charu, Dev, Elan have birthdays in 5 different months.

Aman's birthday is before Bina's but after Charu's.

Dev's birthday is the last of the five.

Elan's birthday is immediately after Bina's.

What is the ORDER of birthdays (earliest to latest)?

- Charu, Bina, Aman, Elan, Dev
- Aman, Charu, Bina, Elan, Dev
- Charu, Aman, Elan, Bina, Dev
- Charu, Aman, Bina, Elan, Dev

**Q.7.** A number is first increased by 50% and then decreased by 50%. What is the net change?

- (a) 25% decrease
- (b) No change
- (c) 25% increase
- (d) 50% decrease

**Q.8.** The sum of all natural numbers from 1 to 50 is:

- (a) 1225
- (b) 1275
- (c) 1325
- (d) 1250

**Q.9.** A train 200 m long crosses a bridge 400 m long in 30 seconds. How long will the SAME train take to cross a tunnel of length 1000 m?

- (a) 45 sec
- (b) 50 sec
- (c) 60 sec
- (d) 70 sec

**Q.10.** ₹2100 is divided among A, B and C.

A gets twice as much as B, and B gets twice as much as C. How much does A get?

- (a) ₹600
- (b) ₹800
- (c) ₹1000
- (d) ₹1200

**SECTION B — GENERAL KNOWLEDGE & CURRENT AFFAIRS** (Q.11 to Q.15)

**No Negative Marking**

**Q.11.** India's 'Operation Sindoor' of May 2025 was launched in response to a terrorist attack in Pahalgam. How many tourists were killed in that attack?

- (a) 12
- (b) 26
- (c) 32
- (d) 40

**Q.12.** 'Chandrayaan-3' successfully landed near the Moon's South Pole on:

- (a) 23 August 2023
- (b) 14 July 2023
- (c) 15 August 2023
- (d) 1 October 2023

**Q.13.** Which country hosted the FIFA World Cup 2022, making it the first World Cup in the Middle East?

- (a) Saudi Arabia
- (b) UAE
- (c) Qatar
- (d) Bahrain

**Q.14.** The 2024 Nobel Prize in Physics was jointly awarded for foundational work on machine learning. Who won it?

- (a) Yann LeCun and Ilya Sutskever
- (b) Sam Altman and Elon Musk
- (c) Alan Turing and Claude Shannon
- (d) John Hopfield and Geoffrey Hinton

**Q.15.** Which Indian city is known as the 'Pink City'?

- (a) Udaipur
- (b) Jaipur
- (c) Jodhpur
- (d) Bikaner

**SECTION C — MATHEMATICS** (Q.16 to Q.30)

**-0.25 for wrong answer**

- Q.16.** Find the HCF of 96 and 404 using Euclid's Division Algorithm.
- (a) 4
  - (b) 8
  - (c) 12
  - (d) 2
- Q.17.** If one zero of the polynomial  $p(x) = x^2 - 3x + k$  is 2, find  $k$ .
- (a) 3
  - (b) 1
  - (c) 2
  - (d) 4
- Q.18.** The sum of the digits of a two-digit number is 9.  
On reversing the digits, the new number exceeds the original by 27.  
Find the original number.
- (a) 54
  - (b) 45
  - (c) 72
  - (d) 36
- Q.19.** Using the quadratic formula, solve:  $2x^2 - 5x + 3 = 0$ . Find the roots.
- (a)  $x = 2$  and  $x = 1$
  - (b)  $x = 3/2$  and  $x = 1$
  - (c)  $x = 3$  and  $x = 1/2$
  - (d)  $x = 2$  and  $x = 3/2$
- Q.20.** In an AP, the first term is 2 and the common difference is 3.  
Find the sum of first 20 terms.
- (a) 610
  - (b) 590
  - (c) 630
  - (d) 570
- Q.21.** In  $\triangle ABC$ ,  $DE \parallel BC$  where  $D$  is on  $AB$  and  $E$  is on  $AC$ . If  $AD/DB = 3/5$  and  $AE = 9$  cm, find  $EC$ .
- (a) 12 cm
  - (b) 18 cm
  - (c) 15 cm
  - (d) 20 cm
- Q.22.** Find the area of the triangle with vertices  $A(0,0)$ ,  $B(4,0)$  and  $C(0,6)$ .
- (a) 8 sq units
  - (b) 10 sq units
  - (c) 16 sq units
  - (d) 12 sq units
- Q.23.** If  $\sin \theta + \cos \theta = 1$ , then  $\sin 2\theta = ?$
- (a) 2
  - (b) 0
  - (c) 1
  - (d) -1
- Q.24.** A sector of a circle has radius 14 cm and central angle  $90^\circ$ .  
Find the area of the sector. ( $\pi = 22/7$ )
- (a)  $144 \text{ cm}^2$
  - (b)  $154 \text{ cm}^2$
  - (c)  $176 \text{ cm}^2$
  - (d)  $196 \text{ cm}^2$
- Q.25.** A solid metallic sphere of radius 6 cm is melted and recast into a solid cone of radius 6 cm.  
Find the height of the cone.
- (a) 24 cm
  - (b) 18 cm
  - (c) 12 cm
  - (d) 36 cm

**Q.26.** The modal class of a distribution has lower limit 20, class size 5, frequency 24, preceding class frequency 16, and following class frequency 10. Find the MODE.

- (a) 22.5
- (b) 23.0
- (c) 22.0
- (d) 21.5

**Q.27.** A bag has 6 red and 4 blue balls.

One ball is drawn. It is red and NOT replaced.

Now a second ball is drawn.

Find P(2nd ball is also red).

- (a)  $\frac{1}{3}$
- (b)  $\frac{3}{5}$
- (c)  $\frac{4}{10}$
- (d)  $\frac{5}{9}$

**Q.28.** A piece of cloth costs ₹200. If the piece were 5 m longer and each metre cost ₹2 less, the cost would still be ₹200.

Find the length of the piece.

- (a) 15 m
- (b) 20 m
- (c) 10 m
- (d) 25 m

**Q.29.** From the top of a 30 m tall building, the angle of elevation of a cell tower is  $60^\circ$ .

The angle of depression of the base of the tower from the top of the building is  $30^\circ$ .

Find the height of the cell tower.

- (a) 120 m
- (b) 90 m
- (c) 60 m
- (d) 150 m

**Q.30.** Prove that  $\sqrt{2}$  is irrational. Which step CORRECTLY shows the contradiction?

- (a) Assuming  $\sqrt{2} = \frac{p}{q}$  where p and q share a common factor of 2, then squaring shows  $p^2$  is odd
- (b) Assuming  $\sqrt{2} = \frac{p}{q}$  where p and q are even, the contradiction is that p is odd
- (c) Assuming  $\sqrt{2} = \frac{p}{q}$  in lowest terms, squaring gives  $2q^2 = p^2$ , so  $p^2$  is even, hence p is even; substituting shows q is also even, contradicting lowest terms
- (d)  $\sqrt{2}$  cannot equal  $\frac{p}{q}$  because the fraction cannot be reduced

**SECTION D — SCIENCE** (Q.31 to Q.40)

**-0.25 for wrong answer**

**Q.31.** The reaction of iron with dilute hydrochloric acid ( $\text{Fe} + 2\text{HCl} \rightarrow \text{FeCl}_2 + \text{H}_2$ ) is classified as a:

- (a) Combination reaction
- (b) Displacement reaction
- (c) Decomposition reaction
- (d) Double displacement reaction

**Q.32.** When sodium hydroxide (NaOH) is added to ammonium chloride ( $\text{NH}_4\text{Cl}$ ) solution and heated, the gas evolved turns moist red litmus paper:

- (a) Blue — it is ammonia ( $\text{NH}_3$ ), which is basic
- (b) Colourless — no change occurs
- (c) Red stays red — the gas is acidic
- (d) White — the gas is  $\text{CO}_2$

**Q.33.** Which metal is extracted by the THERMITE process (using aluminium as a reducing agent)?

- (a) Copper
- (b) Zinc
- (c) Lead
- (d) Iron ( $\text{Fe}_2\text{O}_3 + 2\text{Al} \rightarrow \text{Al}_2\text{O}_3 + 2\text{Fe}$ )

**Q.34.** The IUPAC name of the compound  $\text{CH}_3\text{CH}_2\text{COOH}$  is:

- (a) Ethanoic acid
- (b) Methanoic acid
- (c) Propanoic acid

(d) Butanoic acid

**Q.35.** During photosynthesis in the Calvin cycle (dark reaction),  $\text{CO}_2$  is fixed using:

- (a) Water ( $\text{H}_2\text{O}$ ) directly
- (b) RuBP (Ribulose 1,5-bisphosphate) in the presence of RUBISCO enzyme
- (c) Glucose from the light reaction
- (d) Oxygen from the light reaction

**Q.36.** In Mendel's Law of Independent Assortment, a dihybrid cross ( $\text{RrYy} \times \text{RrYy}$ ) gives phenotype ratio:

- (a) 9:3:3:1
- (b) 3:1
- (c) 1:2:1
- (d) 1:1:1:1

**Q.37.** A convex lens ( $f=20$  cm) forms a real image 60 cm from the lens.

How far is the object from the lens?

- (a) 25 cm
- (b) 40 cm
- (c) 35 cm
- (d) 30 cm

**Q.38.** An electric iron of 1000W is used for 2 hours daily for 30 days.

Cost of electricity = ₹5 per unit (1 unit = 1 kWh).

Total electricity cost:

- (a) ₹200
- (b) ₹250
- (c) ₹300
- (d) ₹350

**Q.39.** The direction of force on a current-carrying conductor in a magnetic field is given by:

- (a) Faraday's Law
- (b) Fleming's Left Hand Rule
- (c) Fleming's Right Hand Rule
- (d) Lenz's Law

**Q.40.** Solar cells (photovoltaic cells) convert solar energy directly into electrical energy. They work on the principle of:

- (a) Photoelectric effect — photons eject electrons from semiconductor material
- (b) Thermoelectric effect — temperature difference generates electricity
- (c) Electromagnetic induction — sunlight rotates a turbine
- (d) Chemical reaction between sunlight and silicon compounds

**SECTION E — ENGLISH** (Q.41 to Q.50)

**-0.25 for wrong answer**

**Q.41.** Choose the sentence in the CORRECT active voice:

- (a) The book was being read by her.
- (b) The book has been read by her.
- (c) She reads the book every evening.
- (d) She is been reading the book.

**Q.42.** The word 'EBULLIENT' means:

- (a) Extremely sad and depressed
- (b) Slow and inactive
- (c) Careful and thoughtful
- (d) Full of energy, enthusiasm and excitement

**Q.43.** Convert to indirect speech: 'The teacher said to the class, "Submit your assignments by Friday."'

- (a) The teacher said the class to submit their assignments by Friday.
- (b) The teacher told the class to submit their assignments by Friday.
- (c) The teacher said that submit your assignments by Friday.
- (d) The teacher told the class that they submit assignments by Friday.

**Q.44.** One word for 'a person who is unable to read or write':

- (a) Illiterate
- (b) Ignorant

- (c) Uneducated
- (d) Incoherent

**Q.45.** 'To turn over a new leaf' means:

- (a) To read a book carefully
- (b) To make a sudden change of plans
- (c) To change one's behaviour or attitude for the better
- (d) To start a new business

**Q.46.** Choose the CORRECT sentence:

- (a) She is good in cooking and excellent at playing piano.
- (b) She is good at cooking and excellent in playing piano.
- (c) She is good in cooking and excellent in playing piano.
- (d) She is good at cooking and excellent at playing piano.

**Q.47.** 'The pen is mightier than the sword.' This means:

- (a) Pens are more expensive than swords
- (b) Writing and communication are more powerful than physical force
- (c) Swords are outdated weapons
- (d) Words can be used as weapons

**Q.48.** Fill in the blank: 'He is \_\_\_\_\_ only student who scored 100% in the exam.'

- (a) the
- (b) a
- (c) an
- (d) no article

**Q.49.** In a formal letter, 'Yours faithfully' is used when:

- (a) You know the person well and write informally
- (b) You start the letter with "Dear [Name]"
- (c) You do not know the recipient and start with "Dear Sir/Madam"
- (d) You are writing to a relative

**Q.50.** 'Education is not the filling of a pail, but the lighting of a fire.' — W.B. Yeats

This quote suggests that true education:

- (a) Should be practical and vocational only
- (b) Is all about memorising as many facts as possible
- (c) Should happen only in schools with good infrastructure
- (d) Should ignite curiosity, creativity and a love of learning, not just fill students with information

**SECTION F — SOCIAL STUDIES** (Q.51 to Q.60)

**-0.25 for wrong answer**

**Q.51.** 'Human Development Index' (HDI) was developed by the UNDP. It was pioneered by economist:

- (a) Mahbub ul Haq and Amartya Sen
- (b) Adam Smith
- (c) John Maynard Keynes
- (d) Milton Friedman

**Q.52.** 'Self Help Groups' (SHGs) in India provide credit to rural poor. They work on the principle of:

- (a) Individual collateral-based bank loans
- (b) Group savings, peer monitoring and joint liability — members guarantee each other's loans
- (c) Government subsidies only
- (d) Loans only to farmers for agricultural purposes

**Q.53.** The 'Dandi March' of 1930 was launched to protest the British tax on:

- (a) Cotton
- (b) Silk
- (c) Salt
- (d) Indigo

**Q.54.** India has a QUASI-FEDERAL structure. This means:

- (a) India has no states — all powers are with the Centre
- (b) All states have equal powers to the Centre
- (c) States can override Central laws in all matters

(d) India has both federal features (Centre and States have their own powers) and unitary features (Centre is stronger in conflicts)

**Q.55.** 'Laterite soil' is found mainly in regions with:

- (a) High temperature and high rainfall — leaching removes minerals, leaving iron and aluminium oxides
- (b) Cold and dry climate
- (c) River delta regions with alluvial deposits
- (d) Regions with low rainfall and high windspeed

**Q.56.** 'Multi-National Corporations' (MNCs) typically set up factories in developing countries because:

- (a) Developing countries have better technology
- (b) Lower wages, cheaper raw materials and growing markets make production costs much lower
- (c) Developing countries have better infrastructure than developed countries
- (d) It is a legal requirement for MNCs to operate in developing countries

**Q.57.** Gutenberg's printing press (invented ~1440) used:

- (a) Woodblock printing — carving individual pages on wooden blocks
- (b) Typewriters with individual letters pressed mechanically
- (c) Movable metal type — individual letters that could be rearranged and reused
- (d) Photographic printing where text is projected onto paper

**Q.58.** A 'Recognised National Party' in India must:

- (a) Have at least 1 crore members across the country
- (b) Contest elections in all 543 Lok Sabha constituencies
- (c) Be in power in at least 5 states
- (d) Win at least 2% of seats in Lok Sabha from at least 3 different states, OR win 6% of votes in 4 states and at least 4 Lok Sabha seats

**Q.59.** 'Jamshedpur' in Jharkhand is famous for iron and steel production. The factor that made it ideal was:

- (a) Proximity to iron ore (Jharkhand), coal (Jharia coalfield), water (Subarnarekha river) and labour
- (b) It is the capital of Jharkhand with excellent transport links
- (c) The government specifically selected it for political reasons
- (d) It has the largest port in eastern India

**Q.60.** 'COPRA' (Consumer Protection Act 2019) established a three-tier consumer dispute redressal mechanism. Which court handles cases involving claims between ₹1 crore and ₹10 crore?

- (a) District Consumer Forum
- (b) State Consumer Disputes Redressal Commission
- (c) National Consumer Disputes Redressal Commission
- (d) Supreme Court

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★ END OF SAMPLE PAPER — Answers in the key below ★

# ANSWER KEY — SAMPLE PAPER CLASS 11

SUN SHINE PUBLIC SCHOOL — Malti Agarwal Smriti Chatravriti Test 2026 | Class 10 CBSE CBSE Syllabus | Sample Paper

Distribution: A=15 B=15 C=15 D=15 ✓ 15 each — Balanced

## SECTION A — MENTAL ABILITY (Q.1–Q.10) No Negative Marking

1. <b>C</b>	2. <b>D</b>	3. <b>A</b>	4. <b>B</b>	5. <b>C</b>
6. <b>D</b>	7. <b>A</b>	8. <b>B</b>	9. <b>C</b>	10. <b>D</b>

## SECTION B — GK & CURRENT AFFAIRS (Q.11–Q.15) No Negative Marking

11. <b>B</b>	12. <b>A</b>	13. <b>C</b>	14. <b>D</b>	15. <b>B</b>
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## SECTION C — MATHEMATICS (Q.16–Q.30) -0.25 for wrong

16. <b>A</b>	17. <b>C</b>	18. <b>D</b>	19. <b>B</b>	20. <b>A</b>
21. <b>C</b>	22. <b>D</b>	23. <b>B</b>	24. <b>A</b>	25. <b>C</b>
26. <b>D</b>	27. <b>B</b>	28. <b>A</b>	29. <b>C</b>	30. <b>D</b>

## SECTION D — SCIENCE (Q.31–Q.40) -0.25 for wrong

31. <b>B</b>	32. <b>A</b>	33. <b>D</b>	34. <b>C</b>	35. <b>B</b>
36. <b>A</b>	37. <b>D</b>	38. <b>C</b>	39. <b>B</b>	40. <b>A</b>

## SECTION E — ENGLISH (Q.41–Q.50) -0.25 for wrong

41. <b>C</b>	42. <b>D</b>	43. <b>B</b>	44. <b>A</b>	45. <b>C</b>
46. <b>D</b>	47. <b>B</b>	48. <b>A</b>	49. <b>C</b>	50. <b>D</b>

## SECTION F — SOCIAL STUDIES (Q.51–Q.60) -0.25 for wrong

51. <b>A</b>	52. <b>B</b>	53. <b>C</b>	54. <b>D</b>	55. <b>A</b>
56. <b>B</b>	57. <b>C</b>	58. <b>D</b>	59. <b>A</b>	60. <b>B</b>

**MARKING:** +2 correct | -0.25 wrong (Maths/Science/English/SST) | No negative in Sec A & B | Max=120