



# OSSSC

RI, ARI, ICDS, VAW  
JA, SFS & AMIN Exam 2026

**STAGE-I**

**15 MTB**

(Mock Test Booklet)

**English**

**Printed Edition**

**FREE**  
15 OMR

**Read the following instructions carefully before you begin to answer the questions.**

This Booklet contains 100 objective-type questions with multiple-choice answers.

Each question carries **one mark**.

There shall be a **negative marking @0.25 mark** per question for wrong/multiple answers.

- Mathematics - 20 questions
- General Studies - 20 questions
- English - 20 questions
- Odia - 15 questions
- Computer - 15 questions
- Logical Reasoning - 10 questions

ଆପଣ ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବା ଆରମ୍ଭ କରିବା ପୂର୍ବରୁ ନିମ୍ନଲିଖିତ ନିର୍ଦ୍ଦେଶଗୁଡ଼ିକୁ ଭଲଭାବେ ପଢନ୍ତୁ ।

ଏହି ପୁସ୍ତକରେ 100ଟି ଅବକେଶିତ ପ୍ରକାର ପ୍ରଶ୍ନ ଏବଂ ବହୁବିକଳ ଉତ୍ତର ରହିଛି ।

ପ୍ରତ୍ୟେକ ପ୍ରଶ୍ନ ପାଇଁ ଗୋଟିଏ ମାର୍କ ରହିଛି ।

ଭୁଲ / ଏକାଧିକ ଉତ୍ତର ପାଇଁ ପ୍ରତି ପ୍ରଶ୍ନରେ ଏକ ନକାରାତ୍ମକ ମାର୍କ @ 0.25 ମାର୍କ ରହିବ ।

- ଗଣିତ - 20 ପ୍ରଶ୍ନଗୁଡ଼ିକ
- ସାଧାରଣ ଅଧ୍ୟୟନ - 20 ପ୍ରଶ୍ନଗୁଡ଼ିକ
- ଇଂରାଜୀ - 20 ପ୍ରଶ୍ନଗୁଡ଼ିକ
- ଓଡ଼ିଆ - 15 ପ୍ରଶ୍ନଗୁଡ଼ିକ
- କମ୍ପ୍ୟୁଟର - 15 ପ୍ରଶ୍ନଗୁଡ଼ିକ
- ତାର୍କିକ ଯୁକ୍ତି - 10 ପ୍ରଶ୍ନଗୁଡ଼ିକ

**INSTRUCTION TO CANDIDATE**

1. This Booklet contains all 100 questions with objective multiple-choice answers.
2. All questions are compulsory and carry equal marks.
3. Before answering any question, check this Booklet and no missing pages. mutilated or repeated.
4. The Invigilator shall supply you the bank OMR Answer Sheet separately. Enter your Roll Number, Question Booklet Serial Number, and Question Booklet Series Code, and darken the corresponding circle/oval provided on the left side of the Answer Sheet carefully with a black/blue ballpoint pen only. You must write the name, date, and center of examination and put your full signature in the appropriate spaces provided therein before answering any question.
5. A machine will read the coded information furnished by you in the OMR Answer Sheet. If the information so furnished by you is incomplete or different from what has been given in the application form, you will be awarded a Zero mark.
6. These instructions must be complied with fully failing which your Answer Sheet will not be evaluated and a Zero mark will be awarded.
7. The answer must be given by completely blackening one of the four circles/ovals representing the correct answer on the right side of the Answer Sheet corresponding to the relevant question number using the Black/Blue ball point pen only. Answers not shown by black/blue ballpoint pen shall not be awarded any mark.
8. Failure to hand over the Answer Sheet to the Invigilator before leaving the examination hall/room will make you liable to penal action.
9. Read carefully the instructions for answering each question before answering it.
10. Answer the questions as quickly and carefully as you can. Some questions may be easy and others difficult. Don't spend too much time on any question.
11. No Rough work has to be done on the OMR Answer Sheet. Space for rough work has been provided below the questions wherever needed.
12. You must not carry into the examination hall/ room any book, mobile phone, or electronic devices, printed/hand-written papers except the Admission Letter. Failure to comply with any of the above instructions will be considered as using unfair means and action as deemed proper will be taken against the violators.

ପ୍ରାର୍ଥୀ/ପାର୍ଥିନୀ ମାନଙ୍କ ପାଇଁ ନିର୍ଦ୍ଦେଶାବଳୀ

୧. ଏହି ପୁସ୍ତକରେ ନିମ୍ନମତେ ମୋଟ ୧୦୦ଟି ବିବିଧ ଉତ୍ତର ଯୁକ୍ତ ସଂକ୍ଷିପ୍ତ ପ୍ରଶ୍ନ ଅଛି ।
୨. ସମସ୍ତ ପ୍ରଶ୍ନ ବାଧ୍ୟତାମୂଳକ ଏବଂ ପ୍ରତ୍ୟେକର ମାର୍କ ସମାନ ।
୩. କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତରଦେବା ଆଗରୁ ପୁସ୍ତକଟି ତନଖି ଦେଖନ୍ତୁ ଓ କୌଣସି ପୃଷ୍ଠା ଛାଡ଼ି, ନଷ୍ଟ କିମ୍ବା ପୁନରାବୃତ୍ତି ହୋଇନାହିଁ ।
୪. ପରୀକ୍ଷକ ଆପଣଙ୍କୁ ସ୍ୱତନ୍ତ୍ରଭାବେ ଓଏମଆର ଉତ୍ତର ଫର୍ମ ଦେବେ । ଉତ୍ତର ଫର୍ମର ବାମ ପାର୍ଶ୍ୱରେ ଯଥା ସ୍ଥାନରେ ଆପଣଙ୍କ ରୋଲ ନମ୍ବର, ପ୍ରଶ୍ନ ପୁସ୍ତକ କ୍ରମିକ ନମ୍ବର ଏବଂ ପ୍ରଶ୍ନ ପୁସ୍ତକ ସିରିଜ୍ କୋଡ୍ ଉଲ୍ଲେଖ କରନ୍ତୁ ଏବଂ ଅନୁରୂପ ବୃତ୍ତ/ଅଣ୍ଡାକୃତିକୁ କେବଳ କଳା/ନୀଳ କାଳିର ବଲପଏଣ୍ଟ୍ ପେନ୍ ଦ୍ୱାରା କାଳି କରନ୍ତୁ । ଏଠାରେ ପ୍ରଦତ୍ତ ନିର୍ଦ୍ଦେଶ ସ୍ଥାନରେ ପରୀକ୍ଷାର ନାମ, ତାରିଖ ଓ କେନ୍ଦ୍ର ନିଶ୍ଚିତ ଭାବେ ଲେଖନ୍ତୁ ଏବଂ କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତରଦେବା ଆଗରୁ ଆପଣଙ୍କ ପୂରା ଦସ୍ତଖତ ଦିଅନ୍ତୁ ।
୫. ଓଏମଆର ଉତ୍ତରଫର୍ମରେ ଆପଣ ଉଲ୍ଲେଖ କରିଥିବା ସାଙ୍କେତିକ ତଥ୍ୟକୁ ଗୋଟିଏ ଯତ୍ନ ପଠନ କରିବ । ତେଣୁ ଆପଣଙ୍କ ଏହି ପ୍ରଦତ୍ତ ତଥ୍ୟ ଯଦି ଦରଖାସ୍ତ ଫର୍ମରେ ଦିଆଯାଇଥିବା ତଥ୍ୟଠାରୁ ଫରକ କିମ୍ବା ଅସମ୍ପୂର୍ଣ୍ଣ ହୁଏ, ଆପଣଙ୍କୁ ଶୂନ୍ୟ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।
୬. ଏହି ନିର୍ଦ୍ଦେଶାବଳୀକୁ ସଂପୂର୍ଣ୍ଣଭାବେ ନିଶ୍ଚିତ ପାଳନ କରନ୍ତୁ, ଅନ୍ୟଥା ଆପଣଙ୍କ ଉତ୍ତରପତ୍ର ମୂଲ୍ୟାୟନ କରାଯାଇ ପାରିବ ନାହିଁ ଏବଂ ଶୂନ୍ୟ ମାର୍କ ପ୍ରଦାନ କରାଯିବ ।
୭. ଉତ୍ତର ଫର୍ମର ଡାହାଣ ପାର୍ଶ୍ୱରେ ଥିବା ସମ୍ପୂର୍ଣ୍ଣ ପ୍ରଶ୍ନ ସଂଖ୍ୟାର ଅନୁରୂପ ବୃତ୍ତ/ଅଣ୍ଡାକୃତିକୁ କେବଳ କଳା/ନୀଳ କାଳିର ବଲପଏଣ୍ଟ୍ ପେନ୍ ଦ୍ୱାରା ନିଶ୍ଚିତ ସଂପୂର୍ଣ୍ଣଭାବେ କାଳି କରି ଉତ୍ତର ଦିଅନ୍ତୁ । କଳା/ନୀଳ ବଲ ପଏଣ୍ଟ୍ ପେନ୍ ଦ୍ୱାରା ଦର୍ଶାଯାଇ ନ ଥିବା ଉତ୍ତର ପାଇଁ କୌଣସି ମାର୍କ ଦିଆଯିବ ନାହିଁ ।
୮. ପରୀକ୍ଷା ହଲ/କୋଠରୀ ଛାଡ଼ିବା ପୂର୍ବରୁ ଆପଣଙ୍କ ଉତ୍ତରପତ୍ର ପରୀକ୍ଷକଙ୍କୁ ହସ୍ତାନ୍ତର କରି ନ ପାରିଲେ ଆପଣ ଆଇନାନୁଯାୟୀ ଦଣ୍ଡନୀୟ ହେବେ ।
୯. ଉତ୍ତର ଦେବାପୂର୍ବରୁ ପ୍ରତ୍ୟେକ ପ୍ରଶ୍ନର ଉତ୍ତର ପ୍ରଦାନ ନିର୍ଦ୍ଦେଶାବଳୀ ଯତ୍ନ ସହକାରେ ପଢନ୍ତୁ ।
୧୦. ଯେତେ ଶୀଘ୍ର ଓ ଯତ୍ନସହକାରେ ପାରିବେ ପ୍ରଶ୍ନଗୁଡ଼ିକର ଉତ୍ତର ଦିଅନ୍ତୁ । କେତେକ ପ୍ରଶ୍ନ ସହଜ ଓ ଅନ୍ୟ କେତେକ କଠିନ ହୋଇପାରେ । କୌଣସି ପ୍ରଶ୍ନରେ ଅତ୍ୟଧିକ ସମୟ ନଷ୍ଟକରନ୍ତୁ ନାହିଁ ।
୧୧. ଓଏମଆର ଉତ୍ତର ଫର୍ମରେ ରଫ୍ କାମ କରିବେ ନାହିଁ । ଯେଉଁଠି ଦରକାର ପ୍ରଶ୍ନ ଗୁଡ଼ିକର ତଳେ ରଫ୍ କାମପାଇଁ ଖାଲି ଜାଗା ଦିଆଯାଇଅଛି ।
୧୨. ପ୍ରବେଶ ପତ୍ର ବ୍ୟତୀତ କୌଣସି ବହି, ଛାପା/ହାତଲେଖା କାଗଜ, ମୋବାଇଲ ଫୋନ୍ କିମ୍ବା ବୈଦ୍ୟୁତିକ ଉପକରଣ ଆପଣ ପରୀକ୍ଷା ହଲ/କୋଠରୀ ଭିତରକୁ ନେଇ ପାରିବେ ନାହିଁ । ଉପରୋକ୍ତ ନିର୍ଦ୍ଦେଶାବଳୀରୁ କୌଣସିଟି ଅନୁପାଳନରେ ଖୋଲାପକଲେ ଏହାକୁ ଅସତ୍ ଉପାୟ ଅବଲମ୍ବନବୋଲି ବିବେଚନା କରାଯିବ ଏବଂ ଉଲ୍ଲଙ୍ଘନକାରୀଙ୍କ ବିରୁଦ୍ଧରେ ଯଥୋଚିତ କାର୍ଯ୍ୟ ଅନୁଷ୍ଠାନ କରାଯିବ ।

## Mathematics

1. A train X traveling at 72 km/hr crosses a platform of length 250 m in 26 seconds. How much time (in seconds) will it take to cross a man running at 8 km/hr in the same direction?  
 (a) 10 (b) 12  
 (c) 15.18 (d) 11.7
2. Simplify:  $\frac{(0.73)^3 + (0.27)^3}{(0.73)^2 + (0.27)^2 - 0.73 \times 0.27}$   
 (a) 0.46 (b) 1  
 (c) 0.9 (d) 1.5
3. The curved surface area of a cone is 2310 cm<sup>2</sup>. If the radius of its base is 35 cm, find its slant height. (Take  $\pi = \frac{22}{7}$ )  
 (a) 21 cm (b) 18 cm  
 (c) 25 cm (d) 21.5 cm
4. If  $x + \frac{1}{x} = 5$ , then find the value of  $\frac{x^4 + \frac{1}{x^2}}{x^2 - 3x + 1}$   
 (a) 55 (b) 65  
 (c) 70 (d) 52.5
5. A can do a piece of work in 20 days and B in 30 days. They work together for 7 days and then both leave the work. Then C alone finishes the remaining work in 10 days. In how many days will C finish the full work?  
 (a) 25 days (b) 30 days  
 (c) 24 days (d) 20 days
6. A shopkeeper marks his goods at 40% above the cost price and allows a discount of 25%. What is his gain or loss percentage?  
 (a) 5% Loss (b) 10% Gain  
 (c) 5% Gain (d) No Profit No Loss
7. The ratio of milk and water in a mixture of 60 liters is 3 : 2. If we want the ratio of milk and water to be 1 : 1, then how much water should be added?  
 (a) 10 liters (b) 12 liters  
 (c) 8 liters (d) 15 liters
8. Find the compound interest on ₹12,000 for 9 months at 20% per annum, compounded quarterly.  
 (a) ₹1,891.50 (b) ₹1,900  
 (c) ₹2,100 (d) ₹1,800
9. If  $\frac{a}{b} = \frac{c}{d} = \frac{e}{f} = 3$  then  $\frac{2a^2 + 3c^2 + 4e^2}{2b^2 + 3d^2 + 4f^2} = ?$   
 (a) 3 (b) 6  
 (c) 9 (d) 27
10. The average weight of 15 students in a class increases by 1.5 kg when one student weighing 40 kg is replaced by a new student. What is the weight of the new student?  
 (a) 62.5 kg (b) 58 kg  
 (c) 64.5 kg (d) 60 kg
11. Two pipes A and B can fill a tank in 24 minutes and 32 minutes respectively. If both the pipes are opened together, after how much time should B be closed so that the tank is full in 18 minutes?  
 (a) 8 minutes (b) 10 minutes  
 (c) 6 minutes (d) 12 minutes
12. A person travels from P to Q at a speed of 40 km/h and returns by increasing his speed by 50%. What is his average speed for both the trips?  
 (a) 48 km/h (b) 50 km/h  
 (c) 45 km/h (d) 52 km/h
13. A sum of money becomes  $\frac{8}{5}$  of itself in 5 years at a certain rate of simple interest. The rate percent per annum is:  
 (a) 8% (b) 10%  
 (c) 12% (d) 15%
14. Find the value of x:  $\sqrt{8 + \sqrt{57 + \sqrt{38 + \sqrt{108 + x}}}} = 4$   
 (a) 13 (b) 36  
 (c) 24 (d) 12
15. A solid metallic sphere of radius 8 cm is melted and recast into spherical balls each of radius 2 cm. The number of such balls is:  
 (a) 32 (b) 64  
 (c) 16 (d) 48
16. In an election between two candidates, 75% of the voters cast their votes, out of which 2% votes were declared invalid. A candidate got 9261 votes which were 75% of the valid votes. The total number of voters enrolled in that election was:  
 (a) 16,000 (b) 16,400  
 (c) 16,800 (d) 18,000
17. Find the greatest number which divides 29, 60, and 103, leaving remainders 5, 12, and 7 respectively.  
 (a) 24 (b) 16  
 (c) 12 (d) 48
18. If  $\sin\theta + \cos\theta = \sqrt{2}\cos\theta$ , then the value of  $(\cos\theta - \sin\theta)$  is:  
 (a)  $\sqrt{3}\sin\theta$  (b)  $\sqrt{2}\sin\theta$   
 (c) 0 (d)  $2\sin\theta$
19. The difference between the semi-perimeter and the sides of a triangle are 8 cm, 7 cm, and 5 cm. The area of the triangle is:  
 (a)  $20\sqrt{14}$  cm<sup>2</sup> (b)  $10\sqrt{14}$  cm<sup>2</sup>  
 (c)  $20\sqrt{7}$  cm<sup>2</sup> (d) 140 cm<sup>2</sup>
20. A boat goes 24 km upstream and 28 km downstream in 6 hours. It goes 30 km upstream and 21 km downstream in 6 hours and 30 minutes. The speed of the boat in still water is:  
 (a) 8 km/h (b) 9 km/h  
 (c) 10 km/h (d) 12 km/h

## General Studies

21. Which article of the Indian Constitution empowers the President to promulgate Ordinances during the recess of Parliament?  
(a) Article 123 (b) Article 213  
(c) Article 110 (d) Article 143
22. Who was the first Satyagrahi chosen by Mahatma Gandhi for the Individual Satyagraha in 1940?  
(a) Jawaharlal Nehru (b) Vinoba Bhave  
(c) Brahma Datt (d) Sardar Patel
23. The Similipal Biosphere Reserve in Odisha was added to the UNESCO World Network of Biosphere Reserves in which year?  
(a) 1994 (b) 2004  
(c) 2009 (d) 2012
24. Which of the following atmospheric layers reflects radio waves back to the earth, aiding in wireless communication?  
(a) Troposphere (b) Stratosphere  
(c) Ionosphere (d) Exosphere
25. The term Fiscal Deficit implies:  
(a) Total Expenditure – (Revenue Receipts + Recovery of Loans + Other Receipts)  
(b) Total Expenditure – Total Receipts  
(c) Revenue Expenditure – Revenue Receipts  
(d) Capital Expenditure – Capital Receipts
26. Who among the following was the founder of the Satya Mahima Dharma in Odisha?  
(a) Bhima Bhoi (b) Mahima Gosain  
(c) Sarala Das (d) Balaram Das
27. Which Five-Year Plan in India gave the slogan “**Garibi Hatao**” (Remove Poverty)?  
(a) Third Plan (b) Fourth Plan  
(c) Fifth Plan (d) Sixth Plan
28. The tropical cyclone ‘Dana’, which affected the Odisha coast in 2024, was named by which country?  
(a) Qatar (b) Thailand  
(c) Yemen (d) India
29. In which year was the Odisha Tenancy Act passed to protect the rights of tenants?  
(a) 1903 (b) 1913  
(c) 1936 (d) 1948
30. Which Committee recommended the establishment of the **three-tier Panchayati Raj system** in India?  
(a) Ashok Mehta Committee  
(b) Balwant Rai Mehta Committee  
(c) G. V. K. Rao Committee  
(d) L. M. Singhvi Committee
31. The headquarters of the Asian Development Bank (ADB) is located in:  
(a) Manila, Philippines (b) Jakarta, Indonesia  
(c) Shanghai, China (d) Tokyo, Japan
32. Who authored the famous Odia book Chha Maana Atha Guntha?  
(a) Radhanath Ray (b) Fakir Mohan Senapati  
(c) Gangadhar Meher (d) Gopabandhu Das
33. Which acid is predominantly found in Sour Milk or Curd?  
(a) Citric Acid (b) Lactic Acid  
(c) Tartaric Acid (d) Acetic Acid
34. The **2025 Nobel Prize in Physics** was awarded for research related to:  
(a) quantum tunnelling  
(b) Artificial Intelligence and Neural Networks  
(c) Climate modeling  
(d) Black hole formation
35. The Paika Rebellion of 1817 in Odisha was led by:  
(a) Jayee Rajguru (b) Baxi Jagabandhu  
(c) Chakra Bisoi (d) Surendra Sai
36. Which water body separates the **Andaman Islands** from the **Nicobar Islands**?  
(a) 9 Degree Channel (b) 10 Degree Channel  
(c) Duncan Passage (d) Palk Strait
37. Under which scheme does the Government of Odisha provide financial assistance to **landless agricultural households** (recently rebranded/updated)?  
(a) KALIA  
(b) Biju Swasthya Kalyan Yojana  
(c) Mission Shakti  
(d) Mo Ghara
38. The chemical formula of Plaster of Paris is:  
(a)  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  (b)  $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$   
(c)  $\text{CaSO}_4 \cdot \text{H}_2\text{O}$  (d)  $\text{CaCO}_3$
39. In the context of computers and data, what does ‘**NITI**’ stand for in NITI Aayog?  
(a) National Institute for Transforming India  
(b) National Institution for Technical India  
(c) National Institution for Transforming India  
(d) New Initiative for Transforming India
40. Which river is known as the “**Sorrow of Odisha**” (traditionally, before the dams)?  
(a) Brahmani (b) Baitarani  
(c) Mahanadi (d) Rushikulya

## English

41. Select the option that acts as a one-word substitute for: “A person who is indifferent to pleasure or pain.”  
(a) Stoic (b) Epicurean  
(c) Cynic (d) Altruist
42. Fill in the blank with the correct preposition: “The committee is comprised \_\_\_\_\_ seven members.”  
(a) of (b) with  
(c) by (d) from

### Mock Test -1 (Solutions)

1. (c): Speed of train = 72 km/h = 20 m/s  
 Distance covered in 26 s =  $20 \times 26 = 520$  m  
 Length of train =  $520 - 250 = 270$  m  
 Relative speed (same direction) =  $72 - 8 = 64$  km/h  
 $64 \times \frac{5}{18} = 17.77$  m/s  
 Time =  $\frac{270}{17.77} \approx 15.18$  s

2. (b): Formula:  
 $\frac{a^3+b^3}{a^2-ab+b^2} = a + b$   
 $0.73 + 0.27 = 1$

3. (a):  $CSA = \pi r l$   
 $2310 = \frac{22}{7} \times 35 \times l$   
 $\Rightarrow 2310 = 110l \Rightarrow l = 21$  cm

4. (a):  $x^3 + \frac{1}{x^3} = (x + \frac{1}{x})^3 - 3(x + \frac{1}{x})$   
 $= 125 - 15 = 110$   
 Denominator:  
 $x + \frac{1}{x} - 3 = 5 - 3 = 2$   
 Value =  $\frac{110}{2} = 55$

5. (c): Work by A+B in 7 days:  
 $7(\frac{1}{20} + \frac{1}{30}) = \frac{7}{12}$   
 Remaining work =  $\frac{5}{12}$   
 C does  $\frac{5}{12}$  work in 10 days  
 Full work time of C =  $10 \times \frac{12}{5} = 24$  days

6. (c): Net % gain:  
 $40 - 25 - \frac{40 \times 25}{100} = 15 - 10 = 5\%$  Gain

7. (b): Milk =  $\frac{3}{5} \times 60 = 36$  L  
 Water = 24 L  
 For 1 : 1 ratio  $\rightarrow$  Water = 36 L  
 Water added =  $36 - 24 = 12$  L

8. (a): Rate per quarter = 5%  
 Time = 3 quarters  
 $A = 12000(1.05)^3 = 13891.5$   
 CI = 1891.5

9. (c): Given  $a = 3b, c = 3d, e = 3f$   
 $\frac{2a^2+3c^2+4e^2}{2b^2+3d^2+4f^2} = \frac{9(2b^2+3d^2+4f^2)}{(2b^2+3d^2+4f^2)} = 9$

10. (a): Increase in total weight:  
 $15 \times 1.5 = 22.5$

New student's weight:  
 $40 + 22.5 = 62.5$  kg

11. (a): Let B work for  $x$  minutes.  
 $\frac{18}{24} + \frac{x}{32} = 1$   
 $\Rightarrow \frac{3}{4} + \frac{x}{32} = 1$   
 $\Rightarrow x = 8$

12. (a): Return speed =  $40 \times 1.5 = 60$   
 Average speed:  
 $\frac{2xy}{x+y} = \frac{2 \times 40 \times 60}{100} = 48$

13. (c):  $\frac{8}{5}P - P = \frac{3}{5}P = SI$   
 $\frac{3}{5}P = \frac{P \times R \times 5}{100}$   
 $\Rightarrow R = 12\%$

14. (a): Solving step-by-step from inside:  
 $108 + x = 121 \Rightarrow x = 13$

15. (b): Number of balls =  $(\frac{8}{2})^3 = 64$

16. (c): Valid votes =  $x \times 0.75 \times 0.98$   
 Winner votes = 75% of valid  
 Solving:  
 $x = 16800$

17. (a): HCF of:  
 (29-5), (60-12), (103-7)  
 $= \text{HCF}(24, 48, 96) = 24$

18. (b): Given:  
 $\sin\theta + \cos\theta = \sqrt{2}\cos\theta$   
 Required:  
 $(\cos\theta - \sin\theta)^2 = 2\sin^2\theta \Rightarrow \sqrt{2}\sin\theta$

19. (a):  $s - a = 8, s - b = 7, s - c = 5$   
 $\Rightarrow s = 20$   
 Area:  $\sqrt{20 \times 8 \times 7 \times 5} = 20\sqrt{14}$

20. (c): Solving upstream-downstream equations gives  
 Speed in still water = **10 km/h**

21. (a): Article 123 grants power to the President to promulgate Ordinances.

22. (b): Vinoba Bhave was the first; Nehru was the second.

23. (c): Added to UNESCO network in 2009.

24. (c): Ionosphere contains charged particles that reflect radio waves.

25. (a): Fiscal Deficit = Total Expenditure - Total Non-debt Receipts.
26. (b): Mahima Gosain founded it; Bhima Bhoi propagated it.
27. (c): Fifth Plan (1974-79) focused on "Garibi Hatao".
28. (a): 'Dana' was named by Qatar.
29. (b): Odisha Tenancy Act, 1913.
30. (b): Balwant Rai Mehta Committee (1957) recommended the 3-tier structure.
31. (a): Manila (Mandaluyong), Philippines.
32. (b): Fakir Mohan Senapati.
33. (b): Lactic Acid is found in sour milk/curd.
34. (a): Three US researchers have won the 2025 Nobel Prize in Physics for their groundbreaking work on quantum tunnelling, a phenomenon that allows particles to pass through energy barriers.
35. (b): Baxi Jagabandhu Bidyadhar.
36. (b): 10 Degree Channel separates Andaman and Nicobar.
37. (a): KALIA (Krushak Assistance for Livelihood and Income Augmentation).
38. (b): Hemihydrate of Calcium Sulphate.
39. (c): National Institution for Transforming India.
40. (c): Mahanadi caused massive floods before Hirakud Dam.
41. (a): Stoic is indifferent to pain or pleasure.
42. (a): Comprised of (Note: 'Comprises' takes no preposition, 'Comprised' as adjective takes 'of').
43. (c): With 'Neither..nor', verb agrees with the nearest subject ('teachers' -> are). Error in 'is'.
44. (c): Present Continuous Passive: is/am/are + being + V3.
45. (a): Working late into night and starting early (exhausting resources/energy).
46. (b): Millennium (Double l, Double n).
47. (b): Lethargy means lack of energy/sluggishness.
48. (b): Obsolete (old/outdated) vs Contemporary (modern/current).
49. (a): "Why have you" -> "Why I had".
50. (c): Subjunctive mood for impossible condition: "If I were".
51. (b): Scarcely... when.
52. (c): "It is the primary duty (Q) of the citizens (P) of the country (S) to respect... (R)". Logic: Q-P-S-R. Wait. Q: It is the primary duty. P: of the citizens. S: of the country. R: to respect... Order: QPSR.
53. (b): Oligarchy.
54. (b): 'Police' is treated as plural.
55. (b): Candid means frank/truthful.
56. (b): The text uses words like "crisis", "threat", "severe".
57. (b): "Threatening food security".
58. (b): "Transition to renewable energy".
59. (a): Relating to existence.
60. (b): "Profound social and economic crisis".
61. (b): ଅସହାୟତା ସହାୟତା (Support for the helpless).
62. (b): ଆଶୀର୍ବାଦ (Long 'ee' then 'reph' on ba).
63. (a): ସରିତ (River).
64. (c): ଅର୍ବାଚୀନ (Modern/New) is antonym of ପ୍ରାଚୀନ. (Also Nua/Adhunika, but Arbachina is formal antonym).
65. (b): ପ୍ରତିକାର ଅପେକ୍ଷା ପ୍ରତିକ୍ଷେପ ଶ୍ରେୟସ୍କର (Standard proverb).
66. (c): Present perfect continuous for action starting in past continuing now.
67. (b): ନିରପେକ୍ଷ (Neutral).
68. (a): ଉପପଦ ଡଡ଼ପୁରୁଷ (Panka-ru jaata je = Pankaja).
69. (d): "ସବୁ ଛାତ୍ରମାନେ" is redundant plural. Correct is "ସବୁ ଛାତ୍ର" or "ଛାତ୍ରମାନେ".
71. (b): ବ୍ଲକ୍ ପାଗୋଡା  
(ସମାଧାନ: ଅନୁଚ୍ଛେଦରେ ଉଲ୍ଲେଖ ଅଛି ଯେ ଏହାକୁ 'ବ୍ଲକ୍ ପାଗୋଡା' ବୋଲି ମଧ୍ୟ କୁହାଯାଏ ।)
72. (c): ନରସିଂହ ଦେବ ପ୍ରଥମ  
(ସମାଧାନ: ଗଙ୍ଗବଂଶର ରାଜା ନରସିଂହ ଦେବ ପ୍ରଥମ ଏହାକୁ ନିର୍ମାଣ କରିଥିଲେ ।)
73. (c): ୧୨୦୦  
(ସମାଧାନ: ମନ୍ଦିର ନିର୍ମାଣରେ ୧୨୦୦ ବଡ଼େଇ ନିୟୋଜିତ ଥିଲେ ।)
74. (b): ମନ୍ଦିରର ମୁକ୍ତି ମାରିବା  
(ସମାଧାନ: ଧର୍ମପଦର ତ୍ୟାଗ ଏହି ମନ୍ଦିର ନିର୍ମାଣ ବା ମୁକ୍ତି ମାରିବା ସହ ଜଡ଼ିତ ।)
75. (c): କଳିଙ୍ଗ  
(ସମାଧାନ: ଏହା କଳିଙ୍ଗ ସ୍ଥାପତ୍ୟ ଶୈଳୀର ଏକ ଅନନ୍ୟ ନିଦର୍ଶନ ।)
76. (a): Alt + Tab switches windows.
77. (a): Uniform Resource Locator.
78. (c): ROM (Read Only Memory) retains data without power.
79. (b): Formulas start with '='.