VLYMBOOQ · FULL-LENGTH MOCK PAPER

Agniveer (Indian Army) - Common Entrance Examination (Full Paper)

50 questions · 100 marks · 60 minutes

Paper pattern

Exam: Agniveer (Indian Army) - Common Entrance Examination (Full Paper)
Questions: 50 Marks: 100 Time: 60 minutes
Negative marking: -0.25 marks per wrong answer
Source: Indian Army Agniveer CEE: 50 questions, 100 marks, 60 minutes; GK 15, Maths 15, Science 10, Reasoning 10.
Generated: 2026-11-16T21:40:30.016Z By: reviewed question bank

Sections

General Knowledge - 15 questions, 30 marks
Mathematics - 15 questions, 30 marks
Science - 10 questions, 20 marks
Reasoning - 10 questions, 20 marks

Instructions

The timer is for practice; the real paper allows 60 minutes.
Each question has exactly one correct option.
Negative marking: -0.25 marks per wrong answer.
The answer key and a full explanation for every question follow the paper.
Model-generated questions are marked as such in the HTML page; verify any factual detail against the official notification.

General Knowledge

Q1. Match the mineral belt with its flagship mineral(s) as per the National Mineral Policy 2019 and geological provinces described:

A. Chotanagpur Plateau - Gold and Iron ore
B. Dharwar Craton - Copper and Uranium
C. Singhbhum Shear Zone - Lead-Zinc and Wollastonite
D. Aravalli Range - Lead-Zinc (Rampura-Agucha)

Q2. Who was the founder of the Mughal Empire in India?

A. Akbar
B. Babur
C. Humayun
D. Shah Jahan

Q3. Which is the largest mammal in the world?

A. Blue Whale
B. African Elephant
C. Giraffe
D. Polar Bear

Q4. Who was the first Indian to win a Nobel Prize?

A. C.V. Raman
B. Rabindranath Tagore
C. Mother Teresa
D. Amartya Sen

Q5. The 'Thomas Cup' is associated with which sport?

A. Badminton
B. Tennis
C. Table Tennis
D. Golf

Q6. Which Mughal emperor built the Taj Mahal?

A. Akbar
B. Aurangzeb
C. Shah Jahan
D. Jahangir

Q7. What is the full form of UNESCO?

A. United Nations Educational, Scientific and Cultural Organization
B. United Nations Economic and Social Council Organization
C. Union of European Nations for Science and Culture
D. United Nations Environment and Scientific Cooperation Organization

Q8. What is the primary source of energy for the Earth?

A. The Sun
B. The Moon
C. Geothermal Heat
D. Nuclear Power

Q9. The Governor of the Reserve Bank of India is appointed by:

A. The Prime Minister
B. The President
C. The Finance Minister
D. The RBI Board

Q10. Sun is classified as?

A. Red Giant
B. White Dwarf
C. Yellow Dwarf
D. Neutron Star

Q11. Which of the following is a strong acid?

A. Acetic acid
B. Citric acid
C. Sulphuric acid
D. Carbonic acid

Q12. Who wrote "The Discovery of India"?

A. Mahatma Gandhi
B. Jawaharlal Nehru
C. R. Ambedkar
D. Rabindranath Tagore

Q13. What is the maximum strength of the Lok Sabha?

A. 500
B. 530
C. 543
D. 550

Q14. Which is the smallest continent by land area?

A. Europe
B. Antarctica
C. Australia
D. South America

Q15. Who was the captain of the Indian cricket team that won the 2011 ICC Cricket World Cup?

A. Sourav Ganguly
B. Rahul Dravid
C. MS Dhoni
D. Sachin Tendulkar

Mathematics

Q16. The radius of a circle is 7 cm. What is its circumference? (Take pi = 22/7)

A. 22 cm
B. 44 cm
C. 14 cm
D. 88 cm

Q17. If the sum of the first 'n' odd natural numbers is 225, then what is the value of 'n'?

A. 10
B. 12
C. 15
D. 20

Q18. LCM of 12, 18 and 24?

A. 36
B. 48
C. 72
D. 96

Q19. If 6 men can do a work in 12 days, how many men are needed to do the same work in 9 days?

A. 6
B. 7
C. 8
D. 9

Q20. What is the formula for the Curved Surface Area (CSA) of a cylinder?

A. 2 r^2
B. 2 rh
C. r^2
D. rl

Q21. Solve: (x-1)/(x+2) = 2/3.

A. 5
B. 6
C. 7
D. 8

Q22. The mean of 10 observations is 42. If each observation is increased by 5, find the new mean.

A. 42
B. 45
C. 47
D. 50

Q23. The average of 5 numbers is 20. If one number is removed, the average becomes 16. Find the removed number.

A. 30
B. 32
C. 36
D. 40

Q24. Find the average of the first 10 prime numbers.

A. 12.5
B. 12.7
C. 12.9
D. 13.1

Q25. Average of first 10 natural numbers?

A. 5
B. 5.5
C. 6
D. 4.5

Q26. The sum of two numbers is 45 and their difference is 15. What is the larger number?

A. 30
B. 25
C. 35
D. 20

Q27. What is the area of a triangle with base 5 cm and height 6 cm?

A. 12 cm^2
B. 15 cm^2
C. 20 cm^2
D. 30 cm^2

Q28. 25% of 40% of 200?

A. 20
B. 25
C. 30
D. 15

Q29. What is the value of sin(30 degrees)?

A. 1/2
B. 1
C. 0
D. -1

Q30. A pipe can fill a tank in 6 hours and another can empty it in 8 hours. If both are opened together, how long to fill the tank?

A. 20 h
B. 22 h
C. 24 h
D. 26 h

Science

Q31. Which lens is used in a magnifying glass?

A. Convex lens
B. Concave lens
C. Plano-concave lens
D. Bifocal lens

Q32. Which gas is produced when a metal reacts with an acid?

A. Oxygen
B. Hydrogen
C. Nitrogen
D. Chlorine

Q33. What is the process called when an organism's genetic information is passed from one generation to the next?

A. Mutation
B. Genetic Drift
C. Hereditary
D. Evolution

Q34. What is the chemical symbol for silver?

A. Si
B. Ag
C. Au
D. Pb

Q35. What is the function of ribosomes in a cell?

A. Energy production
B. Protein synthesis
C. Lipid synthesis
D. DNA replication

Q36. What is the SI unit of electric current?

A. Volt
B. Ohm
C. Ampere
D. Watt

Q37. What is the scientific term for the 'study of the structure, behavior, and properties of matter'?

A. Biology
B. Chemistry
C. Physics
D. Geology

Q38. Which mirror is used in car rear-view mirrors?

A. Plane mirror
B. Concave mirror
C. Convex mirror
D. Parabolic mirror

Q39. Which vitamin is known as niacin?

A. Vitamin B1
B. Vitamin B2
C. Vitamin B3
D. Vitamin B6

Q40. What is the process by which water moves through a plant, from the roots to the leaves?

A. Respiration
B. Photosynthesis
C. Transpiration
D. Evaporation

Reasoning

Q41. A is the brother of B. B is the sister of C. C is the father of D. How is A related to D?

A. Father
B. Uncle
C. Grandfather
D. Brother

Q42. If "GOODNESS" is coded as "HPPOFTT", find "PROJECT".

A. QSPKDFU
B. QSPKD EU
C. QSPKCEU
D. QSPKDEV

Q43. What is the primary function of negative clues in linear seating arrangement puzzles?

A. They directly assign a person to a specific seat.
B. They create a set of possible pairs of slots for two persons.
C. They eliminate impossible slots and prune the search space.
D. They link two separate arrangement models together.

Q44. If it takes 3 hours to walk 9 miles, how many hours will it take to walk 12 miles at the same rate?

A. 3 hours
B. 4 hours
C. 5 hours
D. 6 hours

Q45. Statements: Some professors are researchers. No researcher is a student. Conclusions: I. Some professors are not students. II. Some students are professors.

A. Only I follows
B. Only II follows
C. Both follow
D. Neither follows

Q46. If each letter is shifted by 4 forward, what is 'DOOR' coded as?

A. HSSV
B. FQQT
C. GSSV
D. HSSU

Q47. Find the next term: Z, Y, X, W, V, ?

A. U
B. T
C. A
D. Z

Q48. Find the next number in the series: 2, 5, 8, 11, 14?

A. 15
B. 17
C. 18
D. 20

Q49. Which category of clue does the statement "A sits third to the left of B" belong to in a linear arrangement puzzle?

A. Definite clue
B. Relative clue
C. Negative clue
D. Bridge clue

Q50. X,Y brothers. Z daughter of Y. W wife of X. How is W related to Z?

A. Aunt
B. Mother
C. Sister
D. Niece

Answer key

Q1 D	**Q2 B**	**Q3 A**	**Q4 B**
Q5 A	**Q6 C**	**Q7 A**	**Q8 A**
Q9 B	**Q10 C**	**Q11 C**	**Q12 B**
Q13 C	**Q14 C**	**Q15 C**	**Q16 B**
Q17 C	**Q18 C**	**Q19 C**	**Q20 B**
Q21 C	**Q22 C**	**Q23 C**	**Q24 C**
Q25 B	**Q26 A**	**Q27 B**	**Q28 A**
Q29 A	**Q30 C**	**Q31 A**	**Q32 B**
Q33 C	**Q34 B**	**Q35 B**	**Q36 C**
Q37 B	**Q38 C**	**Q39 C**	**Q40 C**
Q41 B	**Q42 A**	**Q43 C**	**Q44 B**
Q45 A	**Q46 A**	**Q47 A**	**Q48 B**
Q49 B	**Q50 A**		

Solutions and explanations

Q1. Match the mineral belt with its flagship mineral(s) as per the National Mineral Policy 2019 and geological provinces described:
Answer: D
Correct answer: Aravalli Range - Lead-Zinc (Rampura-Agucha).

Q2. Who was the founder of the Mughal Empire in India?
Answer: B
Babur founded the Mughal Empire in 1526 after defeating Ibrahim Lodi at the First Battle of Panipat.

Q3. Which is the largest mammal in the world?
Answer: A
The Blue Whale is the largest mammal, reaching lengths of up to 30 meters and weighing up to 200 tonnes.

Q4. Who was the first Indian to win a Nobel Prize?
Answer: B
Rabindranath Tagore won the Nobel Prize in Literature in 1913, becoming the first Indian Nobel laureate.

Q5. The 'Thomas Cup' is associated with which sport?
Answer: A
Step 1: The Thomas Cup is the World Men's Team Badminton Championship, first held in 1949.Step 2: It is named after Sir George Thomas, a former President of the International Badminton Federation.Shortcut Trick: Remember the sports trophies with this association trick:- Thomas Cup -> Badminton (Men's) -> Think 'Tom' plays badminton- Uber Cup -> Badminton (Women's)- Davis Cup -> Tennis- Swaythling Cup -> Table Tennis (World Team)- Ryder Cup -> GolfMore Badminton Trophies:- Thomas Cup: Men's international team- Uber Cup: Women's international team- Sudirman Cup: Mixed team world championshipCommon Mistake: 'Thomas' sounds like a tennis name (Wimbledon has a 'Gentlemen's' trophy), but Thomas Cup is definitely badminton. Similarly, Davis Cup is tennis, not badminton.

Q6. Which Mughal emperor built the Taj Mahal?
Answer: C
Shah Jahan built the Taj Mahal between 1631 and 1648 in memory of his wife Mumtaz Mahal.

Q7. What is the full form of UNESCO?
Answer: A
UNESCO stands for United Nations Educational, Scientific and Cultural Organization, founded in 1945.

Q8. What is the primary source of energy for the Earth?
Answer: A
The Sun is the primary source of energy for Earth, providing light and heat through nuclear fusion.

Q9. The Governor of the Reserve Bank of India is appointed by:
Answer: B
Correct answer: The President.

Q10. Sun is classified as?
Answer: C
Correct answer: Yellow Dwarf.

Q11. Which of the following is a strong acid?
Answer: C
Correct answer: Sulphuric acid.

Q12. Who wrote "The Discovery of India"?
Answer: B
Correct answer: Jawaharlal Nehru.

Q13. What is the maximum strength of the Lok Sabha?
Answer: C
Correct answer: 543.

Q14. Which is the smallest continent by land area?
Answer: C
Australia is the smallest continent, covering about 3 million square miles.

Q15. Who was the captain of the Indian cricket team that won the 2011 ICC Cricket World Cup?
Answer: C
MS Dhoni was the captain of the Indian cricket team that won the 2011 ICC Cricket World Cup.

Q16. The radius of a circle is 7 cm. What is its circumference? (Take pi = 22/7)
Answer: B
Step 1: Recall the formula for circumference: C = 2pir (where r = radius).Step 2: Substitute values: r = 7, pi = 22/7.C = 2 x (22/7) x 7 = 2 x 22 = 44 cm.Shortcut Trick: When r is a multiple of 7, 22/7 cancels beautifully. 2 x (22/7) x 7 = 2 x 22 = 44. The 7 in denominator and numerator cancel out - just multiply 2 x 22 directly! No need to do long calculations.Formula Memory Aid: 'C = pid' (circumference = pi x diameter). Since d = 2r = 14 cm, C = (22/7) x 14 = 22 x 2 = 44 cm. This is even faster!Common Mistake: Students use the area formula (pir^2) instead of circumference and get 154 cm^2. Check:

Circumference is length (cm), area is square units (cm^2). The question asks for circumference - use 2pir, not pir^2.

Q17. If the sum of the first 'n' odd natural numbers is 225, then what is the value of 'n'?
Answer: C
Step 1: Recall the formula - sum of the first n odd natural numbers = n^2. For example: 1 = 1^2, 1+3 = 4 = 2^2, 1+3+5 = 9 = 3^2, etc. Step 2: Given sum = 225. So n^2 = 225. Step 3: Take the square root: n = sqrt225 = 15. Shortcut Trick: Learn the squares from 1 to 30. 225 is 15 squared - instantly tells you n = 15. No calculation needed if you know that 15^2 = 225 and 16^2 = 256. Alternative Method: The nth odd number is (2n-1). Sum of first n odd numbers = n^2 (this is a fixed result - memorize it!). Common Mistake: Some students use the formula for sum of n natural numbers (n(n+1)/2) instead of the odd number formula, getting the wrong answer. Always check: 'odd natural numbers' -> n^2; 'natural numbers' -> n(n+1)/2.

Q18. LCM of 12, 18 and 24?
Answer: C
Correct answer: 72.

Q19. If 6 men can do a work in 12 days, how many men are needed to do the same work in 9 days?
Answer: C
M1D1 = M2D2. 6x12 = M2x9. M2 = 72/9 = 8 men.

Q20. What is the formula for the Curved Surface Area (CSA) of a cylinder?
Answer: B
Correct answer: 2 rh.

Q21. Solve: (x-1)/(x+2) = 2/3.
Answer: C
3(x-1) = 2(x+2). 3x-3 = 2x+4. x = 7.

Q22. The mean of 10 observations is 42. If each observation is increased by 5, find the new mean.
Answer: C
If each value increases by 5, the mean also increases by 5. New mean = 42+5 = 47.

Q23. The average of 5 numbers is 20. If one number is removed, the average becomes 16. Find the removed number.
Answer: C
Sum of 5 = 5x20 = 100. Sum of 4 = 4x16 = 64. Removed = 100-64 = 36.

Q24. Find the average of the first 10 prime numbers.
Answer: C
First 10 primes: 2,3,5,7,11,13,17,19,23,29. Sum=129. Avg=129/10=12.9.

Q25. Average of first 10 natural numbers?
Answer: B
Correct answer: 5.5.

Q26. The sum of two numbers is 45 and their difference is 15. What is the larger number?
Answer: A
Let numbers be x and y. x+y=45, x-y=15. Adding: 2x=60, x=30. So larger = 30.

Q27. What is the area of a triangle with base 5 cm and height 6 cm?
Answer: B
The area of a triangle is calculated using the formula 1/2 * base * height, so the area is 1/2 * 5 * 6 = 15 cm^2.

Q28. 25% of 40% of 200?
Answer: A
Correct answer: 20.

Q29. What is the value of sin(30 degrees)?
Answer: A
The sine of 30 degrees is 1/2 or 0.5.

Q30. A pipe can fill a tank in 6 hours and another can empty it in 8 hours. If both are opened together, how long to fill the tank?
Answer: C
In 1 hour, fill = 1/6 - 1/8 = 4/24-3/24 = 1/24. Time = 24 hours.

Q31. Which lens is used in a magnifying glass?
Answer: A
A magnifying glass uses a convex lens to produce an enlarged virtual image of an object.

Q32. Which gas is produced when a metal reacts with an acid?
Answer: B
Metals react with acids to produce salt and hydrogen gas (H2).

Q33. What is the process called when an organism's genetic information is passed from one generation to the next?
Answer: C
Hereditary refers to the passing of traits or genetic information from parents to their offspring through the transmission of genetic information.

Q34. What is the chemical symbol for silver?
Answer: B
Ag is the symbol for silver, from the Latin word ‘Argentum’.

Q35. What is the function of ribosomes in a cell?
Answer: B
Ribosomes are the site of protein synthesis, translating mRNA into polypeptide chains.

Q36. What is the SI unit of electric current?
Answer: C
Step 1: The SI unit of electric current is the Ampere (symbol: A).Step 2: 1 Ampere = flow of 1 Coulomb of charge per second through a conductor.Shortcut Trick: Remember the SI units with the mnemonic 'VOW CA' - Volt (potential), Ohm (resistance), Watt (power) - and then Current = Ampere. Or simpler: 'Current is measured in Amps' -> 'A for Ampere, A for Amps'.Complete SI Unit Table for Electricity:- Current: Ampere (A)- Potential Difference: Volt (V)- Resistance: Ohm ()- Power: Watt (W)- Charge: Coulomb (C)- Conductance: Siemens (S)Common Mistake: 'Current is measured in Amperes' but many confuse it with Volts. Remember: Current = flow of electrons (Amps). Voltage = push/pull that causes flow (Volts). Think of a water pipe: current = water flow (Amps), voltage = water pressure (Volts).

Q37. What is the scientific term for the 'study of the structure, behavior, and properties of matter'?
Answer: B
Chemistry is the scientific study of the structure, behavior, and properties of matter, including the formation and reactions of chemical compounds.

Q38. Which mirror is used in car rear-view mirrors?
Answer: C
Convex mirrors produce a diminished, upright virtual image with a wider field of view.

Q39. Which vitamin is known as niacin?
Answer: C
Niacin is Vitamin B3, which helps convert food into energy and supports skin and nerve health.

Q40. What is the process by which water moves through a plant, from the roots to the leaves?
Answer: C
Transpiration is the process by which water moves through a plant, from the roots to the leaves, and is then released into the air as water vapor.

Q41. A is the brother of B. B is the sister of C. C is the father of D. How is A related to D?
Answer: B
A and C are siblings. C is father of D, so A is uncle of D.

Q42. If "GOODNESS" is coded as "HPPOFTT", find "PROJECT".
Answer: A
Correct answer: QSPKDFU.

Q43. What is the primary function of negative clues in linear seating arrangement puzzles?
Answer: C
Correct answer: They eliminate impossible slots and prune the search space..

Q44. If it takes 3 hours to walk 9 miles, how many hours will it take to walk 12 miles at the same rate?
Answer: B
To find the time it will take to walk 12 miles, first find the rate at which the person walks: rate = distance / time = 9 miles / 3 hours = 3 miles per hour. Now, use the rate to find the time it will take to walk 12 miles: time = distance / rate = 12 miles / 3 miles per hour = 4 hours.

Q45. Statements: Some professors are researchers. No researcher is a student. Conclusions: I. Some professors are not students. II. Some students are professors.
Answer: A
Correct answer: Only I follows.

Q46. If each letter is shifted by 4 forward, what is 'DOOR' coded as?
Answer: A
D+4=H, O+4=S, O+4=S, R+4=V = HSSV.

Q47. Find the next term: Z, Y, X, W, V, ?
Answer: A
Alphabet in reverse order: Z, Y, X, W, V, U.

Q48. Find the next number in the series: 2, 5, 8, 11, 14?
Answer: B
The series is formed by adding 3 to the previous term, hence the next number in the series would be: 14 + 3 = 17.

Q49. Which category of clue does the statement "A sits third to the left of B" belong to in a linear arrangement puzzle?
Answer: B
Correct answer: Relative clue.

Q50. X,Y brothers. Z daughter of Y. W wife of X. How is W related to Z?
Answer: A
Correct answer: Aunt.