

Grade 8

Quantity : 700

SARVHITKARI PARKASHAN SOCIETY
SELECTION TEST
FOR
PUNJAB SUPER 100

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INSTRUCTIONS :

1. This test is for students who are presently in grade 10.
2. This test has 3 sections. First section consists of 30 questions from English and Reasoning. Second section consists of 30 questions from Mathematics and last section consists of 30 questions from Science.
3. Each right answer has 2 marks.
4. Each wrong answer will lead to deduct 1 mark from total marks obtained.
5. Mark your responses with blue ball pen in the OMR sheet provided along with this question paper.
6. Attempt all questions accordingly.



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ENGLISH AND REASONING**Q. 1-30**

1. **Which of the following is a non-count noun ?**
 - a) Table
 - b) Candle
 - c) Dog
 - d) Information
2. **One publisher holds a _____ on printing all of our school publications.**
 - a) monogram
 - b) monopoly
 - c) monarch
 - d) monastery
3. **Which option correctly combines the following two simple sentences to create a compound sentence ? Marisol plays the harp. She is not very good.**
 - a) Marisol plays the harp, but she is not very good.
 - b) Marisol is not very good at playing the harp.
 - c) When she plays the harp, Marisol is not very good.
 - d) Although she is not very good, Marisol plays the harp.
4. **What does the suffix “ed” mean?**
 - a) To compare
 - b) Past tense
 - c) Full of
 - d) Runner
5. **Which of the following sentence (s) use (s) semicolons correctly ?**
 - a) The president; was very popular; he easily won the election.
 - b) I cannot buy a new car; I do not have much money.
 - c) I am hot I am wearing; a sweater and a jacket.
 - d) I am hot I am wearing socks.
6. **What kind of pronoun is in capital letters? Joy and George taught Elsa skills of survival so that a life in the wild could be HERS.**
 - a) Reflexive pronoun
 - b) Possessive pronoun
 - c) Indefinite pronoun
 - d) None of the above
7. **Which sentence uses apostrophes correctly ?**
 - a) Daves’ bike is green.
 - b) Stan’s birthday is next week.
 - c) Rohan runs School’s
 - d) None of the above
8. **Which one of the following items has no mistakes in capitalization ?**
 - a) Do you know where Sarah is ? she promised to help me.
 - b) Show me your new game. is it your favourite ?
 - c) Ramon needs a new backpack. Tell him where you got yours.
 - d) Why did Samantha leave early? did she have a doctor’s appointment ?

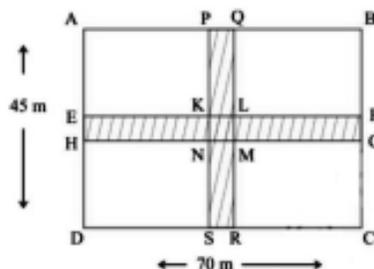
- 9. Remorseless :**
- a) Unemotional or indifferent b) Without a way of protecting yourself
c) Without compassion or pity d) None of these
- 10. When something has been desegregated, it is no longer kept apart.**
- a) Yes b) No
c) Wrong question d) None of the above
- 11. What is the word in capital letters ? Many PLANT species depend on bats for pollination.**
- a) Noun b) Adjective c) Both a and b d) None of the above
- 12. The root port means which of the following ?**
- a) To eat b) To know c) To grow d) To carry
- 13. What is the antecedent in the sentence; A new theatre opened yesterday & it has 6 screens ?**
- a) A new theatre b) yesterday c) it d) six screens
- 14. Choose the correct meaning of the suffix “-ize”**
- a) With, together b) Relating to c) To make d) Inclined to
- 15. Choose the correct meaning of the suffix “-al”.**
- a) Up or upward b) Relating to c) To make d) Inclined to
- 16. In the sentence below, which punctuation mark should Shiv use and why? Parvati is the supreme Goddess.**
- a) Because the sentence is an interrogative sentence and asks a question.
b) Because the sentence is an imperative sentence and gives a command.
c) Because the sentence is a declarative sentence and makes a statement.
d) Because the sentence is an exclamatory sentence and shows strong feeling.
- 17. Identify the capitalized words. He lived in the HOUSE ON THE HILL.**
- a) Phrase b) Clause
c) Both of the above d) None of the above
- 18. Complete the sentence with an action verb and a direct object. She had just enough time, so she ___ .**
- a) to the bank b) a song c) the best actor d) swam in the pool
- 19. Identify the possessive pronoun in the following sentence. Several people claimed the prize was theirs.**
- a) people b) theirs c) prize d) Several

20. What pronoun would correctly replace the capitalized word in the following sentence ? **ALL THE KIDS** like the stories **Ms. Chou** reads.
- a) They b) Them c) We d) None of the above
21. One of my friends (**play, plays**) the tuba.
- a) play b) plays
c) Both can be used d) None of the above
22. Is the pronoun a subject or object pronoun? **Dad drove her to the game.**
- a) Subject pronoun b) Object pronoun
c) Both d) None of the above
23. Choose the correct meaning of the suffix “-some”.
- a) Inclined to b) To make c) Group of d) Up or upward
24. What is the tense of the verb ? **A peanut is not actually a nut.**
- a) Simple present b) Present perfect
c) Present participle d) None of the above
25. Complete the series; **1, 3, 9, 27, 81, __**
- a) 162 b) 324 c) 243 d) 81
26. What is capitalized word used in the subsequent sentence? **The RINGS of Saturn are beautiful.**
- a) Noun b) Verb c) Proverb d) None of the above
27. What is the object of the preposition ? **The Ram Setu Bridge passes over the Sea.**
- a) Ram Setu Bridge b) passes
c) Sea d) All are wrong
28. What is the form of the verb ? **Wishing**
- a) Present b) Present participle
c) Present perfect d) All of the above
29. What is the tense of the verb ? **My brother will paint the mural.**
- a) Present b) Past c) Future d) None of the above
30. What is the object of the preposition? **Maharana Pratap, the famous king, was from Bharat.**
- a) Maharana Pratap b) King c) Bharat d) None of the above

MATHEMATICS

Q. 31-60

31. Simplify : $(x^2 - 5)(x + 5) + 25$.
 a) $x^3 + 5x - 5x$ b) $x^3 + 5x^2 - 5x$ c) $x^3 + 5x^2 - 5$ d) $x + 5x^2 - 5x$
32. Solve; $(ab + bc)^2 - 2ab^2c$.
 a) $a^2 b^2 + b^2 c^2$ b) $a^2 b^2 + b^2 c$ c) $a^2 + b^2 c_2$ d) $a^2 b^2 + c_2$
33. Find the value of $256^{0.125} + 625^{0.25}$.
 a) 2 b) 7 c) 11 d) 14
34. If $2^x = 3^y = 6^z$, then $1/x + 1/y + 1/z =$ _____.
 a) $2/x$ b) $2/y$ c) $2/z$ d) 1
35. If $a + b = 3$ and $ab = 2$, then find $a^3 + b^3$.
 a) 6 b) 4 c) 9 d) 12
36. If $p/q = r/s = t/u$, then $(p^2 + r^2 + t^2)/(q^2 + s^2 + u^2) =$ _____.
 a) pqr/qsu b) 1 c) 3 d) $\{(p+r+t)/(q+s+u)\}^2$
37. The price of a commodity is increased by 40%. By what percent should a consumer reduce his consumption so that his expenditure on the commodity remains constant ?
 a) $144/7$ b) $204/7$ c) $319/7$ d) $200/7$
38. Find the amount to be paid at the end of 3 years when principal = ₹ 7500 at 5% per annum simple interest.
 a) 6423 b) 8625 c) 7456 d) 8644
39. Solve the equation : $y + 4 = -4$.
 a) -8 b) +8 c) 0 d) -1
40. Find the standard form of $(-12)/18$.
 a) $-6/9$ b) $-2/3$ c) $2/3$ d) None of these
41. In the given figure, two cross roads, each of width 5 m run at right angles through the centre of a rectangular park of length 70 m and breadth 45 m and parallel to its sides. Find the area of the roads. Also find the cost of constructing the roads at the rate of ₹ 105 per m².



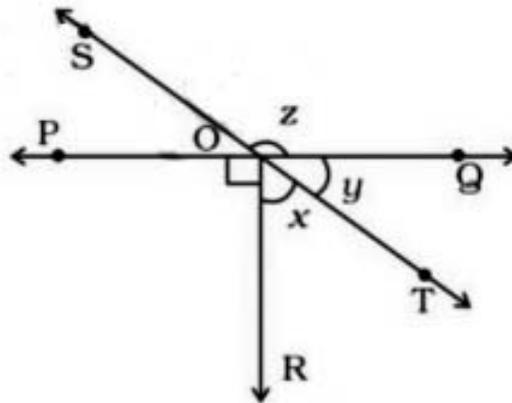
- a) Area of roads: 550 m^2 , cost: ₹ 57,500
 b) Area of roads : 500 m^2 , cost : ₹ 59,750
 c) Area of roads : 550 m^2 , cost: ₹ 57,750
 d) Area of roads : 650 m^2 , cost : ₹ 57,750

42. In the given table, the performance of student in 1st term and 2nd term is provided. In which subject the child improved his performance the most ?

Subject	1st Term M.M. 100	2nd Term M.M. 100
English	67	70
Hindi	72	65
Maths	88	95
Science	81	85
S.Science	73	75

- a) Science b) Mathematics c) Both of them d) None of these

43. In the given figure, lines PQ and ST intersect at O. If angle POR is 90° and $x : y = 3 : 2$ then z is _____.



- a) 126° b) 144° c) 136° d) 154°

44. An aluminum wire when bent in the form of a square encloses an area of 121 cm^2 . If the same wire is bent in the form of a circle, find the area enclosed by it in cm^2 .

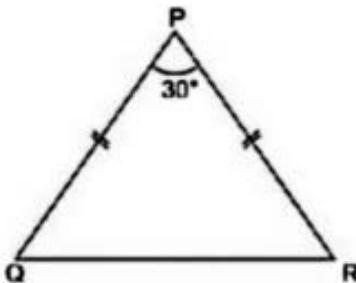
- a) 174 b) 164 c) 154 d) 134

45. Write the next three rational numbers to complete the pattern;

$4/(-5), 8/(-10), 12/(-15), 16/(-20), _, _, _$,

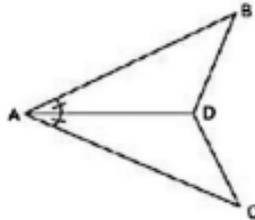
- a) $-6/8, -9/12, -12/16$ b) $14/22, 21/33, 28/44$
 c) $20/-25, -24/30, -28/35$ d) $20/21, 45/33, 23/21$

46. Write each of the following rational numbers with positive denominators;
 $5/(-8)$, $15/(-28)$, $-17/(-13)$.
- a) $5/8$, $15/28$, $-17/13$ b) $-5/8$, $-15/28$, $17/13$
 c) $-5/8$, $-15/28$, $-17/13$ d) $-5/8$, $15/28$, $-17/13$
47. Preeti wrapped a cord around a circular pipe of radius 4 cm and cut off the required cord length from the total cord length. Now she wrapped that cord wrapped around a circular pipe to a new shape i.e. square box of side 4 cm. Did she has any cord left with her ?
- a) Yes, 9.12 cm b) Yes, 8.16 cm
 c) No, it is completely consumed
 d) No, the rope is not sufficient to be wrapped around square box
48. Set up equations and solve them to find the unknown numbers in the following cases; if I take three fourth of a number and add 3 to it, I get 21. The number is _____.
- a) 23 b) 21 c) 25 d) 24
49. Simplify and express the following in exponential form; $(a^6/a^4) \cdot a^5 \times a^2$.
- a) a b) a c) a d) a
50. Two cross roads each of width 10 m cut at right angles through the centre of a rectangular park of length 700 m and breadth 300 m and parallel to its sides. Find the area of the roads. Also find the area of the park excluding cross roads. Give the answer in hectares.
- a) Path:0.97 ha; park excluding path: 20.01 ha
 b) Path:0.99cha; park excluding path: 20.001ha
 c) Path: 0.99 ha; park excluding path: 20.01 ha
 d) None of the above
51. In the figure, PQR is a triangle and $PQ = PR$. Find the angle at Q.



- a) 55° b) 75° c) 65° d) 85°

52. Evaluate the value of the expression $x^2 - 2xy(y - z)$ at $x = 0$, $y = 1$, $z = 2$.
 a) 0 b) 1 c) 4 d) 3
53. 5899855100 km can be written in scientific notation as_____.
 a) $5899 * 10^9$ km b) $5.899 * 10^9$ km
 c) $5.899 * 10^7$ km d) $5.899 * 10^{10}$ km
54. $2.269 * 10^8$ km is written in which form
 a) Scientific notation b) Expanded form
 c) English form d) None of the above
55. The foot of a ladder is 6 m away from a wall and its top reaches a window 8 m above the ground. If the ladder is shifted in such a way that its foot is 8 m away from the wall, to what height does its top reach ?
 a) 5 m b) 4 m c) 8 m d) 6 m
56. Two numbers are in the ratio 7 : 11. If 7 is added to each of the numbers, the ratio becomes 2 : 3. Find the numbers.
 a) 49,77 b) 48,76 c) 49,75 d) 49,74
57. Find the multiplicative inverse of the $-13/19$.
 a) $-1/13$ b) $1/13$ c) $1/19$ d) $-19/13$
58. Zero has _____ reciprocal.
 a) 1 b) -1 c) 0 d) None of the above
59. Five rational numbers which are smaller than 2.
 a) $2/10, 5/10, 10/10, 15/10, 19/10$ b) $6/10, 4, 3/1, 4/2, 3/2$
 c) All of the above d) None of these
60. In the given figure; $AB = AC$, angle $BAD =$ angle CAD . Is triangle $ABD =$ triangle ACD ? Give reason.



- a) Yes, by SSS congruency b) Yes, by SAS congruency
 c) Yes, by ASA congruency d) Yes, by RHS congruency

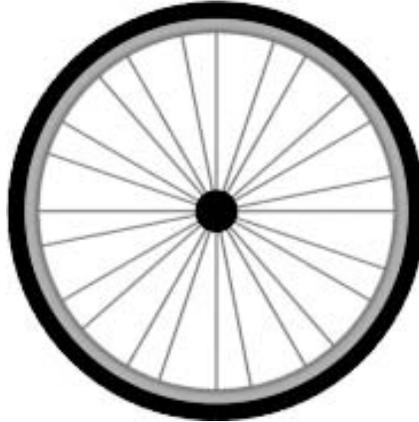
SCIENCE**Q. 61-90**

- 61. The strength of force is expressed by its_____.**
a) Weight b) Mass c) Magnitude d) Longitudinal force
- 62. Leaves fall down on the ground due to_____.**
a) Electrostatic force b) Gravitational force
c) Magnetic force d) Muscular force
- 63. Which of the following fuels is used for running automobiles ?**
a) CNG b) Petrol c) Both (a) and (b) d) Wood
- 64. Coal burns to produce_____.**
a) Calcium bicarbonate b) Magnesium
c) Oxygen d) Carbon dioxide
- 65. The substance that undergoes combustion is said to be_____.**
a) Burning b) Flammable c) Charcoal d) Inflammable
- 66. Which of the following is combustible ?**
a) Stone piece b) Wood c) Glass d) None of these
- 67. Tropospheric atmosphere is turbulent. Which of the following reasons can be attributed to this ?**
a) Convectonal current of air rises up due to high temperature in lower layers of the earth
b) Temperature changes result in change in air pressure
c) More effect of centrifugal force is more in this layer
d) None of these
- 68. Global warming is mainly due to_____.**
a) reradiation of UV rays by carbon dioxide and water
b) reradiation of IR rays by carbon dioxide and water
c) reradiation of IR rays by oxygen and water
d) reradiation of UV by oxygen and water
- 69. The specific heat of water is ___Jg⁻¹ K⁻¹.**
a) 4.1 b) 4.2 c) 4.3 d) None of the above

70. $1 \text{ g/m}^3 = \text{ ____ kg/cm}^3$.
- a) 10^9 b) 10^6 c) 10^{-8} d) 10^{-9}
71. An object moves the first half of the total distance with a speed of 2 m/s. If the average speed of the body is 3 m/s, the speed of the body when it travels the remaining distance is m/s.
- a) 3 b) 6 c) 4 d) 2
72. Which among the following is generally not predicted in a daily weather report ?
- a) Temperature b) Pressure c) Humidity d) Rainfall
73. Rainfall is measured by .
- a) Rain gauge b) Water level increase in ponds
c) Water level increase in water table d) None of these
74. Which of the following statement is incorrect for penguins?
- a) They huddle together b) They cannot swim
c) They have webbed feet d) They have streamlined body
75. The coldest region on earth is .
- a) polar region b) tropical region
c) temperate region d) coastal region
76. Which of the following is not an adaptive feature in polar bear?
- a) White fur b) Strong sense of smell
c) Long curved and sharp claws d) Long tail
77. Choose the correct statement (s) from the following:
- a) We know that air or atmosphere always contains some water vapour or moisture in it
b) Humidity is a measure of water vapour or moisture in air
c) When the amount of water vapour in the air is high, we say humidity is high and the air feels moist or damp
d) All the above
78. Read the following sentences carefully, and choose the incorrect one :
- a) If the humidity in an area is generally high, the climate there is said to be humid.
b) If the amount of water vapor in the air is low, we say the humidity is low.
c) A humidity of hundred percent at a particular temperature means that the air is holding the maximum amount of water vapor for that temperature.
d) Rainfall is measured by an instrument called “rain falling gauge”.

- 79. Raghav is doing his homework which is given by his teacher. Would you help him to choose the incorrect sentences ?**
- a) The weather at a place changes day after day and week after week.
 - b) Weather is such a complex phenomenon that it can change even over very short periods of time.
 - c) It can be sunny weather in the morning but suddenly clouds may appear from nowhere and it can become cloudy.
 - d) Weather is constant anywhere
- 80. What is the CGS unit of force ?**
- a) Joule
 - b) Pascal
 - c) Newton
 - d) Dynes
- 81. Which of the following statement is incorrect for a chemical reaction ?**
- a) Heat may be given out but never absorbed
 - b) Sound may be produced
 - c) A colour change may take place
 - d) A gas may be evolved
- 82. A physical change is generally_____.**
- a) Irreversible
 - b) Reversible
 - c) Considerable
 - d) All of these
- 83. Rusting of iron is a_____.**
- a) Physical change
 - b) Chemical change
 - c) Both (a) and (b)
 - d) None of these
- 84. When carbon dioxide is passed through lime water, the substance formed is_____.**
- a) Calcium oxide
 - b) Calcium titanite
 - c) Calcium carbonate
 - d) None of these
- 85. Burning of any substance is a/an_____.**
- a) Physical change
 - b) Chemical change
 - c) Irreversible change
 - d) Both (b) and (c)
- 86. Read the following sentences carefully, and choose the correct one :**
- a) Thrust per unit area is called pressure
 - b) Air is made up of tiny particles called molecules which move around quickly in all directions.
 - c) The air pressure acting on the thin rubber walls of the balloon from inside causes the balloon to expand and get inflated.
 - d) All the above

87. Why we feel bicycle tyre tight and hard ?



- a) Air molecules inside the tube collide with the walls of the tube and exerts air pressure.
- b) Nitrogen molecules inside the tube responsible for creating pressure.
- c) Oxygen molecules inside the tube creates pressure.
- d) None of the above

88. Anoop appeared in class test but he confused to know the incorrect statement. Would you help him to know that ?

- a) While riding a cycle, we find that it is easier to move the bicycle forward if the wind is coming from our back side.
- b) While rowing a boat in the lake, we find it easier to row the boat forward if the wind is coming from behind us.
- c) When we are flying a kite, then the wind coming from our back side helps.
- d) If the wind blows in opposite direction to the motion of the object, it makes the movement of the object easier

89. Development and movement of cyclones are studied by the

- a) Indian Postal Department
- b) Indian Forensic Department
- c) Indian Meteorological Department
- d) Central Investigation Department

90. Choose space organisation of Bharat.

- a) ISRO
- b) BARC
- c) DRDO
- d) None of these

End

“Everybody’s a genius but if you judge a fish by its ability to climb a tree, it will spend its whole life believing that it is stupid.”