Pinnacle EduCare
Dream it • Do it
JEE / NEET / Olympiads / NTSE / Boards

P-TQE 2025
Pinnacle Talent Quest Exam

For 6th to 10th Class Students

STAGE - 1 & STAGE - 2

Pinnacle Talent Quest Exam

SAMPLE TEST PAPER

Class 6th

What Makes **Pinnacle** Unique?

1 **Best Faculty Team**
2 **Hi-Tech Classrooms**
3 **Customized Study material**
4 **Personal Attention**
5 **Unlimited Doubt Sessions**
6 **Best Testing Methodology**

Lecture Recording Lab

Revision Classes & Self Study Zones

Online Testing Lab (CBT)

Smart & AC Classrooms

Objective + Subjective

Student Performance and Analysis Report

Rich Library & Researched Study Modules

Extra Support to weaker students

CCTV Campus

Biometric Attendance

Classroom Program

1 Comprehensive Classroom Lectures

All classes at Pinnacle are conducted by highly qualified and experienced faculty members, mostly IITians. Each chapter is started at the grass root level and is dealt to an extent which is the requirement of competitive examinations, with an aim of enabling the students to develop a comprehensive view of the whole chapter with a thorough understanding.

Doubt Clearance 2

"If you ask a question, you may apprear fool for some time, but if you don't, you'll remain a fool for whole life."System at Pinnacle encourages all students to ask their doubts and questions.

3 Regular Tests Online and Offline

As JEE Mains and Advanced have gone completely online and NEET is in the pipeline, we have launched a dedicated online testing platform where students can practise over CBT (Computer Based Tests). The combination of online and offline testing modes based on latest JEE/NEET patterns ensure that students are at par with the recent changes. Students and check their test reports and performance analysis via a unique online login ID. Their results are also communicated to parents via SMS.
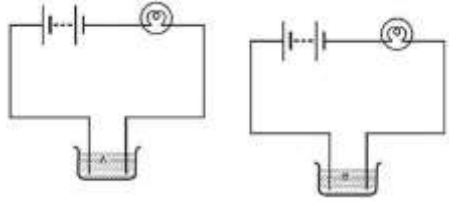
Addressing the Board Exam 4

Pinnacle has a very distinct methodology for preparing the students for competitive examinations while in full synchronization with Board Exams as well. Board level tests are conducted alongside the regular JEE/NEET tests and the copies are graded at very meticulous level by teachers. Students receive methodological tips so as to perform excellent in the board Exams as well.

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Engineering JEE Main & Adv.

Medical NEET

Foundation VIII, IX, X, NTSE, Olympiads

Subjective Boards

Section – A
Science

This section contains **30 Multiple Choice Questions**. Each question has four options out of which **ONLY ONE** is correct.

1. The climate of a place depends on
   (a) latitude
   (b) altitude
   (c) distance from the sea
   (d) all of these

2. Fennec adapt to the desert climate with the help of
   (a) long ears
   (b) being nocturnal in nature
   (c) both (A) & (B)
   (d) none of these

3. The basic unit of speed is:
   (a) km/min
   (b) m/min
   (c) km/h
   (d) m/s

4. Which of the following relations is correct?
   (a) Speed = Distance × Time
   (b) $Speed = \dfrac{Dis\tan ce}{Time}$
   (c) $Speed = \dfrac{Time}{Dis\tan ce}$
   (d) $Speed = \dfrac{1}{Dis\tan ce \times Time}$

5. A weak current can be detected by replacing electric bulb in an electric tester with :
   (a) LED
   (b) A coil wound over a compass needle
   (c) CFL
   (d) Both (A) and (B)

6. In lateral inversion:
   (a) Image is upside down
   (b) Image bends laterally
   (c) Left of an object appears right of an image
   (d) Image gets inverted

7. Which of these does not conduct electricity?
   (a) Brass spoon
   (b) Silver jewellery
   (c) Steel tumbler
   (d) Plastic jug

8. An electric cell can generate electric current in a:
   (a) Open circuit
   (b) Closed circuit
   (c) Both of these
   (d) None of these

9. The process of returning back of light ray from a shining surface is called:
   (a) Reflection
   (b) Refraction
   (c) Inversion
   (d) Lateral inversion

10. Evaporation of water from the soil surface is due to heat from:
    (a) Sun
    (b) Earth
    (c) Moon
    (d) Fire

11. Maximum-minimum thermometer are used to measure
    (a) humidity
    (b) maximum and minimum temperature
    (c) rainfall
    (d) wind

12. Humidity is measured by using
    (a) Thermometer
    (b) Rain gauge
    (c) Hygrometer
    (d) All of these

13. Rain gauge is used to measure
    (a) humidity
    (b) rainfall
    (c) temperature
    (d) all of these

14. The process of changing water into ice is called
    (a) Sublimation
    (b) Evaporation
    (c) freezing
    (d) precipitation

15. The process of falling down of water in the form of rain, snow or hail is called
    (a) Sublimation
    (b) Evaporation
    (c) Condensation
    (d) Precipitation

16. How much water is lost approximately through transpiration by wheat plants that give one kilogram of wheat ?
    (a) 5 litres
    (b) 50 litres
    (c) 500 litres
    (d) 5000 litres

17. Water freezes at___to a solid state called snow or ice
    (a) 0°C
    (b) –1C^0
    (c) 1°C
    (d) 100°C

18. A tester is used to check the conduction of electricity through two liquids, labelled A and B. It is found that the bulb of the tester glows

brightly for liquid A while it glows very dimly for liquid B. You would conclude that

(a) liquid A is a better conductor than liquid B.
(b) liquid B is a better conductor than liquid A.
(c) both liquids are equally conducting
(d) conducting properties of liquid cannot be compared in this manner.

19. Silicon is a :
    (a) Conductor
    (b) Insulator
    (c) Semiconductor
    (d) Superconductor
20. Water occurs in the atmosphere in how many forms?
    (a) One
    (b) Two
    (c) Three
    (d) Four
21. What will happen when diaphragm relaxes and curves upwards?
    (a) Air is forced out of the lungs
    (b) The rib cage goes up and outward
    (c) The volume of the thoracic cavity increases
    (d) Air pressure inside the thoracic cavity decreases
22. When we inhale, we breathe in air into the lungs. What do we breathe out when we exhale?
    (a) Only oxygen gas
    (b) Only hydrogen gas
    (c) Air that has more oxygen than inhaled air
    (d) Air that has more carbon dioxide than inhaled air
23. Which one of the following structures closes the respiratory passage during ingestion of food?
    (a) Larynx
    (b) Epiglottis
    (c) Hard palate
    (d) Soft palate
24. The covering of lungs is called
    (a) Pericardium
    (b) Pleural membrane
    (c) Perichondrium
    (d) Peritoneum
25. The narrowest and most numerous tubes of lungs are termed as
    (a) Bronchus
    (b) Alveoli
    (c) Bronchioles
    (d) Hilum
26. Which of the following will lead to a reduction in the availability of ground water ?
    (a) Plantation
    (b) Rain water harvesting
    (c) Constructing more lakes
    (d) Building accrete roads
27. Cotton bolls are which part of the plant?
    (a) Flower
    (b) Fruit
    (c) Stem
    (d) Root
28. Earth worm takes oxygen from the soil through:
    (a) Lungs
    (b) Gills
    (c) Moist skin
    (d) Spiracles
29. Oxygen and carbon dioxide are replaced in nature through:
    (a) Photosynthesis
    (b) Respiration
    (c) Both (A) and (B)
    (d) None of these
30. Sugar is obtained from
    (a) sugarcane
    (b) beetroot
    (c) Both a and b
    (d) none

Section – B
Mathematics

This section contains **20 Multiple Choice Questions**. Each question has four options out of which **ONLY ONE** is correct.

31. Solve : $2^{x+1} = 8^x$
    (a) 1
    (b) 3
    (c) $\dfrac{-1}{3}$
    (d) $\dfrac{1}{2}$

32. Which of the following is not equal to y^6?
    (a) $[y^{2/3}]^9$
    (b) $\left[\sqrt{y^6}\right]^2$
    (c) $\sqrt[3]{y^{18}}$
    (d) $\left[y^{1/3}\right]^{12}$

33. $16^{\frac{5}{2}} \div 16^{\frac{1}{2}} = ?$
    (a) 250
    (b) 256
    (c) 255
    (d) 200

34. Find the value of p so that $\left(\dfrac{4}{5}\right)^3 \div \left(\dfrac{4}{5}\right)^{-3} = \left(\dfrac{4}{5}\right)^{3p}$.
    (a) 3
    (b) 0
    (c) 2
    (d) 1

35. The value of $3\sqrt[3]{2} \times 7\sqrt[3]{6} \times 5\sqrt[3]{18}$
    (a) 545
    (b) 500
    (c) 630
    (d) 400

36. The value of $\left(\dfrac{x^{a^2}}{x^{b^2}}\right)^{\frac{1}{a+b}} \cdot \left(\dfrac{x^{b^2}}{x^{c^2}}\right)^{\frac{1}{b+c}} \cdot \left(\dfrac{x^{c^2}}{x^{a^2}}\right)^{\frac{1}{c+a}}$ is
    (a) 0
    (b) 1
    (c) 2
    (d) 3

37. Given that $- 0.3k + 2.1 = 0.4k$, the value of k =
    (a) 21
    (b) 7
    (c) 3
    (d) -1

38. If $\dfrac{1}{7} + \dfrac{x}{7} = 3$, then the value of x =
    (a) 20
    (b) 7
    (c) 3
    (d) 1

39. Three-fourths of a number is 60 more than its one-third. The number is
    (a) 108
    (b) 84
    (c) 144
    (d) 116

40. If 10 is added to four times a certain number, the result is 5 less than five times the number. Find the number.
    (a) 10
    (b) 15
    (c) 20
    (d) 25

41. There were only two candidates in an election. One got 62% votes and was elected by a margin of 144 votes. The total number of votes were
    (a) 500
    (b) 600
    (c) 700
    (d) 800

42. A quadrilateral can have
    (a) 4 acute angles
    (b) 4 obtuse angles
    (c) 3 obtuse angles
    (d) 2 right angles and 2 obtuse angles

43. A regular polygon is
    (a) equilateral
    (b) equiangular
    (c) both (A) & (B)
    (d) none of these
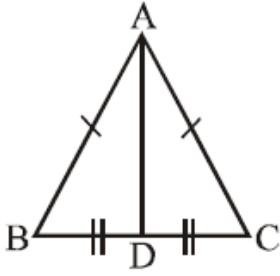
44. If PQRS is a parallelogram, then $\angle P - \angle P$ is
    (a) 0^0
    (b) 90^0
    (c) 180^0
    (d) 360^0

45. In a ΔABC, If AB + BC = 10 cm, BC + CA = 12 cm, CA + AB = 16 cm, then the perimeter of the triangle is :
    (a) 19 cm
    (b) 17 cm
    (c) 28 cm
    (d) None of these

46. In the following figure, If AB = AC and BD = DC, then $\angle$ ADC =
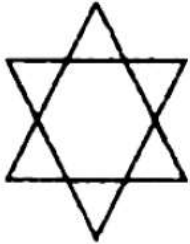

   (a) 60
   (b) 120^0
   (c) 90^0
   (d) 45^0

47. If two sides of an isosceles triangles are 3 cm and 8 cm, then the length of the third side is :
   (a) 3 cm
   (b) 8 cm
   (c) 3 cm or 8 cm
   (d) 5 cm

48. The three angles of a triangle are in the ratio 1 : 2 : 1, then the greatest angle is :
   (a) 45^0
   (b) 90^0
   (c) 60^0
   (d) 120^0

49. An exterior angle of a triangle is _____ the sum of its interior opposite angles
   (a) Greater than
   (b) Less than
   (c) Equal to
   (d) Greater or equal to

50. In a Δ PQR, PQ = PR and $\angle$ Q is twice that of $\angle$ P. Then $\angle$ Q =
   (a) 72^0
   (b) 36^0
   (c) 144^0
   (d) 108^0

Section – C
Mental Ability

This section contains **10 Multiple Choice Questions**. Each question has four options out of which **ONLY ONE** is correct.

51. How many triangles are there in the following figure?

    (a) 6
    (b) 7
    (c) 8
    (d) 9

52. 3, 8, 15, 24, 34, 48, 63
    (a) 15
    (b) 24
    (c) 34
    (d) 48

53. 24, 27, 31, 33, 36
    (a) 24
    (b) 27
    (c) 31
    (d) 33

54. 5.40, 8.00, 10.20, 12.40, 3.00, 5.20
    (a) 7.40
    (b) 8.00
    (c) 10.20
    (d) 12.30

55. BEGK is related to ADFJ in the samMe way as PSVY is related to ....?....
    (a) LOQT
    (b) ROUX
    (c) OTUZ
    (d) ORUX

56. A's father's mother-in-law's only daughter's son is B. How is A related to B?
    (a) Brother
    (b) Sister
    (c) Nephew
    (d) Cannot be determined

57. A person starts towards South direction. Which of the following orders of direction will lead him to East direction ?
    (a) Right, Right Right
    (b) Left, Left, Left
    (c) Left, Right, Right
    (d) Right, Left, Right

58. Mohit walks 6 km to the East and turns to the South and walk 5 km. Again he turns to the East and walks 6 km. Next, he turns northwards and walks 10 km. How far is he from his starting point?
    (a) 5 km
    (b) 12 km
    (c) 13 km
    (d) 17 km

59. BLOCKED : YOLXPVW : : ? : OZFMXS
    (a) LAUNCH
    (b) DEBATE
    (c) LABOUR
    (d) RESULT

60. Ashok is facing North. He turns 45 degrees in the clockwise direction and then turns 90 degrees in the anticlockwise direction. Finally, he turns back. Which direction is he facing now ?
    (a) South-East
    (b) South-West
    (c) North-East
    (d) North-West

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SPACE FOR ROUGH WORK

PTQE-2025

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ans.	d	c	d	a	d	c	d	b	a	a	b	c	b	c	d	c	a	**a**	c	c
Que.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Ans.	a	d	b	b	c	**d**	**b**	**c**	**c**	**a**	**d**	**d**	**b**	**c**	**c**	**b**	**c**	**a**	**c**	**b**
Que.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	b	c	c	a	a	c	b	b	b	a	a	c	**c**	a	d	d	a	c	d	a