



**P-STAR 2024**

**Pinnacle** Talent Quest Exam

For 6<sup>th</sup> to 11<sup>th</sup> Class Students

**STAGE - 1 & STAGE - 2**

**Pinnacle Talent Quest Exam**

**SAMPLE TEST  
PAPER**

**Class 7<sup>th</sup>**

**Pinnacle Techno School**



Call

**98153-55955 | 90413-54955**

**Gurunanak Colony, Sangrur, Punjab.**



# 6<sup>th</sup> to 11<sup>th</sup> Class Students GET READY FOR

THE MOST AWAITED & BIGGEST  
TALENT QUEST EXAM  
OF THE YEAR BY **PINNACLE** IS HERE!



## P-STAR 2024

**Pinnacle** Talent Quest Exam

STAGE - 1 & STAGE - 2



### Test Date

**Stage-1** 5<sup>th</sup> Nov & 3<sup>rd</sup> Dec, 2023

**Stage-2** 10<sup>th</sup> December, 2023

### Registration Details

Register Online  
at our Website

OR

Scan  
QR



Free Registration

### Address

Pinnacle Techno School  
Opp. Kidzee School, Dr. DP Singla  
Road, Guru Nanak Colony,  
Sangrur, Punjab.

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WE ARE THE

# CHAMPIONS OF JEE MAIN 2023

13

Students Scored More than 99 Percentile



## EXTRAORDINARY RESULTS IN NEET



## TOP PERFORMANCES IN JEE MAINS & ADVANCE



### KVPY RESULT

### ADVANCE OLYMPIADS RESULT

### NTSE RESULT

### NMTC-2022

### IOQM-2023



### IMO-2022 RESULT



### IOS - 2022 RESULT

### NSO RESULT





# 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 appear 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 can 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.



Engineering  
JEE Main & Adv.



Medical  
NEET



Foundation  
VIII, IX, X, NTSE, Olympiads

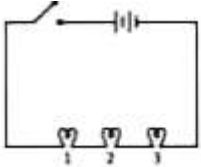


Subjective  
Boards

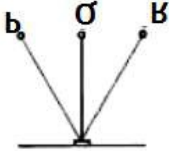
## Section – A Science

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

1. Phenomenon of advance sunrise and delayed sunset is caused by:
  - (a) Reflection of light
  - (b) Refraction of light
  - (c) Dispersion of light
  - (d) All the above
2. Marking on a bulb is 15 W, 120 V. What does it signify?
  - (a) The bulb is connected across the 120 volts, 15 joules of energy is consumed for every second
  - (b) The bulb is connected across 15 volts, 120 joules of energy is released.
  - (c) 40 units of current will flow in the bulb
  - (d) 220 unit of current will flow in the bulb
3. A child pushes a car but it does not displace from its place then, the work done by child will be known as:
  - (a) positive work
  - (b) negative work
  - (c) zero work
  - (d) none of these
4. Which of the following statements will be true for the given circuit, when the switch will be on?
 



- (a) Lamp 3 will glow first
  - (b) Lamp 1 will glow first
  - (c) Lamp 1 and 2 will glow together and lamp 3 will glow later
  - (d) All the lamps will glow together
5. When two bodies at different temperatures are placed in thermal contact with each other, heat flows from the body at higher temperature to the body at lower temperature until they both acquire the same temperature. Assuming that there is no loss of heat to the surroundings, the heat:
  - (a) The heat gained by the hotter body will be equal to the heat lost by the colder body
  - (b) the heat gained by the hotter body will be less than the heat lost by the colder body
  - (c) the heat gained by the hotter body will be greater than the heat lost by the colder body
  - (d) the heat lost by the hotter body will be equal to the heat gained by the colder body.
6. We receive heat energy from the sun through \_\_\_\_ mode of transmission
  - (a) Conduction
  - (b) Convection
  - (c) Radiation
  - (d) Yet to be found
7. Richa takes 20 minutes from her house to reach her school. If her speed is 4 m/s, calculate the distance between her house and the school.
  - (a) 4800 m
  - (b) 2400 m
  - (c) 1600 m
  - (d) 1500 m
8. The time period in the given simple pendulum is:
 

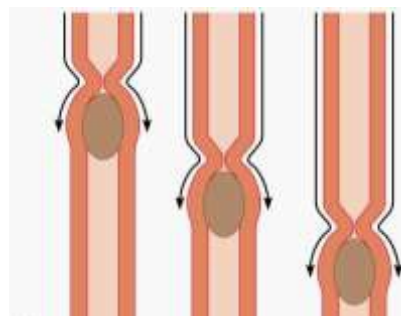


- (a) Time taken by bob to travel Q to R
  - (b) Time taken by bob to travel Q to P then from P to Q.
  - (c) Time taken by bob to travel Q to R then from R to P
  - (d) Time taken by bob to travel Q to R then from R to P and then from P to Q
9. Which of the following is an advantage of distance-time graph?
  - (a) Variation of distance travelled by an object with time can be seen easily
  - (b) We can find distance moved by the object at any point of time
  - (c) We can find speed of an object
  - (d) All of these
10. Short wire has \_\_\_\_ whereas long wire has \_\_\_\_ resistance.
  - (a) More , less
  - (b) Less, no
  - (c) Less, more

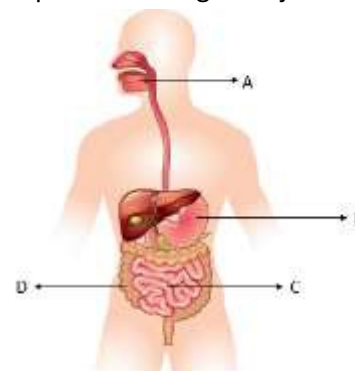
- (d) All the above
11. When phenolphthalein is introduced in lime water, the solution turns:
- Yellow
  - Green
  - Colourless
  - Pink
12. The chemical used in the manufacture of antacid is –
- phosphoric acid
  - magnesium hydroxide
  - caustic soda
  - Both b and c
13. Conversion of ozone into oxygen is
- physical change
  - chemical change
  - periodic change
  - temporary change
14. When sodium oxide reacts with water it undergoes a chemical change. The name of the product is –
- Hydrogen
  - Sodium chloride
  - Sodium hydroxide
  - Sodium nitride
15. A fibre which is lustrous in appearance is –
- Jute
  - Cotton
  - Rayon
  - wool
16. The “World Water Day” is celebrated on –
- 12 January
  - 22 March
  - 16 June
  - 14 July
17. The fibres of silk are made up of –
- Fat
  - Protein
  - Carbohydrate
  - vitamin
18. The substance having highest specific heat is –
- Kerosene
  - Petrol
  - Alcohol
  - water
19. The rate of evaporation increases with the
- increase in temperature.
  - decrease in surface area.
  - increase in humidity.
  - decrease in wind speed.
20. Renu had a basic solution. She added an indicator and the solution turned green. The indicator is –
- Phenolphthalein
  - Methyl orange
  - Litmus red

(d) China rose

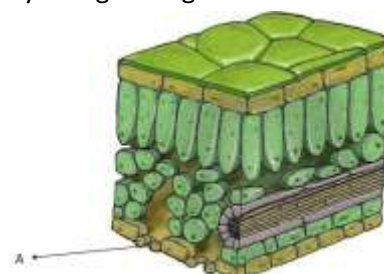
21. Which of the following sets is the correct combination of organs that carry out digestive functions?
- Oesophagus, Large intestine, Rectum
  - Buccal cavity, Oesophagus, Rectum
  - Buccal cavity, Small intestine, Large intestine
  - Stomach, Buccal cavity, Small intestine
22. The movement shown in figure is aided by the muscles of the oesophagus in a wave-like action called



- Diapedesis
  - Peristalsis
  - Rumination
  - Muscularization
23. Which part secretes gastric juice?



- A
  - B
  - C
  - D
24. Identify A in given figure



- Leaf cell
- Flower anatomy
- Stomata



- (d) Can't determine
25. How many statements are correct?
- Statement 1: Fungi grow on pickles, leather, clothes and other articles that are left in hot and humid weather for long time
- Statement 2: Egestion is the process of utilizing the absorbed nutrients to produce energy for various body function
- Statement 3: The jug-like structure in pitcher plant is the modified part of stem
- Statement 4: Algae can prepare their own food by photosynthesis
- (a) One  
(b) Two  
(c) Three  
(d) Four
26. Consider the following statements and select the option which correctly identifies true (T) and false (F) ones.
- Statement 1: Insects have a network of air tubes called tracheae for gas exchange
- Statement 2: During heavy exercise, we get cramps in the legs due to accumulation of carbon dioxide
- Statement 3: Earthworms breathe only through lungs
- Statement 4: During inhalation, ribs move down and inwards and diaphragm moves up
- (a) (1) → F, (2) → T, (3) → F, (4) → T  
(b) (1) → T, (2) → T, (3) → F, (4) → T  
(c) (1) → T, (2) → F, (3) → F, (4) → F  
(d) (1) → T, (2) → T, (3) → T, (4) → F
27. Read the given passage.
- Pulmonary carries rich blood from the heart to the lungs and pulmonary\_\_\_ carries\_\_\_rich blood from the lungs to the heart.
- Select the option that correctly fills up the blank spaces in the above passage.
- (a) Vein, Carbon dioxide, Artery, Oxygen  
(b) Vein, Oxygen, Artery, Carbon dioxide

- (c) Artery, carbon dioxide, Vein, Oxygen  
(d) Artery, Oxygen, Vein, Carbon dioxide
28. Which part will protect the flower in bud condition?



- (a) P  
(b) Q  
(c) R  
(d) S
29. How many statements are incorrect?
- Statement 1: The process of removal of metabolic wastes produced in the cells of the living organisms is called excretion
- Statement 2: The urine consists of 70 % water, 25 % urea and 2.5% other waste products.
- Statement 3: From ureter, urine will directly go outside the body
- (a) One  
(b) Two  
(c) Three  
(d) All are correct
30. Consider the following statements
- Statement 1 – The heart beat is initiated by special patch of muscle called SA node
- Statement 2 – The walls of the chambers of the heart contract and relax rhythmically
- (a) Both statements 1 and 2 are true and statement 2 is the correct explanation of statement 1.  
(b) Both statements 1 and 2 are true but both are different statements  
(c) Statement 1 is true but statement 2 is false  
(d) Both statements 1 and 2 are false

## Section – B Mathematics

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

31. The value of  $(-3) + (4 \times 5) - (10)$  is

- (a)  $-5$
- (b)  $5$
- (c)  $17$
- (d)  $10$

32. Find the value of  $|3 - 7|$ ?

- (a)  $4$
- (b)  $10$
- (c)  $-4$
- (d)  $-10$

33. In a class of 50 students, 20% of them are girls and rest are boys. Find the ratio of number of boys to the number of girls in the class.

- (a)  $3 : 1$
- (b)  $4 : 1$
- (c)  $3 : 2$
- (d)  $2 : 3$

34. 0 is an integer which is:

- (a) Positive
- (b) Negative
- (c) Either positive or negative
- (d) Neither positive nor negative

35. If one-fifth of two-third of one-half of number is 30, then find the number.

- (a) 450
- (b) 900
- (c) 950
- (d) 400

36. The highest score in a cricket test match in an innings was  $\frac{3}{11}$  of the total and the next highest

was  $\frac{3}{10}$  of the remaining. If the difference between two scores was 24 runs, then the total score is equal to:

- (a) 420
- (b) 430
- (c) 410
- (d) 440

37.  $\frac{0.55^2}{0.055^2} \cdot \frac{0.07^2}{0.007^2} \cdot \frac{0.027^2}{0.0027^2} = ?$

- (a) 100
- (b) 10

(c) 1000

(d) 1

38. If  $2x = \frac{1}{1 + \frac{1}{3 + \frac{1}{4}}}$ , then the value of x is

(a)  $\frac{12}{17}$

(b)  $\frac{21}{17}$

(c)  $\frac{18}{17}$

(d)  $\frac{13}{17}$

39.  $\frac{63 \cdot 36^2}{63^2} \cdot \frac{63 \cdot 36^2}{36^2} = ?$

(a) 1

(b) 2

(c) 3

(d) 4

40. If  $\frac{a}{3} = \frac{b}{4} = \frac{c}{7}$ , then the value of  $\frac{a+b+c}{c}$  is

(a) 3

(b)  $\sqrt{2}$

(c) 2

(d) 7

41. The median of the following data is equal to:

$-2, 3, 4, -5, 9, 8, 11$

(a) 5

(b) 4

(c) 9

(d) None of these

42. If mode and median of a given data are 6 and 3 respectively, then their mean is

(a) 1.5

(b) 1.6

(c) 1.4

(d) None of these



43. The denominator of a fraction is 2 more than its numerator. If 2 is added to both numerator and denominator, then we get  $\frac{3}{5}$ . The required fraction is

- (a)  $\frac{1}{3}$
- (b)  $\frac{3}{5}$
- (c)  $\frac{7}{9}$
- (d)  $\frac{9}{11}$

44. The complement and supplement of an angle are such that the complement is  $\frac{5}{14}$  times its

supplement. The angle is

- (a)  $40^\circ$
- (b)  $60^\circ$
- (c)  $70^\circ$
- (d) None of these

45. The angle formed by the bisectors of a linear pair of angles is

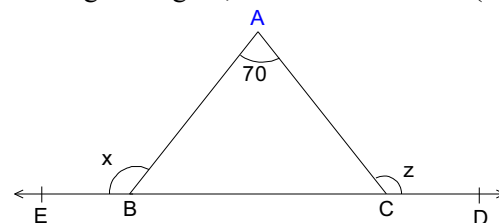
- (a) Right – angle
- (b) Acute angle
- (c) Obtuse angle
- (d) Reflex angle

46. The altitudes of a triangle are concurrent. The point of concurrence is known as

- (a) Orthocenter
- (b) Circumcenter
- (c) Centroid

(d) Incentre

47. In the given figure, find the measure of  $(x + z)$



- (a)  $225^\circ$
- (b)  $250^\circ$
- (c)  $300^\circ$
- (d) None of these

48. A rectangle of length 40 cm and of diagonal 41 cm is constructed. Find the area of the square described on its breadth

- (a) 100
- (b) 41
- (c) 81
- (d) 121

49. Two numbers are in the ratio 5:3. If they Differ by 18, then the number are

- (a) 45, 27
- (b) 25, 15
- (c) 35, 21
- (d) 65, 39

50. Which of the following is not correct

- (a) two lines segments of length 4 cm are always congruent
- (b) a person and his image in plane mirror are congruent
- (c) two equilateral triangle are always congruent
- (d) two circles of the same radii are always congruent

## Section - C Mental Ability

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

51. Complete the series

3,6,18,72,360,.....

- (a) 1296
- (b) 2160
- (c) 2254
- (d) 4329

52. Arrange the given words in Alphabetical order and choose the one that comes in the 2<sup>nd</sup> position.

- (a) Restrict
- (b) Rocket
- (c) Robber
- (d) Random

53. In a certain code 678 means 'Study very hard', 347 , means 'hard work pays' and 246 means 'study and work'. Which of the following is the code for 'very'?

- (a) 4
- (b) 6
- (c) 7
- (d) 8

54. If the day before yesterday was Thursday, when will be Sunday?

- (a) Today
- (b) Two days after today
- (c) Tomorrow
- (d) Day after tomorrow

55. If A stands for +, B stands for -, C stands for  $\times$ , then what is the value of  $(10 \text{ C } 4) + (4 \text{ C } 4) \text{ B } 6 = ?$

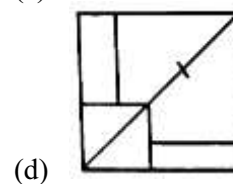
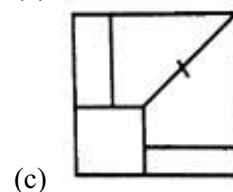
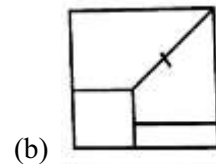
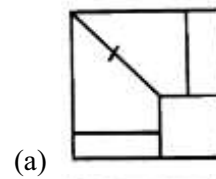
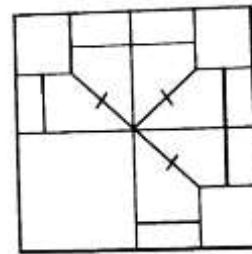
- (a) 60
- (b) 56
- (c) 50
- (d) 20

56. Sobha was facing East, She walked 20 metres.

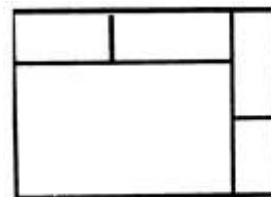
Turning left she moved 15 metres and then turning right moved 25 metres. Finally, she turned right and moved 15 metres more. How far is she from her starting point?

- (a) 25 metres
- (b) 35 metres
- (c) 50 metres
- (d) 45 metres

57. Which answer figure will complete the pattern in the question figure?



58. What is the number of rectangles in the following figure?



- (a) 5
- (b) 7
- (c) 8
- (d) 9

59. How many meaningful words can be formed with the letters EAML?

- (a) 1
- (b) 3
- (c) 4
- (d) 2



60. In a month of 31 days, the third Wednesday falls on the 15<sup>th</sup>. What will be the last day of that month?
- (a) Fifth Thursday
- (b) Fifth Wednesday
- (c) Fourth Sunday
- (d) Fifth Friday

SPACE FOR ROUGH WORK

**Answer Key**

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