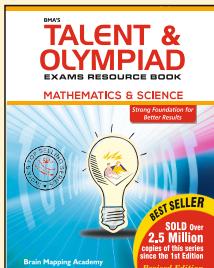


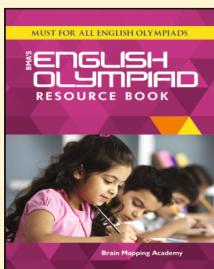
Most Popular Books in India for Academic Excellence

Classes 1 - 10



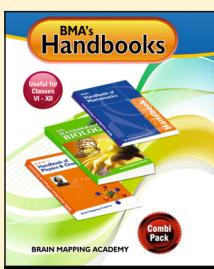
Price range ₹ 110 to 130

Classes 1 - 10



Each class ₹ 100

Combo Pack



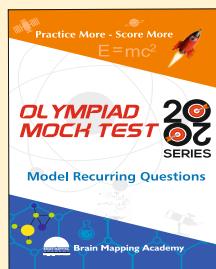
₹ 540

Classes 1 - 10



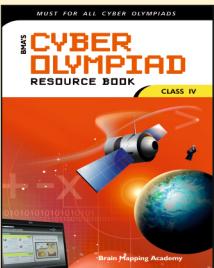
Price range ₹ 100 to 175

Classes 1 - 10



Each class ₹ 100

Classes 2 - 8



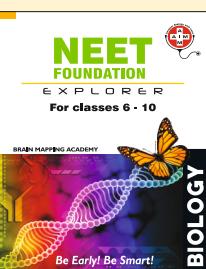
Each class ₹ 150

Classes 3 - 10



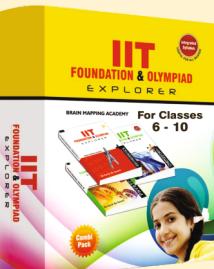
Each book ₹ 175

Classes 6 - 10



Each class ₹ 200

Classes 6 - 10



Price range ₹ 550-795

Online payment facility is available at www.bmatalent.com ☎ 8142 635 635



Get 15% discount on all packages by using the discount coupon code: KR15TN



India's FIRST scientifically designed portal for Olympiad preparation
 • Mock Test Packages • Past question papers
 • Analysis Reports • Free Demo Packages
 • Free Android Mobile App

A unique opportunity to take about 50 tests per subject.



National Level Science Talent Search Examination

Conducted by

UNIFIED COUNCIL

An ISO 9001 Certified organization

Time : 60 minutes

Questions : 60
INSTRUCTIONS

Read all instructions carefully before attempting any question.

- Ensure that the 'Class' printed here and inside, is the same as the test you are appearing for.
- You must complete the paper within the time allotted.
- Do not open this question paper until you are permitted to.
- You are not allowed to use a calculator.
- Figures herein are not to scale. Hence, you cannot depend on the estimate of size or measurement. Use your knowledge of the subject.
- Rough work shall be carried out only in the space provided for the same throughout this booklet. No separate sheets are allowed for the same.
- Return your answer sheet to the invigilator soon after completion and before leaving the examination hall. Take the question paper with you.
- There is no negative marking.
- Results would be made available on www.unifiedcouncil.com

Conducted by



UNIFIED COUNCIL

INDIA'S 1st ISO 9001:2008 Certified Organisation in Testing & Assessment

Foundation for success

www.unifiedcouncil.com

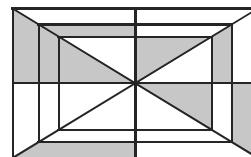
PAPER CODE UN436M



UCN/QP-V/02

01 In the given figure, what fraction of the figure is shaded ?

- (A) $\frac{2}{5}$ (B) $\frac{3}{8}$
 (C) $\frac{1}{3}$ (D) $\frac{1}{4}$



02 A 2-litre bottle is half-filled with water. How much more water must be added to fill up the bottle completely ?

- (A) $\frac{1}{2}$ cm³ (B) 100 cm³ (C) 500 cm³ (D) 1000 cm³

03 Two numbers are respectively 20% and 50% more than the third number. What % is the first number of the second ?

- (A) 40% (B) 50% (C) 80% (D) 70%

04 How many prime numbers are there from 50 to 100 ?

- (A) 18 (B) 12 (C) 10 (D) 20

05 John had some pencils. $\frac{3}{5}$ of them were red and the rest were green. He gave $\frac{2}{3}$ of the red pencils and $\frac{1}{4}$ of the green pencils to his sister. If he had 80 pencils left, how many pencils did he have at first ?

- (A) 240 (B) 40 (C) 160 (D) 200

06 The average temperature of the first three days of a week is 27 °C and that of the next three days is 29 °C. If the weekly average is 28.5 °C, what is the temperature on the last day ?

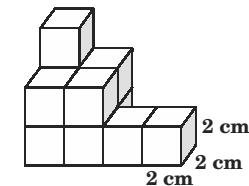
- (A) 31.5 °C (B) 28 °C (C) 21 °C (D) 42 °C

07 Which of the following statements is false ?

- (A) The join of two points on a circle is its diameter.
 (B) A diameter of a circle passes through its centre.
 (C) A semicircle is an arc.
 (D) The length of a circle is called its circumference.

08 What is the volume of the smallest number of cubes that must be added to make the given figure a cuboid ?

- (A) 104 cm³
 (B) 64 cm³
 (C) 27 cm³
 (D) 13 cm³

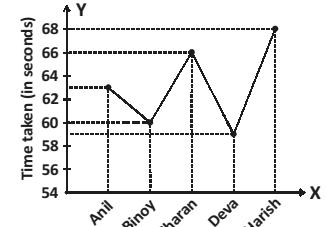


09 By how many times do the place values of the digits increase from right to left in a number ?

- (A) 100 (B) $\frac{1}{10}$ (C) 10 (D) 1000

10 What is the average time taken by the boys to complete the race ?

- (A) 62.5 seconds
 (B) 63.2 seconds
 (C) 64 seconds
 (D) 63 seconds



11 What is the H.C.F. of two co-prime numbers ?

- (A) 1 (B) 0 (C) 2 (D) Their product

12 The average between X and Y is 108. Y is 300% the value of X. Find the difference between X and Y.

- (A) 108 (B) 54 (C) 36 (D) 144

13 Which of the following is equal to $\frac{1}{3}$?

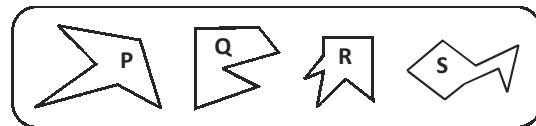
- (A) $\frac{1}{6} + \frac{1}{6}$ (B) $\frac{7}{12} - \frac{1}{6}$ (C) $\frac{1}{2} \times \frac{1}{6}$ (D) $\frac{5}{6} \div \frac{2}{3}$

14 Identify the smallest number of 4-digits exactly divisible by 12, 15, 20 and 35.

- (A) 1000 (B) 1160 (C) 1260 (D) none

15 In which of the following figures is the number of angles that are smaller than a right angle the same as the number of angles that are greater than a right angle?

- (A) P and S
(B) Q and S
(C) P and R
(D) R and S



16 $\frac{4}{5}$ kg of fish and 2 kg of squid cost ₹ 52. $\frac{1}{4}$ kg of fish and 1 kg of squid cost ₹ 23. Find the cost of 3 kg of squid.

- (A) ₹ 20 (B) ₹ 36 (C) ₹ 54 (D) ₹ 60

17 Vinod had $1\frac{1}{2}$ bags of chocolates. The full bag had 32 packets of chocolates in it with 10 chocolates in each packet. Which expression gives the total number of chocolates Vinod had?

- (A) $1\frac{1}{2} + 32 \times 10$ (B) $1\frac{1}{2} \times 32 + 10$
(C) $1\frac{1}{2} \times 32 \times 10$ (D) $1\frac{1}{2} (32 + 10)$

18 Which of these is true?

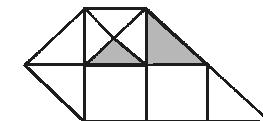
- (A) A simple closed figure bounded by five line segments is called a square.

(B) A simple closed figure bounded by three line segments is called a triangle.

- (C) An angle is formed by three rays with a common end point.
(D) A square has only one pair of parallel line segments.

19 Identify the decimal equivalent of the area of the shaded region.

- (A) 0.1 (B) 0.15
(C) 0.2 (D) 0.3



20 The product of L.C.M. and H.C.F. of two numbers is 285. If one number is 15, then find the other number.

- (A) 15 (B) 16 (C) 18 (D) 19

21 Which one of the following is the best estimation of 5663×2234 ?

- (A) 5000×2000 (B) 5700×2200
(C) 5660×2230 (D) 5660×2300

22 Water is flowing into a tank from a pipe at a rate of 3.5 l per minute. How much water would have flowed in after 15 minutes?

- (A) 50 l (B) 52.5 l (C) 54 l (D) 60 l

23 Which two numbers have 11 as their greatest common factor?

- (A) 22 & 44 (B) 33 & 55 (C) 11 & 101 (D) 33 & 99

24 At what rate of percent per annum does a sum of ₹ 1800 become ₹ 2700 in 10 years?

- (A) 5% (B) 6% (C) 10% (D) 8%

25 Which fraction lies between $\frac{2}{5}$ and $\frac{5}{2}$?

- (A) $\frac{2}{5}$ (B) $\frac{7}{5}$ (C) $\frac{9}{2}$ (D) $\frac{7}{2}$

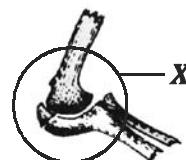
Class - 5

General Science

[26] What is the main function of the human digestive system ?

- (A) It gets rid of toxins in the body.
- (B) It carries the waste materials away from the body.
- (C) It converts the digested food into energy for the body.
- (D) It breaks down food into simpler substances so that the body can use them for energy.

[27] Which joint is represented by 'X' in the given figure ?



- (A) Ball and socket joint (B) Pivot joint
- (C) Hinge joint (D) Gliding joint

[28] Which shows the correct order of the stages in a life cycle of a plant ?

- (A) seed → shoot → roots → leaves
- (B) shoot → leaves → roots → seed
- (C) seed → roots → shoot → leaves
- (D) shoot → roots → leaves → seed

[29] What happens when a burning stick was brought into a jar filled with oxygen ?

- (A) It will put off with a pop sound
- (B) It will burn more brightly
- (C) It will turn milky
- (D) It will be put off and give out pungent smell

[30] Which of the following bones protects delicate organs in the body ?

- | | |
|------------------|-------------------|
| P: Skull | Q: Finger bones |
| R: Thigh bones | S: Rib bones |
| (A) P and Q only | (B) P and S only |
| (C) Q and R only | (D) P, Q, R and S |

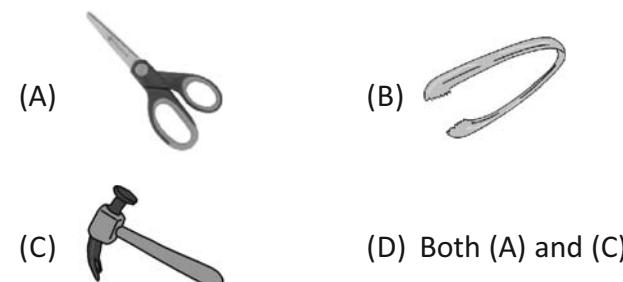
[31] Which helps a coconut plant to anchor to the ground during heavy storms ?

- (A) Its trunk holds the tree to the ground.
- (B) It has a canopy to protect it.
- (C) It has a root system to hold it firmly to the ground.
- (D) Its branches support the tree from being blown away.

[32] A mixture of sand and iron filings can be separated by

- (A) magnetic separation. (B) distillation.
- (C) evaporation. (D) condensation.

[33] The examples of I order lever is/are



(D) Both (A) and (C)

34 Which of the given statements about lotus plant are true?

- P: Long and spongy stalks.
- Q: Needle like leaves.
- R: Stomata on the lower surface.
- S: Leaves coated with a layer of wax.
- (A) P and S only (B) P, Q and S only
- (C) Q and R only (D) P, R and S only

35 Object Q has a fixed volume and cannot be compressed. It also cannot flow. What is it likely to be ?

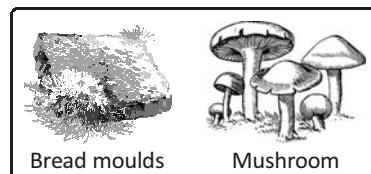
- (A) Coffee in a cup (B) Gas in a balloon
- (C) Orange juice in a glass (D) A block of wood

36 In potatoes, new plants grow from

- (A) bulbs of the modified stems.
- (B) notches of the leaf.
- (C) modified roots.
- (D) eyes of the modified stems.

37 Mushrooms and Bread mould are

- (A) algae.
- (B) bacteria.
- (C) non-living things.
- (D) fungi.



38 How are the roots of the sweet potato useful to the plants ?

- (A) The roots help to store food for the plant.
- (B) The roots absorb water and mineral salts.
- (C) The roots transport food to the leaves only.
- (D) Both (A) and (B).

39 Name the ball and socket joint in our body in addition to the shoulder joint.

- (A) Elbow joint (B) Hip joint
- (C) Wrist joint (D) Knee joint

40 Which of the following vitamins is prepared in our body in the presence of sunlight ?

- (A) Vitamin A (B) Vitamin B
- (C) Vitamin C (D) Vitamin D

41 Which of the following figures shows the correct position of the legs of an insect ?



42 Which one of the following animals differs from the rest in terms of their food habit ?

- (A) Bear (B) Elephant (C) Sheep (D) Goat

43 How is yeast useful to humans ?

- (i) Yeast is used in baking to make the bread rise.
- (ii) Yeast helps us to break down our food into simpler substances before we eat.
- (iii) We can use yeast to help us make wine.
- (A) (i) only (B) (i) and (ii) only
- (C) (i) and (iii) only (D) (i), (ii) and (iii)

44 In the given diagram, what is the function of Part A ?

- (A) It provides oxygen for the seedling.
- (B) It provides protection for the seed.
- (C) It provides water for the seedling.
- (D) It provides chlorophyll for the seedling.



45 Which of the following statements about the skeletal system is wrong ?

- (A) There are 206 bones in an adult human body.
- (B) The skeletal system helps to protect our vital organs such as the heart and lungs.
- (C) The bones in our body produce both white and red blood cells
- (D) The skeletal system provides the bulky frame for our body.

46 Our muscles work when _____.

- (P) we are running around the school field.
 - (Q) we are eating our meal.
 - (R) we are crossing the road.
 - (S) we are sleeping soundly.
- (A) (P) and (Q) only (B) (Q) and (R) only
 - (C) (P), (Q) and (R) only (D) (P), (Q), (R) and (S)

47 Which is the leaflike part of the plant embryo ?

- (A) Plumule (B) Radicle
- (C) Cotyledon (D) Seed coat

48 While chewing our food, the tongue is needed to

- (A) mix the food with saliva and form it into balls
- (B) produce the digestive juices
- (C) cover the windpipe to prevent the food from entering it
- (D) moisten the food

49 What causes the leaves of a plant to be green ?

- (A) Sunlight (B) Stomata
- (C) Starch (D) Chlorophyll

50 Which part of sweet potatoes are edible ?

- (A) Leaves (B) Stems (C) Flowers (D) Roots

51 Which of the following statements is true about matter ?

1. Matter occupies space.
 2. Matter has definite volume.
 3. Matter has mass.
- (A) 1 only (B) 1 and 3 only
 - (C) 2 and 3 only (D) 1, 2 and 3 only

52 We cannot see oxygen but it is considered matter. Which of the following sentences explain why oxygen is matter ?

- i) Oxygen occupies space.
 - ii) Oxygen has no smell.
 - iii) Oxygen has no definite shape.
 - iv) Oxygen has mass.
- (A) (i) and (ii) only (B) (i) and (iv) only
 - (C) (i), (ii) and (iii) only (D) (i), (ii), (iii) and (iv)

53 Which of the following gives out light on its own ?

- (i) The sun (ii) Candle wax
 - (iii) Lightning (iv) Firework
- (A) (i) and (ii) only (B) (i) and (iii) only
 - (C) (i), (ii) and (iii) only (D) (i), (iii) and (iv) only

54 Plants with weak stems need a support to climb to get

- (A) water. (B) air. (C) sunlight. (D) food.

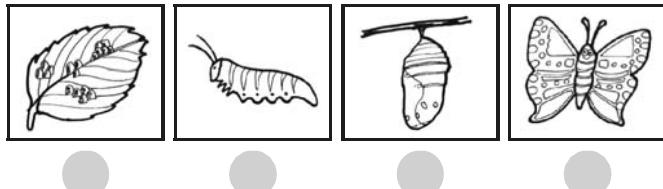
55 A wheel and axle is a lever that rotates around a fixed point. All of the following machines employ a wheel and axle except a

- (A) bicycle. (B) skateboard.
- (C) pencil sharpener. (D) crowbar.

Class - 5

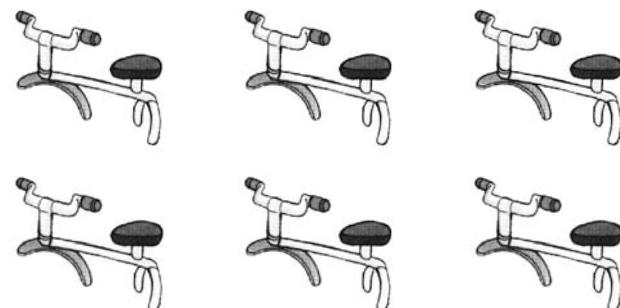
Critical Thinking

- 56** Write the numbers {1, 2, 3, 4} to show the correct order of the life cycle of a butterfly, starting from the eggs.



- (A) 1, 2, 3, 4 (B) 1, 4, 2, 3
(C) 1, 3, 2, 4 (D) 1, 3, 4, 2

- 57** There are a total of 6 bicycles and tricycles. If there is a total of 15 wheels, how many bicycles and tricycles are there ?



- (A) 2, 4 (B) 3, 3 (C) 4, 2 (D) 1, 5

- 58** Write the name of the fruit described.

- This fruit is not in column B.
- This fruit is not in the same row or column as the grapes.
- This fruit is not in row 1.

4				
3				
2				
1				

- A B C D
- (A) Apple (B) Mango
(C) Banana (D) Strawberry

- 59** Only one part of each person's statement is true.

P: P is third and R is first.

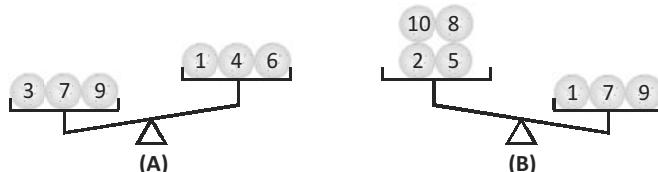
Q: P is first and Q is third.

R: Q is third and R is second.

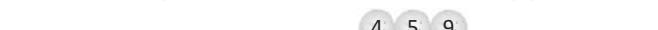
Who is third in position ?

- (A) P (B) Q (C) R (D) P and Q

- 60** There are 10 marbles in total. One marble weighs 18 g, another marble weighs 13 g and the remaining eight marbles weigh 10 g each. Marbles are placed on balances as shown below. Find out which marble weighs 18 g.



(A)



(B)



(C)

- (A) 9 (B) 7 (C) 10 (D) 4