

# Olympiad Foundation

**SAMPLE PAPER CLASS 7<sup>th</sup>**



**OLYMPIAD FOUNDATION**



## Division of Marks

S.No.	Topic/Section	No. of Question	Marks
1	Science	25	25
2	HOTS (High Order thinking Skill)	10	10
3	Reasoning & Mental Ability	15	15
	<b>Total</b>	<b>50</b>	<b>50</b>

### INSTRUCTIONS :

1. Use Blue/Black ballpoint pen only to darken the appropriate circle.
2. Mark should be dark and should completely fill the circle.
3. Dark only one circle for each entry.
4. Dark the circle in the space provided only.
5. Rough work must not be done on the answer sheet and do not use white- fluid or any rubbing material on Answer Sheet.
6. Each question carries one mark.

Select the correct answer and darken your answer in the table :

**SCIENCE**

1. Which of the following is a part of waste water treatment plants ?  
(A) Clarified (B) Aeration  
(C) Vertical bars (D) All of these
2. Which of following trees should be grown nearby sewage ponds ?  
(A) Eucalyptus trees (B) Ashoka trees  
(C) Mango tress (D) Bananan trees
3. The light material which float during waste water treatment is \_\_\_\_\_.  
(A) Sludge (B) Scum  
(C) Sewerage (D) Bio gas
4. The roof of a large trees that serve as a roof to shelter an area or other plants in the forest is called \_\_\_\_\_.  
(A) Canopy (B) Crown  
(C) Carnival (D) None of these
5. Which of the following is an example of decompose ?  
(A) Elephant (B) Lion (C) Fungi (D) Tulsi
6. Which of the following is not help the conserve of water ?  
(A) Drip irrigation  
(B) Planting more trees  
(C) Water treatment plants  
(D) Cutting trees to check water loss due to transpiration
7. The region covered by water is called  
(A) Hydrosphere (B) Ionosphere  
(C) Atmosphere (D) Water park
8. Images that cannot be captured on the screen are called \_\_\_\_\_.  
(A) Virtual image (B) Real image  
(C) Inverted image (D) Reflected image
9. Which type of mirror is used in periscope ?  
(A) Concave mirror (B) Convex mirror  
(C) Plane mirror (D) None of these

10. The device is used to make or break an electric circuit is \_\_\_\_\_.  
(A) Resistor (B) Battery  
(C) Switch (D) Ammeter
11. The magnetic effects of current was discovered by \_\_\_\_\_ ?  
(A) Newton (B) Joule  
(C) Oersted (D) Ohm
12. The metallic ball in a pendulum is called as \_\_\_\_\_.  
(A) Gong (B) Fork  
(C) Rod (D) Bob
13. The meter that is used to measure the distance moved by the vehicle is known as \_\_\_\_\_.  
(A) Speedometer (B) Odometer  
(C) Chronometer (D) Ammeter
14. Hydra produces by \_\_\_\_\_.  
(A) Fragmentation (B) Budding  
(C) Spores (D) Fusion of gametes
15. Which of following does not have bisexual flower ?  
(A) Mustard (B) Papaya  
(C) Rose (D) Petunia
16. Name the pigment which gives red color to the blood in animal.  
(A) Globulin (B) Plasma  
(C) Platelets (D) Hemoglobin
17. Which components of blood in mammals built up defense against harmful germs enter in the body ?  
(A) RBCs (B) Plasma (C) Platelets (D) WBCs
18. Phloem helps in the transport of \_\_\_\_\_ in plants.  
(A) Food (B) Water (C) Minerals (D) Carbon dioxide
19. Breathing is a \_\_\_\_\_ Process while respiration is a \_\_\_\_\_ process.  
(A) Physical, chemical (B) Chemical, physical  
(C) Physical, physical (D) Chemical, chemical
20. Tiny hair sacs of lungs are called \_\_\_\_\_.  
(A) Trachea (B) Bronchi  
(C) Alveoli (D) Larynx

21. Percolation rate of water is the least in \_\_\_\_\_ ?  
(A) Sandy soil (B) Clayey soil  
(C) Loamy soil (D) None of these
22. Soil formation is an \_\_\_\_\_ process.  
(A) Slow process (B) Fast process  
(C) Rapid process (D) None of these
23. An instrument is used to study the speed of wind, is called \_\_\_\_\_.  
(A) Manometer (B) Anemometer  
(C) Ammeter (D) Speedometer
24. The eye of a cyclone is  
(A) Cloudy and highly stormy  
(B) Full of strong winds  
(C) Calm and cloudless  
(D) Site with high atmospheric pressure
25. Which of the following is not an element of weather ?  
(A) Humidity (B) Temperature  
(C) Soil (D) Rain

**HOTS (HIGHER ORDER THINKING SKILLS)**

26. The special feature and habits that help an animal survive in its environment are known as \_\_\_\_\_.  
(A) Evolution (B) Adaptation  
(C) Polymorphism (D) Hibernation
27. In India, rain forest are found in which of the following state ?  
(A) Andhra Pradesh (B) Madhya Pradesh  
(C) Assam (D) Kerala
28. Which of the following is an chemical change ?  
(A) Boiling of water (B) Tearing of newspaper  
(C) Cooking a vegetable (D) Freezing water into ice
29. When carbon dioxide gas is passed through lime water, it turns lime water into \_\_\_\_\_.  
(A) Milky (B) Blue (C) Silver (D) Golden
30. Which of the following is the strong acid ?  
(A) Acetic acid (B) Nitric acid (C) Lactic acid (D) Citric acid

31. The most commonly used natural indicator 'Litmus' is extracted from.  
(A) Lichens (B) Turmeric  
(C) Beet roots (C) China rose
32. When matter gets warmer, the atoms and molecules in that matter \_\_\_\_\_.  
(A) Stand still (B) Move faster  
(C) Move slower (D) Can't say
33. Which one of the following climate hot and humid ?  
(A) Polar climate (B) Temperate climate  
(C) Tropical climate (D) Desert climate
34. Amylase enzyme is present in \_\_\_\_\_.  
(A) Bile juice (B) Saliva  
(C) Gastric juice (D) Pancreatic juice
35. The internal factors which affects that process of photosynthesis is \_\_\_\_\_.  
(A) Temperature (B) Chlorophyll  
(C) Light (D) None of these

### **REASONING AND MENTAL ABILITY**

36. Select the pair which is related in the same way as the pair of words given in Destroy : Construct :: \_\_\_\_\_ : \_\_\_\_\_.  
(A) War : Peace (B) Father : Son  
(C) Soldier : Regiment (D) Eye : Camera
37. Replace the question mark with suitable option. Month : 30 :: Leap Year : ?  
(A) 367 (B) 365  
(C) 368 (D) 366
38. Seema is the wife of Gopi and Gopi is the brother of Akhil. Akhil is the only uncle of Vijay. What is Vijay's relation with Seema ?  
(A) Son (B) Nephew  
(C) Mother in law (D) Daughter
39. Replace the question mark in the given letter series with the correct option. U R P M K ?  
(A) G (B) E  
(C) H (D) F
40. In the given series, some letters are missing. Select the correct alternative.  
a \_ ab \_ ab \_ bc \_ ba \_ cab  
(A) a c a b a (B) b a c a b (C) b c a b c (D) b c a a b



41. Group the given figures into three classes using each figure only once.



1



2



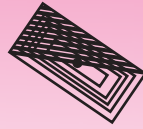
3



4



5



6



7



8



9

(A) 1,3,5 : 2,4,7 : 6,8,9

(B) 1,5,7 : 2,3,6 : 4,8,9

(C) 1,3,5 : 2,6,7 : 4,8,9

(D) 1,6,9 : 2,4,7 : 3,5,8

42. How many pair of letters are there in the word OPERATION which has as many letters between them in the word as in the English alphabet ?

(A) Five

(B) Six

(C) Seven

(D) More than seven

43. If all the vowels are removed are after reversing the English alphabetically series, then which will be the 8th letter from the right end ?

(A) L

(B) H

(C) K

(D) J

44. If 'NSCAIR' is coded as 'RIACSN', then the code for 'CREATE' will be :

(A) AETERC

(B) ETAERC

(C) ETAECR

(D) TEAERC

45. The mean, median, mode, and range for the following list of values are :

8, 9, 10, 10, 10, 11, 11, 11, 11, 13

(A) 10.5, 10.5, 10, 11

(B) 10.5, 10.4, 10, 5

(C) 10.4, 10.5, 11, 5

(d) 10.5, 10.4, 11, 11

46. Mohit walks 6km to the east and then turns to the south and walks 5km. Again he turns to the east and walks 6 km. Next, he turns northwards and walks 10 km. How far is he now from his starting points ?

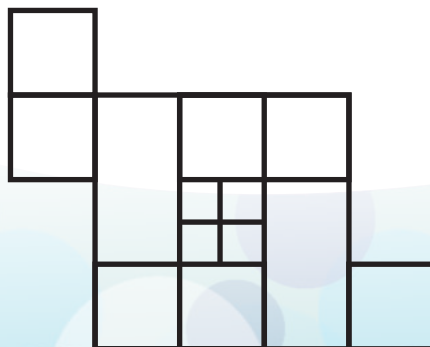
(A) 5 km

(B) 12 km

(C) 13 km

(D) 17 km

47. How many squares are there in the given figure ?



(A) 11

(B) 13

(C) 14

(D) 15

48. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was :
- (A) 2500 (B) 2700  
(C) 2900 (D) 3100
49. P is Y's brother. Y is Q's father. Q and X are sister. How is X related to P ?
- (A) Niece (B) Cousin  
(C) Aunt (D) Nephew
50. How many 2's are there in the following series which are immediately preceded by 9 but not immediately followed by 7 ?
- 7 5 2 4 2 9 7 2 9 2 5 4 2 5 7 2 9 1 2 7
- (A) 1 (B) 2 (C) 3 (D) 0

### ANSWER KEY

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. D  | 11. C | 21. B | 31. A | 41. D |
| 2. A  | 12. D | 22. A | 32. B | 42. D |
| 3. B  | 13. B | 23. B | 33. C | 43. C |
| 4. A  | 14. B | 24. C | 34. B | 44. B |
| 5. C  | 15. B | 25. B | 35. B | 45. C |
| 6. D  | 16. D | 26. C | 36. A | 46. C |
| 7. A  | 17. D | 27. C | 37. D | 47. C |
| 8. A  | 18. A | 28. C | 38. A | 48. B |
| 9. A  | 19. A | 29. A | 39. C | 49. C |
| 10. C | 20. C | 30. B | 40. D | 50. A |