



Test Booklet Code

0414

NATIONAL TEACHERS COUNCIL

All India Talent Search Examination - 2014

Class - IV

Time Allowed: 2 Hours

Maximum Mark: 70

This Test Booklet contains 16 pages. Do not open the Test Booklet until you are asked to do so.

Important instructions

1. This question paper contains 70 multiple choice questions each of one mark.
2. The question paper is divided into two sections, **A** and **B**.
3. Section **A** is **Scholastic Aptitude Test (SAT)**, contains 40 questions. This section covers **General Science** and **Mathematics**.
4. Section **B** is **Mental Ability Test (MAT)**, **Computer Awareness** and **General Knowledge**, contains 30 questions.
5. There will be no negative marks for wrong answer.
6. A separate answer sheet is provided for answering the questions. Each question should be answered by **darkening** the appropriate circle (A, B, C, or D) with a **blue or black ball pen**.
7. Answer recorded once in the answer sheet cannot be altered.
8. All rough works should be done only in the space provided for **rough work** in this question paper.
9. Calculator is not permitted in the examination hall.
10. Candidate should write his / her name in the space provided for the purpose.

Roll Number :

Candidates Name :

Candidates Signature :

.....
Invigilator's Signature

SECTION: A

GENERAL SCIENCE (Q No. 1 to 20)

1. The leaves of plants are generally green in colour. The green leaves can trap solar energy. The green colouring material present in leaves is
 - (A) Chlorophyll
 - (B) Haemoglobin
 - (C) Colour
 - (D) Stomata
2. Movement is possible because of our skeletal and muscular system. Which one of the following is not true about our skeletal and muscular system?
 - (A) Muscles pull the bones
 - (B) Bones can move their own
 - (C) Muscles are attached to bones
 - (D) Muscles work together in pairs to bring about movement at the joints
3. Our heart works non –stop. We are not able to control its working. This is because
 - (A) It does not have bones
 - (B) It has voluntary muscles
 - (C) It has involuntary muscles
 - (D) None of these
4. What is common between solar cell and green leaves?
 - (A) Both are green in colour
 - (B) Both can make their own food
 - (C) Both can trap and convert solar energy into usable form
 - (D) All of the above
5. A lever is a simple machine which can be used to lift heavy loads easily. The point at which a lever turns about is called
 - (A) Effort
 - (B) Fulcrum
 - (C) Load
 - (D) Pulley

6. In mountains the roads are very long and winding. This is done on purpose because
- (A) The slope is to be made gentle so that vehicles can move easily
 - (B) People will have to pay more for the longer distance travelled
 - (C) People should enjoy nature on their way to the mountain top
 - (D) All of these.
7. Which condition is not necessary for a total solar eclipse?
- (A) The earth, the moon and the sun should be in a straight line
 - (B) The moon's shadow should fall on the earth
 - (C) The moon should be between the sun and the earth
 - (D) The earth should cover the sun
8. If you and your friend stand on the moon and you say something to your friend, then
- (A) Your voice will be heard over a very long distance
 - (B) Your voice will not be heard
 - (C) Your voice will echo
 - (D) Your voice will be louder.
9. Sarita buys 500grams of solid turmeric. She then grinds it in a grinder. The weight of powdered turmeric will be
- (A) 250 gram
 - (B) 1000 gram
 - (C) 500 gram
 - (D) 450 gram
10. The space occupied by an object is called its
- (A) Volume
 - (B) Area
 - (C) Weight
 - (D) Mass
11. ***"I have sloping leaves which are like needles. I grow on hill tops. My seeds are like cones."*** Who am I?
- (A) Hydrilla
 - (B) Pine tree
 - (C) Water Lily
 - (D) Cactus

12. Match the following and select the correct option

Column A		Column B	
P	Aerial	1	Whale
Q	Arboreal	2	Dog
R	Terrestrial	3	Squirrel
S	Aquatic	4	Parrot

	P	Q	R	S
A	3	4	2	1
B	3	4	1	2
C	4	1	2	3
D	4	3	2	1

13. Select the INCORRECT statement

- (A) Non-living things cannot adapt to changing environments
- (B) Plants use oxygen to prepare their food
- (C) Plants move towards sunlight
- (D) Leaves of trees transpire

14. Arrange the following in correct sequence

- (1) Farmers sow seeds to get seedlings
 - (2) They transplant these young plants distantly in the field
 - (3) Farmers use plough for tilting the land
 - (4) Farmers spray pesticides to save crops from plant diseases
- (A) 2 → 3 → 4 → 1 (B) 1 → 3 → 2 → 4
- (C) 3 → 1 → 2 → 4 (D) 4 → 2 → 3 → 1

15. The reverse process of condensation

- (A) Evaporation
- (B) Transpiration
- (C) Precipitation
- (D) Infiltration

16. The simple food chain operating in grassland can be represented as
- (A) Grass \longrightarrow Lion \longrightarrow Deer
(B) Lion \longrightarrow Grass \longrightarrow Deer
(C) Deer \longrightarrow Lion \longrightarrow Grass
(D) Grass \longrightarrow Deer \longrightarrow Lion
17. Leather shoes should be aired at least once a week to prevent
- (A) Breeding of mosquitoes (B) Growth of mould fungus
(C) Breeding of houseflies (D) None of the above
18. Eggs of frog hatch into
- (A) Nymph (B) Larva
(C) Tadpole (D) Caterpillar
19. Digestion of food is completed in
- (A) Stomach (B) Mouth
(C) Large intestine (D) Small intestine
20. The part of the tooth which we can see when we smile is called
- (A) Crown (B) Root
(C) Enamel (D) Dentine

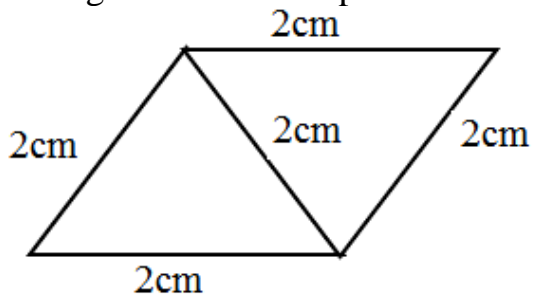
MATHEMATICS (Q No. 21- 40)

21. The largest 6-digit even number is
- (A) 100000 (B) 999998
(C) 888888 (D) 999999
22. A three digit number is formed by 6, 7 and 8. The product of the place values of 6 and 8 in the number is 480. The number formed is
- (A) 867 (B) 678
(C) 768 (D) 678

Questions 23 and 24: Study the grid given below. The number at the end of each row or column gives the total cost of items in that row or column. Use this information and answer **Questions 23 and 24**

Pen	Pencil	Rs. 25
Pencil	Eraser	Rs.8
Eraser	Eraser	Rs.6
Rs. 28	Rs.11	

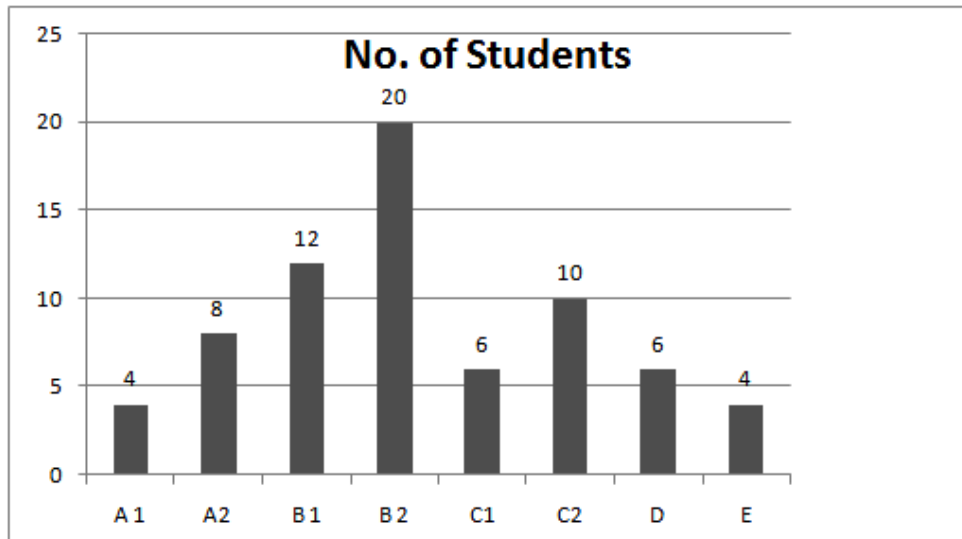
23. What is the cost of two pencils and one eraser?
 (A) Rs. 20 (B) Rs. 14
 (C) Rs. 16 (D) Rs. 13
24. How many pencils can be purchased at the cost of two pens?
 (A) 8 (B) 4
 (C) 6 (D) 10
25. The length of the boundary of a plane figure is called its perimeter.



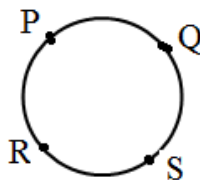
The perimeter of the above figure is

- (A) 10cm (B) 10cm²
 (C) 8 cm (D) 8cm²
26. Sujith wants to fix 136 stamps equally in 17 pages of his stamp album. How many stamps should he fix on each page?
 (A) 8 (B) 10
 (C) 17 (D) 18

Questions 27 to 29: The Bar Graph given below shows the Grades scored by students of class IV in an examination. Study the Bar Graph and answer the questions 27 to 29.

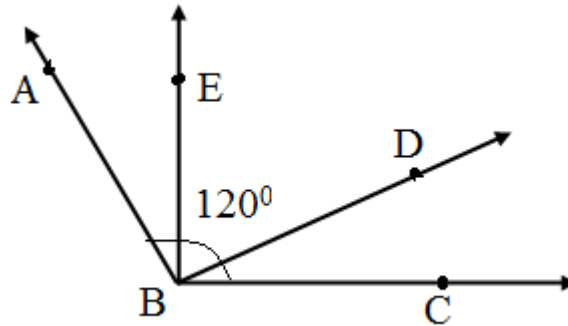


27. How many students scored B 1 grade in the examination?
 (A) 12 (B) 20
 (C) 32 (D) 8
28. How many more students scored C2 grade than C1?
 (A) 6 (B) 10
 (C) 4 (D) 6
29. What is the total number of students appeared for the examination?
 (A) 20 (B) 48
 (C) 56 (D) 70
30. In the below given figure, if the points P, Q, R and S are joined, the number of line segments obtained is



- (A) 8 (B) 10
 (C) 6 (D) 4

Questions 31 and 32: In the figure given the measure of the angle ABC is 120° and angle ABD and angle CBE are right angles.

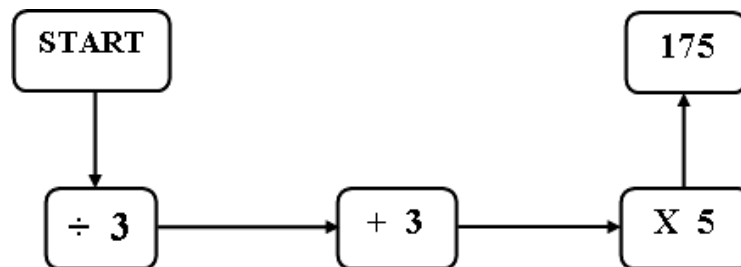


31. What is the measure of angle ABE?
- (A) 90° (B) 60°
(C) 30° (D) 20°
32. What is the measure of angle DBE?
- (A) 90° (B) 60°
(C) 30° (D) 20°
33. A can contains 15Kg of ghee. If 7Kg 300g of ghee is used from this can, how much ghee is left in the can?
- (A) 7 Kg 700 g (B) 8 Kg 800 g
(C) 22 Kg 200 g (D) 8 Kg 300g
34. There are three circles. The radius of the second circle is equal to the diameter of the first circle and radius of the third circle is equal to the diameter of the second circle.
- What is the diameter of the third circle, if the diameter of the first circle is 4cm?
- (A) 4cm (B) 8cm
(C) 16cm (D) 32cm
35. The LCM of 6, 12 and 18 is
- (A) 18 (B) 36
(C) 12 (D) 24

36. The following numbers are arranged in the ascending order. The number that comes in the third position from the last number is

75694, 75964, 76594, 75649, 76495

- (A) 76495 (B) 75964
 (C) 76594 (D) 75694
37. Find the number in the **START BOX**



- (A) 92 (B) 96
 (C) 225 (D) 108
38. The table shows the volume of each type of canned drink.

Drink	Volume
W	1 litre 480 millilitre
X	1 litre 250 millilitre
Y	1 litre 420 millilitre
Z	1 litre 500 millilitre


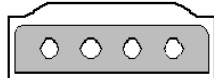


Which two types of drinks have a total volume of 1 litre 750 millilitre?

- (A) W and X (B) X and Y
 (C) X and Z (D) Y and Z
39. 21 months can be represented as
- (A) $13/4$ years (B) $11/4$ years
 (C) $14/3$ years (D) $11/2$ years

40. Sushil runs 1500m on Monday and Saturday. He runs 1600 m on other days except Sunday. (He doesn't run on Sunday). How many Kilometres does he run in a week?
- (A) 4.6 Kilometres (B) 11 Kilometres
 (C) 3.1 Kilometres (D) 9.4 Kilometres

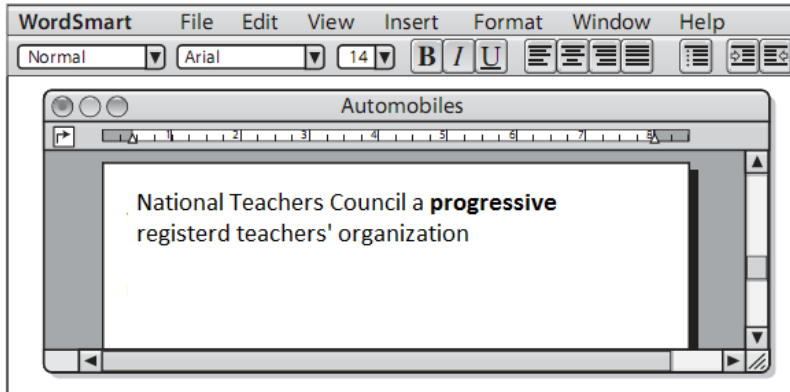
SECTION: B

41. What is the function of 'Central Process Unit in a computer?
- (A) Create invoices
 (B) Perform calculation and processing
 (C) Accepts Data
 (D) Store information
42. Which one of the following is not correctly matched?

A)	Mouse	Input	
B)	Modem	Input and Output	
C)	Memory (RAM)	External storage	
D)	Hard Disks	Long term storage	

43. Program designed to destroy data on your computer which can travel to "infect" other computers
- (A) Software (B) Torpedo
 (C) Hurricane (D) Virus

44. Which button is used to change the style of the word “progressive?”



- A)
- B)
- C)
- D)

45. What is downloading?

- (A) Sending a file on the internet
- (B) Retrieving a file on the internet
- (C) Moving a file from a floppy
- (D) Moving a file from Pen Drive

Questions 46 & 47: Study the following data of solar planetary system and answer the questions 46 & 47

Planetary Data

Planet	Diameter (km)	Length of Day ¹ (hours)	Distance from Sun (10 ⁶ km)	Orbital Period ² (days)
Mercury	4879	4222.6	57.9	88.0
Venus	12,104	2802.0	108.2	224.7
Earth	12,756	24.0	149.6	365.2
Mars	6794	24.7	227.9	687.0
Jupiter	142,984	9.9	778.6	4331
Saturn	120,536	10.7	1433.5	10,747
Uranus	51,118	17.2	2872.5	30,589
Neptune	49,528	16.1	4495.1	59,800

46. What do you mean by **orbital period** of a planet in solar system?
- (A) Time taken for a planet to make one complete orbit around the Sun.
 - (B) Time taken for a planet to make one rotation in its imaginary axis.
 - (C) Time taken by the sun to make one complete rotation.
 - (D) Time taken by the earth to complete one revolution around the sun.

47. In order of their distance from the sun which of the following planets lies between Mars and Uranus?

- (A) Earth and Jupiter
- (B) Jupiter and Saturn
- (C) Saturn and Earth
- (D) Saturn and Neptune

48. Which one of the following is a suitable method for clean India?



A)



B)



C)

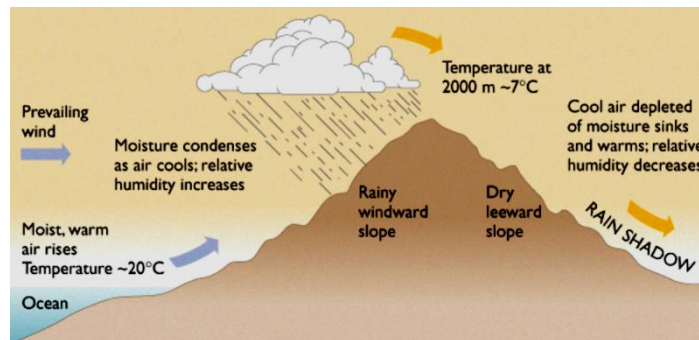


D)

49. What causes day and night?

- (A) The sun goes around the earth
- (B) The Earth orbits the sun
- (C) The Earth rotates or spins every 24 Hrs
- (D) The Movement of Moon

50. The following diagram is best to explain:



- (A) Orographic rainfall
- (B) Structure of Mountains
- (C) Environment
- (D) Wind System

51. Which one of the following is/are non-renewable resources?

- (A) Animals.
- (B) Forests.
- (C) Fossil fuels.
- (D) All of these.

52. Which one of the following is a not natural resource?



A)



B)



C)



D)

53. The following features are located in which one of the following state?



(A) Rajasthan



(C) Gujarat



(B) Madhya Pradesh

(D) Haryana

54. What is "Swachh Bharat Abhiyan"?

(A) Country's biggest ever cleanliness drive

(B) Anti Poverty measures

(C) Programme for the economic development of India

(D) Energy conservation programme

55. Identify this famous Indian sports personality

(A) Gurpreet Singhv

(B) Tintu Lukka

(C) Sarita Devi

(D) Mary Kom



56. Identify the marked ocean.

(A) Pacific Ocean

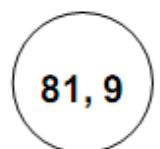
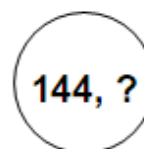
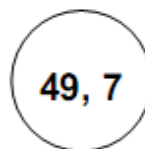
(B) Arctic Ocean

(C) Atlantic Ocean

(D) Southern Ocean



57. Replace question mark?



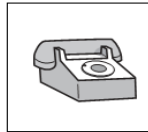
(A) 13

(B) 12

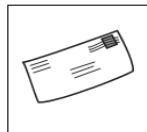
(C) 14

(D) 11

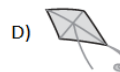
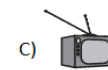
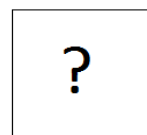
58. Replace the question mark.



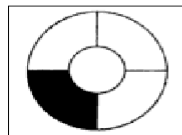
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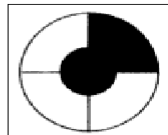
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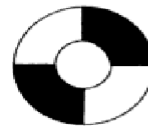
59. Replace the question mark.



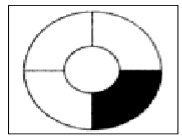
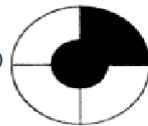
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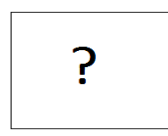
A)



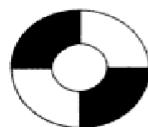
B)



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C)



D)



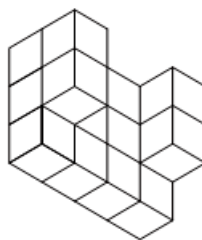
60. How many cubes are there in the picture?

(A) 16

(B) 14

(C) 15

(D) 10



61. Replace the question mark.

(A) 29

(B) 24

(C) 36

(D) 22

5	4	8	3	4
2	5	6	12	4
8	15	42	?	12

62. What come next?



A)

B)

C)

D)

Questions 63 and 64:- Find the odd one out

63. (A) Trophy (B) Medal (C) Running (D) Certificate

64. (A) Breeze (B) Earthquake (C) Volcano (D) Flood

65. From the given alternative of words, select the word which cannot be formed using the letters of the given word:

Word: **RESONING**

(A) SONG

(B) REASON

(C) GONE

(D) GOING

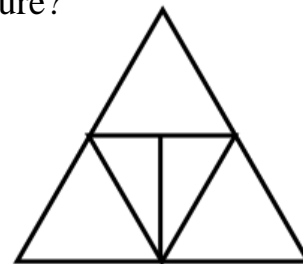
66. How many triangles are there in following picture?

(A) 7

(B) 4

(C) 9

(D) 8



Questions 67 to 69:- Complete the series:

67. A1 C3 E5 G7 I9 ?

(A) K11

(B) MII

(C) K12

(D) L11

68. 1 4 9 16 25 ?

(A) 36

(B) 34

(C) 34

(D) 32

69. ZZZZZZ ZZZZZ ZZZZ ZZZ ?

(A) Z

(B) ZZ

(C) ZZZZ

(D) ZZZ

70. Study the Figure A, and decide which of the following shapes and patterns matches with figure.

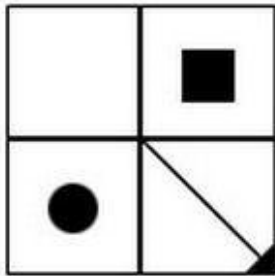
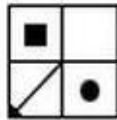
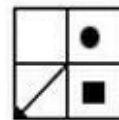


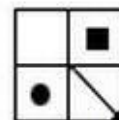
Figure A



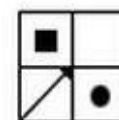
A)



B)



C)



D)
