



Test Booklet Code

**0514**

NATIONAL TEACHERS COUNCIL

**All India Talent Search Examination - 2014****Class - V**

Time Allowed: 2 Hours

Maximum Mark: 90

This Test Booklet contains 20 pages. Do not open the Test Booklet until you are asked to do so.

**Important instructions**

1. This question paper contains 90 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 50 questions. This section covers **Environmental Science** and **Mathematics**.
4. Section **B** is **Mental Ability Test (MAT)**, **Computer Awareness** and **General Knowledge**, contains 40 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

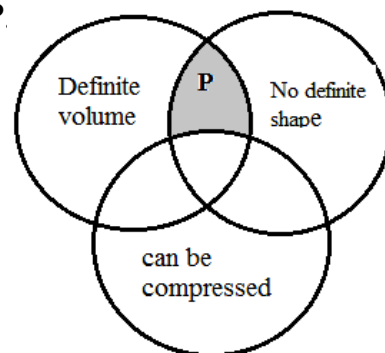
## SECTION: A

## GENERAL SCIENCE (Q No: 1 to 25)

1. The circulation of water in the nature is called water cycle. The other name of water cycle is
  - (A) Hydrological Cycle
  - (B) Cloud Cycle
  - (C) Rainological Cycle
  - (D) Rain water harvesting
2. Which of the following are biotic components of an ecosystem?
  1. *The non-living organisms;*
  2. *The producer organisms*
  3. *The consumer organisms;*
  4. *The decomposer organisms*
  - (A) 1, 2 and 3
  - (B) 1, 2 and 4
  - (C) 2, 3 and 4
  - (D) 1, 2, 3 and 4
3. Those organisms that cannot synthesis their own food from basic nutrients like carbon dioxide, water and solar energy are called
  - (A) Autotrophs
  - (B) Heterotrophs
  - (C) Abiotic
  - (D) Biotic
4. Which of the following represents an aquatic food chain?
  - (A) Grass → Insects → Frog → Birds
  - (B) Algae → Protozoa → Small fish → Big fish
  - (C) Algae → Big fish → Small fish → Protozoa
  - (D) Insects → Grass → Frog → Birds
5. Cattle dung and compost are common examples of
  - (A) Biodegradable wastes
  - (B) Non biodegradable wastes
  - (C) Recycling of biodegradable wastes
  - (D) Non of the above

6. A boy kicks a foot ball and the ball rolls on the ground for some distance and stop by its own. The force that stops the ball is
- (A) Muscular force (B) Gravitational force  
(C) Frictional force (D) Mechanical force
7. Based on the chemical composition of the matter, matter is classified as elements, compounds and mixtures. Which one of the following is a mixture?
- (A) Water (B) Oxygen  
(C) Carbon dioxide (D) Air
8. Vivek is watching the moon during a total lunar eclipse. Slowly the entire Moon becomes dark and invisible. At this point Vivek can assume that
- (A) The Sun blocked the Moon  
(B) The Moon, the earth & the sun are in straight line  
(C) The moon comes in between the earth & the sun  
(D) The moon stopped reflecting the light.
9. Electricity is due to the flow of electric charges. The path for the flow of electric current is called
- (A) Circuit (B) Filament  
(C) Orbit (D) Switch
10. Calcium is an important mineral required for our body. The deficiency of calcium in our body result in
- (A) Weak muscles (B) Loss of vision  
(C) Tooth decay (D) Bleeding gums
11. Which of the following plants' leaves have waxy coating?
- (A) Tamarind (B) Mango  
(C) Sunflower (D) Lotus
12. There are different kinds of energy. Energy can be transformed from one form to another. The form of energy that depends on mass and speed of the body is
- (A) Potential energy (B) Kinetic energy  
(C) Solar energy (D) Muscular energy

13. Which is a part of the digestive system where no digestion occurs?  
(A) Mouth (B) Intestine  
(C) Food pipe (D) Stomach
14. Farmers use different methods to maintain the quality and improve the fertility of the soil. Some farmers grow different crops in different seasons in the same field. This method of cropping is known as  
(A) Crop rotation. (B) Multiple cropping  
(C) Seasonal cropping (D) Mixed cropping
15. Our body has 206 bones connected by movable or immovable joints. The type of joint in our shoulder  
(A) Shoulder joint (B) Ball & socket joint  
(C) Hinge joint (D) Pivot joint
16. Study the Venn diagram and Identify **P**.

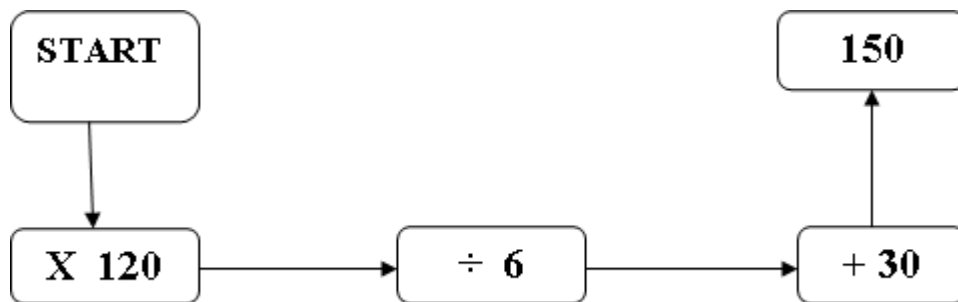


- (A) Paper  
(B) Clay  
(C) Oxygen  
(D) Water
17. Which one of the following expands most on heating?  
(A) Solid (B) Liquid  
(C) Gas (D) Same for all
18. Which of the following is NOT a function of root?  
(A) To prepare starch for photosynthesis  
(B) To absorb minerals for the plants  
(C) To absorb water from the soil  
(D) To provide support to the plant

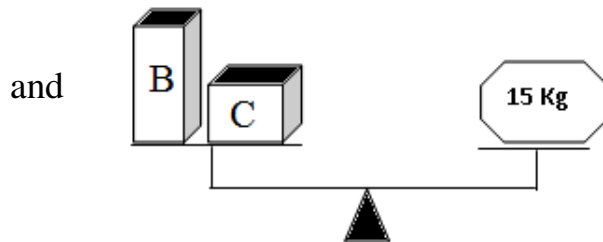
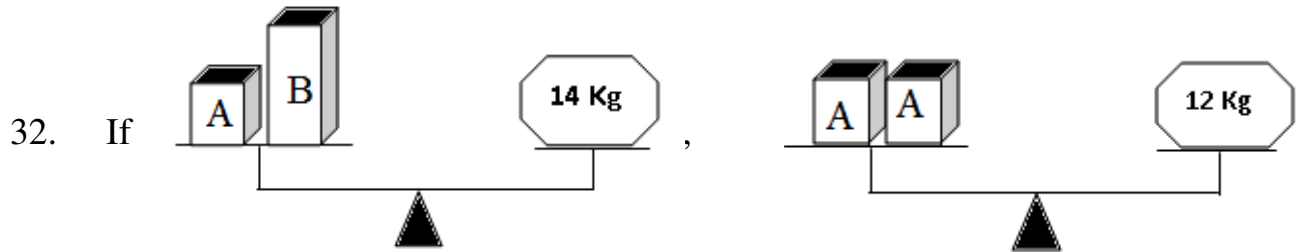
19. Water is transferred from a small spherical bottle P to a big spherical bottle Q. Which of the following get changed when water is transferred from bottle P to Q?
- (A) Volume (B) Shape  
(C) Temperature (D) Mass
20. Wet clothes dry fastest on a
- (A) Humid day (B) Windy day  
(C) Sunny and humid day (D) Sunny and windy day
21. Which of the following diseases are water borne?
- (A) Typhoid & Malaria (B) Cholera & Smallpox  
(C) Diarrhoea & Jaundice (D) Amoebic dysentery & Malaria
22. A stone thrown vertically upward will come down after some time. This is because of
- (A) Gravitational force (B) Frictional force  
(C) Magnetic force (D) Pulling force
23. A person met with an accident and wrapped himself in a blanket. The accident may be due to
- (A) Poisoning (B) Electric shock  
(C) Burns (D) Cuts
24. A simple machine is a device which
- (A) Magnifies the movements  
(B) Enables to do more work by less effort  
(C) Changes direction of force in all case  
(D) None of the above
25. Mountaineers carry oxygen cylinders with them, because
- (A) Air becomes thinner as we go higher  
(B) Air become denser as we go higher  
(C) Oxygen supports burning  
(D) The dense air at higher altitude contains less oxygen


**MATHEMATICS (Q No. 26 to 50)**

26. The numeral for the expanded form  $40000 + 200 + 2$  is  
(A) 422 (B) 40202  
(C) 40022 (D) 42002
27. The smallest six digit number that can be formed using 0, 1, 2, 3, 6 and 9 is  
(A) 106239 (B) 103269  
(C) 102369 (D) 012369
28. The place value and face value of a number is always equal at  
(A) One's Place (B) Ten's place  
(C) Hundred's Place (D) At all Places
29. The number 80808080 comes after  
(A) 80807980 (B) 80807979  
(C) 80808099 (D) 80808079
30. The number in the **START** Box is



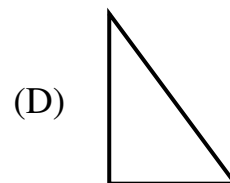
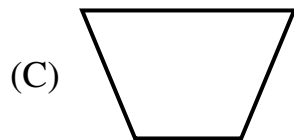
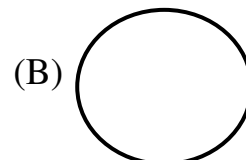
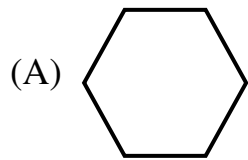
- (A) 12 (B) 6  
(C) 720 (D) 450
31. A triangle is a plane figure. It is formed by joining three  
(A) Collinear points (B) Non-collinear points  
(C) Equal points (D) parallel lines



Then the mass of  is

- (A) 6Kg (B) 8 Kg  
(C) 7 Kg (D) 9 Kg

33. Which one of the following is NOT a polygon?



34. The number of students in Class V of the Sun Rise School is 40. If the number of girls in the class is 24, what is the percentage of boys in the class?

- (A) 70% (B) 60%  
(C) 50% (D) 40%

**Questions 35 – 37:** The given table shows the time schedule of the arrival and departure times of a train at different destination along its route. Study the table carefully and answer the questions 32 to 34.

Destination	Arrival	Departure
Central	_____	08:30
Toy Town	09:20	09:35
Cherry Park	12:05	12:15
Saints Ville	13:00	14:00
Blue Lake	16:10	16:25
Alpha Street	18:00	_____

35. How long does it take the train to travel from Cherry Park to Blue Lake?
- (A) 4 hours 5 minutes                      (B) 3 hours 55 minutes  
(C) 4 hours 20 minutes                      (D) 4 hours 55 minutes
36. If the train is delayed by 45 minutes at Toy Town due to technical problem, at what time does the train reach at Cherry Park?
- (A) 12:50                                      (B) 10:20  
(C) 12: 45                                      (D) 13:00
37. How long does it take the train to travel from Central to Alpha Street?
- (A) 9 hours                                      (B) 10 hours 30 minutes  
(C) 18 hours                                      (D) 9 hours 30 minutes
38. The total number of edges a cube has
- (A) 4    (B) 16  
(C) 8    (D) 12



**Questions 39 to 42:** 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 39 to 42**.

Box	Pen	Pen	Rs. 55
Pen	Pencil	Pen	Rs.38
Pencil	Pencil	Pen	Rs. 31
Rs. 48	Rs. 31	Rs. 45	

39. What is the cost of two pens and a pencil?

- (A) Rs. 31 (B) Rs.45  
(C) Rs. 38 (D) Rs. 36

40. The cost of two pencils is

- (A) Rs. 30 (B) Rs. 16  
(C) Rs. 50 (D) Rs. 12

41. How many pens can be purchased at the cost of three boxes?

- (A) 8 (B) 3  
(C) 15 (D) 5

42. The cost of two pencils, two boxes and two pens is

- (A) Rs. 96 (B) Rs. 48  
(C) Rs. 56 (D) Rs. 72

43. The numeral for the expanded form  $40 + 2 + \frac{6}{100} + \frac{1}{10000}$  is

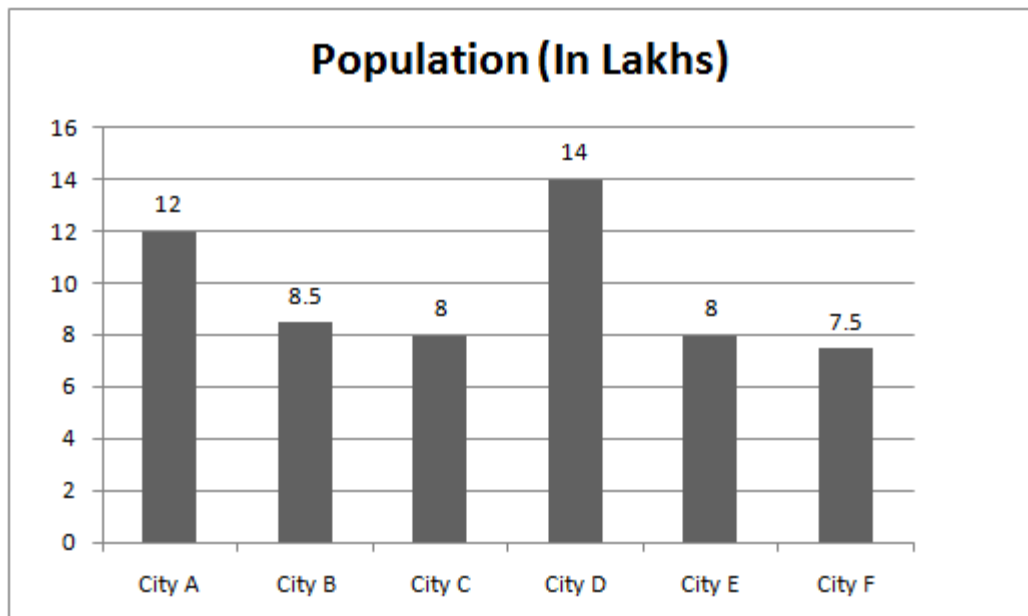
- (A) 42. 61 (B) 42. 061  
(C) 42. 0601 (D) 42. 00601

44. The equivalent fraction for the decimal **1.75** is

- (A)  $\frac{7}{4}$  (B)  $\frac{6}{5}$   
(C)  $\frac{17}{4}$  (D)  $\frac{9}{6}$

45.  $12.12 \div 0.001$  is equal to  
(A) 0.01212 (B) 12120  
(C) 12.012 (D) 1.212
46.  $2 + 2 \div 2$  is equal to  
(A) 1 (B)  $\frac{3}{2}$   
(C) 2 (D) 3
47. A rectangle is divided into 16 equal parts. How many portions have to be shaded to represents one – quarter of the rectangle?  
(A) 4 (B) 8  
(C) 6 (D) 2

**Questions 48 to 50:** The bar graph given below shows the population of six cities. Study the graph and answer the Questions 48 to 50.



48. Which city has lowest population?  
(A) City A (B) City D  
(C) City E (D) City F

49. What is the difference in population of City B and City D?

- (A) 8 lakh (B) 5 lakh  
(C) 5.5 lakh (D) 4.5 lakh

50. What is the total population of six Cities?

- (A) 58 lakh (B) 56.5 lakh  
(C) 62 lakh (D) 14 lakh

**SECTION: B**

51. What does one understand by the hardware of Computer System?

- (A) The Central Processing Unit  
(B) Computer cabinets  
(C) Computer Programmes  
(D) All the physical parts of a computer

52. In most of the programs u can press this key to get help



- A) B) C) D)

53. Which key combination helps you to save the file?

- (A) Alt + S (B) Ctrl + z (C) Ctrl + X (D) Ctrl + S

54. Which one of the following is not true related to e-mail?

- (A) Messages can be send anywhere in the world.  
(B) One person can use many e – mail address  
(C) Messages are very costly  
(D) Provision to send large numbers of messages.

55. A website's main page is called:

- (A) Home Page (B) Browser Page  
(C) Bookmark (D) Search Page

**Questions 56 and 57:- Read the following passage and answer the questions:**

A **family tree**, or pedigree chart, is a chart representing family relationships in a conventional [tree structure](#). The more detailed family trees used in [medicine](#) and [social work](#) are known as [genograms](#). Genealogical data can be represented in several formats, for example as a [pedigree](#) or **ancestry chart**. Family trees are often presented with the oldest generations at the top and the newer generations at the bottom. An ancestry chart, which a tree is showing the ancestors of an individual, will more closely resemble a tree in shape, being wider at the top than the bottom.

56. In an ancestry chart (Ancestry family tree) you will be placed:
- (A) Bottom of the tree (B) Top of the tree  
(C) Middle of the tree (D) Anywhere in the tree.
57. Which one of the following information is not available from a family tree?
- (A) Details about members (B) Family Relationship  
(C) Economic and Social status (D) Family History

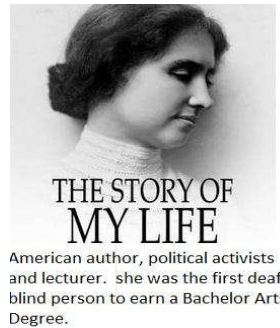
**Questions 58 and 59:- Read the following passage and answer the questions:**

**Bird migration** is the regular seasonal movement, often north and south along a [flyway](#), between breeding and wintering grounds. Many species of [bird](#) migrate. [Migration](#) carries high costs in predation and mortality, including from hunting by humans. Migration is driven primarily by availability of food. It occurs mainly in the Northern Hemisphere, where birds are funneled on to specific routes by natural barriers such as the [Mediterranean Sea](#) or the [Caribbean Sea](#). Historically, migration has been recorded as much as 4,000 years ago by [Ancient Greek](#) authors including [Homer](#) and [Aristotle](#).

58. Identify this great According to the passage, what is the primary reason for the birds' migration?
- (A) Climatic change. (B) Availability of food  
(C) Breeding (D) To escape from human hunting
59. Ancient authors Homer and Aristotle belongs to:
- (A) Greece (B) Caribbean Islands  
(C) India (D) Rome

60. Identify this great personality with the help of available indication.

- (A) Jane Austin
- (B) Anne Marie
- (C) Helen Keller
- (D) Charlotte Bronte



61. Green Revolution is associated with

- (A) Milk production
- (B) Protection of the environment
- (C) Agriculture Production
- (D) Fish Production

62. The following mascot is associated with:

- (A) Asian Games
- (B) Commonwealth Games
- (C) National Games of India
- (D) Olympic Games



63. What is Garib Rath?

- (A) Express Train at lower cost
- (B) Anti Poverty Measures
- (C) Luxurious Train
- (D) None of these

64. The following map best explain:

- (A) South American Countries
- (B) North American Countries
- (C) Pacific Ocean
- (D) Atlantic Ocean



65. Identify this great Social Reformer:

- (A) Rajaram Mohan Roy
- (B) Subash Chandra Bose
- (C) Bhagath Singh
- (D) Swami Vivekananda



66. What are Hiroshima and Nagasaki?

- (A) Two cities of Japan
- (B) Two cities of China
- (C) Names of Japanese General
- (D) Two cities of Vietnam

67. Which country secured largest number of Medals in 2014 Asian Games?

- (A) Japan
- (B) South Korea
- (C) India
- (D) China

**Questions: 68 and 70:-** Read the following passage and answer the questions:

Nation is all set for the inauguration of **Swachh Bharat Mission** by Prime Minister on 2nd of October, the birth anniversary of Mahatma Gandhi. The mission targets a clean India by 2019. It is going to be a mass movement, as it will be a tribute to Mahatma Gandhi. He devoted his life so that India attains "Swarajya". Through this mission Our Prime Minister has urged every one of us to devote at least hundred hours every year i.e. two hours every week towards cleanliness. He saysj "I myself will set out with a broom and contribute towards this pious task".

68. What is the main target of **Swachh Bharat Mission?**

- (A) Clean India
- (B) Tribute to Mahatma Gandhi
- (C) Create the feeling of Nationalism
- (D) To attain Swarajya

69. According to the Prime Minister, to ensure the success of **Swachh Bharat Mission**, who should contribute minimum 100hours for cleaning in every year

- (A) Citizen of India
- (B) Political Leaders
- (C) Nine selected members
- (D) Ministers of India

70. When Swachh Bharat Mission was inaugurated in India?

(A) 2<sup>nd</sup> October 2013

(B) 2<sup>nd</sup> October 2014

(C) 2<sup>nd</sup> January 2014

(D) 2<sup>nd</sup> January 2013

71. Replace the question mark.

(A) 3

(B) 11

(C) 20

(D) 19

C	4	L	9	T
3	D	12	H	?

72. Replace the question mark.

5	25	125	625	?
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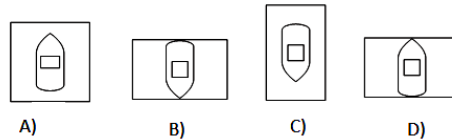
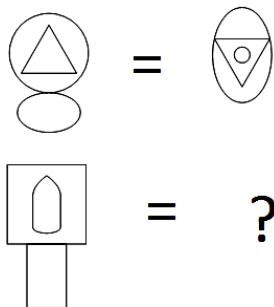
(A) 3125

(B) 1300

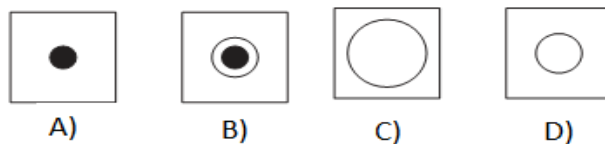
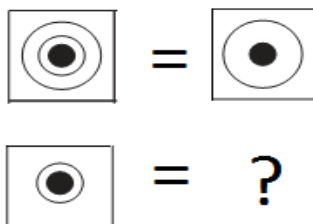
(C) 3150

(D) 1375

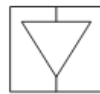
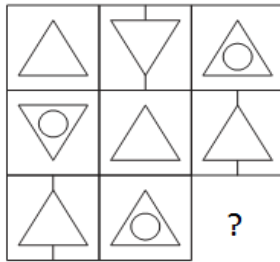
73. Replace the question mark:



74. Replace the question mark.



75. Replace question mark.



A)



B)



C)



D)

**Questions: 76 to 78:- Find the odd one out**

76.



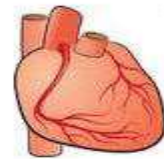
A)



B)



C)



D)

77.



A)



B)



C)



D)

78.



A)



B)



C)



D)

79. Replace the question marks

(A) C

(B) F

(C) D

(D) E

1	2
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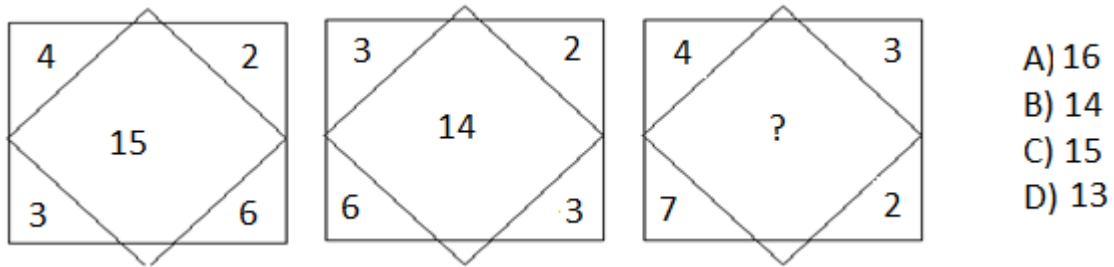
3	1
1	E

2	2
2	?

1	D
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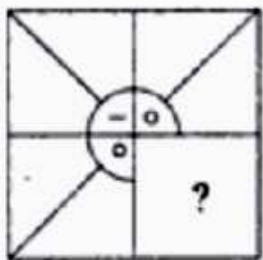


80. Replace the question mark



**Questions 81 to 83:-** In each of the following questions there is a series with one term missing as shown by (?). This term is given as one of the alternatives. Find the correct alternatives:

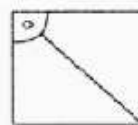
81. 9      10      13      13      18      25      ?  
 (A) 32                      (B) 33                      (C) 34                      (D) 35
82. A      B      D      G      K      P      ?  
 (A) U                      (B) V                      (C) W                      (D) X
83. 1A      5B                      11C                      19D                      ?  
 (A) 29E                      (B) 39E                      (C) 29F                      (D) 39F
84. If 1<sup>st</sup> October is Sunday, then 21<sup>st</sup> November will be?  
 (A) Sunday                      (B) Monday  
 (C) Tuesday                      (D) Saturday
85. Which answer figure will complete the question figure?



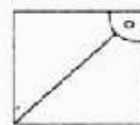
A)



B)

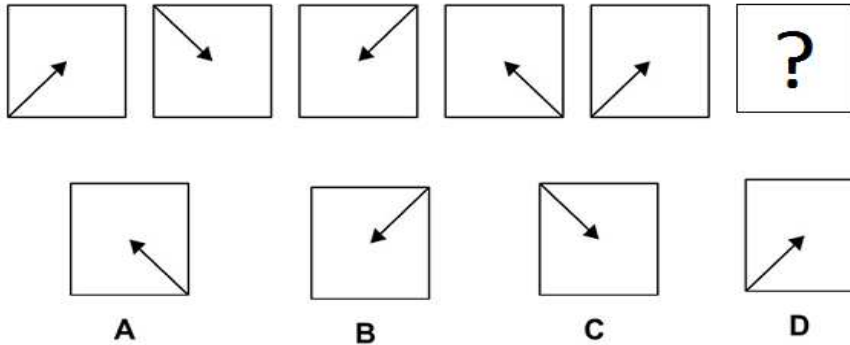


C)

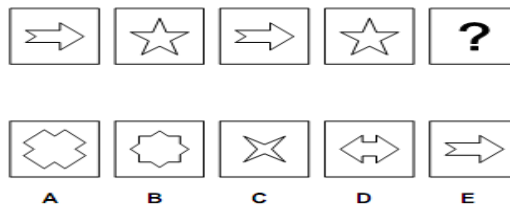


D)

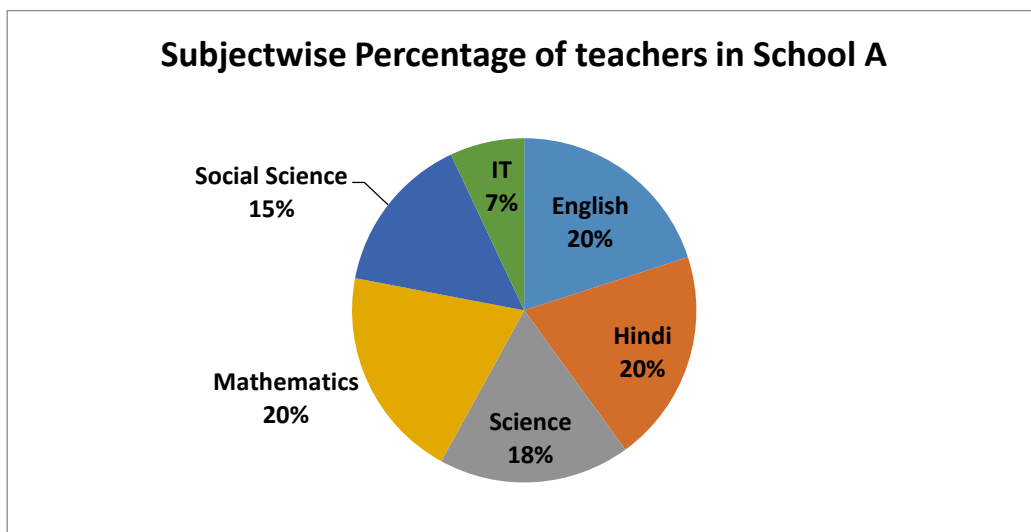
86. Replace the question mark.



87. Replace the question Mark:



**Questions 88 to 90:-** Subject wise teachers working in a school is given in the following Pie-chart. Study the chart and answer the questions 88 to 90:



88. Which subject has the least number of teachers?
- (A) Mathematics (B) Hindi
- (C) IT (D) Social Science
89. If 40 teachers are working in Mathematics department what will the number of teachers in Social Science Department?
- (A) 25 (B) 30
- (C) 35 (D) 40
90. More than 50 percentage of teachers are working in:
- (A) English, Hindi and Science
- (B) IT, English, and Social Science
- (C) Social Science, Hindi and IT
- (D) IT, Social Science and Science

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*Space for Rough Work*