# STaRT-2012
# SAMPLE TEST PAPER
# CLASS-VII

**Time : 90 min.**                                      **Maximum Marks : 200**

## GENERAL INSTRUCTIONS

1.    he question paper contains **50** questions, **15 Questions from Mathematics (1-15), 10 questions from Physics (16-25), 5 questions from Chemistry (26-30), 5 questions from Biology (31-35), and 15 questions from Mental Ability (36-50).**

2.    **The OMR sheet given in the examination hall is the Answer Sheet.**

3.    **Blank papers, clip boards, log tables, slide rule, calculators, mobile or any other electronic gadgets in any form is not allowed.**

4.    **Do not forget to mention your roll number neatly and clearly in the blank space provided in the answer sheet.**

5.    **Each Question carries 4 marks. '1' mark will be deduct for each wrong answer. So attempt each question carefully.**

6.    **No rough sheets will be provided by the invigilators. All the rough work is to be done in the blank space provided in the question paper.**

7.    **In case of any dispute, the answer filled in the OMR sheet available with the institute shall be final.**
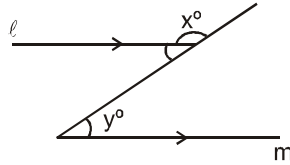
Name : _____    Roll No. : _____

**1.** LCM of 14, 35, 40, 56, 28 is
(A) 280      (B) 140      (C) 560      (D) 70

**2.** In the given diagram $\ell$ || m. Find x and y if x = 2y
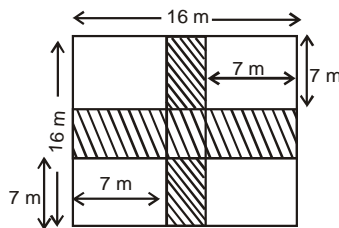


(A) x = 130º, y = 50º      (B) x = 120º, y = 60º
(C) x = 110º, y = 55º      (D) x = 140º, y = 70º

**3.** The value of $[- \{- (- 2)\}] + (- 7) \times \{- (- 3)\}$ is
(A) – 12      (B) 21      (C) –289      (D) – 23

**4.** Which number should come in place of ▭ ?

$$\frac{1}{7} + \frac{2}{7} + \frac{\square}{7} = 1\frac{3}{7}$$

(A) 1      (B) 2      (C) 3      (D) 7

**5.** Find the area of the figure shown below.
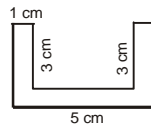


(A) 9 sq cm      (B) 10 sq cm      (C) 11 sq cm      (D) 15 sq cm

**6.** The area of the shaded region in the figure is



(A) 64 m$^2$
(B) 62 m$^2$
(C) 58 m$^2$
(D) 60 m$^2$

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*Space For Rough Work*

**7.** If 6(2a – 1) + 8 = 14 then the value of 'a' is

(A) –1      (B) $3\frac{1}{12}$      (C) $\frac{4}{10}$      (D) 1

**8.** The algebric equation for the statement; 'half of a number added to 10 is 15' is

(A) $\frac{x}{2}$ = 10 + 5      (B) $\frac{x}{2}$ + 10 = 15      (C) $\frac{x}{2}$ + 15 = 10      (D) $\frac{x}{2}$ = 10 + 15

**9.** In the word MATHEMATICS, the ratio of number of consonants to the number of vowels

(A) 4 : 7      (B) 7 : 4      (C) 7 : 5      (D) 6 : 5

**10.** Study the given table. Which equation describes the correct relationship between the values of x and y in the given table ?

| x | y |
|---|---|
| 1 | –1 |
| 2 | 1 |
| 3 | 3 |
| 4 | 5 |

(A) y = x + 3      (B) y = x – 3      (C) y = 2x + 3      (D) y = 2x – 3

**11.** Of the three numbers, second is twice the first and is also thrice the third. If the average of the three numbers is 44, the largest number is

(A) 24      (B) 72      (C) 36      (D) 48

**12.** What least value must be assigned to ＊ so that number 63576＊2 is divisible by 8 ?

(A) 2      (B) 3      (C) 4      (D) 5

**13.** In a two-digit number, the sum of digit is 15. If 9 is added to the number, the digits are reversed. The number is

(A) 87      (B) 78      (C) 69      (D) 96

**14.** Two wires 15 cm and 25 cm in length are to be cut into smaller pieces of equal length. What can be maximum length of each smaller piece ?

(A) 8 cm      (B) 4 cm      (C) 5 cm      (D) 6 cm

**15.** By selling a house for Rs. 1980, a man gained 10%. The house was bought for

(A) Rs. 1800      (B) Rs.1782      (C) Rs.2178      (D) Rs. 1728

**16.** The material used to make filament of electric bulb should be of :
(A) low resistivity and high melting point
(B) high resistivity and high melting point
(C) low resistivity and low melting point
(D) high resistivity and low melting point

*Space For Rough Work*

**17.** There are two bulbs in a house. One glows brighter than the other. Which of the two bulbs has a higher resistance ?
(A) The brighter bulb
(B) The dim bulb
(C) Both bulbs have same resistance resistance
(D) The brightness of bulbs is not linked with its

**18.** Electroplating does not help metals to :
(A) give fine finish to the surface
(B) give shining appearance
(C) become hard
(D) to protect against corrosion

**19.** The defect of vision in which person can see distant objects clearly but nearly object look blurred is :
(A) Myopia (B) Astigmatism (C) Hypermetropia (D) Presbyopia

**20.** What is the angle of deviation for prism ?
(A) Angle between the reflected ray and incident ray
(B) Angle between the reflected ray and refracted ray.
(C) Angle between the incident ray and emergent ray
(D) Angle between the incident ray and refracted ray

**21.** If a ray of light travelling along the normal passes undeflected then :
(A) $\angle i = 0^0$ (B) $\angle r = 0^0$ (C) $\angle i = \angle r = 0^0$ (D) All are correct

**22.** On a mercury thermometer, celsius scale is graduated . there are bigger marks which read one degree and have five divisions between then. One small division can read
(A) 0.2ºC (B) 0.02ºC (C) 0.2ºF (D) 2ºC

**23.** An iron ball at 30ºC is dropped in a mug containing water at 40ºC the heat will.
(A) Flow from iron ball to water
(B) not flow from iron ball to water or from water to iron ball
(C) flow from water to iron ball.
(D) Increase the temperature of both

**24.** If a tin can with a little amount of water is heated up till the water start boiling and its lid is closed putting off the supply of heat energy .
Why the shape of tin can distorted when fresh water is poured over it ?
(A) because of cheaper quality of tin.
(B) because of reduced atmospheric pressure
(C) because of reduced pressure inside the can
(D) all of these

**25.** Air moves from the region where the air pressure is _____ to the region where the pressure is _____.
(A) High, low (B) low, High (C) Can't say (D) depends on the air

**26.** The practice which is not concerned with soil conservation is -
(A) deforestation (B) reforestation (C) crop rotation (D) vegetable cover

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**27.** A man can tolerate a sound intensity of -
(A) 60 dB  (B) 70 dB  (C) 80 dB  (D) 90 dB

**28.** A mixture of alcohol and water can be separated by -
(A) separating funnel  (B) fractional distillation
(C) simple distilllation  (D) crystallisation

**29.** Sorting of materials is useful as -
(A) it makes their study convenient  (B) any pattern in their properties can be observed
(C) properties of a substance can be predicted  (D) All of these

**30.** The metal which cannot displace hydrogen from an acid is -
(A) copper  (B) zinc  (C) magnesium  (D) aluminium

**31.** Who wrote the book Micrographia, which contains some of the most beautiful drawings of microscopic observations ever made ?
(A) Anton Van Leeuwenhoek  (B) Robert Hooke
(C) Sir Christopher Wren  (D) Ivan Pavlov

**32.** Raw materials required for the process of photosynthesis are :
(A) $CO_2$ and $H_2O$  (B) Sugar and $H_2O$
(C) $O_2$ and chlorophyll  (D) Minerals and $O_2$

**33.** Which is not the constituent of blood ?
(A) Red blood cells  (B) White blood cells  (C) Platelets  (D) Lymph

**34.** "Nitrogen fixation" means
(A) conversion of atmospheric nitrogen into nitrogen compounds
(B) nitrogen cycle in nature
(C) manufacture of nitrogen from air
(D) liquification of nitrogen

**35.** The oxygen evolved in photosynthesis comes from
(A) $CO_2$  (B) water  (C) temperature  (D) all of the above

*Direction : (36 to 38) Find the missing term(s)—*

**36.** 101, 100, ?, 87, 71, 46.
(A) 92  (B) 88  (C) 89  (D) 96

**37.** (ABC) – 6, (DEF) – 15, (GHI) – 24, ?
(A)(KLM) – 34  (B) (JKM) – 33  (C) (LKJ) – 33  (D) (JKL) – 33

**38.**

12  18  30    16  32  40    36  18  34

30    44    ?

(A) 48  (B) 9  (C) 44  (D) 64

*Space For Rough Work*

**39.** A meaningful word starting with **A** is made from the first, the second, the fourth, the fifth and sixth letters of the word **CONTRACT**, which of the following is the middle letter of the word ?
(A) C        (B) T        (C) O        (D) R

**40.** If Anil is the brother of the son of Sunil's son, what is the relationship between Anil and Sunil ?
(A) Cousin        (B) Brother        (C) Nephew        (D) Grandson

**41.** One evening before sunset two friends Amit and Sunil were talking to each other face to face. If Sunil's shadow was exactly to his left side, which direction was Amit facing ?
(A) North        (B) South        (C) West        (D) Data inadequate

**42.** Bank is related to **'Money'** in the same way as **'Transport'** is related
(A) Goods        (B) Road        (C) Terrace        (D) Floor

**43.** Select the diagram that best represents the given relationship
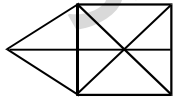Clever, Punctual, Poor
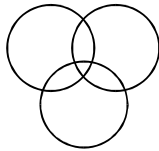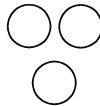
(A)        (B)
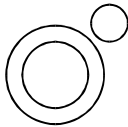
(C)        (D)

**44.** How many triangles does the figure have ?

(A) 15        (B) 16        (C) 17        (D) 18

*Direction : (45) A sheet has been folded in the manner as shown in X, Y and Z respectively and punched. You have to choose from the alternatives how it will look when unfolded.*
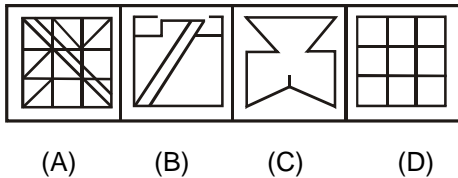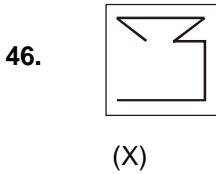
**45.**

X        Y        Z

(A)        (B)        (C)        (D)

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*Directions : (46)  In the following question, choose the alternative figure in which the question figure (X) is embedded.*

**46.**



(X)



| (A) | (B) | (C) | (D) |

**47.** In a code language **DRAMA** is coded as **37** and **STAGE** as **52**, then how is **ACTOR** written in the same code language ?

(A) 56      (B) 50      (C) 57      (D) 67

**48.** In a group of six children, Q is taller than P but not as tall as L. M is taller than N and O, but not as tall as P. Who is the shortest among them ?

(A) N      (B) O      (C) M      (D) Data inadequate

**Direction : (49)** In the following question there is some relation between the first two terms. Same relationship exists in the next two terms. The missing term (?) is one of the options given below. Find the correct option.

**49.** PALE : LEAP : : POSH : ?

(A) HSOP      (B) POHS      (C) SHOP      (D) SHPO

**50.** Arrange the following in meaningful sequence :

1. Child      2. Job      3. Marriage      4. Infant      5. Education

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

# ANSWER

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