STAR (STUDENT TALENT ACADEMIC REWARD)

CLASS –VII

SAMPLE PAPER

Time: 90 Min.   **Max. Marks: 90**

GENERAL INSTRUCTIONS

TEST PATTERN					
Time	Total No. of Questions	Subject/Question Segregation	Type	Total Marks : 90	
				Correct	Negative
90 Minutes	1-90	Physics (1-10) Chemistry (11-20) Biology (21-30) Mathematics (31-55) Social Science (56-65) Mental Ability (66-80) English (81-90)	Objective Question	1 Mark	0.25 Mark

1. A student has to write his/her answers in the OMR sheet by darkening the appropriate bubble with the help Of Ball pen only as the correct answer(s) of the question attempted.

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

3. Write your **Name** & **Roll No.** in the space provided in the bottom of this booklet.

4. Before answering the paper, fill up the required details in the blank space provided in the OMR sheet.

5. **In case of any dispute, the answer sheet available with the institute shall be final.**

6. **In case of tie the younger in age will get top rank**

NAME OF THE CANDIDATE : ……………………………………………………….ROLL NO. : …………………………..…
I have read all the instructions   I have verified the identity, name and roll number
and shall abide by them   of the candidate.

……………………………………….   ……………………………………….
Signature of the Candidate   **Signature of the Invigilator**

DO NOT BREAK THE SEALS WITHOUT BEING INSTRUCTED TO DO SO BY THE INVIGILATOR

1. PHYSICS

Straight Objective

This section contains 10 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

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1. $20kg/m^2$ is equivalent to
   (A) $20 \ g/cm^2$ (B) $2000 \ g/cm^2$ (C) $2 \ g/cm^2$ (D) $0.02kg/m^2$

2. $500N/kg$ is equivalent to
   (A) $0.5 \ N/g$ (B) $5000 \ dyne/g$ (C) $50000 \ dyne/ g$ (D) Both A & C

3. If temperature of a body increases from 250K to 325K ,then change in temperature of the body is
   (A) $75 \ ^oF$ (B) 75K   (C) 75^oC (D) both B &C

4. Two threads of length 2.2cm & 5mm are connected end to end then tptal length of combination is
   (A) 7.2cm   (B) 7.2mm   (C) 2.7cm   (D) 27cm

5. A ray of light is incident normally on a plane mirror. The glance angle of reflection will be
   (A) $0°$ (B) $90°$
   (C) Will not be reflected   (D) None of the above

6. Which of the following can produce a real image
   (A) Plane mirror   (B) Convex mirror
   (C) Concave mirror   (D) All the above

7. SI unit of wavelength is
   (A) second   (B) cm   (C) m   (D) Hz

8. What kind of motion is executed by a pendulum of a wall clock?
   (A) Oscillatory motion   (B) Linear motion   (C) Circular motion   (D) None of these

9. Which letters of English alphabet will not show lateral inversion?
   (A) I, O, U   (B) N, Z, X   (C) I, X, E   (D) A, E, I

10. Light year is the unit of
    (A) Time   (B) Distance   (C) Speed   (D) None of these

2. CHEMISTRY

Straight Objective Type

This section contains 10 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

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11. Caterpillars spin their cocoons at which stage?
    (A) Pupa stage   (B) Moth stage   (C) Both (A) & (B)   (D) None of these

12. Jute is obtained form which part a patsun?
    (A) Leaves   (B) Root   (C) Stem   (D) Both (A) and (C)

13. _____is a cellulose fiber.
    (A) Cotton   (B) Wool   (C) Silk   (D) None of these

14. Which of the following is a base and not an alkali?
    (A) NaOH   (B) KOH   (C) $Fe(OH)_3$ (D) None of these

15. Which of the following is a strong acid?
    (A) Acetic acid   (B) Citric acid   (C) Nitric acid   (D) Tartaric acid

16. Which of the below turns blue litmus red?
    (A) NaOH   (B) HCl   (C) H_2SO_4 (D) Both (B) and (C)

17. Slow eating away of iron articles in the presence of moist air is called
(A) Galvanisation   (B) Crystalliston   (C) Rusting   (D) Neutralisation

18. Which of the following is a physical change
(A) Digestion of food   (B) Boiling of an egg   (C) Making a cup of tea   (D) None of these

19. Mass of a proton is
(A) 1.6725×10^{-24} gm   (B) 1.75×10^{-24} gm   (C) 9.109×10^{-28} gm   (D) 1.602×10^{-19} gm

20. Atomic number (z) equals to
(A) Number of neutron   (B) Number of proton   (C) Both (A) and (B)   (D) None of these

3. BIOLOGY

Straight Objective Type

This section contains 10 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.
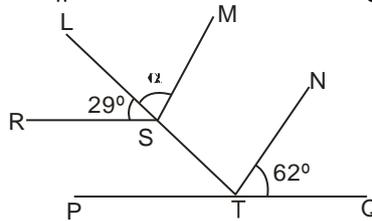
21. An adaptation is: -
(A) A place where an organism lives.
(B) A characteristic that improves the organism's ability to survive.
(C) A stage in an animal's life cycle.
(D) A characteristic the prevents an organism's ability to survive.

22. A place where an organism or group of organisms live and obtain food, air, water, shelter or space, or light needed to survive is called _____.
(A) A habitat   (B) A metamorphosis   (C) An adaptation   (D) Locomotion

23. Some animals begin as an egg and then undergo changes in their life cycle, such as in appearance, color, shape, or growth of new structures. This is called
(A) Metamorphosis   (B) Adaptation   (C) Birth   (D) Camouflage

24. Some animals have special adaptations for living in their particular habitat. For example, in a *cold* habitat animals may have _____.
(A) Blubber   (B) Gills   (C) Venom   (D) Wings

25. *Nocturnal* animals _____.
(A) Seek food during the day   (B) Sleep during the night
(C) Sleep during the day   (D) Do not sleep

26. Soil differs according to their
(A) colour   (B) Texture   (C) Aeration   (D) All

27. Which of the following have maximum water holding capacity
(A) Sandy   (B) Clay   (C) Loamy   (D) None

28. Large scale planting of trees is called
(A) Afforestation   (B) Defforestation   (C) Soil erosion   (D) Soil Pollution

29. During extreme aridity desert rat
(A) Stores water   (B) Uses metabolic water
(C) Saves water   (D) Don't use water

30. In aerial animal forelimb are modified into
(A) Wings   (B) Hind limbs   (C) Body   (D) air chambers
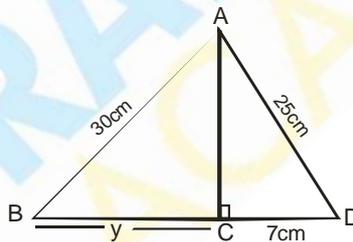
4. MATHEMATICS

Straight Objective Type

This section contains 25 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.
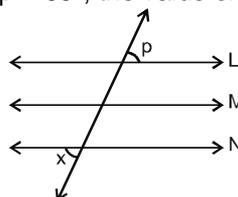
31. In the figure shown PQ || RS and SM || TN. Then measure of angle α is:

(A) 58⁰   (B) 118⁰   (C) 89⁰   (D) 91⁰

32. Pythagoras theorem is applied in
(A) acute angled triangle   (B) obtuse angled triangle
(C) right angled triangle   (D) none of these

33. An angle is 14⁰ more than its complementary angle then angle is :
(A) 38⁰   (B) 52⁰   (C) 50⁰   (D) None of these

34. The vertical angles of an isosceles triangle measures $(5p – 18)$⁰ and one of the base angles measures 3 3p⁰. What is the value of p ?
(A) 24   (B) 15   (C) 18   (D) 12

35. If the supplement of an angle is three times its complement, then angle is:
(A) 40⁰   (B) 35⁰   (C) 50⁰   (D) 45⁰
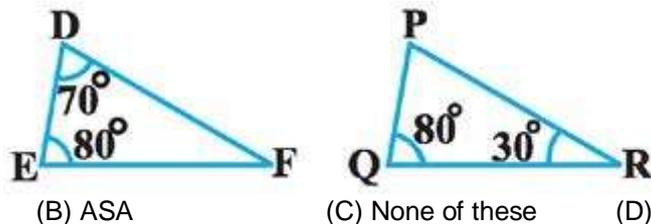
36. Find the length marked y in figure :

(A) 18 cm   (B) 24 cm   (C) 19 cm   (D) 30 cm

37. In the given figure if AB || DF, AD || FG, $\angle BAC = 65°$, $\angle ACB = 55°$. Find $\angle FGH$.

(A) 125⁰   (B) 100⁰   (C) 120⁰   (D) 0.015⁰

38. The angles of a triangle are in the ratio 3 : 2 : 1, then the angles are :
(A) 90⁰, 60⁰, 30⁰   (B) 100⁰, 50⁰, 30⁰   (C) 80⁰, 60⁰, 40⁰   (D) 70⁰, 60⁰, 50⁰

39. In the below figure L || M, M || N and $\angle p = 65$⁰, the value of $\angle x$ is =
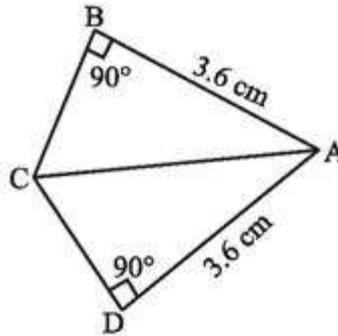

(A) 65⁰   (B) 115⁰   (C) 25⁰   (D) 45⁰

40. The sum of two angles of a triangle is half of a right angle and their difference is 1º more than $\frac{2}{5}$ th of a right angle, then smallest angle of the triangle is :
(A) 4º   (B) 41º   (C) 40º   (D) 3º

41. One of the angles of a triangle is 74º and the other two angles are equal. Find the measure of each of the equal angles
(A) 58º   (B) 100º   (C) 53º   (D) 116º

42. Which of the following can be the sides of a right triangle.
(A) 4 cm, 5 cm, 6 cm   (B) 2.5 cm, 6cm, 1.5 cm   (C) 1.5 cm, 2 cm, 2.5 cm   (D) 5cm, 6cm, 7cm

43. One of the exterior angles of a triangle is 72º and it interior opposite angles are in ratio 4:5. The angles of the triangle are
(A) 32º, 40º   (B) 30º, 42º   (C) 28º, 44º   (D) 50º, 22º

44. The perpendicular line segment from a vertex a triangle to its opposite side is called
(A) Median   (B) Diagonal   (C) Base   (D) Altitude

45. XYZ is a triangle right angled at 'Y'. If ZX = 25 cm, YZ = 7cm, XY is
(A) 38 cm   (B) 26 cm   (C) 23 cm   (D) 24 cm

46. If an exterior angle of a triangle is 108º and one of the interior opposite angle is 38º. The other interior opposite angle is
(A) 138º   (B) 70º   (C) 60º   (D) 80º

47. The three angles of a triangle are in the ratio 2: 3 : 4, then the measure of three angle are
(A) 20º, 60º, 100º   (B) 40º, 60º, 80º   (C) 40º, 50º, 9º   (D) 50º, 60º, 70º

48. Which one is possible to have a triangle from the following measures
(A) 6 cm, 3cm, 2 cm,   (B) 5.5 cm, 2.5 cm, 2.5 cm
(C) 3cm, 6cm, 7cm,   (D) 2cm, 8cm, 3cm

49. An exterior angle of a triangle is
(A) Equal to adjacent angle
(B) Smaller than each one of its interior opposite angle
(C) Less than its adjacent angle
(D) Equal to the sumof the two interior opposite angles

50. The two interior opposite of an exterior angle of a triangle is 45º & 63º, then the measure of exterior angle is
(A) 100º   (B) 80º   (C) 63º   (D) 108º

51. In congruent triangles ABC and DEF, ∠A = ∠E = 40º, and ∠F = 65º, then ∠B =
(A) 60º   (B) 50º   (C)75º   (D) None of these

52. In the below figure, if EF = QR then the congruence rule used for the congruency of the given triangles is

(A) SAS   (B) ASA   (C) None of these   (D) SSS

53. In the below figure, by which congruence rule the following triangles are congruent?

(A) ASA   (B)SAS   (C) RHS   (D) None of these

54. In triangles ABC and PQR, $\angle B = 90^\circ$, AC = 8 cm, AB = 3 cm, $\angle P = 90^\circ$, PR = 3 cm, QR = 8 cm. By which congruence rule the triangles are congruent?
(A) ASA   (B) SSS   (C) RHS   (D) None of these

55. The hypotenuse of a right triangle is 37 cm long. If one of the remaining two sides is 12 cm in length, then the length of the other side is
(A) 30 cm   (B) 35 cm   (C) 38 cm   (D) None of these

5. Social Science

Straight Objective Type

This section contains 10 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

56. Who among the followings was a foreign traveller?
(A) Ibn-battuta   (B) Kalhan   (C) Marco polo   (D) Both a & c

57. Ain-i-Akbari gives us an insight of
(A) Babar's administration   (B) Humayun's administration
(C) Akbar's administration   (D) Jahangir's administration

58. The court language of the Mughals was
(A) Hindi   (B) Sanskrit   (C) Persian   (D) Urdu

59. Epigraphy is knowns as:
(A) Science of studying inscriptions   (B) Science of studying autobiograhies
(C) Science of studying coins   (D) none of these

60. Tuzuk -i - Jahangiri was written by
(A) Kalhan   (B) Jahangir   (C) Firdausi   (D) Masum

61. Which is not a natural ecosystem?
(A) Desert   (B) Aquarium   (C) Forest   (D) Grass land

62. Natural Environment refers to.
(A) Abiotic   (B) Biotic   (C) Both a & b   (D) None of these

63. Which domain exist between 5 miles above & 5 miles below sea level?
(A) Lithosphere   (B) Hydrosphere   (C) Atmosphere   (D) Biosphere

64. Which among the following statement is incorrect?
(A) Landforms are found on ocean floor
(B) Lithosphere provide us grazing land
(C) The gravitational force of earth holds the atmosphere around it.
(D) All plants, animals & human being do not depend on their immediate surroundings.

65. The average thickness of the lithosphere is about
(A) 10 km   (B) 200 km   (C) 100 km   (D) 1000 km

6. MENTAL ABILITY

Straight Objective Type

This section contains 15 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

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66. Arrange the given words in the sequence in which they occur in the dictionary and then choose the correct sequence.

1. Select   **2.** Seldom   **3.** Send   **4.** Selfish   **5.** Seller

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

67. If Letters of alphabet series are written in reverse way then which letter will be seventh letter right to Q ?

(A) K   (B) U   (C) J   (D) W

68. In the word **PARADISE** how many pairs of letters are there which have as many letters between them in the word as in the alphabet series?

(A) None   (B) One   (C) Two   (D) Three

Directions : (69 to 70) Arrange the following group such that when arranged in a specific order, meaningful word is formed.

69.
```
R   T   A   N   U   E
1   2   3   4   5   6
```
(A) 1,3,2,6,4,5   (B) 3,2,4,6,1,5   (C) 4,3,2,5,1,6   (D) 4,6,5,2,3,1

70.
```
V   A   H   Y   E
1   2   3   4   5
```
(A) 2, 3, 4, 5, 1   (B) 3, 2, 5, 1, 4   (C) 3, 5, 2, 1, 4   (D) 1, 5, 2, 3, 4

71. If the positions of the first and the sixth letters in the word 'COMPROMISE' are interchanged, similarly the positions of the second and the seventh and so on, then which of the letters will be the seventh letter from the right end ?

(A) P   (B) R   (C) E   (D) S

Directions : (72) Arrange the following group such that when arranged in a specific order, meaningful word is formed.

72.
```
R   U   S   G   A
1   2   3   4   5
```
(A) 1, 5, 4, 2, 3   (B) 5, 3, 4, 1, 2   (C) 3, 2, 4, 5, 1   (D) 4, 5, 3, 2, 1

73. Which letter is midway between 22nd letter from the left and 21st letter from the right in alphabet series?

(A) L   (B) M   (C) O   (D) None of these

Directions : (74) Arrange the following group such that when arranged in a specific order, meaningful word is formed.

74.
```
K   A   T   C   E   L
1   2   3   4   5   6
```
(A) 4, 2, 3, 1, 5, 6   (B) 1, 2, 4, 5, 6, 3   (C) 6, 5, 3, 2, 4, 1   (D) 3, 2, 4, 1, 6, 5

75. Find which one word can not be made from the letters of the given word.

KALEIDOSCOPE

(A) SCALE   (B) PADLOCK   (C) PACKET   (D) DIESEL

76. If **D = 4** and **COVER = 63**, then **BASIS** = ?

(A) 49   (B) 50   (C) 54   (D) 55

77. In a certain code **SOCIAL** is written as **TQFMFR**, then how you will code **DIMPLE**?

(A) EKPTQK   (B) EKPQPJ   (C) EKPSPJ   (D) EKPSOH

78. If **CARPET** is coded as **TCEAPR**, then the code for NATIONAL would be:-

(A) NLATNOIA   (B) LANOITAN   (C) LNAANTOI   (D) LNOINTAA

79. The following question is based on the following alphabet series.
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Which alphabet comes immediately before the sixth alphabet from the left extreme of the given alphabets ?
(A) E   (B) F   (C) G   (D) U

80. If **ACNE** is coded as **3**, **7**, **29**, **11**, then **BOIL** will be coded as:
(A) 5, 31, 21, 25   (B) 5, 31, 19, 25   (C) 5, 29, 19, 25   (D) 5, 29, 19, 27

7. ENGLISH

Straight Objective Type

This section contains 10 questions. Each question has 4 choices (A), (B), (C) and (D) for its answer, out of which **ONLY ONE** is correct.

Fill in the blanks with the correct answer selecting from the given options.

81. Measles ………. broken out in the city .
(A) has   (B) have   (C) were   (D) are

82. My brother and I went to the shop and bumped into ………. uncle.
(A) my   (B) his   (C) our   (D their

83. Bangladesh was hit by a ………. Storm this year.
(A) heavy   (B) heavier   (C) heaviest   (D) none

84. I have ………. money to buy a car .
(A) very   (B) too   (C) enough   (D) any

85. My mother ………. to London last week .
(A) went   (B) go   (C) goes   (D) is going

86. Change into passive : "Open the door, please."
(A) The door was opened.   (B) Let the door be opened.
(C) I request to open the door.   (D) I told him to open the door.

87. We eat so that we ………. Live.
(A) should   (B) must   (C) shall   (D) may

88. ………. care could have prevented the disaster.
(A) A little   (B) Too much   (C) Many a   (D) The

89. With an umbrella ………. my head, I protected myself from the sun.
(A) on   (B) above   (C) over   (D) upon

90. Identify the Kind of given sentence. "How tall the building is!"
(A) Negative   (B) Imperative   (C) Interrogative   (D) Exclamatory

CLASS : VII
SAMPLE PAPER

ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	C	D	D	C	B	C	C	A	A	B	A	C	A	C	C
Ques.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	D	C	D	A	B	B	A	A	A	B	D	B	A	B	A
Ques.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	C	C	B	C	D	A	A	A	A	A	C	C	A	D	D
Ques.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	B	B	C	D	D	C	B	C	C	B	D	C	C	A	B
Ques.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Ans.	B	C	A	B	C	C	C	D	C	C	D	C	D	D	C
Ques.	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Ans.	B	A	C	A	B	A	C	A	C	A	B	D	A	C	B