

FIITJEE Admission Test

for students presently in **Class 7 (Paper 1)**

Time: 3 Hours (9:00 am – 12:00 pm)

CODE: 78-1

Maximum Marks: 240

Instructions:

Caution: Class, Paper, Code as given above MUST be correctly marked on the answer OMR sheet before attempting the paper. Wrong Class, Paper or Code will give wrong results.

1. You are advised to devote 35 Minutes on Section-I, 35 Minutes on Section-II, 50 Minutes on Section-III, 30 Minutes on Section-IV and 30 Minutes on Section-V.
2. This Question paper consists of 5 sections. Marking scheme is given in table below:

Section	Subject	Question no.	Marking Scheme for each question	
			Correct answer	Wrong answer
SECTION – I	APTITUDE TEST	1 to 12	+3	0
		13 to 18	+4	0
SECTION – II	PHYSICS (PART-A)	19 to 22	+2	0
	CHEMISTRY (PART-B)	23 to 26	+2	0
	MATHEMATICS (PART-C)	27 to 31	+2	0
	BIOLOGY (PART-D)	32 to 36	+2	0
SECTION – III	PHYSICS (PART-A)	37 to 48	+1.5	0
	CHEMISTRY (PART-B)	49 to 60	+1.5	0
	MATHEMATICS (PART-C)	61 to 72	+1.5	0
	BIOLOGY (PART-D)	73 to 84	+1.5	0
SECTION – IV	PHYSICS (PART-A)	85 to 88	+3	0
	CHEMISTRY (PART-B)	89 to 92	+3	0
	BIOLOGY (PART-C)	93 to 96	+3	0
SECTION – V	MATHEMATICS (PART-A)	97 to 102	+3	0
	MATHEMATICS (PART-B)	103 to 108	+3	0

3. Answers have to be marked on the OMR sheet. The Question Paper contains blank spaces for your rough work. No additional sheets will be provided for rough work.
4. Blank papers, clip boards, log tables, slide rule, calculator, cellular phones, pagers and electronic devices, in any form, are not allowed.
5. **Before attempting paper write your OMR Answer Sheet No., Registration Number, Name and Test Centre in the space provided below.**
6. **See method of marking of bubbles at the back of cover page for question no. 103 to 108.**

Note: Please check this Question Paper contains all **108** questions in serial order. If not so, exchange for the correct Question Paper.

OMR Answer Sheet No. : _____

Registration Number : _____

Name of the Candidate : _____

Test Centre : _____

For questions **103 to 108**

Numerical based questions single digit answer 0 to 9

Example 1:

If answer is 6.

Correct method:

① ② ③ ④ ⑤ ● ⑦ ⑧ ⑨

Example 2:

If answer is 2.

Correct method:

① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

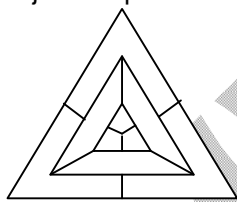
Recommended Time: 35 Minutes for Section – I

Section – I

APTITUDE TEST

This section contains 18 Multiple Choice Questions number 1 to 18. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.

- If 1st April 1963 was a Monday, then which day of the week will 1st August 1959 be?
(A) Saturday (B) Monday
(C) Tuesday (D) Thursday
- Which year will have same calendar as 2002?
(A) 2008 (B) 2011
(C) 2009 (D) 2013
- In a certain code language if the word 'CHAMBER' is code as CHADBEI, then how will you code the word 'INDUSTRY' in that language?
(A) IEDUIBIG (B) IEDCSBIG
(C) IEDCJTIG (D) IEDCJBIG
- Consider the adjoining diagram :
What is the minimum number of colours required to fill the spaces in the diagram without any two adjacent spaces having the same colour?



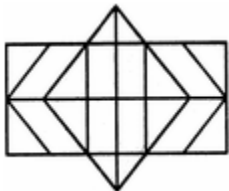
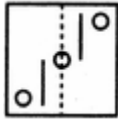
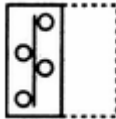
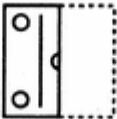
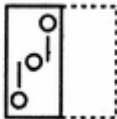
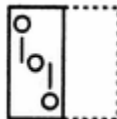
(A) 6

(B) 5

(C) 4

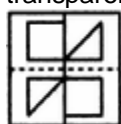
(D) 3

Space for Rough Work

6. The fourth proportional to 5, 8, 15 is:
 (A) 18 (B) 24 (C) 19 (D) 20
7. Determine the number of rectangles and hexagons in the given figure.
- 
- (A) 30, 5 (B) 32, 3 (C) 28, 5 (D) 30, 3
8. Choose the word which is different from the rest.
 (A) Flood (B) Hurricane (C) Avalanche (D) Explosion
9. A sum at R% compound interest doubles in 3 years. In 9 years it will be k times of the original principal. What is the value of k?
 (A) 8 (B) 9 (C) 12 (D) 15
10. A can finish the work in 16 days while B can finish the work in 8 days. After A started the work alone, B joined him after 4 days. Find out the total Time taken to finish the work.
 (A) 4 days (B) 8 days (C) 6 days (D) 14 days
11. Choose the alternative which is closely resembles the water-image of the given combination.
- FROG**
 (1) **ƆꞤOꞤ** (2) **GORF**
 (3) **ꞤORꞤ** (4) **ƆꞤOꞤ**
- (A) 1 (B) 2 (C) 3 (D) 4
12. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.
- 
- 
- 
- 
- 
- (X) (1) (2) (3) (4)
 (A) 1 (B) 2 (C) 3 (D) 4

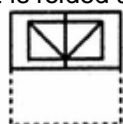
Space for Rough Work

13. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



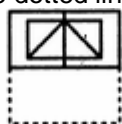
(X)

(A) 1

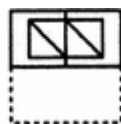


(1)

(B) 2

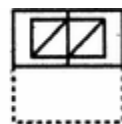


(2)



(3)

(C) 3



(4)

(D) 4

14. Select the figure which satisfies the same conditions of placement of the dots as in Figure-X.



(X)

(A) 1



(1)

(B) 2



(2)



(3)

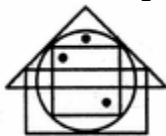
(C) 3



(4)

(D) 4

15. Select the figure which satisfies the same conditions of placement of the dots as in Figure-X.



(X)

(A) 1



(1)

(B) 2



(2)



(3)

(C) 3



(4)

(D) 4

16. What is the remainder when we divide $3^{90} + 5^{90}$ by 34?
 (A) 0 (B) 17 (C) 33 (D) 1

17. An alloy of iron and nickil weight 50g. It contains 80% iron. How much iron should be added to the alloy so that percentage of iron is increased to 90?
 (A) 50 g (B) 60 g (C) 30 g (D) 40 g

18. In a certain code, RIPPLE is written as 613382 and LIFE is written as 8192. How is PILLER written in That code?
 (A) 318826 (B) 318286 (C) 618826 (D) 328816

Space for Rough Work

Recommended Time: 35 Minutes for Section – II

Section – II

PHYSICS – (PART – A)

*This part contains 4 Multiple Choice Questions number 19 to 22. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

19. Temperature of A is 200°C and heat of B is 20°C . When they are kept in contact, heat will
(A) flows from B to A (B) flows from A to B
(C) no heat flow at all (D) flows from B to A only if A is bigger in size
20. In water, heat transfer takes place mainly due to
(A) radiation (B) conduction
(C) convection (D) all of these
21. A destructive tornado can travel at a speed of about
(A) 40 km/h (B) 100 km/h
(C) 300 km/h (D) 200 km/h
22. In an electric bulb, electric energy is converted into:
(A) sound energy (B) mechanical energy
(C) light energy (D) magnetic energy

Space for Rough Work

CHEMISTRY – (PART – B)

*This part contains 4 Multiple Choice Questions number 23 to 26. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

23.acid is used in the manufacture of many car batteries.
(A) Phosphoric (B) Hydrochloric
(C) Nitric (D) Sulphuric
24. During a chemical change, which will not happen?
(A) New substance formed (B) Energy changes are involved
(C) It is a permanent change (D) Only state of the substance is changed
25. Black soil does not exhibit one of the properties
(A) porous (B) rich in iron and magnesium
(C) rich in humus (D) contains large amount of sand
26. Soil particles arranged in order of increasing size are :
(A) Sand – Silt – Clay (B) Clay – Sand – Silt
(C) Silt – Clay – Sand (D) Clay – Silt – Sand

Space for Rough Work

MATHEMATICS – (PART – C)

*This part contains 5 Multiple Choice Questions number 27 to 31. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

27. If one-fifth of two-third of one-half of number is 30, then find the number.
(A) 450 (B) 900 (C) 950 (D) 400
28. The median of the following data is equal to:
–2, 3, 4, –5, 9, 8, 11
(A) 5 (B) 4 (C) 9 (D) none of these
29. What is the probability of getting a prime number when a dice is thrown?
(A) $\frac{2}{3}$ (B) $\frac{1}{3}$ (C) $\frac{1}{2}$ (D) $\frac{1}{6}$
30. One seventh of a number is same as one eight of that number plus 3. Find the number.
(A) 165 (B) 168 (C) 158 (D) 169
31. If 3 toys are sold at the cost price of 4 toys of the same kind, then profit will be :
(A) 25% (B) $33\frac{1}{3}\%$ (C) $66\frac{2}{3}\%$ (D) 50%

Space for Rough Work

BIOLOGY – (PART – D)

*This part contains 5 Multiple Choice Questions number 32 to 36. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

32. The main function of intestinal villi is
 (A) Stimulate peristalsis (B) Prevent peristalsis
 (C) Provide large surface area for absorption (D) None of these

33. Match the following

Column – I		Column – II	
(a)	Salivary gland	(i)	Acid release
(b)	Liver	(ii)	Absorption of water
(c)	Large intestine	(iii)	Bile juice secretion
(d)	Stomach	(iv)	Saliva secretion

- (A) a – i, b – ii, c – iii, d – iv (B) a – iv, b – iii, c – ii, d – i
 (C) a – iv, b – i, c – ii, d – iii (D) a – ii, b – iii, c – i, d – iv

34. Digestion or conversion of large food molecule into their smaller monomers is due to
 (A) Enzyme (B) Action of saliva
 (C) Churning movement of stomach (D) Chewing

35. Translocation of food primarily takes place through:
 (A) Phloem (B) Xylem
 (C) Cortex (D) Pith

36. Which of the following words can complete the given table?

Organisms	Mode of nutrition
Cuscuta	P
Q	Insectivorous
R	Saprophytic

- (A) P-Parasitic; Q-Mosquito; R-Algae (B) P-Autotrophic; Q-Mushroom; R-Algae
 (C) P-Parasitic; Q-Nepenthes; R-Mould (D) P-Autotrophic; Q-Mushroom; R-Yeast

Space for Rough Work

Recommended Time: 50 Minutes for Section – III

Section – III

PHYSICS – (PART – A)

This part contains **12 Multiple Choice Questions** number **37 to 48**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

37. Given below are two columns I and II.

Column I		Column II	
(i)	Conductor	(p)	Wood, Plastic, Wool, Air, Water
(ii)	Insulators	(q)	Metals
(iii)	Closed circuit	(r)	Presence of electric current in the circuit
(iv)	Open circuit	(s)	Absence of electric current in the circuit

(A) (i)-r, (ii)-p, (iii)-s, (iv)-q

(B) (i)-q, (ii)-p, (iii)-r, (iv)-s

(C) (i)-r, (ii)-q, (iii)-s, (iv)-p

(D) (i)-q, (ii)-p, (iii)-p, (iv)-r

38. Which one is odd?

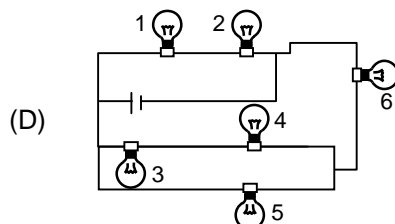
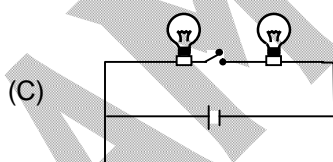
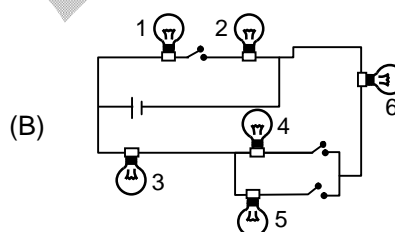
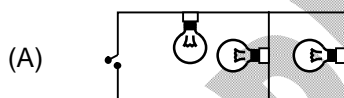
(A) Hurricane

(B) Typhoon

(C) Cyclone

(D) winter

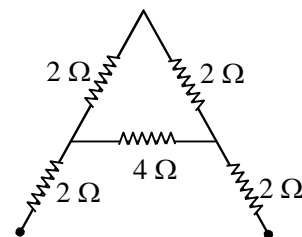
39. In which of the circuits given below, all the bulbs glow?



Space for Rough Work

40. The equivalent resistance of the network shown in the figure between the base terminals is

- (A) $6\ \Omega$
 (B) $3\frac{1}{2}\ \Omega$
 (C) $2\frac{2}{3}\ \Omega$
 (D) $2\ \Omega$

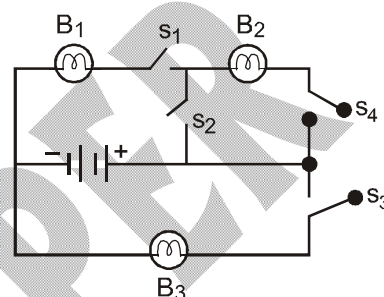


41. Three bulbs B_1 , B_2 and B_3 are connected in an electric circuit as shown below:

s_1 , s_2 , s_3 and s_4 are four switches.

To switch on bulb B_2 only, which switch must be closed:

- (A) S_1 only
 (B) S_2 only
 (C) S_3 only
 (D) Both S_1 and S_4



42. What is the highest total resistance (in ohms) that can be secured by combinations of three resistors of 12Ω , 13Ω and 16Ω ?

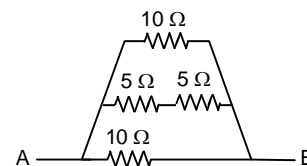
- (A) 36Ω
 (B) 44Ω
 (C) 12Ω
 (D) 41Ω

43. In an electric bell, electric energy is converted into:

- (A) sound energy
 (B) mechanical energy
 (C) light energy
 (D) magnetic energy

44. The resultant resistance between point A and B is

- (A) $\frac{10}{3}\ \Omega$
 (B) $\frac{10}{4}\ \Omega$
 (C) $\frac{10}{6}\ \Omega$
 (D) $10\ \Omega$

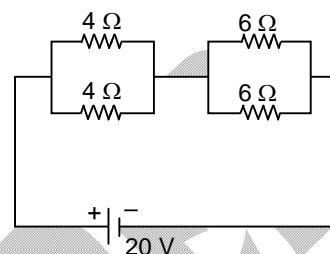


Space for Rough Work

45. is the degree of hotness or coldness of a body:
 (A) heat (B) temperature
 (C) Celsius (D) none of these

46. 10°C is equal to
 (A) 20°F (B) 80°F
 (C) 122°F (D) 50°F

47. Four resistances are connected in a circuit as shown in the adjacent figure. The values of the current, in ampere, in the $4\ \Omega$ and $6\ \Omega$ resistance are
 (A) 2 and 2
 (B) 1 and 2
 (C) 1 and 1
 (D) 2 and 4



48. Black bodies are
 (A) good absorbers of heat (B) poor radiators of heat
 (C) good radiators of heat (D) both (A) and (C)

Space for Rough Work

CHEMISTRY – (PART – B)

*This part contains 12 Multiple Choice Questions number 49 to 60. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

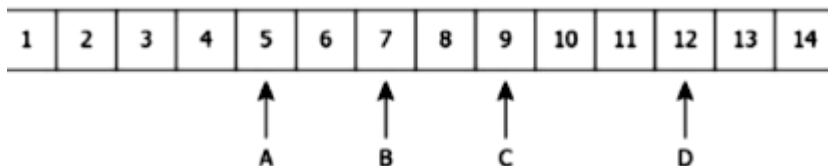
49. Silk made up of damaged cocoons is known as
 (A) raw silk (B) thrown silk
 (C) spun silk (D) none of the above
50. Which of the following is not a base?
 (A) KOH (B) Mg(OH)_2
 (C) Al(OH)_3 (D) NaCl
51. Formation of a compound from two or more elements or compounds is called
 (A) Decomposition reaction (B) Combination reaction
 (C) Displacement reaction (D) Oxidation reaction
52. The fleece is combed to remove.
 (A) burrs (B) dust
 (C) low quality hairs (D) none of these
53. Animal fibre is made up of
 (A) cellulose (B) protein
 (C) nylon (D) rayon
54. Sodium hydroxide is a
 (A) weak base (B) weak acid
 (C) strong base (D) strong acid.
55. Alkalies are
 (A) acids, which are soluble in water (B) acids, which are insoluble
 (C) bases, which are insoluble in water (D) bases, which are soluble in water
56. In terms of acidic strength, which one of these following is in the correct increasing order?
 (A) Water < Acetic acid < Hydrochloric acid (B) Water < Hydrochloric < Acetic acid
 (C) Acetic acid < Water < hydrochloric acid (D) Hydrochloric acid < water < acetic acid.

Space for Rough Work

57. Which one of the following salts does not contain water of crystallization?
 (A) Blue vitriol (B) Baking soda
 (C) Washing soda (D) Gypsum

58. What is the scientific name of mulberry tree?
 (A) Magnifera indica (B) Morus alba
 (C) Desmodium girenge (D) None of these

59. The image shows the pH values of four solutions on a pH scale.



Which solutions are alkaline in nature?

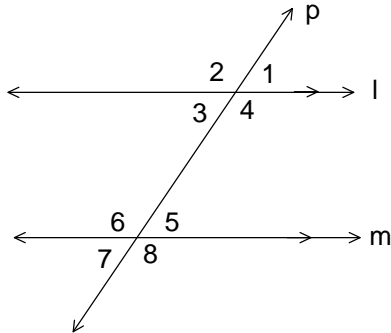
- (A) A and B (B) B and C
 (C) C and D (D) A and D
60. Turmeric is a natural indicator. On adding its paste to acid and base separately, which colours would be observed.
 (A) Yellow in both acid and base (B) Yellow in acid and red in base
 (C) Pink in acid and yellow in base (D) Red in acid and blue in base.

Space for Rough Work

MATHEMATICS – (PART – C)

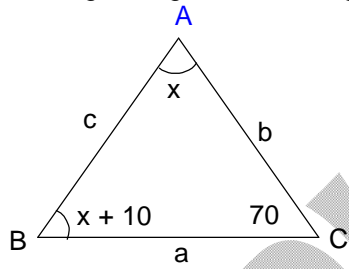
This part contains **12 Multiple Choice Questions** number **61 to 72**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

61. Which of the following is incorrect for the given figure.



- (A) $\angle 1 + \angle 2 = 180^\circ$
 (B) $\angle 2 + \angle 3 = \angle 1 + \angle 4 = \angle 6 + \angle 7$
 (C) $\angle 3 + \angle 8 = 180^\circ$
 (D) $\angle 1 = \angle 8$

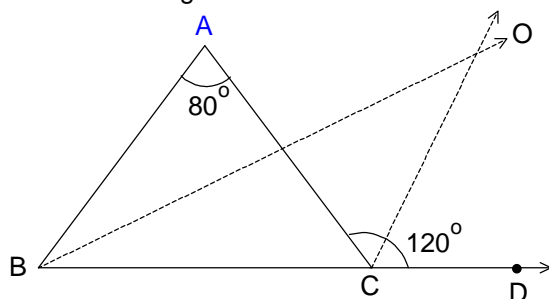
62. In the given figure, the arrangement of sides in ascending order is



- (A) $c > b > a$
 (B) $b > c > a$
 (C) $a > c > b$
 (D) none of these

Space for Rough Work

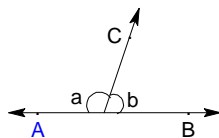
63. In the given figure CO and BO are the bisectors of exterior angles and interior angles $\angle ABC$. The measure of angle BOC is



- (A) 20° (B) 30° (C) 50° (D) none of these
64. The temperature at 12 noon was 10°C above zero. If it decreases at the rate of 2°C per hour until midnight at what time would the temperature be 8°C below zero?
 (A) 9 pm (B) 10 pm (C) 11 pm (D) none of these
65. A rectangular sheet of paper is $12\frac{1}{2}$ cm long and $10\frac{2}{3}$ cm wide. Its area in square m is
 (A) $\frac{1}{75}\text{m}^2$ (B) $\frac{1}{90}\text{m}^2$ (C) $\frac{1}{105}\text{m}^2$ (D) none of these
66. If $x_1, x_2, x_3, x_4, \dots, x_n$ are the n different observations of data and N , a positive real number is subtracted from each observations, the new mean will differ by
 (A) $\frac{N}{2}$ (B) N (C) $N - 2$ (D) none of these
67. If a 4 digit number A381 is divisible by 11, find the value of smallest natural number A.
 (A) 5 (B) 6 (C) 7 (D) 9

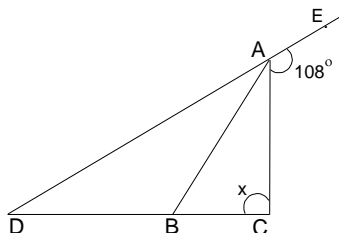
Space for Rough Work

68. In the given figure, a is greater than b by one third of a right angle, then the values of a and b =



- (A) 100° and 80° (B) 105° and 75°
(C) 60° and 120° (D) None

69. In the given figure, AB divides $\angle DAC$ in the ratio $1:3$ and $AB = DB$, then the value of x =



- (A) 90° (B) 60° (C) 30° (D) None

70. If x is 80% of y , what percent of x is y ?
(A) 75% (B) 80% (C) 100% (D) 125%
71. If ratio of two numbers is $3:4$ and their HCF is 5. Their LCM is :
(A) 10 (B) 60 (C) 136 (D) 12
72. The mean of 50 observations was 36. It was found later that an observation 48 was wrongly taken as 23. The corrected new mean is equal to
(A) 35.2 (B) 36.1 (C) 36.5 (D) 39.1

Space for Rough Work

BIOLOGY – (PART – D)

This part contains 12 Multiple Choice Questions number 73 to 84. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.

73. Floor of the chest cavity is formed by
(A) Lungs (B) Ribs
(C) Diaphragm (D) Pericardium
74. The action of bile can be called
(A) Oxidation (B) Emulsification
(C) Esterification (D) Dehydrogenation
75. Mammals are said to have a double circulatory system. It means that
(A) Blood vessels are paired, e.g., artery to each leg
(B) There are two types of blood vessels attached to every organ e.g., an artery and a vein
(C) There are two systems, one from the heart to the lungs and then lungs to heart
(D) The blood circulates twice in the heart during each trip around the body
76. Which of the following statements regarding anaerobic respiration is not correct?
(A) yeast show anaerobic respiration
(B) alcohol and lactic acid is a product of it
(C) anaerobic respiration does not play any role in muscle cramp
(D) fermentation is another anaerobic pathway for breaking down glucose
77. The site for light reaction in plants is
(A) Grana (B) Stroma
(C) ER (D) Cytoplasm
78. During anaerobic respiration done by yeast, how many ATP are formed from one molecule of glucose?
(A) 38 (B) 42
(C) 2 (D) None
79. Which of the following is a respiratory disease?
(A) Emphysema (B) Asthma
(C) Bronchitis (D) All of above

Space for Rough Work

80. Blood pressure in humans is measured using
(A) Potometer (B) Stethoscope
(C) Hygrometer (D) Sphygmomanometer
81. Which enzyme is most abundantly found on Earth?
(A) RuBisCO (B) Nitrogenase
(C) Invertase (D) Catalase
82. Mushroom and others micro-organism eat
(A) Brinjal (B) Humus
(C) Rice (D) Wax
83. Duodenum, Jejunum, ileum are _____ parts.
(A) small Intestine (B) Large Intestine
(C) Oesophagus (D) Stomach
84. Air tubes in insect is called
(A) Gills (B) Air tube
(C) Air bladder (D) Tracheae

Space for Rough Work

Recommended Time: 30 Minutes for Section – IV**Section – IV****PHYSICS – (PART – A)**

*This part contains 4 Multiple Choice Questions number 85 to 88. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

85. Given below are two columns I and II.

Column I		Column II	
(i)	Conduction	(p)	Night time
(ii)	Convection	(q)	metals
(iii)	Radiation	(r)	water
(iv)	Land Breeze	(s)	Transfer of heat from sun to us

- (A) (i)-r, (ii)-p, (iii)-s, (iv)-q
 (B) (i)-q, (ii)-r, (iii)-s, (iv)-p
 (C) (i)-r, (ii)-q, (iii)-s, (iv)-p
 (D) (i)-q, (ii)-s, (iii)-p, (iv)-r
86. Speed of light in vacuum is
 (A) 3×10^5 cm/s
 (B) 3×10^{11} mm/s
 (C) 3×10^7 cm/s
 (D) 3×10^{10} mm/s
87. Which of the following is a good conductor of heat?
 (A) Aluminium
 (B) Iron
 (C) copper
 (D) All of these
88. Cyclone warning is issued by Government
 (A) one day in advance
 (B) one year in advance
 (C) 20 hrs in advance
 (D) none of these

Space for Rough Work

CHEMISTRY – (PART – B)

*This part contains 4 Multiple Choice Questions number 89 to 92. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

89. What is the formula of rust?
(A) Fe_2O_3 (B) FeO
(C) Fe_3O_4 (D) None of these
90. _____ is a reaction between acid and base to form salt and water
(A) Electrolysis (B) Neutralisation
(C) Decomposition (D) Corrosion
91. What happened when wool fibre is burn
(A) It produces a sizzling noise (B) It smells like burning hair
(C) Curls away from flamed (D) All of above
92. When CO_2 is passed through lime water, it turns lime water.
(A) Milky (B) Blue
(C) Silver (D) Golden

Space for Rough Work

BIOLOGY – (PART – C)

*This part contains 4 Multiple Choice Questions number 93 to 96. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

93. During the dark reaction, the synthesis of carbohydrate occurs from CO_2 in the _____ of the chloroplast.
(A) Grana (B) Stroma
(C) Mesophyll cells (D) Plasmodesmata
94. Trachea of man is made up of
(A) Bone (B) Cartilage
(C) Muscles (D) Phospholipid
95. The accumulation of _____ acid causes muscle cramps.
(A) hydrochloric acid (B) lactic acid
(C) ascorbic acid (D) citric acid
96. Lenticels are found in which of the following of a plant?
(A) The stem in which secondary growth has taken place.
(B) The root where secondary growth has not taken place.
(C) The roots as well as the stem where secondary growth has occurred.
(D) The leaves and roots.

Space for Rough Work

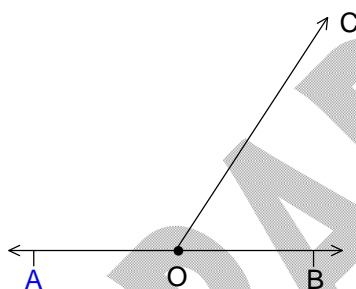
Recommended Time: 30 Minutes for Section – V

Section – V

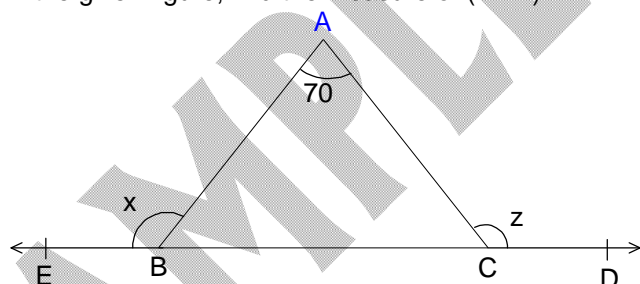
MATHEMATICS – (PART – A)

This part contains **6 Multiple Choice Questions** number **97 to 102**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

97. Ray \overrightarrow{OC} stands on a line \overleftrightarrow{AB} such that adjacent-angles are one third and half of a constant 'K'. Find the value of K.



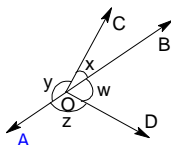
- (A) 256° (B) 220° (C) 216° (D) none of these
98. Three sides of a triangle are produced in order. The exterior angles so formed are each equal to one-another. What kind of triangle is formed?
 (A) isosceles triangle (B) scalene triangle (C) equilateral triangle (D) none of these
99. In the given figure, find the measure of $(x + z)$



- (A) 225° (B) 250° (C) 300° (D) none of these

Space for Rough Work

100. The median for first 10 natural numbers are
 (A) 5 (B) 5.5 (C) 6 (D) 6.5
101. On dividing 2272 as well as 875 by 3 digit number N, we get the same remainder. The sum of the digits of N is
 (A) 10 (B) 11 (C) 12 (D) None of these
102. In the given figure, if $x + y = w + z$, then $x + y =$



- (A) 220° (B) 100° (C) 180° (D) None of these

Space for Rough Work

MATHEMATICS – (PART – B)

This part contains 6 Numerical Based Questions number 103 to 108. Each question has Single Digit Answer 0 to 9.

103. If the median of first nine prime numbers is $11p$, find p .
104. Find the greatest single digit number that completely divides $49^{15} - 1$?
105. The supplement of an angle is one – third of itself, then angle is x . Find the sum of digits of x
106. If $\frac{P}{q} = \left(\frac{2}{3}\right)^2 \div \left(\frac{6}{7}\right)^0$ then find the value of $4\left(\frac{q}{p}\right)$ is
107. The lengths of three sides of a triangle is 7 cm, 24 cm and 25 cm respectively. The the area of the triangle is $x \text{ cm}^2$. Find the value of $\frac{x}{12}$.
108. The height of an equilateral triangle is $5\sqrt{3}$ cm, then the length of side is a cm. Find $\frac{a}{2}$

Space for Rough Work

FIITJEE Admission Test

for students presently in **Class 7 (Paper 1)**

SAMPLE PAPER ANSWER KEY

1. A	2. D	3. D	4. D
5. B	6. B	7. A	8. D
9. A	10. B	11. A	12. B
13. A	14. D	15. B	16. A
17. A	18. A	19. B	20. C
21. C	22. C	23. D	24. D
25. A	26. D	27. A	28. B
29. C	30. B	31. B	32. C
33. B	34. A	35. A	36. C
37. B	38. D	39. D	40. A
41. D	42. D	43. A	44. A
45. B	46. D	47. A	48. D
49. C	50. D	51. B	52. A
53. B	54. C	55. D	56. A
57. B	58. B	59. C	60. B
61. D	62. A	63. D	64. A
65. A	66. B	67. C	68. B
69. A	70. D	71. B	72. C
73. C	74. B	75. D	76. C
77. A	78. C	79. D	80. D
81. A	82. B	83. A	84. D
85. B	86. B	87. D	88. A
89. A	90. B	91. D	92. A
93. B	94. B	95. B	96. A
97. C	98. C	99. B	100. B
101. A	102. C	103. 1	104. 8
105. 9	106. 9	107. 7	108. 5