

FIITJEE SAMPLE PAPER – 2018

(Big Bang Edge Test / Talent Recognition Exam)

for students presently in
Class 5 (Paper 1)

Time: 3 Hours (9:30 am – 12:30 pm)

Code **5000**

Maximum Marks: 354

Instructions:

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

1. This Question paper consists of 3 sections. All questions will be multiple choice single correct out of four choices with marking scheme in table below:

Section		Question no.	Marking Scheme for each question	
			correct answer	wrong answer
SECTION – I	APTITUDE TEST	1 to 5, 13 to 14, 22 to 23	+3	0
		6 to 12, 15 to 18, 24 to 27	+4	0
		19 to 21, 28 to 30	+5	0
SECTION– II & III (SCIENCE & MATHEMATICS)	PHYSICS	31 to 32, 36, 81	+3	0
		33 to 34, 37 to 38, 82	+4	0
		35, 39, 83	+5	0
	CHEMISTRY	40 to 41, 45, 84	+3	0
		42 to 43, 46 to 47, 85	+4	0
		44, 48, 86	+5	0
	MATHEMATICS	49 to 50, 59 to 60, 87	+3	0
		51 to 56, 61 to 66, 88, 89	+4	0
		57 to 58, 67 to 68, 90	+5	0
	BIOLOGY	69 to 70, 73, 77	+3	0
		71, 74 to 75, 78 to 79	+4	0
		72, 76, 80	+5	0

2. 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.
3. Blank papers, clip boards, log tables, slide rule, calculator, cellular phones, pagers and electronic devices, in any form, are not allowed.
4. **Before attempting paper write your OMR Answer Sheet No., Registration Number, Name and Test Centre** in the space provided at the bottom of this sheet.
5. **See method of marking of bobbles of the back of cover page for question no. 81 to 90.**

Note: Please check this Question Paper contains all **90** 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 **81 to 90**

Numerical based questions single digit answer 0 to 9

Example 1:

If answer is 6.

Correct method:

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

Example 2:

If answer is 2.

Correct method:

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

Section-I**APTITUDE TEST****Straight Objective Type**

This section contains 30 multiple choice questions number 1 to 30. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

1. A is mother of B but B is not son of A. Then how is B related to A?
 (A) Brother (B) Daughter
 (C) Son (D) Daughter-in-law
2. Arrange the words given below in a meaningful sequence.
 1. Police 2. Punishment 3. Crime 4. Judge 5. Judgement
 (A) 3, 1, 2, 4, 5 (B) 1, 2, 4, 3, 5
 (C) 5, 4, 3, 2, 1 (D) 3, 1, 4, 5, 2

Directions (Q. 3 to 5): In each of the following questions, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern.

3. 3, 6, 11, 18, 27, ?
 (A) 37 (B) 36
 (C) 38 (D) 40
4. 0, 2, 6, 14, 30, ?
 (A) 58 (B) 62
 (C) 68 (D) 60
5. 4, 12, 36, 108, ?
 (A) 144 (B) 216
 (C) 304 (D) 324
6. If $-$ means \times , \times means $+$, $+$ means \div and \div means $-$, then $14 - 10 \times 4 \div 16 + 8 = ?$
 (A) 142 (B) 134
 (C) 6 (D) 5
7. If $+$ means \times , $-$ means \div , \times means $+$ and \div means $-$, then $(18 + 10 \times 20) - 8 \div 6 = ?$
 (A) 92 (B) 35
 (C) 26 (D) 19

Space for Rough Work

8. If + means \div , - means \times , \times means + and \div means -, then $(280 + 10 \times 20) - 8 \div 6 = ?$
(A) 378 (B) 258
(C) 70 (D) 64
9. If \times means -, \div means +, + means \times , then find the value of given equation.
 $(16 \times 5) \div 5 + 3 = ?$
(A) 62 (B) 10
(C) 2 (D) 26

Directions (Q. 10 to 12): Find the odd one from the alternative.

10. (A) 89 (B) 97
(C) 79 (D) 69
11. (A) A (B) E
(C) O (D) V
12. (A) January (B) March
(C) December (D) June
13. In a certain code KAVERI is written as IREVAK, then how is MYSORE written in that same code?
(A) EROSYM (B) EROYSM
(C) SYMERO (D) SMYREO

Directions (Q. 14 to 15): In each of the following questions, which word cannot be formed by using the letter of given word.

14. CONSTITUTIONAL
(A) LOCATION (B) TUTION
(C) TALENT (D) CONSULT
15. COURAGEOUS
(A) COURAGE (B) SOURCE
(C) COURSE (D) GENEROUS

Space for Rough Work

16. Ravi is eighteenth from left and nineteenth from right in a row. How many students in a row?
 (A) 36 (B) 37
 (C) 35 (D) 38
17. In a row of 40 students Ranjeet is seventeenth from right and then what will be Ranjeet position from left?
 (A) 22 (B) 23
 (C) 24 (D) 28

Directions (Q. 18 to 21): Study the following information carefully and answer the questions given below:

- (i) Five persons A, B, C, D, E are sitting in a circle and their faces are towards the centre.
 (ii) D is between B and C.
 (iii) B is sitting immediately left of E.

18. Who is sitting exactly between A and B?
 (A) C (B) D
 (C) E (D) None of these
19. Who is sitting immediately right of A?
 (A) B (B) D
 (C) C (D) E
20. Who is sitting immediately right of E?
 (A) A (B) C
 (C) B (D) D
21. Who is sitting exactly between A and D?
 (A) C (B) E
 (C) B (D) None of these
22. Anand is son of Prerna. Rajeev is brother of Prerna. Neha is daughter of Rashmi. Neha is sister of Rajeev. How is Anand related to Rashmi?
 (A) Son (B) Grandfather
 (C) Grandson (D) Granddaughter

Space for Rough Work

23. A is mother of B, C is son of A, D is brother of E, E is daughter of B. Who is grandmother of E?
(A) A (B) B
(C) C (D) D
24. Hemant travels 10 km towards North then he turns left and travels 4 km and then he turns to his right and covers another 5 km. He then turns to his right and travels another 4 km. How far is he from the point of starting his journey?
(A) 10 km (B) 15 km
(C) 5 km (D) 25 km

Directions (Q. 25 to 27): Read the following information carefully and answer the question based on it by. Five students K, L, M, N and O study in a class of these.

- (i) K and L study Physics and Chemistry (ii) M and L study Physics and Mathematics
(iii) N and K study Biology and Chemistry (iv) O and L study Anthropology and Civics
(v) O and N study Chemistry and Mathematics

25. Who among the studies maximum number of subjects?
(A) O (B) N
(C) L (D) K
26. Who among the studies minimum number of subjects?
(A) O (B) N
(C) K (D) M
27. Who among the students studies only four subjects?
(A) M (B) O
(C) N (D) K

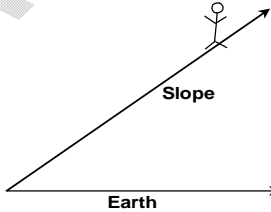
Directions (Q. 28 to 30): Choose the option which best fits the series:

28. CJ, FK, IL, LM, ?
(A) MP (B) ON
(C) MN (D) OP
29. BI, DH, FG, HF, ?
(A) JD (B) KE
(C) JE (D) IE
30. Y, T, P, M, ?
(A) K (B) L
(C) J (D) H

Space for Rough Work

Section-II**Science & Mathematics****Physics****(Part - A)****Straight Objective Type**

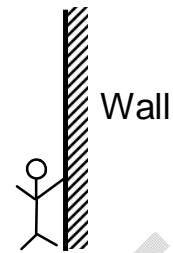
Question numbers 31 to 39 are 9 multiple choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

31. Which of the following simple machine has one end of the flat surface higher than the other
 (A) Wedge (B) Pulley
 (C) Lever (D) Axle
32. When we throw a ball vertically up in space, the ball
 (A) Will come to our hand again (B) Won't come back
 (C) Start flying horizontally (D) Will come back after a long time.
33. Which of the following is an example of communication?
 (A) Travelling by car. (B) Travelling by aeroplane.
 (C) Talking over phone. (D) all are correct.
34. A child is at the top of a slider and free to slide, which of the following is correct?
 (A) he will slide up due to earth's pull
 (B) he will slide down due to earth's pull
 (C) Both A & B
 (D) None of these.
- 
35. Choose the correct answer?
 (A) Satellites can be man-made (B) Planets can be man-made
 (C) both A and B are correct (D) None of the above.
36. A simple machine can do which of the following :-
 (A) It can change the direction of effort (B) It can increase the force of effort
 (C) It can increase speed (D) All of above.

Space for Rough Work

37. The stick to move a heavy stone lying on the surface is an example of
(A) Lever (B) Pulley
(C) Wheel (D) Screw

38. Your friend pushing the wall and wall does not move with his hand is an example of :-
(A) Force (B) Speed
(C) Distance (D) Pull



39. People cleaning the garbage around us is an example of –
(A) Force (B) Work
(C) Distance (D) None

Space for Rough Work

Chemistry**(Part - B)****Straight Objective Type**

Question numbers 40 to 48 are 9 multiple choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

40. Burning of candle is an example of
(A) Physical change (B) Chemical change
(C) Both physical and chemical change (D) None of these
41. Inside the earthen pot water is cool
(A) It is the application of evaporation
(B) It is the application of melting
(C) Both (A) and (B)
(D) None of these
42. Total number of atoms in one water molecule is
(A) 2 (B) 3
(C) 4 (D) 5
43. The main part in soil which makes soil fertile is
(A) Humus (B) Sand
(C) Clay (D) None of these
44. Sugar water mixture is an example of
(A) Chemical change (B) Physical change
(C) Both physical and chemical change (D) None of these
45. The gas which is released by plants during photosynthesis in atmosphere is
(A) H₂ (B) O₂
(C) N₂ (D) CO₂
46. Gas which is used for making fertilizer is
(A) O₂ (B) N₂
(C) H₂ (D) CO₂
47. Air is a
(A) Mixture (B) Pure
(C) Both (A) and (B) (D) None of these
48. Ground water is
(A) Water found in oceans and seas (B) Water of rivers
(C) Water found below the water table (D) None of these

Space for Rough Work

Mathematics**(Part - C)****Straight Objective Type**

Question numbers 49 to 68 are 20 multiple choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

49. A triangle is said to be scalene if all the 3 angles are _____
(A) Unequal (B) Equal
(C) Only two equal (D) none of these
50. A triangle in which all the three sides are equal is
(A) Equilateral (B) Isosceles
(C) Scalene (D) None of these
51. With which of the given angle measurements can a triangle be constructed?
(A) 30° , 60° , 70° (B) 50° , 70° , 60°
(C) 40° , 80° , 65° (D) 72° , 28° , 90°
52. A rectangular plot is to be enclosed by wire fencing. If length and breadth of the plot are 90 metres and 40 metres respectively, how many metres of fencing will be required?
(A) 130 metres (B) 260 metres
(C) 390 metres (D) 520 metres
53. The perimeters of two squares are 40 cm and 32 cm. The sum of the areas of the squares is
(A) 72 cm^2 (B) 164 cm^2
(C) 18 cm^2 (D) None of these
54. The ratio of boys and girls in a school is 12 : 5. If the number of girls be 840, the total strength of the school is
(A) 1190 (B) 2380
(C) 2856 (D) 2142
55. In covering 222 km, a car consumes 12 litres of petrol. How many kilometers will it go in 10 litres of petrol?
(A) 172 km (B) 185 km
(C) 205 km (D) 266.4 km
56. The two angles of a triangle are complementary. The third angle is
(A) 45° (B) 60°
(C) 30° (D) 90°

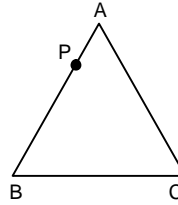
Space for Rough Work

57. The measures of two angles of a triangle are 75° and 65° . Then the 3rd angle is
(A) 45° (B) 40°
(C) 50° (D) 55°
58. If $a = 3$ and $b = 5$, then the value of $a^2 + ab =$
(A) 42 (B) 24
(C) 14 (D) 16
59. 70% of 80% of 30% of 3000 = ?
(A) 900 (B) 2400
(C) 2100 (D) 504
60. The sides of a triangle are in the ratio 1 : 3 : 5. If its perimeter is 90cm, the length of its largest side is
(A) 40 cm (B) 50 cm
(C) 36 cm (D) 54 cm
61. A triangle having only two of its sides equal is called _____
(A) Equilateral (B) Isosceles
(C) Scalene (D) None of these
62. A piece of wire, $3\frac{3}{4}$ meters long, broke into two pieces. One piece is $\frac{5}{8}$ metre long. How long is the other piece?
(A) $2\frac{1}{8}$ m (B) $3\frac{1}{8}$ m
(C) $8\frac{1}{3}$ m (D) $3\frac{1}{8}$ cm
63. By selling 21 mangoes a vendor loses the selling price of 4 mangoes. Find the loss percent.
(A) 14% (B) 16%
(C) 18% (D) 21%
64. If 14 is subtracted from 5 times a number, the result is 106. The number is:
(A) 25 (B) 24
(C) 42 (D) 52

Space for Rough Work

65. If 28% of 75 students failed in an examination, find the number of students who passed in that examination.
 (A) 21 (B) 54
 (C) 28 (D) 47

66. In the adjoining figure, the point P lies
 (A) in the interior of $\triangle ABC$
 (B) on the $\triangle ABC$
 (C) in the exterior of $\triangle ABC$
 (D) none of these



67. $4 + 1\frac{1}{5} + \frac{2}{3} - \frac{7}{15} =$
 (A) $4\frac{7}{15}$
 (C) $5\frac{6}{15}$

- (B) $3\frac{7}{15}$
 (D) $7\frac{5}{14}$

68. When a commodity is sold for Rs.34.80, there is a loss of 25%. What is the cost price of the commodity?
 (A) Rs.26.10 (B) Rs.43
 (C) Rs.43.20 (D) Rs.46.40

Space for Rough Work

Biology **(Part - D)**

Straight Objective Type

Question numbers 69 to 80 are 12 multiple choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

69. How many bones are there in the face?
(A) 14 (B) 18
(C) 24 (D) 100
70. Which of the following acts as a pump?
(A) Artery (B) Lungs
(C) Heart (D) Stomach
71. Plants get nutrients and water with the help of:
(A) Leaves (B) Stem
(C) Flower (D) Roots
72. Which of the following food we eat is a root?
(A) Brinjal (B) Carrot
(C) Cauliflower (D) Cabbage
73. Scurvy is caused by the deficiency of:
(A) Vitamin A (B) Vitamin B
(C) Vitamin C (D) Vitamin D
74. Which one of the following is not a mineral?
(A) Calcium (B) Potassium
(C) Iron (D) Vitamin
75. Which class of animals can live both on land and in water?
(A) Reptiles (B) Amphibians
(C) Mammals (D) Aquatic
76. All infectious diseases are caused by:
(A) Lack of any nutrients (B) Lack of minerals and vitamins
(C) Lack of water (D) Germs

Space for Rough Work

77. Match the following:

(i)	Chicken pox	(a)	Vomiting
(ii)	Cholera	(b)	Mosquito
(iii)	Measles	(c)	Spread through air
(iv)	Malaria	(d)	Prevented by vaccination

(A) (i → c), (ii → a), (iii → d), (iv → b)

(B) (i → b), (ii → c), (iii → d), (iv → a)

(C) (i → a), (ii → c), (iii → b), (iv → d)

(D) (i → d), (ii → b), (iii → a), (iv → c)

78. Match the following

(i)	Sericulture	(a)	Honey bees
(ii)	Vermiculture	(b)	Silk worms
(iii)	Apiculture	(c)	Grape farming
(iv)	Viticulture	(d)	Earthworms

(A) (i) → (b), (ii) → (d), (iii) → (c), (iv) → (a)

(B) (i) → (b), (ii) → (d), (iii) → (a), (iv) → (c)

(C) (i) → (a), (ii) → (c), (iii) → (b), (iv) → (d)

(D) (i) → (a), (ii) → (b), (iii) → (c), (iv) → (d)

79. Complete the given pair:

(i) Poliomyelitis : Polio virus

(ii) Cholera :

(A) *Vibrio cholerae*

(B) *Mycobacterium cholerae*

(C) *Staphylo cholerae*

(D) *Salmonella cholerae*

80. In human, kidneys are a part of theA.....system. Kidney produces the yellowish liquid.....B.....

(A) A – Excretory, B – Mucous

(B) A – Respiratory, B – Mucous

(C) A – Excretory, B – Urine

(D) A – Excretory, B – Sweat

Space for Rough Work

Section-III **Physics, Chemistry & Mathematics**

Physics

(Part - A)

Numerical Based Type

Question numbers 81 to 83 are 3 numerical based questions single digit answer 0 to 9.

81. Earth completes rotation about its own axis in $3k$ hours. Where k is an integer. What is the value of k ?
82. How many planets are there in our solar system?
83. A boy tries to move the concrete wall by applying force equal to 8 N . But the force is not enough to move the wall. What is the work done by the boy on the wall?
-

Space for Rough Work

Chemistry

(Part - B)

Numerical Based Type

Question numbers 84 to 86 are 3 numerical based questions single digit answer 0 to 9.

84. Which of the following is natural disaster?
Tsunami, Draught, Explosion, Flood, Earthquake, Cyber attack
85. For which of the following water is required:
Germination, Digestion, Breathing, Excretion, Reflex action
86. Which of the following is a way to check floods?
Dams, Reserviors, Erosion, Embankments
-

Space for Rough Work

Mathematics

(Part - C)

Numerical Based Type

Question numbers 87 to 90 are 4 numerical based questions single digit answer 0 to 9.

87. The area of a rectangle is equal to the area of a square of side 12m. If the length of rectangle is 16m, then the breadth is:
88. The area of rectangle is 108 m^2 . If the length of rectangle is 12 m, then the breadth is:
89. If a person travels 160 km in 4 hours, then he travels 240 km in _____ hours.
90. The base of a triangle is 12 cm and its area is 30 cm^2 then the height of the triangle is:
-

Space for Rough Work

FIITJEE SAMPLE PAPER – 2018

(Big Bang Edge Test / Talent Recognition Exam)

for students presently in

Class 5

ANSWERS

PAPER-1

1.	B	2.	D	3.	C	4.	B
5.	D	6.	A	7.	D	8.	A
9.	D	10.	D	11.	D	12.	D
13.	A	14.	C	15.	D	16.	A
17.	C	18.	C	19.	C	20.	A
21.	A	22.	C	23.	A	24.	B
25.	C	26.	D	27.	B	28.	B
29.	C	30.	A	31.	A	32.	B
33.	C	34.	B	35.	A	36.	D
37.	A	38.	A	39.	B	40.	C
41.	A	42.	B	43.	A	44.	B
45.	B	46.	B	47.	A	48.	C
49.	A	50.	A	51.	B	52.	B
53.	B	54.	C	55.	B	56.	D
57.	B	58.	B	59.	D	60.	B
61.	B	62.	B	63.	B	64.	B
65.	B	66.	B	67.	C	68.	D
69.	A	70.	C	71.	D	72.	B
73.	C	74.	D	75.	B	76.	D
77.	A	78.	B	79.	A	80.	C
81.	8	82.	8	83.	0	84.	4
85.	3	86.	3	87.	9	88.	9
89.	6	90.	5				