FIITJEE SAMPLE PAPER – 2018
(Big Bang Edge Test / Talent Recognition Exam)
for **students presently in**
Class 9 (Paper 1)

Time: 3 Hours (9:30 am – 12:30 pm) | **Code** | **9000** | *Maximum Marks: 423*

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 2 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	Q. 1 to 24	**+3**	**0**
		Q. 25 to 36	**+4**	**0**
		Q. 37 to 45	**+5**	**0**
SECTION – II (SCIENCE & MATHEMATICS)	PHYSICS	Q. 46 to 54	**+3**	**0**
		Q. 55 to 60	**+4**	**0**
	CHEMISTRY	Q. 61 to 69	**+3**	**0**
		Q. 70 to 75	**+4**	**0**
	MATHEMATICS	Q. 76 to 93	**+3**	**0**
		Q. 94 to 105	**+4**	**0**
	BIOLOGY	Q. 106 to 114	**+3**	**0**
		Q. 115 to 117	**+4**	**0**
		Q. 118 to 120	**+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.

Note: *Please check this Question Paper contains all 120 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 : _____
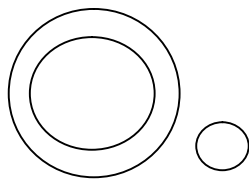
Section-I

APTITUDE TEST

Straight Objective Type

*This section contains 45 multiple choice questions numbered 1 to 45. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*
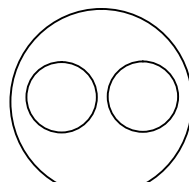
Directions (Questions 1 – 2): In the following questions four diagrams and three classes of elements are given. You have to choose which of the figure will best represent the relationship amongst three classes:
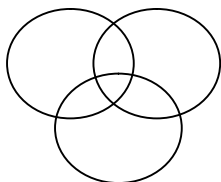
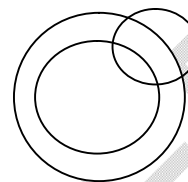(A)   (B)   (C)   (D)

1.   Metal, Iron, Chlorine

2.   Mammals, Cows, Crows

3.   My dog Bunny, runs 30 m towards west, turns left and runs 10 m, then turns right, and runs 5 m, then turns left and runs 2 m and again turns right, runs 12 m. Finally it turns left and runs 7 m. In which direction is it running now?
        (A) East   (B) West
        (C) North   (D) South

Directions (Questions 4 – 8): Study the information given below and answer the questions that follow:

There is a family of six persons A, B, C, D, E and F. They are Lawyer, Doctor, Teacher, Salesman, Engineer and Accountant. There are two married couples in the family. D, the salesman is married to the Lady Teacher. The Doctor is married to the Lawyer. F, the Accountant is the son of B and brother of E. C, the lawyer is the daughter – in – law of A. E is the unmarried Engineer. A is the grandmother of F.

4.   How is E related to F?
        (A) Brother   (B) Sister
        (C) Cousin   (D) None of these

5.   What is the profession of B?
        (A) Teacher   (B) Doctor
        (C) Lawyer   (D) None of these

6.   What is the profession of A?
        (A) Lawyer   (B) Teacher
        (C) Doctor   (D) Accountant

Space for Rough Work

7. Which of the following is one of the couples?
    (A) F & D   (B) D & B
    (C) E & A   (D) None of these

8. How is D related to F?
    (A) Grand father   (B) Father
    (C) Uncle   (D) Brother

9. In a certain code language, DISABLE is written as HRL20. How is ENABLE written in that code?
    (A) GA 21   (B) HR 20
    (C) JB 20   (D) ID 20

10. If East become North – West, North – West become South, and so on, then what will South become?
    (A) North - West   (B) South – West
    (C) West   (D) North – East

11. N ranks fifth in the class. S is eight from the last. If T is sixth after N and just in the middle of N and S, then how many students are there in the class?
    (A) 23   (B) 24
    (C) 25   (D) 26

Directions (Questions 12 – 16): On the basis of the information provided below, answer these questions:
Six people A, B, C, D, E and F are sitting in a hexagonal shape. All the sides of the hexagon so formed are of same length. A is not adjacent to B or C; D is not adjacent to C or E; B and C are adjacent; F is in the middle of D and C.

12. Which of the following is not a correct neighbour pair?
    (A) A and F   (B) D and F
    (C) B and E   (D) C and F

13. Who is at the same distance from D as E is from D?
    (A) B   (B) C
    (C) D   (D) F

14. Which of the following is in the right sequence?
    (A) A, F, C   (B) F, A, E
    (C) B, C, F   (D) D, A, B

15. If one neighbour of A is D, who is the other one?
    (A) B   (B) C
    (C) E   (D) F

16. Who is placed opposite to E?
    (A) B   (B) C
    (C) D   (D) F

Space for Rough Work

17. In a certain code language, 'UNIVERSITY' is written as 'VNJVFRTIUY'. Following the same code language, how would you write 'SECRETARY'?
   (A) TFDRFTBRZ   (B) TFERFTBRY
   (C) SFCSEUASY   (D) TEDRFTBRZ

18. A 'room' is called 'bed', 'bed' is called 'window', 'window' is called 'flower' and 'flower' is called 'cooler', on what would a man sleep?
   (A) Cooler   (B) Flower
   (C) Window   (D) Bed

19. Find the next term in the series:
   1, 26, 62, 111, 175 _____
   (A) 250   (B) 242
   (C) 238   (D) 256

20. A man goes to a park and sees a girl who he recognised to be his relative. The girl was the daughter of his sister's husband's wife. How is the girl related to the man?
   (A) sister   (B) niece
   (C) wife   (D) sister in law

21. A student went to a class at quarter to ten. After 15 minutes his professor came who is late to the class by 25 minutes. At what time should the class start?
   (A) 9:25   (B) 9:35
   (C) 9:40   (D) 9:45

Directions (Questions 22 – 24): A block is painted Red on all the six faces. The side of this block is 5 cms. It is cut into smaller cubes of side 1 cm. Answer the following questions based on this statement.

22. How many cubes have three faces coloured?
   (A) 10   (B) 8
   (C) 6   (D) 5

23. How many cubes have two faces coloured?
   (A) 36   (B) 30
   (C) 28   (D) 22

24. How many cubes have only one faces coloured?
   (A) 10   (B) 18
   (C) 36   (D) 54

25. In a certain code if white is called as black, black as yellow, yellow as blue, blue as red, red as green, green as purple then what is the colour of blood in that language?
   (A) Red   (B) Green
   (C) Yellow   (D) Purple

Space for Rough Work

Directions (Question 26): In the following problem, a square transparent sheet with a pattern is given. Figure out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.

26.

                       (A)   (B)   (C)   (D)
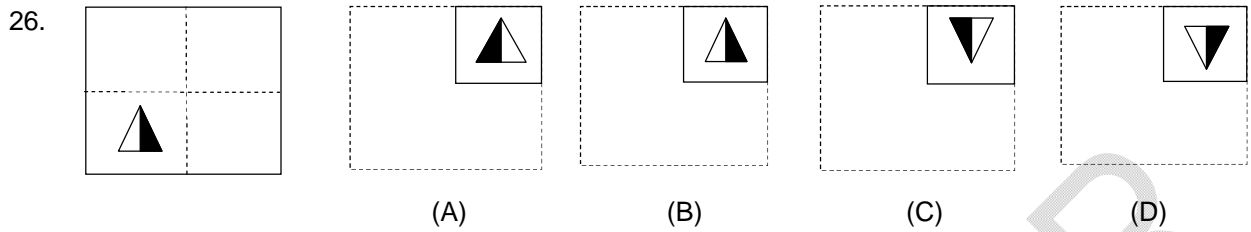
Directions (Questions 27 – 29): Out of the four figures marked (A), (B), (C) and (D) three are similar in a certain manner. However, one figure is not like the other four. Choose the figure which is different from the rest.

27.

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

28.

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

29.

    (A)   (B)   (C)   (D)
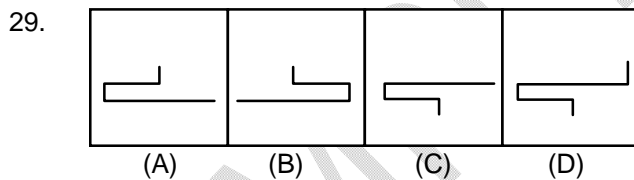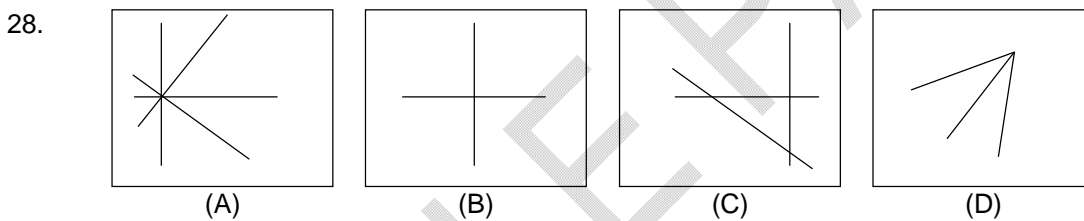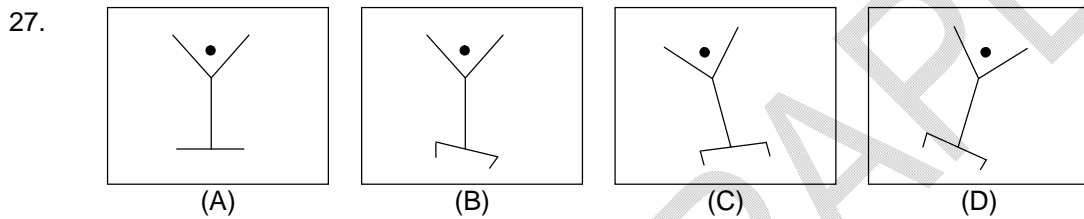
Directions (Questions 30 – 31): Arrange the given words in the sequence in which they occur in the dictionary and, then choose the correct sequence

30.   1. Page   2. Pagan   3. Palisade   4. Pageant   5. Palate
      (A) 1, 4, 2, 3, 5   (B) 2, 4, 1, 3, 5
      (C) 2, 1, 4, 5, 3   (D) 1, 4, 2, 5, 3

Space for Rough Work

31.   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, 3, 1, 4

32.   In a certain code language, if each letters in the English alphabet, with an odd numbered value is
        given a code of 2, and each of the remaining letters is coded as 1, what is the code for
        SALVATION?
        (A) 221121221   (B) 211121212
        (C) 211221121   (D) 221112122

Directions (Question 33): Each question below has two statements followed by three conclusions (i), (ii)
and (iii). Read the statements carefully and identify how many of the given conclusions logically follow
and mark your answer as

        (A) None of the given conclusions follows.   (B) Only one conclusion follows.
        (C) Only two conclusions follow.   (D) All three conclusions follow.

33.   Statements:
        All gods are great.
        Some greats are brave.

        Conclusions:
        (i) Some gods are not brave.
        (ii) Some gods are brave.
        (iii) Some brave are not gods.

34.   In a certain code language if RAIN is coded as abcd, GAIN is coded as bcde and PAIN is coded
        as bcdf, then what is the code for word GRAIN?
        (A) abcde   (B) bcdef
        (C) acdfe   (D) abcfe

Directions (Question 35): Select the correct alternative from the given choices.

35.   12 : 1728 : : 8 : _____
        (A) 64   (B) 256
        (C) 512   (D) 1024

36.   A clock strikes once at 1 o' clock, twice at 2 o' clock, three times at 3 o' clock and so on. If it takes
        10 seconds to strike at 6 o' clock, find the time taken by it to strike at 12 o' clock.
        (A) 18 seconds   (B) 22 seconds
   (C) 24 seconds   (D) 26 seconds

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Space for Rough Work

Directions (Questions 37 – 38): These questions are based on the following data.

In an international conference scientists from six different countries are invited. They are from America, Germany, France, Japan, Russia and India. On a particular day presentations of these six scientists are scheduled. German scientist's presentation is the only presentation between the presentations of the Russia and the Indian scientists. There are three presentations between the presentations of the French and the Japanese scientists.

37. How many presentations are there after the German scientist's presentation?
    (A) 2 (B) 3
    (C) 4 (D) Can not be determined

38. If the Russian scientist's presentation is before the American scientist's presentation and the Japanese scientist's presentation is immediately after the Indian scientist's presentation, then the Russian scientist's presentation is the ___
    (A) 2nd (B) 3rd
    (C) 4th (D) 5th

39. If in a certain code language, 'BROWSER' is written as 'RESWORB', then how 'TEACHER' be coded in that same language?
    (A) REHCEAT (B) REHCAET
    (C) REHCTEA (D) AHRCTEA

Directions (Questions 40 – 42): Study the diagram below and answer each of the following questions.
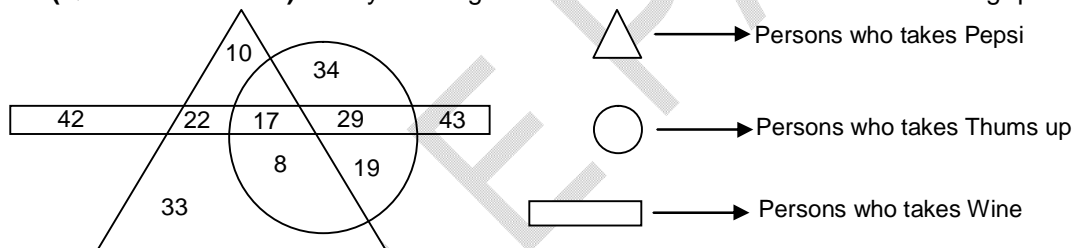
40. How many persons take Thums up?
    (A) 101 (B) 99
    (C) 107 (D) 53

41. How many persons take all the three?
    (A) 17 (B) 39
    (C) 29 (D) 8

42. How many persons are there who take both Pepsi and wine, but not Thums up?
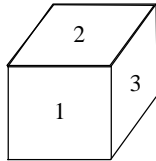   (A) 17 (B) 29
    (C) 22 (D) 10

Space for Rough Work

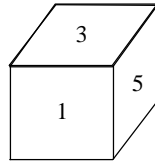**Directions (Questions 43 – 44):** Complete the following series.

43. BC25, CE64, EG144, GK324, ___
    (A) HO529   (B) KM729
    (C) HI289   (D) KM576

44. 150, 392, 810, 1452, 2366, ___
    (A) 3375   (B) 3600
    (C) 2800   (D) 3000

45.

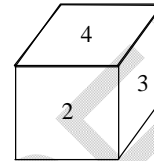(i)   (ii)   (iii)

What would be the number opposite 3?
(A) 1   (B) 6
(C) 5   (D) 4

Space for Rough Work

Section-II   **Science and Mathematics**

Physics   *(Part – A)*

Straight Objective Type

*Physics contains 15 multiple choice questions numbered 46 to 60. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

46. Nature of gravitational force is
    (A) Attractive
    (B) Repulsive
    (C) can be attractive or repulsive
    (D) cannot comment

47. Gravitational force between two bodies which are separated by a distance is given by
    (A) Newton
    (B) Kepler
    (C) Hubbles
    (D) Galileo

48. All planet move in _____ orbital path around sun.
    (A) Circular
    (B) Elliptical
    (C) Parabolic
    (D) Straight

49. You are pushing a wall but the wall is not moving. What does this mean?
    (A) Force applied by you is zero.
    (B) Wall experience no force.
    (C) The net force on the wall is zero.
    (D) None of these

50. A driver accelerates his car first at the rate of 1.8 m/s^2 and then at the rate of 1.2 m/s^2. The ratio of two forces exerted by the engine in the two cases will be
    (A) 1 : 2
    (B) 2 : 1
    (C) 2 : 3
    (D) 3 : 2

51. kg-m/s^2 is the unit of
    (A) momentum
    (B) speed
    (C) acceleration
    (D) force

52. A stone tied to a string is whirled in a circle. As it is revolving, the rope suddenly breaks then
    (A) the stone files off tangentially
    (B) the stone moves radially inward
    (C) the stone moves radially outward
    (D) the motion of the stone depends upon its velocity

53. Following table shows the odometer reading at different times of a journey by bus.

Time (AM)	Odometer Reading	Distance from the starting point
8:00 A.M.	16540 KM	0 KM
8:30 A.M.	16560 KM	20 KM
9:00 A.M.	16580 KM	40 KM
9:30 A.M.	16600 KM	60 KM
10:00 AM	16620 KM	80 KM

What is the speed of the bus?
    (A) 20 km/h
    (B) 30 km/h
    (C) 40 km/h
    (D) 50 km/h

Space for Rough Work

54. A train is approaching a station with velocity 60 kmph and after 20 min it come to rest. The train has
     (A) positive acceleration   (B) retardation
     (C) uniform acceleration   (D) uniform velocity

55. What force will change the velocity of a body of mass 1kg from 20 m/s to 30 m/s in two seconds?
     (A) 10 N   (B) 5 N
     (C) 2 kg wt   (D) 25 N

56. The proper use of lubricants cannot reduce:
     (A) static friction   (B) inertia
     (C) sliding friction   (D) rolling friction

57. Which of the following is a wrong statement?
     (A) Speed is a scalar quantity.
     (B) SI unit of distance is metre.
     (C) Distance and displacement have units of length.
     (D)Displacement can be greater than distance traveled.

58. Car 1 is moving with a constant speed of 54 km/h and car 2 is moving with a constant speed of 15 m/s. On observing their motion, 3 friends A, B and C discuss
     A – car 1 is having more speed.
     B – car 2 is having more speed.
     C – both car 1 and car 2 are moving with equal speed.
     Whose statement is correct?
     (A) A   (B) B
     (C) C   (D) All statements are wrong

59. A ball of mass 4kg and another ball of mass 8 kg are dropped from equal height. If time taken by the balls are t_1 and t_2 respectively, then
     (A) $t_1 = \dfrac{t_2}{2}$ (B) $t_1 = t_2$
     (C) $t_1 = 2t_2$ (D) $t_1 = t_2/4$

60. The unit of G/g is
     (A) kg/m   (B) kg/m^2
     (C) m^2/kg (D) m/ kg

Space for Rough Work

Chemistry (Part – B)

Straight Objective Type

*Chemistry contains 15 multiple choice questions numbered 61 to 75. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

61. The mass per unit volume of a substance is called
    (A) Gravity (B) Weight
    (C) Density (D) None of these

62. The highly ordered arrangement of constituent particles in a solid is called
    (A) Lattice (B) Rigidity
    (C) Compressibility (D) Fluidity

63. A substance having a definite shape and definite volume is called
    (A) Solid (B) Liquid
    (C) Plasma (D) Gas

64. In summer, water kept in an earthen pot becomes cool because of
    (A) Sublimation (B) Diffusion
    (C) Evaporation (D) Osmosis

65. Boiling is
    (A) an endothermic process (B) an exothermic process
    (C) neutralization process (D) none of these

66. Name the solid that would sublime on heating
    (A) Butter (B) Ice
    (C) Ammonium chloride (D) Hydrogen

67. What is SI unit of density?
    (A) Kgm^{-3} (B) Kgm^{-1}
    (C) Nm^{-2} (D) None of these

68. A substance is said to be a gas if its boiling point is
    (A) above room temperature (B) below room temperature
    (C) both (A) and (B) (D) None of these

69. When pressure is applied on ice cubes the freezing point of ice
    (A) Increases (B) Decreases
    (C) Remain constant (D) None of these

70. The purity of a liquid is checked by determining its
    (A) Vapour pressure (B) Boiling point
    (C) Viscosity (D) Surface tension

Space for Rough Work

71.   A compound can be a mixture of
       (A) atoms   (B) molecules
       (C) ions   (D) none of these

72.   Combination of different atoms through stoichiometric ratio forms
       (A) compounds   (B) elements
       (C) mixtures   (D) solutions

73.   Aqueous solution of potash alum ($K_2SO_4.Al_2(SO_4)_3.24H_2O$) does NOT display the properties of
       (A) K^+ ions   (B) Al^{3+} ions
       (C) SO_4^{2-} ions   (D) O^{2-} ions

74.   Which of the following can't be the particles of a colloid?
       (A) group of atoms   (B) group of molecules
       (C) group of similar charged ions   (D) group of opposite charged ions

75.   Liquid Carbon dioxide (CO_2) is a
       (A) mixture of carbon and oxygen   (B) compound of carbon and oxygen
       (C) solution of carbon and oxygen   (D) colloid of carbon and oxygen

Space for Rough Work

Mathematics   *(Part – C)*

Straight Objective Type

*Mathematics contains 30 multiple choice questions numbered 76 to 105. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

76. Three vertices of a parallelogram are $(a+b,\ a-b)$, $(2a+b,\ 2a-b)$, $(a-b,\ a+b)$. Then the fourth vertex is
    (A) $(b,\ -b)$ (B) $(-b,\ b)$
    (C) $(a,\ -b)$ (D) $(b,\ a)$

77. The two vertices of a triangle are (6, 3) and (-1, 7) and its centroid is (1, 5). Then the third vertex is
    (A) $(2,\ 5)$ (B) $(2,\ -5)$
    (C) $(-2,\ -5)$ (D) $(-2,\ 5)$

78. Which of the following points is not 10 units from the origin
    (A) $(-6,\ 8)$ (B) $(8,\ -6)$
    (C) $(-6,\ -8)$ (D) $(6,\ 4)$

79. In the figure , If $AQ = QB$, then which of the following is correct
    (A) $PQ = AP$
    (B) $TB = BR$
    (C) $PQ = QR$
    (D) $SA = AP$
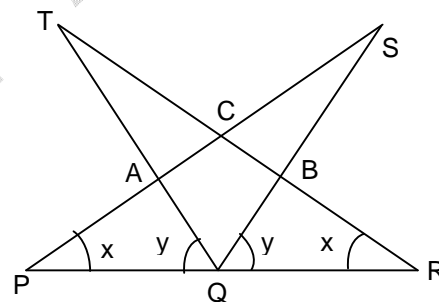
80. Area of an isosceles triangle with base as 'a' and its equal sides of length 'x' is
    (A) $\dfrac{1}{2}\left(a \times \sqrt{x^2 - a^2}\right)$ (B) $\dfrac{1}{2}\left(a \times \sqrt{x^2 - \dfrac{a^2}{2}}\right)$
    (C) $\dfrac{1}{2}\left(a \times \sqrt{x^2 - \dfrac{a^2}{4}}\right)$ (D) None of these

81. Height of an equilateral triangle with area of $9\sqrt{3}$ cm^2 is
    (A) $2\sqrt{3}$ (B) 3
    (C) $3\sqrt{3}$ (D) None of these

Space for Rough Work

82. Line $2x + 3y = 7$ intersects x-axis at the point

    (A) (2, 6)

    (B) $\left(0, \dfrac{7}{2}\right)$

    (C) (0, 2)

    (D) $\left(\dfrac{7}{2}, 0\right)$

83. Which of the following points are equidistant from y –axis?
    (A) (3, 1) and (–3, 2)   (B) (0, 1) and (1, 0)
    (C) (4, 2) and (5, 1)   (D) (1, 1) and (–2, 1)

84. If $x + 1$ is a factor of the polynomial $2x^2 + kx$, then $k = ?$
    (A) – 2   (B) - 3
    (C) 4   (D) 2

85. If $f(x)$ be polynomial such that $f\left(-\dfrac{1}{2}\right) = 0$ then a factor of f(x) is

    (A) $2x - 1$ (B) $2x + 1$
    (C) $x - 1$ (D) $x + 1$

86. The factors of $x^3 - 7x + 6$ are
    (A) $x(x - 6)(x - 1)$ (B) $(x^2 - 6)(x - 1)$
    (C) $(x + 1)(x + 2)(x - 3)$ (D) $(x - 1)(x + 3)(x - 2)$

87. The value of $\dfrac{\sqrt{48} + \sqrt{32}}{\sqrt{27} + \sqrt{18}}$ is

    (A) $\dfrac{4}{3}$ (B) 4

    (C) - 4   (D) $\dfrac{3}{4}$

88. In which quadrant, does the point (–3, 7) lie?
    (A) Q_1 (B) Q_2
    (C) Q_3 (D) Q_4

89. If $x + \sqrt{15} = 4$ then $x + \dfrac{1}{x} = ?$
    (A) 2   (B) 4
    (C) 8   (D) 1

Space for Rough Work

90. $23.\overline{43}$ when expressed in the form $\dfrac{p}{q}$ (p, q are integers $q \neq 0$), is

(A) $\dfrac{2320}{99}$

(B) $\dfrac{2343}{100}$

(C) $\dfrac{2343}{999}$

(D) $\dfrac{2320}{199}$

91. Which of the following is irrational?
(A) 0.15
(B) 0.01516
(C) $0.\overline{1516}$
(D) $0.5015001500015…..$

92. If $10^x = 64,$ what is the value of $10^{\frac{x}{2}+1}$?
(A) 18
(B) 42
(C) 80
(D) 81

93. If $x^{-2} = 64,$ then $x^{1/3} + x^0 =$
(A) 2
(B) 3
(C) 3/2
(D) 2/3

94. If $2^x = 3^y = 6^{-z},$ then $\dfrac{1}{x} + \dfrac{1}{y} + \dfrac{1}{z}$ is equal to

(A) 2
(B) 3
(C) 1
(D) 0

95. In the figure, find the value of x
(A) 100°
(B) 120°
(C) 140°
(D) 160°
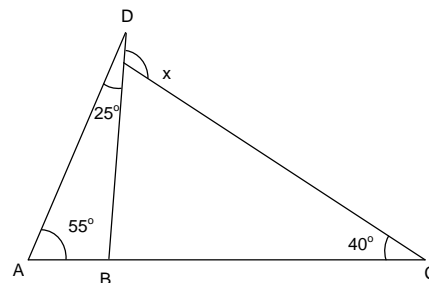
96. The sides of triangle are 5 cm, 12 cm and 13 cm respectively. The length of the shortest altitude is
(A) 5 cm
(B) 12 cm
(C) $\dfrac{60}{13}$ cm
(D) $\dfrac{66}{13}$ cm

Space for Rough Work

97. $32x^{10} - 33x^5 + 1$ is divisible by
   (A) $x - 1$ (B) $x + 1$
   (C) $x - 2$ (D) $2x + 1$

98. The complement of $38° \ 16'$ is
   (A) $52°54'$ (B) $51°36'$
   (C) $52°34'$ (D) $51°44'$

99. The value of $\left[\left(\sqrt[n]{x^2} \right)^{n/2} \right]^2$ is
   (A) x (B) $x^{n/2}$
   (C) x^2 (D) $\dfrac{1}{x^2}$

100. HCF of $(x-1)^3 (x-2)^2 (x-a)$ and $(x-b)(x-1)^5$ is $(x-1)^4 (x-2)$, then
   (A) $b^a + a = 4$ (B) $b^a + a^b$ is prime number
   (C) $b^a - a = 3$ (D) $\sqrt{b^a + a^b}$ is rational number

101. The lines $x = 4$ and $y = 3$ intersect at point
   (A) $(0, 3)$ (B) $(4, 0)$
   (C) $(3, 4)$ (D) $(4, 3)$

102. Each side of rhombus is 15 cm and the longer diagonal is 24 cm. Which of the following is the area of rhombus.
   (A) $202 \ cm^2$ (B) $216 \ cm^2$
   (C) $221 \ cm^2$ (D) $230 \ cm^2$

Space for Rough Work

103. In the given figure, if $\ell \parallel m$, find the value of z, if x is two-third of y which is a complement of $45°$
    (A) $75°$
    (B) $60°$
    (C) $80°$
    (D) $90°$
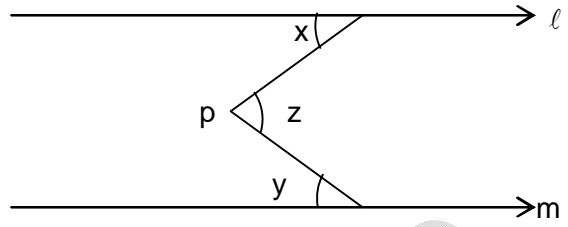
104. The sides of a triangular field are in the ratio 2 : 3 : 4 and its perimeter is 180 m find its area.
    (A) $80\sqrt{15}\,m^2$
    (B) $90\sqrt{15}\,m^2$
    (C) $100\sqrt{15}\,m^2$
    (D) $300\sqrt{15}\,m^2$

105. The sum of two angles of a triangle is $90°$ and their difference is $30°$, then angles of triangle are
    (A) $30°, 60°, 90°$
    (B) $20°, 70°, 90°$
    (C) $40°, 50°, 90°$
    (D) $15°, 75°, 90°$

Space for Rough Work

Biology   (Part – D)

Straight Objective Type

*Biology contains 15 multiple choice questions numbered 106 to 120. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

106.   Mitochondria are absent in
    (A) Viruses   (B) Blue green algae
    (C) Bacteria   (D) All of these

107.   Which organelle is called as Suicidal bag?
    (A) Mitochondria   (B) Lysosomes
    (C) Chloroplast   (D) Nucleus

108.   Cell theory was profounded by
    (A) Watson and Crick   (B) Mendel and Morgan
    (C) Schleiden and Schwann   (D) Wallace and Darwin

109.   What is DNA?
    (A) Deoxy acid   (B) Ribose nucleic acid
    (C) Deamine nucleic acid   (D) Deoxy ribose nucleic acid

110.   Average pH of blood is
    (A) 10.0   (B) 6.2
    (C) 9.0   (D) 7.4

111.   Deficiency of Vitamin – D in children causes
    (A) Beri - Beri   (B) Scurvy
    (C) Rickets   (D) Osteomalacia

112.   Which of the following is found in blood plasma?
    (A) Albumin   (B) Platelets
    (C) RBCs   (D) Monocytes

113.   Largest muscle of the body is
    (A) Stapedius   (B) Quadriceps
    (C) Gastrochemicus   (D) Gluteus maximus

114.   Which is shortest bone in the human body. Where it is present?
    (A) Stapes in heart   (B) Thigh bone in leg
    (C) Stapes in ear   (D) Stapes in nose

115.   What do you mean by NPK fertilizers?
    (A) Nicotine, phosphorous, potassium   (B) Nitrogen, phosphorous, potassium
    (C) Nitrogen, phenolphthalein, potassium   (D) Nitrogen phosphorous, calcium

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Space for Rough Work

116. What is the scientific name of 'Indian bee'?
(A) *Apis mellifera*   (B) *Apis Indica*
(C) *Apis florae*   (D) *Apis dorsata*

117. What is the full form of IVRI?
(A) Indian Veterinary Research Institute   (B) Indian Vietnam Research Institute
(C) International Vietnam Research Institute   (D) Integrated Variety Research Institute

118. When is the 'World Food Day'?
(A) 15th October   (B) 17th October
(C) 16th October   (D) 5th September

119. How many biosphere reserves have been set up in our country?
(A) 8   (B) 18
(C) 4   (D) 21

120. A.G. Tansley gave the term
(A) Ecosystem   (B) National Park
(C) Biosphere   (D) Sanctuaries

Space for Rough Work

FIITJEE **SAMPLE PAPER – 2018**
(Big Bang Edge Test / Talent Recognition Exam)
for **students presently in**
Class 9

ANSWERS
Paper 1

1.	**B**	2.	**B**	3.	**D**	4.	**D**
5.	**B**	6.	**B**	7.	**D**	8.	**A**
9.	**C**	10.	**D**	11.	**B**	12.	**A**
13.	**B**	14.	**C**	15.	**C**	16.	**D**
17.	**D**	18.	**C**	19.	**D**	20.	**B**
21.	**B**	22.	**B**	23.	**A**	24.	**D**
25.	**B**	26.	**C**	27.	**A**	28.	**C**
29.	**D**	30.	**C**	31.	**C**	32.	**A**
33.	**A**	34.	**A**	35.	**C**	36.	**B**
37.	**D**	38.	**A**	39.	**B**	40.	**C**
41.	**A**	42.	**C**	43.	**D**	44.	**B**
45.	**B**	46.	**A**	47.	**A**	48.	**B**
49.	**C**	50.	**D**	51.	**D**	52.	**A**
53.	**C**	54.	**B**	55.	**B**	56.	**B**
57.	**D**	58.	**C**	59.	**B**	60.	**C**
61.	**C**	62.	**A**	63.	**A**	64.	**C**
65.	**A**	66.	**C**	67.	**A**	68.	**B**
69.	**B**	70.	**B**	71.	**D**	72.	**A**
73.	**D**	74.	**D**	75.	**B**	76.	**B**
77.	**D**	78.	**D**	79.	**C**	80.	**C**
81.	**C**	82.	**D**	83.	**A**	84.	**D**
85.	**B**	86.	**D**	87.	**A**	88.	B
89.	**C**	90.	**A**	91.	**D**	92.	**C**
93.	**C**	94.	**D**	95.	**B**	96.	**C**
97.	**A**	98.	**D**	99.	**C**	100.	**B**
101.	**D**	102.	**B**	103.	**A**	104.	**D**
105.	**A**	106.	**D**	107.	**B**	108.	**C**
109.	**D**	110.	**D**	111.	**C**	112.	**A**
113.	**D**	114.	**C**	115.	**B**	116.	**B**
117.	**A**	118.	**C**	119.	**B**	120.	**A**