# FIITJ EE sAMPLE PAPER <br> (FIITJ EE Talent Reward Exam-2020) 

## for students presently in

## Class 7 (Paper 2)

## 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 $\mathbf{6 0}$ Minutes on Section-I, $\mathbf{6 0}$ Minutes on Section-II and $\mathbf{6 0}$ Minutes on Section-III.
2. This Question paper consists of 3 sections. Marking scheme is given in table below:

| Section | Subject |  | Question no. | Marking Scheme for each question |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | correct answer | wrong answer |
| SECTION - I | PHYSICS | (PART-A) |  | 1 to 15 | +1.5 | 0 |
|  | CHEMISTRY | (PART-B) | 16 to 30 | +1.5 | 0 |
|  | MATHEMATICS | (PART-C) | 31 to 45 | +1.5 | 0 |
|  | BIOLOGY | (PART-D) | 46 to 60 | +1.5 | 0 |
| SECTION - II | PHYSICS | (PART-A) | 61 to 66 | +3 | -1 |
|  | CHEMISTRY | (PART-B) | 67 to 72 | +3 | -1 |
|  | MATHEMATICS | (PART-C) | 73 to 78 | +3 | -1 |
|  | BIOLOGY | (PART-D) | 79 to 84 | +3 | -1 |
| SECTION - III | MATHEMATICS | (PART-A) | 85 to 96 | +3 | 0 |
|  | MATHEMATICS | (PART-B) | 97 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 at the bottom of this sheet.
6. See method of marking of bubbles at the back of cover page for question no. 97 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 $\quad:$ |  |
| Name of the Candidate $:$ |  |
| Test Centre | $:$ |

For questions 97 to 108
Numerical based questions single digit answer 0 to 9

## Example 1:

If answer is 6 .
Correct method:
(0)
(2)
(3)
(4) $(5)$
(6) 7
(8) (9)

## Example 2:

If answer is 2.
Correct method:
(0) (1)
(2)
(4)
(5)
(6) 7
(8) (9)

## Recommended Time: 60 Minutes for Section - I

## Section - I <br> PHYSICS - (PART - A)

This part contains 15 Multiple Choice Questions number 1 to 15. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.

1. Absolute zero corresponds to
(A) 273 K
(B) -273 K
(C) $273^{\circ} \mathrm{C}$
(D) $-273^{\circ} \mathrm{C}$
2. The fundamental particle of an atom which is not found in its nucleus is called
(A) proton
(B) electron
(C) neutron
(D) none of these
3. Charge particles which move from a region of lower potential to a region of higher potential are
(A) electrons
(B) protons
(C) neutrons
(D) none of these
4. One joule is approximately equal to
(A) 0.28 cal
(B) 0.32 cal
(C) 0.24 cal
(D) 4.2 cal
5. The property of a substance due to which it obstructs the movement of electric current is called
(A) emf
(B) potential difference
(C) resistance
(D) electrical charge
6. Flow of heat takes place
(A) from a body at higher temperature to a body at lower temperature
(B) from a body at lower temperature to a body at higher temperature
(C) when both the bodies are at same temperature
(D) None of these

## FTRE-2020-C-VII (Paper-2)-S\&M-4

7. At which temperature water has maximum density?
(A) $0^{\circ} \mathrm{C}$
(B) $-273^{\circ} \mathrm{C}$
(C) $4^{\circ} \mathrm{C}$
(D) $100^{\circ} \mathrm{C}$
8. "Electric current flowing through a conductor is directly proportional to potential difference". This statement comes under
(A) Coulomb's law
(B) Faraday's law
(C) Kirchhoff's law
(D) Ohm's law
9. Which of the following will cause more severe burn
(A) steam at $100^{\circ} \mathrm{C}$
(B) boiling water
(C) water at $95^{\circ} \mathrm{C}$
(D) none of these
10. A 100 g iron ball is cooled down from $100^{\circ} \mathrm{C}$ to $30^{\circ} \mathrm{C}$. Calculate the loss of heat if specific heat of iron is $4.8 \times 10^{2} \mathrm{~J} \mathrm{~kg}^{-1}{ }^{\circ} \mathrm{C}^{-1}$.
(A) 3360000 J
(B) 3360 J
(C) 336 J
(D) 33.6 J
11. Metals being good conductor of electricity because
(A) they have free electrons.
(B) they are electronegative elements.
(C) their percentage in nature being high.
(D) they have more electrons than number of protons.
12. $10^{-6} \mathrm{~A}=$ $\qquad$
(A) 1 mA
(B) $1 \mu \mathrm{~A}$
(C) 10 mA
(D) $100 \mu \mathrm{~A}$
13. $\quad 100 \mathrm{~g}$ of hot water at $90^{\circ} \mathrm{C}$ is mixed to 400 g of cold water at $10^{\circ} \mathrm{C}$, the equilibrium temperature of the mixture is:
(A) $26^{\circ} \mathrm{C}$
(B) $45^{\circ} \mathrm{C}$
(C) $60^{\circ} \mathrm{C}$
(D) $50^{\circ} \mathrm{C}$
14. An electric kettle use $\qquad$ effect of electric current.
(A) heating
(B) magnetic
(C) chemical
(D) Doppler's
15. Why a coiled-coil filament is used in an electric bulb?
(A) Coiling of filament makes it more attractive
(B) Coiling of filament offers less resistance.
(C) Coiling of filament increases length and hence offers more resistance.
(D) Both (A) \& (B)

## CHEMISTRY - (PART - B)

This part contains 15 Multiple Choice Questions number 16 to 30. Each question has 4 choices $(A),(B),(C)$ and (D), out of which ONLY ONE is correct.
16. Curd consists of the following acid.
(A) ascorbic
(B) butyric
(C) lactic
(D) oxalic
17. Scouring is done to remove
(A) grease
(B) dust
(C) dirt
(D) all the three
18. The colour of methyl orange in an alkaline solution is
(A) orange
(B) pink
(C) red
(D) yellow
19. Find the odd one among the following fibres.
(A) cotton
(B) silk
(C) nylon
(D) wool
20. The fleece of sheep are generally sheared during
(A) winter
(B) summer
(C) spring
(D) autumn
21.
(A) Humus
(B) Water
(C) Minerals
(D) Air
22. The salt produced by neutralization of an acid and a base may be
(A) acidic
(B) basic
(C) neutral
(D) all the three
23. Which one of the following acid is inorganic?
(A) acetic acid
(B) carbonic acid
(C) lactic acid
(D) citric acid
24. Vinegar is a dilute solution of
(A) acetic acid
(B) citric acid
(C) tartaric acid
(D) none of these
25. The fine gummy filaments from silkworms get hardened on exposure to
(A) water
(B) sunlight
(C) air
(D) none of these
26. Silk fibres are made up of
(A) carbohydrates
(B) proteins
(C) fats
(D) wax
27. Weathering is breaking down of rock by the action of:
(A) wind
(B) water
(C) (A) \& (B) both
(D) corrosion
28. Select the one that provides shelter for living organisms like worms, rodents, etc.
(A) B- horizon
(B) A - horizon
(C) C-horizon
(D) None of these
29. In which soil is the proportion of fine and large particles?
(A) Sandy soil
(B) Loamy soil
(C) Clayey soil
(D) None of these
30. Various layers of soil are called:
(A) soil profile
(B) soil erosion
(C) horizon
(D) none of these

## MATHEMATICS - (PART - C)

This part contains 15 Multiple Choice Questions number 31 to 45. Each question has 4 choices $(A),(B),(C)$ and (D), out of which ONLY ONE is correct.
31. For rational numbers $a$ \& $b$, if $b$ is multiplicative inverse of $a$ and $b \neq 0$ then $a b=$ ?
(A) $a^{2}$
(B) $b^{2}$
(C) 1
(D) 0
32. If the sum of three consecutive even numbers is 234 , then the smallest among them is:
(A) 76
(B) 78
(C) 80
(D) 70
33. In the following figure $A B$ is a straight line. Find ( $\mathrm{x}+\mathrm{y}$ ):
(A) $55^{\circ}$
(B) $65^{\circ}$
(C) $75^{\circ}$
(D) $80^{\circ}$

34. In the given figure $A B\|G H\| D E$ and $\mathrm{GF}\|\mathrm{BD}\| \mathrm{HI}, \quad \angle \mathrm{FGC}=80^{\circ}$. Find the value of $\angle \mathrm{CHI}$ :
(A) $80^{\circ}$
(B) $120^{\circ}$
(C) $100^{\circ}$
(D) $160^{\circ}$


## FTRE-2020-C-VII (Paper-2)-S\&M-8

35. We have to divide a sum of Rs. 13950 among three persons A, B and C. B must get the double of A's share and C must get Rs. 50 less than the double of B's share. The share of A will be:
(A) Rs. 1950
(B) Rs. 1981.25
(C) Rs. 2000
(D) Rs. 2007.75
36. $\frac{3}{5}$ is what part of $\frac{36}{25}$ ?
(A) $\frac{5}{12}$
(B) $\frac{108}{125}$
(C) $2 \frac{2}{5}$
(D) None of these
37. The value of $[(-4) \times(-9) \times 25] \div[(-2) \times(-3) \times(-5)]$ is
(A) 60
(B) -20
(C) -30
(D) 40
38. The value of $(-5)+(-4)-(-4)-(-5)+(-5)+(-4)-(-5)+(-4)$ is
(A) -4
(B) -5
(C) 0
(D) -8
39. If the sum of 4 consecutive integers is 70 then the greatest among them is
(A) 19
(B) 23
(C) 17
(D) 16
40. Which one of the following is the rational number lying between $\frac{6}{7}$ and $\frac{7}{8}$ ?
(A) $\frac{3}{4}$
(B) $\frac{99}{112}$
(C) $\frac{95}{112}$
(D) $\frac{97}{112}$
41. Two sums of money are in the ratio $2: 5$. If the second sum is Rs. 95 then first sum is
(A) Rs. 28
(B) Rs. 21
(C) Rs. 42
(D) Rs. 38
42. The rational number $-\frac{18}{5}$ lies between the consecutive integers
(A) -2 and -3
(B) -3 and -4
(C) -4 and -5
(D) -5 and -6
43. Which of the following illustrates the additive inverse property for integers?
(A) $5+(-5)=0$
(B) $5+5=10$
(C) $5+0=5$
(D) $5-0=5$
44. Find $(x+y) \div(x-y)$ if $x=\frac{1}{4}$ and $y=\frac{3}{2}$ :
(A) $\frac{6}{5}$
(B) $\frac{10}{3}$
(C) $\frac{-5}{4}$
(D) $\frac{-7}{5}$
45. When simplified, the product of $\left(1-\frac{1}{2}\right)\left(1-\frac{1}{3}\right)\left(1-\frac{1}{4}\right) \cdots . .\left(1-\frac{1}{\mathrm{n}}\right)$ gives
(A) $\frac{1}{\mathrm{n}}$
(B) $\frac{2}{n}$
(C) $\frac{2(n-1)}{n}$
(D) $\frac{2}{n(n+1)}$

## BIOLOGY - (PART - D)

This part contains 15 Multiple Choice Questions number 46 to 60. Each question has 4 choices $(A),(B),(C)$ and (D), out of which ONLY ONE is correct.
46. Which one of the following contains haemoglobin?
(A) RBC
(B) WBC
(C) Platelets
(D) None of these
47. The muscular tube through which stored urine is passed out of the body is called:
(A) Kidney
(B) Ureter
(C) Urethra
(D) Urinary bladder
48. In which of the following groups of organisms, the food material is broken down outside the body and then absorbed?
(A) Mushroom, green plants, amoeba
(B) Yeast, mushroom, bread mould
(C) Paramecium, amoeba, cuscuta
(D) Cuscuta, lice, tapeworm
49. Omnivores are those which eat:
(A) Only plants
(B) Only animals
(C) Both A \& B
(D) None of these
50. A balanced diet contains:
(A) Carbohydrate
(B) Protein
(C) Fat, minerals, vitamins
(D) All of these
51. Dietary fibers are known as:
(A) Roughage
(B) Protein
(C) Carbohydrate
(D) None of these
52. Which vitamin can be prepared by our body in presence of sunlight?
(A) Vitamin A
(B) Vitamin B
(C) Vitamin C
(D) Vitamin D
53. If saliva is lacking in the salivary amylase, then which of the following processes taking place in the buccal cavity will be affected?
(A) Protein breakdown
(B) Starch breakdown
(C) Fat breakdown
(D) All of the above
54. For photosynthesis, plants need raw materials where they are available? Fill in the blanks with appropriate options in correct sequence.

55. The rate of photosynthesis is least in
(A) Red light
(B) Green light
(C) Yellow light
(D) Orange light
56. The cells lining the stomach walls are protected from damage by HCl because
(A) HCl is not acidic
(B) Cells are not affected at all by HCl , they are resistant
(C) HCl is not present in stomach
(D) Cells are covered with a layer of mucus.
57. Plants that have mutualistic relation with nitrogen fixing bacteria, the bacteria fixes nitrogen for the plant and in turn plant provide the bacteria with
(A) Enzymes
(B) Nitrogen
(C) Sugars
(D) Oxygen
58. Plants cannot manufacture food without:
(A) Oxygen
(B) Chlorophyll
(C) Both (A) \& (B)
(D) None of these
59. The process by which an organism produces food is called:
(A) Respiration
(B) Nutrition
(C) Transportation
(D) All of these
60. Which of the following statements are correct?
(i) All green plants can prepare their own food.
(ii) Most animals are autotrophs.
(iii) Carbon dioxide is not required for photosynthesis.
(iv) Oxygen is liberated during photosynthesis.

|  | (i) | (ii) | (iii) | (iv) |
| :--- | :--- | :--- | :--- | :--- |
| (A) | T | F | F | T |
| (B) | F | T | T | F |
| (C) | F | T | F | T |
| (D) | T | F | T | F |

## Recommended Time: 60 Minutes for Section - II

## Section - II <br> PHYSICS - (PART - A)

This part contains 6 Multiple Choice Questions number 61 to 66. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.
61. 1 litre of water at $40^{\circ} \mathrm{C}$ is mixed with 1 litre of water at $80^{\circ} \mathrm{C}$. Temperature of resulting mixture will be
(A) Less than $40^{\circ} \mathrm{C}$
(B) Greater than $80^{\circ} \mathrm{C}$
(C) $100^{\circ} \mathrm{C}$
(D) Greater than $40^{\circ} \mathrm{C}$ but less than $80^{\circ} \mathrm{C}$
62. How much heat energy is required to completely melt 20 g of ice at $0^{\circ} \mathrm{C}$ to water at $0^{\circ} \mathrm{C}$ ? (Latent heat of fusion of ice $=80 \mathrm{cal} / \mathrm{g}$ )
(A) 1600 cal
(B) 1.6 cal
(C) 80 cal
(D) None of these
63. Calculate the quantity of heat required to convert 1.5 kg of ice at $0^{\circ} \mathrm{C}$ to water at $15^{\circ} \mathrm{C}$. Latent heat of fusion of ice $=3.35 \times 10^{5} \mathrm{~J} \mathrm{~kg}^{-1}$, specific heat of water $=4186 \mathrm{~J} \mathrm{~kg}^{-1}{ }^{\circ} \mathrm{C}^{-1}$
(A) 597000 J
(B) 596685 J
(C) 595000 J
(D) none of these
64. When an appliance is connected to a 12 V battery then 0.15 A current flows though it. What is the resistance of the appliance?
(A) $18 \Omega$
(B) $1.8 \Omega$
(C) $80 \Omega$
(D) $40 \Omega$
65. The correct relationship between the SI unit and the commercial unit of electrical energy is
(A) $1 \mathrm{~J}=1 \mathrm{Ws}$
(B) $1 \mathrm{kWh}=3600000 \mathrm{~J}$
(C) $1 \mathrm{kWh}=3.6 \times 10^{-6} \mathrm{~J}$
(D) $3.6 \times 10^{5} \mathrm{~J}=1 \mathrm{kWh}$
66. $\quad 10 \mathrm{~kg}$ of water at $90^{\circ} \mathrm{C}$ is cooled to $60^{\circ} \mathrm{C}$. Calculate the heat lost by the water. Specific heat of water is $4200 \mathrm{~J} \mathrm{~kg}^{-1}{ }^{\circ} \mathrm{C}^{-1}$.
(A) 1260 kJ
(B) 42000 J
(C) 1260 J
(D) 420 kJ

## CHEMISTRY - (PART - B)

This part contains 6 Multiple Choice Questions number 67 to 72. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.
67. Slaked lime is chemically
(A) CaO
(B) $\mathrm{Ca}(\mathrm{OH})_{2}$
(C) $\mathrm{CaCO}_{3}$
(D) $\mathrm{Ca}\left(\mathrm{HCO}_{3}\right)_{2}$
68. Arrange the following terms in order for wool processing

1. Sorting
2. Scouring
3. Spinning
4. Shearing
(A) 4, 3, 2, 1
(B) 4, 1, 2, 3
(C) $4,2,1,3$
(D) $4,3,1,2$
5. Acid rain may contain
(A) carbonic acid
(B) sulphurous acid
(C) nitric acid
(D) all the three
6. Horizons differ from each other in:
(A) colour
(B) depth
(C) chemical composition
(D) All of these
7. Which one is NOT a property of silk?
(A) cool in summer
(B) difficult to dye
(C) warm in winter
(D) absorbs moisture
8. Vinegar is added to baking soda and a chemical change takes place. This can be the best example for
(A) production of heat
(B) change of colour
(C) production of sound
(D) evolution of gas

## MATHEMATICS - (PART - C)

This part contains 6 Multiple Choice Questions number 73 to 78. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.
73. The value of $\frac{1}{15}+\frac{1}{35}+\frac{1}{63}+\frac{1}{99}+\frac{1}{143}$ is
(A) $\frac{5}{39}$
(B) $\frac{4}{39}$
(C) $\frac{2}{39}$
(D) $\frac{7}{39}$
74. On selling an article for Rs. 105 a trader loses $9 \%$. To gain $30 \%$ he should sell the article at
(A) Rs. 126
(B) Rs. 144
(C) Rs. 150
(D) Rs. 139
75. In an examination, there were 1000 boys and 800 girls. $60 \%$ of the boys and $50 \%$ of the girls passed. Find the percent of the candidates failed?
(A) $46.4 \%$
(B) $48.4 \%$
(C) $44.4 \%$
(D) $49.6 \%$
76. In the figure $A B \| C D, \angle A B E=100^{\circ}, \angle B E D=25^{\circ}$. Find $\angle C D E$
(A) $125^{\circ}$
(B) $55^{\circ}$
(C) $65^{\circ}$
(D) $75^{\circ}$

77. If $\angle A O C=3 x-70$ and $\angle C O B=3 x+40$, then the value of $x$ is
(A) $70^{\circ}$
(B) $35^{\circ}$
(C) $65^{\circ}$
(D) none of these

78. Sum of the additive inverse and multiplicative inverse of 2 is:
(A) $\frac{3}{2}$
(B) $\frac{-3}{2}$
(C) $\frac{1}{2}$
(D) $\frac{-1}{2}$

## BIOLOGY - (PART - D)

This part contains 6 Multiple Choice Guestions number 79 to 84. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.
79. Deficiency of iron mineral in our diet causes:
(A) Anaemia
(B) Goitre
(C) Rickets
(D) Bone and tooth decay
80. Holozoic nutrition includes taking in the $\qquad$ substances and converting them into $\qquad$ substances:
(A) complex, more complex
(B) simpler, complex
(C) complex, simpler
(D) None of these
81. If a photosynthesizing plant releases oxygen containing more than the normal amount of 180 , it is concluded that the plant has been supplied with
(A) C 6 H 12 O 6 containing 18 O
(B) H 2 O containing 18 O
(C) CO 2 containing 180
(D) Oxygen in the form of ozone
82. In photosynthesis, light energy is used for activation of
(A) Chlorophyll molecule
(B) ATP
(C) $\mathrm{CO}_{2}$
(D) All of these
83. A type of teeth presents in adult human being, but absent in child.
(A) Incisor
(B) Molar
(C) Canines
(D) Premolar
84. Amoeba obtain the food using finger-like projections called
(A) Pseudopodia
(B) Spiracles
(C) Mouth
(D) Diaphragm

## Recommended Time: 60 Minutes for Section - III <br> Section - III

## MATHEMATICS - (PART - A)

This part contains 12 Multiple Choice Guestions number 85 to 96. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.
85. The ratio of two numbers is $3: 8$ and their difference is 115 . The largest number is:
(A) 69
(B) 115
(C) 184
(D) 230
86. If $\frac{1}{3} \times\left(\frac{3}{4}+\frac{-4}{5}\right)=\frac{1}{3} \times x+y \times \frac{-4}{5}$ then $x+y=$ ?
(A) $\frac{12}{13}$
(B) $\frac{13}{12}$
(C) $\frac{11}{12}$
(D) $\frac{-13}{12}$
87. If $\frac{x+1}{2 x+3}=\frac{3}{8}$ then $x=$ ?
(A) $\frac{1}{4}$
(B) $\frac{1}{3}$
(C) $\frac{1}{6}$
(D) $\frac{1}{2}$

88 If A exceeds B by $40 \%, B$ is less than C by $20 \%$, then $A: C$ is :
(A) $28: 25$
(B) $26: 25$
(C) $3: 2$
(D) $3: 1$
89. In the adjoining figure $A B \| D E, \angle A B C=67^{\circ}$ and $\angle E D C=23^{\circ}$. Find $\angle B C D$ :
(A) $90^{\circ}$
(B) $44^{\circ}$
(C) $46^{\circ}$
(D) none of the above

90. If $2 \frac{1}{2}$ is added to a number and the sum multiplied by $4 \frac{1}{2}$ and 3 is added to the product and then dividing the sum by $1 \frac{1}{5}$, the quotient becomes 25 . What is the number?
(A) $2 \frac{1}{2}$
(B) $3 \frac{1}{2}$
(C) $4 \frac{1}{2}$
(D) $5 \frac{1}{2}$
91. If $\frac{35}{\mathrm{a}}=\frac{7}{13}=\frac{\mathrm{b}}{104}$ then $\mathrm{a}-\mathrm{b}=$ ?
(A) 4
(B) 9
(C) 2
(D) 16
92. Consider the following statements.

If a money is loaned at simple interest then the:
(i) money gets doubled in 5 years if the rate of interest is $16 \frac{2}{3} \%$
(ii) money gets doubled in 5 years if the rate of interest is 20\%
(iii) money becomes four times in 10 years if it gets doubled in 5 years. of the statement
(A) (i) and (iii) are correct
(B) (iii) alone is correct
(C) (ii) alone is correct
(D) (ii) and (iii) are correct

## Space for Rough Work

93. $[-(-3)+(-16)]$ $\qquad$ $[(-3)-(-19)]$
(A) $>$
(B) $=$
(C) $<$
(D) none of these
94. If $\frac{1}{5}$ of $\frac{3}{5}$ of a number is 144 , then the number is
(A) 1200
(B) 2880
(C) 8640
(D) None of these
95. The multiplicative inverse of $|(-2)+(-5) \times(-7)|$ is
(A) $\frac{1}{33}$
(B) $-\frac{1}{33}$
(C) 33
(D) -33
96. The least fraction that must be added to $1 \frac{1}{3} \div 1 \frac{1}{2} \div 1 \frac{1}{9}$ to make the result an integer is
(A) $\frac{4}{5}$
(B) $\frac{3}{5}$
(C) $\frac{2}{5}$
(D) $\frac{1}{5}$

## MATHEMATICS - (PART - B)

This part contains 12 Numerical Based Guestions number 97 to 108. Each question has Single Digit Answer 0 to 9.
97. How many pieces of equal size can be cut from a rope 30 metres long, If each piece measuring $3 \frac{3}{4}$ metres?
98. How many one-fourths should be added to $2 \frac{1}{4}$ to get sum 4 ?
99. In a unit fraction, the numerator is
100. Find the value of $x$ if $\frac{3}{8}$ and $\frac{4+x}{24}$ are equivalent fractions.
101. Additive inverse of -7 is equal to
102. How many lines can be drawn passing through two given points?
103. A reduction of $25 \%$ in the price of rice enabled a person to buy 5 kg more for Rs. 120. Find original price per kg of rice?
104. In the given figure $S P \| R T$ and $R U \| Q V$, and PQR is a straight line. Find the value of $\frac{x+y}{70}$.

105. In the diagram, $P Q R$ is a straight line and $\triangle S Q R$ is an equilateral triangle. Find the value of $\frac{X}{10}$

106. When 60 is subtracted from $60 \%$ of $x$, the result is 60 . Find $\frac{2}{50} \times x$
107. The ratio of the C.P. and S.P. of an article is $20: 21$. What is the gain percent?
108. In the given figure, if $\ell \| \mathrm{m}$ then value of $\frac{\mathrm{x}}{15}$ is:


FIIT EE SAMPLE PAPER - 2020 (FIITJ EE Talent Reward Exam-2020)
for students presently in

## Class 7 (Paper 2) AN SWERS

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

