

FIITJEE COMMON TEST

LITTLE GENIE (2021) BATCHES: A - LOT PHASE TEST (PHASE – I) QP CODE:

Time : 1:30 Hours

Maximum Marks : 90

Scholastic Aptitude Test

Instructions

- The question paper consists of **90** multiple choice questions divided into four sections.
Section – I contains **45** questions of **Mathematics**.
Section – II contains **15** questions of **Physics**.
Section – III contains **15** questions of **Chemistry**.
Section – IV contains **15** questions of **Biology**.
- Each question carries **+1** mark.
- There is **No negative** marking.
- Attempt **All** questions.
- Use of Calculator is **NOT PERMITTED**.
- All symbols have their usual meanings, if not mentioned in the question.
- The Question Paper contains blank spaces for your rough work.
No additional sheets will be provided for rough work.
- This booklet also contains **OMR** answer sheet.

Enrollment No. :	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Batch :	_____
Name :	_____									Date :	_____
Candidate's Signature	_____									Invigilator's Signature:	_____

Section – I**Mathematics**

1. Value of $976 \times 237 + 976 \times 763$ is
 (A) 968000 (B) 976000
 (C) 100000 (D) 900000
 1 B,
2. Roman numeral for the greatest three-digit number is
 (A) IXIXIX (B) CMXCIX
 (C) CMIXIX (D) CMIIC
 2. B,
3. If A and B represent two integers other than zero, then $|A| + |B| - |B| - |A|$
 (A) may be negative (B) may be positive
 (C) may be 0 (D) must be 0
 3 D,
4. The additive inverse of the sum of the integers. -9853 and -3187
 (A) 6666 (B) 4031 (C) 10340 (D) 13040
 4. D
5. What is the successor of $12 + (-11)$?
 (A) 0 (B) 1 (C) 2 (D) 3
 5. C
6. If $45 - [28 - \{36 - (13 + x)\}] = 60$, then x is
 (A) -19 (B) 19
 (C) 20 (D) -20
 6. D,
7. By how much is three-fifth of 350 greater than four-seventh of 210?
 (A) 100 (B) 110
 (C) 90 (D) 95
 7. C,
8. What is the value of $\frac{(P+Q)}{(P-Q)}$, if $\frac{P}{Q} = 9$?
 (A) $\frac{2}{4}$ (B) $\frac{3}{4}$
 (C) $\frac{5}{4}$ (D) None of these
 8. C,
9. Find the difference between greatest four digit number and smallest four digit number using digit 5, 4, 0, 2.
 (A) 3375 (B) 3275 (C) 3175 (D) 3075
 9. A
10. Identify the property used in the following: $2 \times 13 + 8 \times 13 = (2 + 8) \times 13$
 (A) Commutative (B) Closure (C) Associative (D) Distributive
 10. D

11. $\frac{3}{8}$ is what part of $\frac{1}{12}$?
 (A) $\frac{3}{7}$ (B) $\frac{1}{12}$
 (C) $\frac{9}{2}$ (D) $\frac{4}{3}$
11. C,
12. 73412130 is exactly divisible by
 (A) 3 (B) 11 (C) 7 (D) Both (A) and (B)
12. D
13. The sum of the prime numbers between 90 and 100 is
 (A) 188 (B) 281
 (C) 376 (D) 97
13. D,
14. $8456 - 7222 = \underline{\hspace{2cm}} - 1111$
 (A) 2340 (B) 2342
 (C) 2343 (D) 2345
14. D,
15. Which is correct?
 (A) $-5 \geq 1$ (B) $+4 \leq -2$
 (C) $-4 > -2$ (D) $8 > -3$
15. D,
16. Find the least number exactly divisible by 36 and 24.
 (A) 144 (B) 72 (C) 64 (D) 324
16. B
17. If the seven digit number 4567X75 is divisible by 15 then find the least possible value of X.
 (A) 2 (B) 1 (C) 0 (D) 3
17. A
18. $3 - [3 - \{3 - 3(3 + 3)\}] = ?$
 (A) -15 (B) 15
 (C) 16 (D) none of these
18. A,
19. HCF of the two co-prime numbers is
 (A) 1 (B) 0
 (C) 2 (D) none
19. A,
20. Replace y by the non-zero digit, if the number 68y70 is divisible by 6.
 (A) 2 (B) 3 (C) 1 (D) 4
20. B
21. 532460 is not divisible by _____.
 (A) 10 (B) 5 (C) 3 (D) 4
21. C

22. On dividing 55,390 by 299 the remainder is 75. The quotient is
 (A) 195 (B) 185 (C) 175 (D) 193
22. B
23. Multiplication of a negative integer for odd times gives a _____ result.
 (A) Positive (B) Negative
 (C) 0 (D) None
23. B,
24. Smallest negative number
 (A) - 1 (B) - 10
 (C) 0 (D) does not exist
24. D,
25. Place value of 5 in 605,116,218 is
 (A) million (B) 5 million
 (C) 5 (D) 50 million
25. B,
26. Place value and face value are always equal at
 (A) 100's place (B) unit digit
 (C) any digit (D) 10's place
26. B,
27. What least number should be added to 1330 to get a number exactly divisible by 43?
 (A) 46 (B) 1
 (C) 3 (D) 7
27. C,
28. The number 24 has
 (A) 2 factors (B) 4 factors
 (C) 6 factors (D) 8 factors
28. D,
29. Which of the following is prime number.
 (A) 198 (B) 241 (C) 291 (D) 309
29. B
30. Roman numeral for 76 is
 (A) LXXIV (B) LXXXVI
 (C) XXLVI (D) LXXVI
30. D,
31. The sum of two integers is -23. If one of them is 16 then the other is:
 (A) -7 (B) -39
 (C) 39 (D) none of these
31. B,
32. Sum of ages of A & B is 48. If A is 12 years old, what is the age of B?
 (A) 36 (B) 35
 (C) 38 (D) 39
32. A,
33. The sum of first 10 natural numbers is
 (A) 45 (B) 35
 (C) 56 (D) 55
33. D,

34. What integers or number should be added to -5 to get 4
 (A) 1 (B) -1 (C) -9 (D) 9
34. D
35. Additive inverse of $(54 \div 3)$ of $6 + 9$ is:
 (A) -117 (B) -12
 (C) -33 (D) -24
35. A
36. The HCF of 100 and 101 is _____.
 (A) 1 (B) 7 (C) 37 (D) None of these
36. A
37. If $2x - 5 = 1$, then the value of x is equal to
 (A) 1 (B) 2
 (C) 3 (D) 4
37. C,
38. The value of $25 - \{12 \div (2 \times 4 - 4)\}$ is
 (A) 20 (B) 21 (C) 22 (D) 23
38. C
39. On dividing a negative integer by other negative integer the quotient will be
 (A) Always negative (B) Always Positive
 (C) Either Negative or positive (D) 1
39. B
40. The difference between the largest 5-digit number and the largest 5-digit number with three distinct digits is
 (A) 10 (B) 10012
 (C) 12 (D) 123
40. C,
41. The smallest 8-digit number using three distinct digits can be read as
 (A) Ten million two (B) One million two
 (C) One hundred million two (D) One hundred thousand two
41. A,
42. The product of the place values of two 5's in 85356 is
 (A) 2500 (B) 25
 (C) 25000 (D) 250000
42. D,
43. Which of the following expression is true?
 (A) $-10 < -4$ (B) $11 < -14$
 (C) $-13 > -2$ (D) $-250 > 0$
43. A,
44. The predecessor of is $|-1|$ is:
 (A) -2 (B) 2
 (C) 0 (D) 1
44. C,
45. $|10 - 4| \div |-3|$ is equal to:
 (A) -2 (B) -18
 (C) 2 (D) 3
45. C,

Section – II**Physics**

1. Convert 3.25 kilogram into gram.
 (A) 25 gram (B) 3250 gram
 (C) 3200 gram (D) 32.5 gram
1. B,
2. Convert $\frac{1}{6}$ hour into seconds.
 (A) 500 seconds (B) 600 seconds
 (C) 100 seconds (D) 700 seconds
2. B,
3. A speed of 500 cm/sec is equivalent to
 (A) 50 m/sec (B) 5000 m/sec
 (C) 5 m/sec (D) 10 m/sec
3. C,
4. The correct arrangement of the following is
 (A) 1 m > 1 cm > 1 km > 1 mm (B) 1 m > 1 cm > 1 mm > 1 km
 (C) 1 km > 1 m > 1 cm > 1 mm (D) 1 km > 1 cm > 1 m > 1 mm
4. C,
5. A speed of 60 m/sec is equivalent to
 (A) 196 km/hr (B) 316 km/hr
 (C) 216 km/hr (D) 416 km/hr
5. C,
6. While measuring the length of a pencil the reading of the scale at one end is 4.0 cm and at the other 17.2 cm. What is the length of the Pencil?
 (A) 13.2 cm (B) 13.8 cm
 (C) 14.8 cm (D) 14.2 cm
6. A,
7. Time taken by a simple pendulum to complete one oscillation is known as _____ .
 (A) Mass (B) Time period
 (C) Length (D) Decade
7. B,
8. The footstep is an unreliable measure of length because
 (A) people do not measure properly with it
 (B) it varies from person to person
 (C) some people jump too much while measuring with the footsteps
 (D) it is a standard unit of measurement
8. B,
9. 30 years is equal to
 (A) 30 decade (B) 3 decade
 (C) 20 decade (D) 300 decade
9. B,
10. 1 meter is equal to
 (A) 100 centimeters (B) 10 centimeters
 (C) 1000 centimeters (D) 10000 centimeters
10. A,

11. Cubit is a unit for measuring
(A) Mass (B) Time
(C) Length (D) Volume
11. C,
12. Number of seconds in one day is
(A) 24000 s (B) 86400 s
(C) 4000 s (D) 20000 s
12. B,
13. If a person goes 10 m away to a point and gets back to its initial position then find out its displacement?
(A) 0 (B) 5
(C) 10 (D) 20
13. A,
14. 360 km/hr is same as
(A) 360 m/s (B) 200 m/s
(C) 100 m/s (D) 600 m/s
14. C,
15. 120 hours is equal to
(A) 2 day (B) 3 day
(C) 8 day (D) 5 day
15. D,

Section – III**Chemistry**

1. The common name of coconut fibric is:
(A) Linen (B) Coir
(C) Silk (D) Flax
1. B,
2. Takli is a device used for
(A) Spinning (B) Weaving
(C) Knitting (D) Reeling
2. A,
3. Which of the following is lighter than water?
(A) Aluminum (B) Chalk powder
(C) Ice (D) Iodine
3. C,
4. Which of the following is not transparent?
(A) Alcohol (B) Groundnut Oil
(C) Clouds (D) Glass
4. C,
5. Which of the following has organic origin?
(A) Flax (B) Rayon
(C) Nylon (D) Acrylic
5. A,
6. Which of the following is soluble in water?
(A) Kerosene (B) Copper Sulphate
(C) Wax (D) Glass
6. B,
7. Bast fibers are obtained from outer bark of
(A) Jute (B) Lint
(C) Flax (D) Both A and C
7. D,
8. Which of the following is immiscible in water?
(A) Vinegar (B) Glycerin
(C) Lemon Juice (D) Kerosene
8. D,
9. Washing soda does not contain
(A) Sodium (B) Oxygen
(C) Carbon (D) Nitrogen
9. D,
10. Metal which is liquid at room temperature
(A) Bromine (B) Mercury
(C) Chlorine (D) Lithium
10. B,

11. _____ is used for making cigarette paper.
(A) Coir (B) Hemp
(C) Flax (D) Nylon
11. C,
12. The process of making yarn from fibers is called
(A) Spinning (B) Ginning
(C) Weaving (D) Scouring
12. A,
13. Jute is cultivated in _____ type of soil.
(A) Sandy (B) Clayey
(C) Black (D) Alluvial
13. D,
14. Which of the following fibers are obtained from balls of fruits?
(A) Jute (B) Polyester
(C) Cotton (D) Wool
14. C,
15. Which of the following is lustrous?
(A) Wood (B) Door Handle
(C) Plastic (D) Papers
15. B,

Section – IV**Biology**

1. On application of iodine solution, both bread and potato become blue black in colour. This indicates the presence of
 (A) Starch (B) Fats
 (C) Proteins (D) Vitamins

1. A,

2. Ram fainted in school while playing football. Which of the following foods should be given to him as a source of instant energy?

(A) Salt (B) Glucose
 (C) Ghee (D) Pulses

2. B,

3. When we add two drops of solution of copper sulphate and ten drops of solution of caustic soda in the test tube filled with milk, the contents of the test tube turn violet. The violet colour indicates:

(A) Presence of carbohydrates in milk (B) Presence of fats in the milk
 (C) Presence of protein in the milk (D) Presence of sugar

3. C,

4. Match the following:

Column A	Column B
1. Food	(a) Dog
2. Herbivores	(b) Plants
3. Carnivores	(c) Energy
4. Omnivores	(d) Camel
5. Potatoes are rich in	(e) Frog
6. Autotrophs	(f) Carbohydrate

(A) 1 → b, 2 → f, 3 → c, 4 → a, 5 → e, 6 → b (B) 1 → a, 2 → c, 3 → b, 4 → f, 5 → e, 6 → d
 (C) 1 → c, 2 → d, 3 → e, 4 → a, 5 → f, 6 → b (D) 1 → f, 2 → b, 3 → a, 4 → c, 5 → e, 6 → d

4. C,

5. Which of the following stems are edible

(A) ginger, onion, potato
 (B) carrot, radish, pumpkin
 (C) carrot, ginger, onion
 (D) onion, potato, garlic

5. A,

6. Choose the correct column among the following:

Options	Vitamins	Importance	Deficiency disease
(A)	Vitamin A (Water soluble)	Required for vision	Night Blindness, color blindness
(B)	Vitamin K (Fat soluble)	Muscles and teeth	Hemorrhage
(C)	Vitamin C (water soluble)	Bones	Scurvy
(D)	Vitamin D (Fat soluble)	Bones	Rickets

6. D,

7. Match the column:

Column A		Column B	
(P)	Iron	(i)	Dental caries
(Q)	Iodine	(ii)	Muscular weakness
(R)	Protein	(iii)	Anemia
(S)	Fluorine	(iv)	Obesity
		(v)	Kwashiorkor
		(vi)	Goitre

(A) P-v, Q-i, R-iii, S-vi

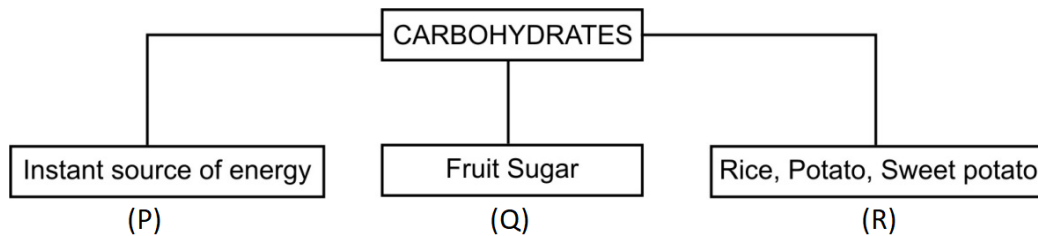
(B) P-iv, Q-i, R-v, S-ii

(C) P-iii, Q-vi, R-v, S-i

(D) P-iii, Q-vi, R-i, S-ii

7. C,

8.



Choose the correct match regarding P, Q and R:

(A) Q – Glucose

P – Fructose

R – Starch

(B) P – Starch

Q – Glucose

R – Fructose

(C) P – Glucose

Q – Fructose

R – Starch

(D) R – Glucose

P – Glucose

Q – Glucose

8. C,

9. A student of little genie was studying about a nutrient and founds that nutrient provides double the energy provided by carbohydrates and also helps in the absorption of certain vitamins like vitamin-A. Identify the nutrient :

(A) Proteins

(B) Fats

(C) Roughage

(D) Can be any one

9. B,

10. Deficiency of iron in blood causes

(A) Cancer

(B) Fever

(C) Anemia

(D) Cold

10. C,

11. Heart disease, high blood pressure and diabetes are some of the harmful effects of

(A) Malnutrition

(B) Obesity

(C) Deficiency of proteins

(D) Dehydration

11. B,

12. Sunshine vitamin is

(A) Vitamin A

(B) Vitamin D

(C) Vitamin K

(D) Vitamin E

12. B,

13. (i) Lizard – Omnivores, Man – Carnivores

(ii) The organisms that eat members of their own species are known as *cannibals*.

(iii) The edible parts of mustard are oil, seeds and leaves.

(iv) Wheat, rice, potato are carbohydrate rich foods.

Choose the correct statement among the above said statement:

(A) i only

(B) ii, iii, iv

(C) iii and iv only

(D) iv only

13. B,

14. Choose the correct statement regarding balanced diet:
(A) Balanced diet should not contain roughage as it is not digested by our body
(B) Balanced diet is same for every individual of any age.
(C) Balanced diet is different for individuals of different age groups.
(D) Balanced diet consists adequate amount of roughage but not of fats and proteins
14. C,
15. Rearing of silkworms on large scale is called
(A) Sericulture (B) Apiculture
(C) Aquaculture (D) Pisciculture
15. A,