

FIITJEE Medical Admission Test

(SAMPLE PAPER)

for students presently in Class X (Going to Class XI)

Paper-1

Time: 3 Hours (9:00 am – 12:00 pm)

CODE

Maximum Marks: 420

Instructions:

- You are advised to devote 60 Minutes on Section-I, 30 Minutes on Section-II, 45 Minutes on Section-III and 45 Minutes on Section-IV.
- This Question paper consists of 4 sections. Marking scheme is given in table below:

Section	Subject	Question no.	Marking Scheme for each question	
			correct answer	wrong answer
SECTION – I	IQ	1 to 30	+3	-1
		31 to 60	+3	-1
SECTION – II	PHYSICS (PART-A)	1 to 5	+3	0
	CHEMISTRY (PART-B)	6 to 10	+3	-0
	BIOLOGY (PART-C)	11 to 15	+3	-0
	MATHEMATICS (PART-D)	16 to 20	+3	0
SECTION – III	PHYSICS (PART-A)	1 to 5	+4	-1
	CHEMISTRY (PART-B)	6 to 10	+4	-1
	MATHEMATICS (PART-C)	11 to 15	+4	-1
SECTION – IV	BIOLOGY (PART-A)	1 to 30	+4	-1

- 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.
- Blank papers, clip boards, log tables, slide rule, calculator, cellular phones, pagers and electronic devices, in any form, are not allowed.
- Before attempting paper write your Registration Number, Name and Test Centre in the space provided at the bottom of this sheet.

Note: Please check this Question Paper contains all 4 sections and **125** questions. If not so, exchange for the correct Question Paper

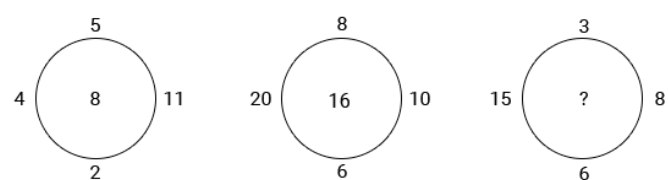
Registration Number : _____
 Name of the Candidate : _____
 Test Centre : _____

Disclaimer: This sample paper is for students to understand the level of questions for Fiitjee Medical Admission Tests and may not match the real Test Paper.

Recommended Time: 60 Minutes for Section – I

APTITUDE TEST

This section contains 60 **Multiple Choice Questions** number 1 to 60. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

- Which letter in the word 'SELFRIGHTEOUSNESS' does not change its position when the letters are reversed?
(A) E (B) G (C) H (D) T
- If it is possible to form a word with the first, fourth, seventh and eleventh letters in the word "SUPERFLUOUS" write the first letter of that word. Otherwise x is the answer.
(A) S (B) L (C) E (D) X
- One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?
(A) East (B) west (C) north (D) south
- If South-East becomes North, North-East becomes West and so on. What will West become?
(A) North east (B) north west (C) south east (D) south west
- Find the mirror image
INFORMATION
[1] INFORMATION
[3] SNOITAWROFI
(A) 1 (B) 2 (C) 3 (D) 4
- Find the water image
SERVICE
(A) SERVICE (B) SERVICE
(C) SERVICE (D) SERVICE
- 664, 332, 340, 170, ____, 89, ... What number should fill the blank?
(A) 85 (B) 97 (C) 109 (D) 178
- 4, 7, 25, 10, __, 20, 16, 19, ... What number should fill the blank?
(A) 13 (B) 15 (C) 20 (D) 28
- Priya and Divya are ranked seventh and twelfth respectively from the top in a class of 35 students. What will be their respective ranks from the bottom in the class?
(A) 24th and 28th (B) 29th and 24th (C) 28th and 23rd (D) 29th and 34th
- Charu correctly remembers that her father's birthday is after 24 but before 29 of May. Her sister remembers that their father's birthday is after 27 but before 31 May and her brother remembers that the birthday is on an even date. On which date in May is definitely their father's birthday?
(A) 26th (B) 28th (C) 30th (D) Data inadequate
- If A means 'plus', B means 'minus', C means 'divided by' and D means 'multiplied by', then $18 \text{ A } 12 \text{ C } 6 \text{ D } 2 \text{ B } 5 = ?$
(A) 15 (B) 25 (C) 27 (D) none of these
- 
(A) 5 (B) 6 (C) 14 (D) 8

13. It being given that : $>$ denotes $+$, $<$ denotes $-$, $+$ denotes $/$ (division), $-$ denotes $=$, $=$ denotes less than' and \times denotes 'greater than', find which of the following is a correct statement.
 (A) $3 + 2 > 4 < 9 + 3 < 2$ (B) $3 > 2 > 4 = 18 + 3 < 1$
 (C) $3 > 2 < 4 \times 8 + 4 < 2$ (D) $3 + 2 < 4 \times 9 + 3 < 3$
14. If Anand is the brother of Bimala; Bimala is the sister of Chetan; and Chetan is the father of D, how D is related to Anand?
 (A) Brother (B) Niece (C) sister (D) can't be determined
15. Karan's father's brother's daughter's husband's mother-in-law is related to Karan as
 (A) Aunt (B) sister (C) mother (D) can't be determined
16. The following questions consists of two sets of figures. Figures A, B, C and D constitute the Problem Set while figures 1, 2, 3, 4 and 5 constitute the Answer Set. There is a definite relationship between figures A and B. Establish a similar relationship between figures C and D by selecting a suitable figure from the Answer Set that would replace the question mark (?) in fig. (D).

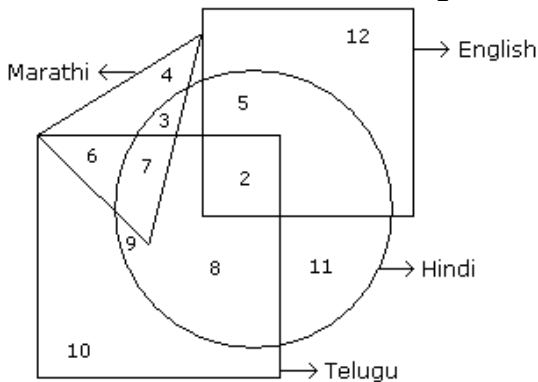


A B C D
(A) 1

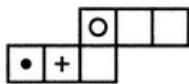


1 2 3 4 5
(B) 2 (C) 3 (D) 4

Directions (Q. No. 17 to 19) In the following figure small square represents the persons who know English, triangle to those who know Marathi, big square to those who know Telugu and circle to those who know Hindi. In the different regions of the figures from 17 to 19 are given.



17. How many persons can speak English and Hindi both the languages only ?
 (A) 5 (B) 8 (C) 7 (D) 18
18. How many persons can speak Marathi and Telugu both ?
 (A) 10 (B) 11 (C) 13 (D) None of these
19. How many persons can speak only English?
 (A) 9 (B) 12 (C) 7 (D) 19
20. Find the missing term in the series. SCD, TEF, UGH, _____, WKL
 (A) CMN (B) UJI (C) VIJ (D) IJT
21. If 'diamond' is called 'gold', 'gold' is called 'silver', 'silver' is called 'ruby' and 'ruby' is called 'emerald', which is the cheapest jewel?
 (A) Diamond (B) Silver (C) Gold (D) Ruby
22. Choose the box that is similar to the box formed from the given sheet of paper (X).



(X)



(1)



(2)



(3)



(4)

- (A) 1 only (B) 1, 2 and 3 only (C) 2 and 3 only (D) 1, 2, 3 and 4

23. Choose the box that is similar to the box formed from the given sheet of paper (X).

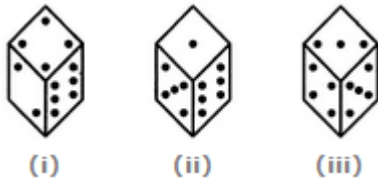


- (A) 1 and 3 only (B) 2 and 4 only (C) 3 and 4 only (D) 1 and 4 only

Directions (Q. No. 24 to 26) Eight boxes D to K are placed one above other in the form of a stack. Box H is two places below Box D and four places above Box E. Number of boxes below Box J is as same as the number of boxes above Box F. Only one box is placed between Box J and Box G. Box K is placed at one of the position above Box I. No two boxes with consecutive alphabets are placed adjacent to each other.

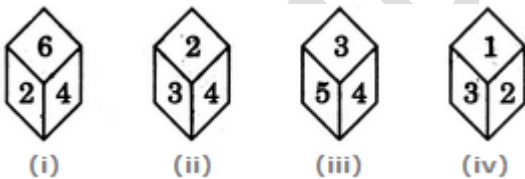
24. Which box is exactly placed between D and the box which is immediately above of K?
 (A) J (B) H (C) E (D) F
25. How many boxes are between J and I?
 (A) 2 (B) 4 (C) 3 (D) 1
26. Which of the following statement is true?
 (A) F is placed three boxes below J (B) G is placed immediately above D.
 (C) Only two boxes are placed between E and I. (D) Both A and B.

27. Three different positions of a dice are shown below. How many dots lie opposite 2 dots?



- (A) 1 (B) 3 (C) 5 (D) 6

28. A dice is thrown four times and its four different positions are shown below. Find the number on the face opposite the face showing 2.



- (A) 3 (B) 4 (C) 5 (D) 6

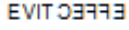

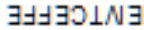
Directions (Q.No.29 to 30) In each question below are given two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance with the commonly known facts and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

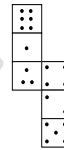
Give answer

- (A) If only conclusion (I) follows (B) If only conclusion (II) follows
 (C) If both (I) and (II) follows (D) If neither (I) nor (II) follows

29. Statements: All poets are authors
 All singers are authors
 Conclusions: I. All singers are poets
 II. Some authors are not singers
30. Statements: Most crops are machines
 Some machines are fools
 Conclusions: I. Some fools are machines
 II. Some crops are fools

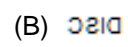
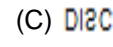
Directions (31-32) : Choose correct alternative that will continue the same pattern and replace the question mark in the given series.

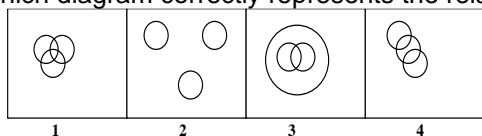
31. 10, 100, 200, 310, ?
 (A) 400 (B) 410 (C) 420 (D) 430
32. 2, 7, 27, 107, 427, ?
 (A) 1262 (B) 1707 (C) 4027 (D) 4207
33. Introducing a boy, a girl said "He is the son of the daughter of the father of my uncle" How is boy related to the girl?
 (A) Brother (B) Nephew (C) Uncle (D) Son-in-law
34. One morning after sunrise Kiran and Arvind were talking to each other face to face at Dalphin crossing. If Arvind's shadow was exactly to the right of Kiran. Which direction Arvind was facing?
 (A) North (B) South (C) East (D) Data is inadequate
35. Choose the alternative which is closely resembles the mirror image of the given combination EFFECTIVE
 (A)  (B) EVITCEFFE (C)  (D) 
36. How many dots lie opposite to the face having three dots, when the given figure is folded to form a cube?
 (A) 1 (B) 4
 (C) 5 (D) 6
37. Arrange the words given below in meaningful sequence.
 1. word 2. Paragraph 3. Sentence
 4. Letter 5. Phrase
 (A) 4, 1, 5, 2, 3 (B) 4, 1, 3, 5, 2
 (C) 4, 2, 5, 1, 3 (D) 4, 1, 5, 3, 2



Directions(38 - 39): Each of the questions is based on the following information:

1. A + B means A is the mother of B
2. A – B means A is the sister of B
3. A * B means A is the father of B
4. A & B means A is is the brother of B

38. Which of the following means Q is the grand father of P?
 (A) $P + N * M * Q$ (B) $Q * N \& * M + P$
 (C) $Q \& M \& N * P$ (D) None of these
39. Which of the following means that N is the maternal uncle of M?
 (A) $N \& P - L + E - M$ (B) $N - Y + A \& M$ (C) $M - Y * P - N$ (D) $N \& C + F * M$
40. Choose the correct alternative which is closely resembles the water-image of the given combination DISC
 (A) CSID (B)  (C)  (D) DISC
41. Which diagram correctly represents the relationship between politicians, poets and woman



- (A) 2 (B) 1 (C) 4 (D) 3

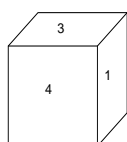
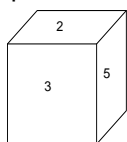
42. If '+' means \times , '-' means \div , \times means '-' and \div means '+', find the value of $26 + 74 - 4 \times 5 \div 2$
 (A) 220 (B) 376 (C) 478 (D) 488

Directions : (43 - 44): Study the following number sequence and answer the questions given below it
8 1 3 2 5 4 7 6 8 9 6 1 3 5 2 8 4 4 4 5 2 7 8 2 9 7 2 1 5 6

43. If all 1 is replaced by 2 and all 4 replaced by 5 in the given number series then, which will be fourth to the right of seventeenth number from the right end?
(A) 1 (B) 2 (C) 3 (D) 5
44. How many odd number/s which is/are immediately preceded by a 'perfect square' and immediately followed by a perfect cube are there in the above sequence?
(A) One (B) Two (C) Three (D) None
45. If 1 is added to each odd digit and 2 is sub-tracted from each even digit in the given number 1436587 then how many digits will appear twice in the new number this formed?
(A) only 8 (B) only 8 and 6 (C) 2, 4 and 6 (D) 8, 6 and 4
46. What number will replace the question mark(?) so that the numbers follow a fixed pattern?

25	?	81
5	7	9
15	13	11
20	20	20

- (A) 9 (B) 81 (C) 48 (D) 49
47. In a certain language, STOVE is written as FNBLK, then how will VOTES be written?
(A) FLKBN (B) LBNKF (C) LKNBF (D) LNBKF
48. In row of boys, A is fifteenth from the left and B is fourth from right. There are three boys between A and B. C is just left of A. What is C's position from the right?
(A) 9th (B) 10th (C) 12th (D) 13th
49. Arrange the given words in the sequence in which they occur in the dictionary
1. Perplex 2. Persistent 3. Periodic
4. Persist 5. Perception
(A) 51243 (B) 52413 (C) 53142 (D) 12354
50. C and D start cycling from their fitness club. C rides 1 k.m west, then turns to his left and rides 5 k.m. In the mean while D rides 3 km south, then turns west and rides 7 k.m, then turns to his left and rides 2 k.m. What is the position of C with respect to D
(A) 8 k.m East (B) 6 k.m West
(C) 6 k.m East (D) 8 k.m West
51. In certain code PHYSICAL is written as MQBIDZJT How is BREAKING written in that code?
(A) HCOQJFLB (B) HCOJFLB
(C) HCOJLJKB (D) HCOJFLB
52. If BE QUICK is coded as ZCOSGAI, then the code of the last letter of the third word in the sentence I LOVE MU COUNTRY is
(A) T (B) A (C) U (D) W
53. In a certain code 'bright fresh sunny day' means 'cin bin zin hin', 'scent of fresh flowers' means 'din kin lin bin', 'bright light of trucks' means 'lin min hin rin', 'trucks loaded with flowers' means 'fin nin din min'. What is the code for 'bright' in that language?
(A) hin (B) bin (C) lin (D) zin
54. Two positions of same dice are given. Which number will be at the top if '4' is bottom?



- (A) 2 (B) 6 (C) 5 (D) 1

Directions: (55 - 56) In each of the questions given below some statements are followed by some conclusions. You have to take the given statements to be true even if they seem to be variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts

Give answer

- (A) If only conclusion I follows
- (B) If only conclusion II follows
- (C) If either conclusion I or II follows
- (D) If neither conclusion I nor II follows

55. Statements:
Some pastries are toffees
All toffees are chocolates
Conclusions:
I. Some chocolates are toffees
II. Some toffees are not pastries

56. Statements:
Many scooters are trucks
All trucks are trains
Conclusions:
I. No truck is a scooter
II. Some scooters are trains

Directions (57 - 60): Some friends are sitting on a bench, Sunil is sitting next to Sunita and Sanjay is sitting next to Bindu. Bindu is not sitting with Sunit. Sumit on the left end of the bench and Sanjay is on second position from right hand side. Sunil is on the right side of Sunita and to the right side of Sunil. Sunil and Sanjay are sitting together based on above sitting arrangements, answer the following questions.

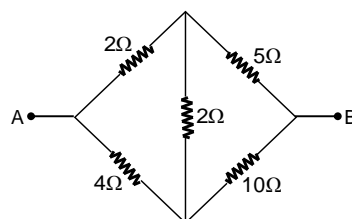
57. Sunita is sitting how many places away from Bindu?
(A) 2 (B) 1 (C) 4 (D) 3
58. Who is sitting in the centre?
(A) Sumit (B) Sunil (C) Bindu (D) Sanjay
59. Sanjay is sitting between?
(A) Bindu and Sunita (B) Sunil and Sumit (C) Sumit and Bindu (D) Sunil and Bindu
60. Bindu is sitting on the
(A) Extreme left side (B) Extreme right side
(C) Second from left side (D) Third from left side.

Recommended Time: 30 Minutes for Section – II

PHYSICS – (PART – A)

*This part contains 5 Multiple Choice Questions number 1 to 5. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

1. Find the equivalent resistance of the circuit across A and B



- (A) $\frac{14}{3} \Omega$ (B) $\frac{9}{3} \Omega$ (C) $\frac{7}{3} \Omega$ (D) $\frac{4}{3} \Omega$

2. When electric current is passed through a conductor, electrons move from:
(A) high potential to low potential. (B) low potential to high potential.
(C) in the direction of the electric current. (D) None of these
3. In a circuit containing two unequal resistors connected in parallel
(A) The current is the same in both the resistors
(B) A large current flows through the large resistor
(C) The voltage drop across both the resistances is the same
(D) The smaller resistance has smaller conductance
4. A wire is drawn into double its length and $\frac{1}{4}$ th of its original cross – section. What will be its new resistance
(A) Increases to 8 times (B) decreases by 3 times
(C) Increases to 4 times (D) decreases by 2 times
5. A vertical straight conductor carries a current vertically upwards. A point P lies to the east of it at a small distance and another point Q lies to the west at the same distance. The magnetic field at P is
(A) Greater than at Q
(B) Same as at Q
(C) Less than at Q
(D) Greater or less than at Q depending upon the strength of the current

CHEMISTRY – (PART – B)

*This part contains 5 Multiple Choice Questions number 6 to 10. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

6. Arrange the following in the increasing order of oxidation state of Mn
(i) Mn^{+2} (ii) MnO_2 (iii) KMnO_4 (iv) K_2MnO_4
(A) (i) > (ii) > (iii) > (iv) (B) (i) < (ii) < (iv) < (iii)
(C) (ii) < (iii) < (i) < (iv) (D) (iii) < (i) < (iv) < (ii)
7. Which of the following are exothermic processes?
(i) Reaction of water with quick lime
(ii) Dilution of an acid
(iii) Evaporation of water
(iv) Sublimation of camphor (crystals)
(A) (i) and (ii) (B) (ii) and (iii) (C) (i) and (iv) (D) (ii) and (iv)
8. Essential constituent of amalgam is
(A) An alkali metal (B) Silver (C) Mercury (D) Iron
9. When Ag is exposed to air it gets a black coating of
(A) AgNO_3 (B) Ag_2S (C) Ag_2O (D) Ag_2CO_3
10. Which of the following species can be a bronsted base?
(A) CH_3^+ (B) H_2S (C) CH_4 (D) O^{2-}

BIOLOGY – (PART – C)

*This part contains 5 Multiple Choice Questions number 11 to 15. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

11. The kidneys resemble contractile vacuoles of amoeba in
(A) Expelling out excess water (B) Expelling out glucose
(C) Expelling out urea and uric acid (D) Expelling out salts
12. In plants, stomatal apparatus includes
(A) Stoma and guard cells (B) Stoma and subsidiary cells
(C) Stoma, guard cells and subsidiary cells (D) Guard cells and subsidiary cells

13. The process of transpiration in plants help in
 (A) Opening of stomata (B) Absorption of CO_2 from atmosphere
 (C) Upward conduction of water and minerals (D) Absorption of O_2 from atmosphere
14. Hormone that plays an important role in regulation of BMR
 (A) Parathormone (B) Thyroxine
 (C) Insulin (D) Cortisol
15. Excretion in Earthworm is carried out with the help of?
 (A) Solenocytes (B) Flame cells
 (C) Nephridia (D) Malpighian tubules

MATHEMATICS – (PART – D)

*This part contains 5 Multiple Choice Questions number 16 to 20. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

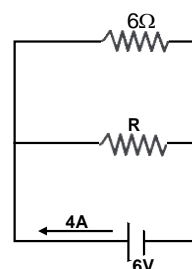
16. If α, β are the roots of the equation $ax^2 + bx + c = 0$, then $\frac{\alpha}{a\beta + b} + \frac{\beta}{a\alpha + b} =$
 (A) $\frac{2}{a}$ (B) $\frac{2}{b}$ (C) $\frac{2}{c}$ (D) $-\frac{2}{a}$
17. The product of the roots of the equation $x^2 - 8x + k = 0$ is 12. Find the value of k.
 (A) 8 (B) 12 (C) -8 (D) -12
18. The roots of $\sqrt{2}x^2 - 3x + \sqrt{2} = 0$ are
 (A) $-\frac{1}{\sqrt{2}}, -\sqrt{2}$ (B) $-\sqrt{2}, -\frac{\sqrt{2}}{2}$ (C) $\frac{\sqrt{2}}{2}, \sqrt{2}$ (D) None of these
19. If the roots of equation $(c^2 - ab)x^2 - 2(a^2 - bc)x + b^2 - ac = 0$ are equal, then
 (A) $a = 0$ (B) $a^3 + b^3 + c^3 = -3abc$
 (C) $a^2 + b^2 + c^2 = 2abc$ (D) None of these
20. If the sum of the p terms of an A.P. is the same as the sum of its q terms (where $p \neq q$), then sum of its first (p+q) terms is
 (A) 0 (B) 1 (C) 2 (D) None of these

Recommended Time: 45 Minutes for Section – III

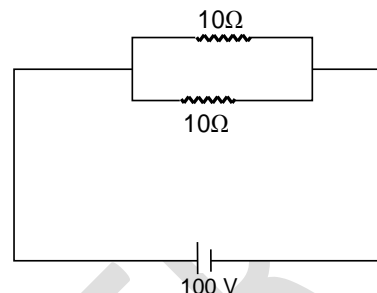
PHYSICS – (PART – A)

*This part contains 5 Multiple Choice Questions number 1 to 5. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

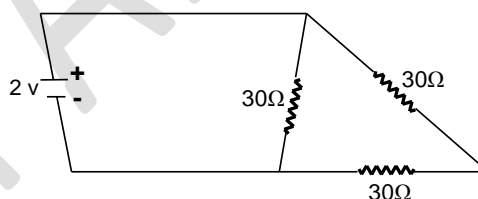
1. If the current in the circuit above is 4A, then the power generated by resistor R is
 (A) 6W (B) 18W
 (C) 24W (D) 7W



2. Electrical resistivity of any given metallic wire depends upon
 (A) its thickness (B) its shape
 (C) nature of the material (D) its length
3. Find the total current 'I' supplied by battery in the circuit shown in the figure. ?



- (A) 10 A (B) 20 A
 (C) 30 A (D) 40 A
4. What is the rate of flow of electric charges called?
 (A) Electric potential (B) electric resistance
 (C) Electric current (D) none of these
5. The current I supplied by battery in the circuit is



- (A) $\frac{1}{15}$ A (B) $\frac{1}{45}$ A (C) $\frac{1}{5}$ A (D) $\frac{1}{10}$ A

CHEMISTRY – (PART – B)

*This part contains 5 Multiple Choice Questions number 6 to 10. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

6. Which of the following element is a metalloid?
 (A) B (B) Si (C) C (D) Both (A) and (B)
7. The least reactive metal among the following is
 (A) Mg (B) Pb (C) Au (D) K
8. Which of the following reaction is not possible?
 (A) $\text{Zn} + \text{CuSO}_4 \rightarrow \text{ZnSO}_4 + \text{Cu}$ (B) $\text{Cu} + 2\text{AgNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + 2\text{Ag}$
 (C) $\text{Cu} + \text{FeSO}_4 \rightarrow \text{CuSO}_4 + \text{Fe}$ (D) $\text{Mg} + \text{FeSO}_4 \rightarrow \text{MgSO}_4 + \text{Fe}$
9. The process in which the ore is heated in a regular supply of air below the melting point of the metal is
 (A) Roasting (B) Calcination (C) Smelting (D) Reduction
10. Identify the reducing and the oxidizing agents in the following reactions respectively when CuSO_4 reacts with Fe to give products FeSO_4 and Cu.
 (A) Fe reducing, CuSO_4 oxidizing (B) Fe oxidizing, CuSO_4 reducing
 (C) Fe oxidizing, CuSO_4 oxidizing (D) Fe reducing, CuSO_4 reducing

MATHEMATICS – (PART – C)

This part contains 5 **Multiple Choice Questions** number 11 to 15. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

11. If the first, second and last terms of an A.P. are a , b and $2a$ respectively, its sum is
 (A) $\frac{ab}{2(b-a)}$ (B) $\frac{ab}{(b-a)}$ (C) $\frac{3ab}{2(b-a)}$ (D) None of these
12. Sum of n terms of the series $\sqrt{2} + \sqrt{8} + \sqrt{18} + \sqrt{32} + \dots$
 (A) $\frac{n(n+1)}{2}$ (B) $2n(n+1)$ (C) $\frac{n(n+1)}{\sqrt{2}}$ (D) None of these
13. If the sum of p terms of A.P. is q and the sum of q terms is p , then the sum of the $p+q$ terms will be
 (A) 0 (B) $p-q$ (C) $p+q$ (D) $-(p+q)$
14. The angle of elevation of the top of a tower standing on a horizontal plane from a point A is α . After walking a distance d towards the foot of the tower the angle of elevation is found to be β . The height of the tower is
 (A) $\frac{d}{\cot \alpha + \cot \beta}$ (B) $\frac{d}{\cot \alpha - \cot \beta}$ (C) $\frac{d}{\tan \beta - \tan \alpha}$ (D) $\frac{d}{\tan \beta + \tan \alpha}$
15. The angles of elevation of the top of a tower from the points C and D at distance of a and b respectively from the base and in the same straight line with it are complementary. The height of the tower is
 (A) ab (B) \sqrt{ab} (C) $\sqrt{\frac{a}{b}}$ (D) $\sqrt{\frac{b}{a}}$

Recommended Time: 45 Minutes for Section – IV BIOLOGY – (PART – A)

This part 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. During glycolysis, glucose is converted into
 (A) CO_2 (B) Cellulose (C) Starch (D) Pyruvic acid
2. Which of the following is most suitable for studying respiration in plants?
 (A) Boiled seeds (B) Germinating seeds (C) Dry seeds (D) Mashed seeds
3. What includes the automatic reflexes?
 (A) Contraction of iris (B) Dilation of pupil
 (C) Contraction of pupil (D) Dilation of iris
4. Nyctalopia can occur due to the deficiency of
 (A) Vitamin – A (B) Vitamin – B_2 (C) Vitamin – K (D) Vitamin – D
5. Plants get rid of their excess water by
 (A) Transportation (B) Guttation (C) Transpiration (D) Both B and C
6. Which of the following functions is carried out by stomatae?
 (A) Photosynthesis (B) Exchange of gases (C) Respiration (D) Absorption of water
7. This hormone is not a growth inhibitor in plants

- acid (C) IAA (A) Ethylene (B) Absciscic
(D) Dormin
8. Pick out the gaseous plant hormone from the following
(A) IBA (B) NAA (C) ABA (D) Ethylene
9. A balanced diet does not include
(A) Carbohydrates and fats (B) Nucleic acids and enzymes
(C) Proteins and vitamins (D) Minerals and salts
10. Which of the following structures is in the diencephalon:
(A) Cerebral cortex (B) Olfactory bulb (C) Hypothalamus (D) Basal ganglia
11. Bud dormancy is induced by
(A) IAA (B) GA (C) ABA (D) Ethylene
12. Stomatal opening is surrounded by
(A) Epidermal cells (B) Chloroplasts (C) Guard cells (D) Chlorophyll
13. Which of the following glands grow to maximum size at puberty and then diminishes gradually?
(A) Thymus (B) Pituitary (C) Thyroid (D) Adrenal
14. Which of these is not a reflex reaction?
(A) Salivation (B) Secretion of sweat
(C) Flexion due to needle prick (D) Blinking of eyes due to strong light
15. The function(s) of oxytocin is / are to _____
(A) Cause the uterus to contract
(B) Induce labour Pain
(C) Stimulate the release of milk from the mother's mammary glands when her baby is nursing
(D) All of the above.
16. Tropic movements are:
(A) In response to light (B) In response to gravity
(C) Uni-directional (D) Non-directional
17. Respiration is
(A) Anabolic process (B) Catabolic process (C) Biophysical process (D) Physical process
18. This hormone is not a growth inhibitor
(A) Dormin (B) IAA (C) Ethylene (D) Absciscic acid
19. Which of the following parts of the brain controls the body temperature and urge of eating " "?
(A) Thalamus (B) Hypothalamus (C) Pons (D) Cerebellum
20. The number of peripheral nerves are:
(A) 86 (B) 43 (C) 62 (D) 24
21. Which of the following is not a part of peripheral nervous system?
(A) Cranial nerves (B) Ganglion (C) Spinal cord (D) Spinal nerves
22. Leaf fall can be induced by:
(A) Florigens (B) Auxins (C) Cytokinins (D) Absciscic acid
23. The first discovery of gibberellins was from:
(A) Algae (B) Fungi (C) Bacteria (D) Mosses
24. Peripheral nervous system of human has how many pairs of spinal nerves?
(A) 21 (B) 11 (C) 31 (D) 12
25. Which one is not a growth promoter?
(A) ABA (B) GA (C) IAA (D) CK

26. Phototropic curvature is the result of uneven distribution of:
(A) Auxin (B) Gibberellin (C) Phytochrome (D) Cytokinins
27. This is not a function of insulin
(A) Gluconeogenesis (B) Glycogenesis
(C) Lipogenesis (D) Decreasing glycogenolysis
28. Insulin functions to:
(A) Promote the storage of nutrients.
(B) Lower the blood glucose level by stimulating liver, fat and muscle cells to metabolize glucose
(C) Stimulate uptake of glucose by cells
(D) All of the above
29. Afferent neurons carry impulses
(A) Towards muscles and glands (B) Away from central nervous system
(C) Towards central nervous system (D) Both (A) and (B)
30. Which of the following is considered as a complete protein food?
(A) Almond (B) Soya bean (C) Cashew nut (D) Horse gram

FIITJEE Medical Admission Test

for students presently in **Class X (Going to Class XI)**
(Paper-1)

Section - I

1. D 2. B 3. C 4. C 5. D 6. B 7. D 8. A 9. B 10. B
11. D 12. C 13. C 14. D 15. A 16. C 17. A 18. C 19. B 20. C
21. D 22. D 23. A 24. A 25. C 26. D 27. C 28. C 29. D 30. A
31. D 32. B 33. A 34. A 35. A 36. D 37. D 38. D 39. A 40. C
41. B 42. C 43. D 44. D 45. C 46. D 47. B 48. A 49. C 50. C
51. B 52. D 53. A 54. C 55. A 56. B 57. A 58. B 59. D 60. B

Section - II

PART - A

1. A 2. B 3. C 4. A 5. B

PART - B

6. B 7. A 8. C 9. B 10. D

PART - C

11. A 12. C 13. C 14. B 15. C

PART - D

16. D 17. B 18. C 19. A 20. A

Section - III

PART - A

1. B 2. C 3. B 4. C 5. D

PART - B

6. D 7. C 8. C 9. A 10. A

PART - C

11. C 12. C 13. D 14. B 15. B

Section - IV

PART - A

1. D 2. B 3. B 4. A 5. D 6. B 7. C 8. D 9. B 10. C
11. C 12. C 13. A 14. B 15. D 16. C 17. B 18. B 19. B 20. A
21. C 22. D 23. B 24. C 25. A 26. A 27. A 28. C 29. C 30. B