Sample Questions

(ALLEN Scholarship Cum Admission Test)

CLASSROOM CONTACT PROGRAMME

PRE-NURTURE & CAREER FOUNDATION: CLASS-VI

(FOR V to VI MOVING STUDENTS)



Corporate Office **ALLEN** CAREER INSTITUTE

"SANKALP", CP-6, Indra Vihar, Kota (Rajasthan)-324005

🖀 +91-744-2757575 🖨 info@allen.ac.in



www.allen.ac.in

INSTRUCTIONS

Things NOT ALLOWED in EXAM HALL: Blank Paper, clipboard, log table, slide rule, calculator, camera, mobile and any electronic or electrical gadget. If you are carrying any of these then keep them at a place specified by invigilator at your own risk

- 1. This booklet is your Question Paper. **DO NOT** break seal of Booklet until the invigilator instructs to do so.
- 2. Fill your Form No. in the space provided on the top of this page.
- 3. The Answer Sheet is provided to you separately which is a machine readable Optical Response Sheet (ORS). You have to mark your answers in the ORS by darkening bubble, as per your answer choice, by using black & blue ball point pen.
- 4. Total Questions to be Attempted 80. Part-I: 20 Questions & Part-II: 60 Questions.
- 5. After breaking the Question Paper seal, check the following:
 - a. There are 13 pages in the booklet containing question no. 1 to 80 under 2 Parts i.e. Part-I & Part-II.
 - b. Part-I contains total 20 questions of IQ (Mental Ability).
 - c. Part-II contains total 60 questions under 4 sections which are Section (A): Physics, Section (B): Chemistry, Section(C): Biology & Section (D): Mathematics.
- 6. Marking Scheme:
 - a. If darkened bubble is RIGHT answer: 4 Marks.
 - b. If no bubble is darkened in any question: **No Mark**.
 - c. Only for part II: If darkened bubble is WRONG answer: -1 Mark (Minus One Mark).
- 7. Think wisely before darkening bubble as there is negative marking for wrong answer.
- 8. If you are found involved in cheating or disturbing others then your ORS will be cancelled.
- 9. Do not put any stain on ORS and hand it over back properly to the invigilator.



PART-I

IQ (MENTAL ABILITY)

This section contains **20 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

1.	Find the wrong term in following series. 4, 8, 13, 16, 20, 24									
	(1) 8	(2) 13	(3) 16	(4) 20						
2.	What direction will you face if you start facing west and make $\frac{1}{4}$ of a revolution clockwise?									
	(1) South	(2) North	(3) West	(4) East						
3.	If the first and last i.e. the first and the 26th letter of the English alphabet are paired, the second and									
	25th, the third and the 24th and so on are paired which of the following would be such a pair?									
	(1) EW	(2) BY	(3) FV	(4) BW						
4.	How many 3 digit numbers can be formed using digits 4, 5, 6 only once									
	(1) 5	(2) 6	(3) 3	(4) 4						
5.	In the following question, choose the pair of words that show the same relationship as given in the above pair									
	Summer : Rainin	g								
	(1) Monday : Su	ınday	(2) Summer: W	inter						
	(3) December : January (4) Licence : Driving									
6.		o form the word.	on which gives the corn	equired to construct the word. Each rect order of the letters as indicated (4) 5, 3, 2, 1, 4						
7.	How many triang	gles are there in the follo	owing figure ?							
	(1) 6	(2) 10	(3) 11	(4) 12						
8.	In the following question, four words are given. Which of them will come at the third position if al									
	of them are arranged alphabetically as in a dictionary?									
	(1) Heaven	(2) Hillock	(3) Hawker	(4) Hilt						
9.	If in a certain lan	nguage KINDLE is code	d as ELDNIK, how is l	EXOTIC coded in that code?						
	(1) CXOTIE	(2) COXITE	(3) CITOXE	(4) EOXITC						



- 10. A plane flying in North-West direction turns clockwise by an angle of 45°. In which direction is it flying now?
 - (1) North
- (2) South
- (3) West
- (4) South-west
- 11. X is brother of Y. B is brother of A. A is mother of X. What is B of Y?
 - (1) Aunt
- (2) Niece
- (3) Nephew
- (4) Uncle
- 12. Find the missing character from amongst the given alternatives.



(1) 37

(2) 38

(3) 39

(4) 42

Direction: (Q.13 & Q.14): P, Q, R, S, T, U, V and W are sitting round the circle and facing the centre P is second to the right of T who is the neighbour of R and V.

S is not the neighbour of U.

V is the neighbour of U.

Q is not between S and W. W is between Q and S.

- 13. What is the position of S?
 - (1) Between U and V

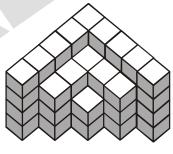
- (2) Second to the right of P
- (3) To the immediate right of P
- (4) Data inadequate
- **14.** Which two of the following are not immediate neighbours?
 - (1) R and V
- (2) U and V
- (3) R and P
- (4) Q and W
- 15. Find the value of + + + = 175 and + = 175 and + = 5
 - (1) 7

(2) 14

(3) 35

(4) 49

16. How many unit cubes are there in the figure?



(1) 52

(2) 53

(3) 54

(4) 56

17. What should come next?

























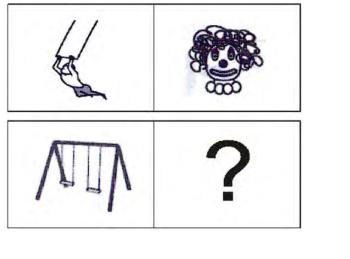


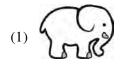






18. Which figure completes the second pair in the same way as the first pair.



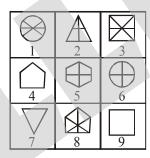








19. Group the following figures into three classes regarding common properties amongst them.



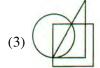
- (1) 4, 7, 9; 2, 5, 8; 1, 3, 6
- (3) 1, 2, 3; 4, 5, 6; 7, 8, 9

- (2) 4, 7, 9; 2, 5, 6; 1, 3, 8
- (4) 1, 2, 3; 4, 7, 9; 5, 6, 8
- 20. In the following question, from amongst the figures marked (1), (2), (3) and (4), select the one which satisfies the same condition of placement of the dot as in the given figure (X)













PART-II

SECTION-A: PHYSICS

This section contains **12 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

21. In which of the following figures only pushing force is applied?









- **22.** Work is always done when
 - (1) an object moves.

- (2) a force moves an object.
- (3) a force is exerted on an object.
- (4) an object has mass.
- 23. An axe is an example of which type of simple machine?
 - (1) Screw

(2) Inclined plane

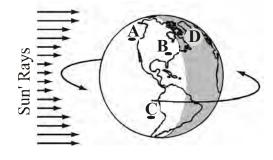
(3) Wedge

- (4) Lever
- 24. A standard bottle opener is an example of which type of lever?
 - (1) Lever of the first order

(2) Lever of the second order

(3) Lever of the third order

- (4) Lever of the fourth order
- 25. In the diagram below, which of these locations would enter the night-time side of Earth next?



(1) A

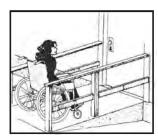
(2) B

(3) C

(4) D



- **26.** The Great Red Spot is a planetary feature that has been observed for hundreds of years. On which planet is the Great Red Spot?
 - (1) Venus
- (2) Mars
- (3) Neptune
- (4) Jupiter
- 27. The illustration below shows a student approaching the door to a building.



Which two simple machines are being used to enable the student to reach the door?

(1) Inclined plane and pulley

(2) Lever and wheel-and-axle

(3) Pulley and lever

- (4) Wheel-and-axle and inclined plane
- 28. Which among the following is the unit of force?
 - (1) Newton

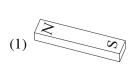
(2) Dyne

(3) $kg \frac{m}{s^2}$

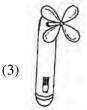
- (4) All are units of force
- 29. The picture shows Raj pulling the car made of iron with a wand.



Which of these is probably inside the wand?



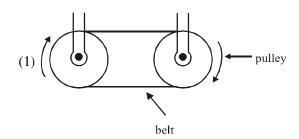


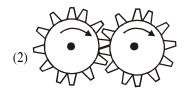


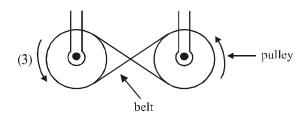


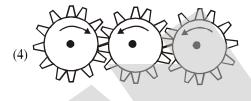


30. Alisha wants to build a machine for her technology class. To think of ideas, she drew four sketches of moving parts for her machine. Which design will work?









- 31. All stars appear to move from
 - (1) East to West

(2) West to East

(3) North to South

- (4) South to North
- 32. Which among the following planets has no rings around it?
 - (1) Jupiter

(2) Saturn

(3) Uranus

(4) Mars

SECTION-B: CHEMISTRY

This section contains 11 Multiple Choice Questions. Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

- 33. Substance from which metal is economically extracted is known as
 - (1) Mineral

(2) Ore

(3) Flux

(4) Slag

- **34.** Soil can be conserved by
 - (1) Afforestation

(2) Terrace farming

(3) Bunds

- (4) All the above
- 35. The origin point of an earthquake is called the
 - (1) Epicentre

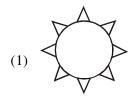
(2) Crater

(3) Focus

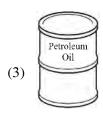
- (4) None of these
- **36.** What is the full form of 'NGO'?
 - (1) Non-Government Organisation.
- (2) National Government Organisation
- (3) National Growth Organisation
- (4) New Great Organisation



37. Nonrenewable resources are natural resources that cannot be replaced quickly by nature when they get used up. According to this definition, which of these is a nonrenewable resource?









- **38.** Diamond is formed at.....
 - (1) high temperature and high pressure
 - (2) high temperature and low pressure
 - (3) low temperature and high pressure
 - (4) low temperature and low pressure
- 39. The diagram below shows the effect of a river on an area over many years.



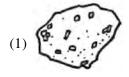
Which process caused the valley to form?

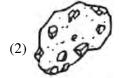
(1) condensation

(2) deposition

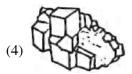
(3) erosion

- (4) evaporation
- **40.** The size of crystals in igneous rock can be determined by how fast the magma cools and solidifies. The faster the magma cools, the smaller the crystals. Which sample of granite is formed from magma that is cooled and solidified at the slowest rate?



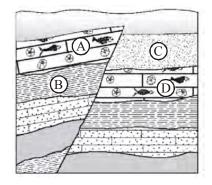








41. The layers of this area do not line up. Which of the following could have caused this?



- (1) Weathering
- (3) Erosion
- **42.** Carbon dioxide is produced during:
 - (1) Photosynthesis and inspiration
 - (3) Burning and respiration
- 43. Vermi Composting involves the addition of
 - (1) Red-worm
 - (3) Pesticides

- (2) Earthquakes
- (4) Volcanoes
- (2) Transpiration and combustion
- (4) Respiration and photosynthesis
- (2) Chemicals
- (4) Wastes of plants only

SECTION-C: BIOLOGY

This section contains 12 Multiple Choice Questions. Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

44.	The mai	n sources	of	vitamins	and	minerals	are
77.	I IIC IIIai	II Sources	OI	VICUITITIO	and	minutars	are

(1) Pulses, meat and egg

- (2) Oil, butter and ghee
- (3) Fruits and green vegetables
- (4) Potato, maize, wheat and rice
- 45. Respiratory pigment found in insects is
 - (1) Haemocyanin

(2) Haemoglobin

(3) Both 1 and 2

- (4) Lymph
- 46. A person is suffering from Anaemia, the food recommended for recovery of this disorder are
 - (1) Iodised salt & sea food

(2) Sea food and milk

(3) Butter, fish & meat

- (4) Apple & Spinach
- 47. Which of the following disease is non communicable?
 - (i) Cholera

(ii) Typhoid

(iii) Diabetes

(iv) Chicken pox

- (1) (i), (ii) and (iii)
- (2) (iii) only
- (3) (i) & (ii) only
- (4) All of these
- **48.** According to the feeding habits of sparrows i.e. crushing of seeds, their beaks have been specialised as being
 - (1) Broad and notched

(2) Short & strong

(3) Sharp and hooked

(4) None of these

- Sample question for ASAT : Class-VI 49. Pernicious anaemia, failure of erythrocytes to mature, is mainly due to deficiency of (1) Vitamin K (2) Thiamine (3) Vitamin C (4) Cyanocobalamin Which of these best defines communicable diseases? 50. (1) They can be cured. (2) They are caused by bacteria. (3) They are spread to others. (4) They can spread only in winter. The pictures below show the change in the fur of an arctic hare from summer to winter. 51. Fur in summer Fur in winter Which of the following statements best describes how this change helps arctic hares? (1) It lowers their body temperature. (2) It protects their eyes from sunlight. (3) It helps them to move on slippery ice. (4) It makes them less visible to predators. 52. John has diabetes. Which of the following should he be careful about eating or drinking? (1) Beef (2) Eggs (3) Milk (4) Fruit juice A polar bear is almost completely covered with white fur. The few parts without fur include the foot 53. bumps help the polar bear to (1) Conserve body heat (2) Swim quickly in cold water (3) Walk on ice without slipping (4) Blend in with its surroundings
- pads on its large, clawed paws. The foot pads are black and covered with many small bumps. The
- Observe the mouthpart of the insect in the illustration below and determine how it would feed? 54.



(1) Cut plant tissues

(2) Siphon nectar

(3) Sponge up food

- (4) Pierce skin and suck liquids
- 55. For immediate energy production in cells one should take
 - (1) Glucose

(2) Proteins

(3) Vitamin C

(4) Minerals



SECTION-D: MATHEMATICS

This section contains **25 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

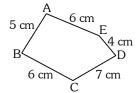
56. Find the perimeter of the following figure.



(2) 25 cm



(4) None of these



- **57.** Which figure can be made using 3 matchsticks (without breaking the sticks)?
 - (1) Square
- (2) Rectangle
- (3) Triangle
- (4) Circle
- 58. Which figure represents greater fraction by shaded part ?



(ii)

(1) (i)

(2) (ii)

- (3) both are equal
- (4) None of these
- **59.** Which point is interior to the angle in the following figure?
 - (1) P

(2) Q

(3) R

- (4) Both P & Q
- P R
- **60.** A pipe leaks 3.5 gallons of water each hour.

Which table represents the total amount of water leaked at the end of each hour?

	Time(Hours)	Water
		Wasted
		(gallons)
	1	3.5
(1)	2	3.5
(1)	3	3.5
	4	3.5
	5	3.5

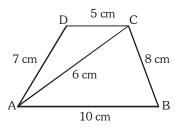
	Time(Hours)	Water
		Wasted
		(gallons)
	1	3.5
(2)	2	7
(2)	3	10.5
	4	14
	5	17.5

	Time(Hours)	Water
		Wasted
		(gallons)
	1	3.5
(2)	2	7
(3)	3	21
	4	84
	5	420

	Time(Hours)	Water
		Wasted
		(gallons)
	1	3.5
(4)	2	12.25
(4)	3	42.88
	4	150.06
	5	525.22



61. Find the perimeter of the following figure ABCD.



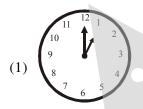
- (1) 30 cm
- (2) 36 cm
- (3) 42 cm
- (4) 24 cm
- **62.** If two angles of a triangle are equal and third is unequal, then the triangle is
 - (1) Isosceles triangle
- (2) Equilateral triangle (3) Scalene triangle
- (4) None of these
- **63.** Mrs. Joshi will put a fence around her rectangular garden.
 - The length of the garden is $9\frac{5}{6}$ yards.
 - The width of the garden is $5\frac{1}{4}$ yards.

How many yards of fencing does Mrs. Joshi need?

(1) $14\frac{6}{10}$

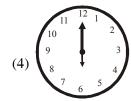
(3) $29\frac{1}{5}$

64. In which clock is the angle between the hour hand and the minute hand less than 90°?



(2)



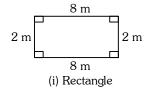


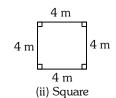
65. Solve

$$92\frac{7}{8} - 49.326 = ?$$

- (1) 40.152
- (2) 43.454
- (3) 43.549
- (4) 57.551

66. Which has greater area?





(1)(i)

(2) (ii)

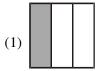
- (3) Both are equal
- (4) None of these

- **67.** In a right angled triangle, one angle is 48°. Then find the remaining angle.
 - $(1) 45^{\circ}$

 $(2) 42^{\circ}$

 $(3) 90^{\circ}$

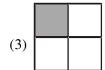
- (4) Can't be determined
- **68.** Which pair of figures has the same fractional area shaded gray?



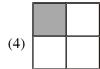














- 69. When an arm of an angle is extended then the measure of angle
 - (1) Doubles

(2) Triples

(3) Remains the same

(4) None of these

- **70.** $2 + \frac{9}{10} + \frac{9}{100} + \frac{9}{1000} + \frac{1}{1000} =$
 - (1) 3

(2) 2

- (3) 2.999
- (4) 2.991
- 71. If 5 \bigcirc can hold 25 litres of water, then 2 such \bigcirc can hold _____ litres of water.
 - (1) 5 L
- (2) 10 L
- (3) 15 L

- (4) 20 L
- 72. Mona spent Rs. 40 and had Rs. 10 left. What fraction of her money had she spent ?
 - (1) $\frac{14}{5}$

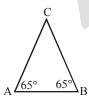
- (2) $\frac{40}{5}$
- (3) $\frac{4}{5}$
- $(4) \frac{1}{5}$

73. Bob covered a floor with carpet.

Which unit of measure describes how much carpet he used ?

- (1) inches
- (2) feet
- (3) square feet
- (4) cubic inches

74. Triangle ABC is shown.



What is the measure of angle C?

- $(1) 50^{\circ}$
- $(2) 65^{\circ}$
- $(3) 90^{\circ}$
- (4) 180°
- 75. Russell bought $2\frac{1}{8}$ pounds of turkey and $3\frac{3}{4}$ pounds of roast beef to make sandwiches. Which

estimate is reasonable for the amount of meat he bought?

- (1) 4 pounds
- (2) 5 pounds
- (3) 6 pounds
- (4) 7 pounds



- Heavy rains caused the water level of a lake to rise eight hundred sixty-four thousandths of a meter. Which number is equivalent to eight hundred sixty-four thousandths?
 - (1) 0.0864
- (2) 0.864
- (3) 86,400

- (4) 864,000
- 77. Bettina has a book with 364 pages. There are 14 chapters in her book. Each chapter has the same number of pages. How many pages are in each chapter of Bettina's book?
 - (1) 25

(2) 26

(3) 27

- (4) 28
- **78.** The triangular sign shown below has a height of 14 inches and a base length of 18 inches.



What is the area of this sign?

(1) 126 square inches

(2) 252 square inches

(3) 504 square inches

- (4) 756 square inches
- Which two numbers have an difference of 2 / 5 ? **79.**

 - (1) $18\frac{2}{3}$ and $15\frac{1}{10}$ (2) $18\frac{5}{10}$ and $18\frac{1}{10}$ (3) $18\frac{1}{4}$ and $18\frac{1}{8}$ (4) $18\frac{5}{4}$ and $15\frac{1}{2}$
- 80. Roberto began his homework at 4:25 p.m. He finished it one and a half hours later. At what time did Roberto finish his homework?
 - (1) 5:05 p.m.
- (2) 5:55 p.m.
- (3) 6:05 p.m.
- (4) 6:15 p.m.



ASAT (SAMPLE PAPER)

CLASS: VI

(V to VI moving Students)

ANSWER KEY

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

Sample Paper

ASAT

ALLEN RESULT: JEE (MAIN) 2019*



Classroom Students Scored 199 PERCENTILE in JEE Main 2019 and made it to All India Top 15

Highest among all Institutes of India







JAYESH
SINGLA
Punjab State Topper



MARTIN Karnataka State Topper



ANKIT K.
MISRA

Maharashtra State Topper



KARTIKEY GUPTA



37 Classroom Students Score 100 Percentile in Maths

✓ 13 Classroom Students Score 100 Percentile in Physics

√ 1650 + Students Score 99 Percentile & Above

239 Students Score 99.9 Percentile & Above

✓ 3 Classroom Students Score 100 Percentile in Chemistry

7 Times All India Rank-1 In Last 9 Years From ALLEN Classroom

AIR 1



Nishita Purohit

AIR 1



Aman Bansal

AIR 1



Het Sanjay Shah NEET 2016

AIR 1



Chitraang Murdia

AIR 1



Tejaswin Jha

AIR 1



Ayush Goel



Lokesh Agarwal
AIPMT 2010

Admission Announcement KOTA CENTER (Session 2019-20)

Stream	Course Name (Eligibility)	Batches Start Date			
	Nurture (X to XI Moving)	3 April, 15 April			
JEE (Advanced)	Enthusiast (XI to XII Moving)	1 April, 8 May			
	Leader (XII Pass/Appeared)	24 April, 08 May			
	Nurture (X to XI Moving)	1 April, 15 April			
JEE (Main)	Enthusiast (XI to XII Moving)	1 April, 6 May			
	Leader (XII Pass/Appeared)	24 April, 6 May			

	•	•			
Stream	Course Name (Eligibility)	Batches Start Date			
PRE-MEDICAL	Nurture (X to XI Moving)	7 April, 21April			
(NEET-UG, AIIMS)	Enthusiast (XI to XII Moving)	1 April, 15 May			
	Leader (XII Pass/Appeared)	8 April, 29 April			
	Achiever (XII Pass/Repeaters)	15 May			
Pre-Nurture &	For Class VI to X	7 April, 13 May			
Career Foundation	NTSE & Olympiads				

For Further Batch Starting Dates & Registration, Log on to www.allen.ac.in or walk-in to ALLEN Center for Application Form



REGISTER KIYA KYA? ALLEN SCHOLARSHIP CUM

ALLEN SCHULARSHIP COM ADMISSION TEST - ASAT

Sunday 7,14 & 28 April

An Opportunity Like Never Before

For JEE (Main+Advanced) | NTSE | OLYMPIADS | PNCF | Class 6th to 12th (Direct Admission in JEE Main & NEET/AIIMS Courses)

- Study With Future Toppers
- **☞** Get Mentored By Result Producing Faculties
- Get National Competition Under One Roof and Much More...

To Apply Online
Log on to www.allen.ac.in or
walk-in to ALLEN Center
for Application Form



Corporate Office: "SANKALP", CP-6, Indra Vihar, Kota (Raj.), India, 324005

0744-2757575 info@allen.ac.in www.allen.ac.in Sunday
OPEN