

## LOYOLA ACADEMY OF EXCELLENCE

### **MODEL QUESTION PAPER**

CLASS

# Section 1: English

l.	There are types of cars to choose from.			6.	Choose the correct word from the homophones to fill up the blank:		
	(Fill up the blank with a suitable determiner from				Ithe truth.		
	the options)				(A) know	(B) no	
	(A) much	(B)	many		(C) now	(D) none of the above	
	(C) any	. ,	most	7.	Which of the following words is not a compound		
2.	Choose the correct form of the be verb from the				word?		
	options to fill up the blank:				(A) firefly	(B) butterfly	
	The number of students in my class			(C) blue berry	(D) happiness		
	thirty-five. (A) are	(B)	is	8.	Find the word with a suitable prefix to form the opposite of the word from the options: Balance		
	(C) am	(D)	be		(A) non-balance	(B) disbalance	
3.	Choose the correct preposition from the options				(C) imbalance	(D) unbalance	
	to fill up the blank:			9.	The expansion for the acronym NASA is		
	We have been studying in this school five years now.			9.	(Choose the correct option to fill up the blank)		
	(A) on	(B)	to		(A) National Air and S <sub>1</sub>	pace Association	
	(C) for	. ,	from		(B) National Aeronaut Administration	tics and Space	
1.	Choose the correct pronoun from the options to fill up the blank:				(C) National All Space	Administration	
					(D) North American Space Authority		
	Raju is helping classmates in preparing for the test.			10.	Identify the part of the sentence that has an error		
	(A) her	(B)	his		This sentence is / so difficult that /		
	(C) their	(D)	its		(A)	(B)	
5.	Choose the correct adjective from the options to fill up the blank:				I can't able to understand it. / No error		
	My school is at		distance from my		(C)	(D)	
	home.						
	(A) walkable	(B)	walky				
	(C) walkful	(D)	walking				

#### Section 2: **Mathematics**

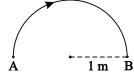
- 11. An elevator descends into a mine shaft at the rate 16. A cow is placed for grazing inside a square field of 6 m per minute. If the descent starts from 19 m above ground level, how long will it take to reach -107 m?
  - (A) 21 minutes
- (B) 18 minutes
- (C) 14 minutes
- (D) 27 minutes
- 12. In a class of 28 students,  $\frac{1}{7}$  of the students like English classes the most,  $\frac{5}{14}$  like Science classes the most and the remaining students like Mathematics classes the most. How many students like Mathematics classes the most?
  - (A) 4
- (B) 10
- (C) 14
- (D) 24
- 13. Find the rational number which is  $\frac{-3}{11}$  more
  - (A)  $\frac{21}{77}$

- 14. Find the value of x so that  $\left(\frac{1}{3}\right)^{-2x} \times \left(\frac{1}{3}\right)^9 = \left(\frac{1}{3}\right)^{2x+1}$ 
  - (A) 2
- (C)  $\frac{1}{2}$
- (D)  $\frac{1}{3}$
- 15. Arun is *n* years old. His father is 4*n* years old. If the sum of their ages is 50 years, then find Arun's age.
  - (A) 5
- (B) 10
- (C) 15
- (D) 20

- of side 18 m and is tethered to one corner by a rope 7 m long. Find the area of the field over which the cow cannot graze.
  - (A)  $280 \,\mathrm{m}^2$
- (B)  $324 \,\mathrm{m}^2$
- (C)  $285.5 \,\mathrm{m}^2$
- (C)  $320 \,\mathrm{m}^2$
- 17. The price of a shirt increased from Rs 700 to Rs 1,064 What is the percentage increase?
  - (A) 38%
- (B) 50%
- (C) 42%
- (D) 52%
- 18. Raj needed a loan of Rs 3,80,000 to buy a new car. The bank manager agreed to give the loan at an interest rate of 6% per annum. If the loan was to be paid back after 5 years, what amount must be returned to the bank?
  - (A) Rs 4,94,000
- (B) Rs 2,66,000
- (C) Rs 5,08,526
- (D) Rs 1,14,000
- 19. By selling a chair for Rs 720, a man gains 20%. At what price must he sell it in order to gain 25%?
  - (A) 850
- (B) 825
- (C) 800
- (D) 750
- 20. The length of a rectangular field is three times its breadth. If the perimeter of the field is 256 m, find its area.
  - (A)  $3000 \,\mathrm{m}^2$
- $3072 \,\mathrm{m}^2$
- (C)  $4052 \,\mathrm{m}^2$
- (D)  $4000 \,\mathrm{m}^2$

#### **Science** Section 3:

21. A person is travelling along the circular are from 22. Distance travelled is always.....than A to B as shown in the figure.



The distance and displacement of this journey respectively are (in meter)

- , 2 (A)
- (B) 2,
- (C) 2,2
- (D) , 0

- displacement.
  - (A) Greater
  - (B) Greater than or equal to
  - (C) Less
  - (D) Less than or equal to
- 23. Two plastic combs rubbed against dry hair are brought near each other.
  - (A) They attract each other.

- (B) They repel each other.
- (C) They neither attract nor repel each other.
- (D) They generate spark when brought closer.
- 24. March 22nd of every year is celebrated as
  - (A) World Environment Day
  - (B) World Zoo Day
  - (C) World Water Day
  - (D) World Chemistry Day
- 25. The correct match of elements in column A with their types in column B are

Column A

Column B

- (a) Neon
- (i) Non metal
- (b) Carbon
- (ii) Metalloid
- (c) Magnesium
- (iii) Noble gas
- (d) Silicon
- (iv) Metal
- (A) (a)-(iii), (b)-(i)
- (c)-(iv), (d)-(ii)
- (B) (a)-(iv), (b)-(ii), (c)-(i),
- (d)-(iii)

- (C) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)
- (D) (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)
- 26. Which one of the following pairs of elements have the same number of neutrons?

  - (A)  ${}_{5}B^{11}$  and  ${}_{6}C^{12}$  (B)  ${}_{4}Be^{9}$  and  ${}_{7}N^{14}$

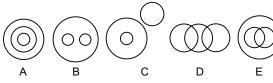
  - (B)  $_{16}S^{32}$  and  $_{18}Ar^{38}$  (D)  $_{12}Mg^{24}$  and  $_{15}P^{31}$
- 27. Which one of the following is usually developing in our body against disease?
  - (A) nothing will be developing in our body

- (B) antipyretic substances will be developing
- (C) antibiotics will be developing
- (D) antibody will be developing.
- 28. Usually cows keep on chewing when they are not eating. What is the reason for it?
  - (A) Already eaten food is brought back to mouth and is being chewed.
  - (B) It is simply an action of cows without any food in the mouth.
  - (C) They keep the food in their mouth long time and chew it.
  - (D) Both (A) and (C).
- 29. Which process is responsible for the formation of mango fruit?
  - (A) Growth of the plant
  - (B) Pollination of the flower
  - (C) Pollination and fertilization of the flower.
  - (D) Respiration of the plant.
- 30. One organism is made up of one cell but in the cell no nucleus whereas the other cell has nucleus. What are they?
  - (A) Non living and living cells
  - (B) Living and nonliving cells
  - (C) Bacterium and virus
  - (D) Prokaryote and eukaryote

# Section 4: Logical Reasoning

- 31. The missing number in the sequence:
  - 24, 12, 36, 18, 54, .....?...
  - (A) 72
- (B) 162
- (C) 37
- (D) 27
- 32. Code for 'MATHS' is 'LZSGR', select code for 'SCIENCE'
  - (A) QAGCLAB
- (B) RBDHBMD
- (C) TDJFODF
- (D) RBHDMBD

33. Choose the Venn diagram that best illustrates the relationship among the following classes from the five given diagrams A, B, C, D and E:



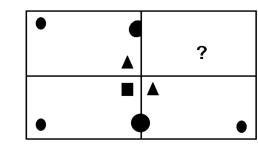
Textbooks, Newspaper, Reading material

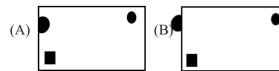
- (A) A
- (B) B
- (C) D
- (D) C

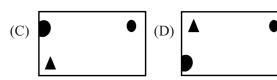
34. The number of rectangles in the following figure:

- (A) 22
- (B) 18
- (C) 27
- (D) 32

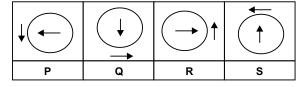
35. Complete the missing portion from selecting the alternatives:







36. Find the figure from (A), (B), (C) and (D) which 40. Pick the odd man in the series: would continue the series of four figures P, Q, R and S.











37. If we arrange the alphabets I, Y, T, X, U, S, Q, A, V, Z in descending order then, the number of letters between V and I is .....

- (A) 2
- (B) 5
- (C) 3
- (D) 4

38. TV: UW::....:

- (A) CD: YX
- (B) PR:AC
- (C) AB: PQ
- (D) DF: GH

39. The next term in the sequence:

1, 3, 7, 15, 31, 63, .....?....

- (A) 127
- (B) 94
- (C) 95
- (D) 126

- 1, 4, 27, 16, 25, 36, 343
- (A) 25
- (B) 27
- (C) 343
- (D) 36

Section 5: General Knowledge

41. Which two countries' National Anthems were 43. Find out the country from the following clues: written by the same author?

- (A) India and Bangladesh
- (B) Nepal and Bhutan
- (C) India and Pakistan
- (D) Cambodia and Vietnam

42. When was the modern Olympic Games started?

- (A) 1776
- (B) 1813
- (C) 1896
- (D) 19141

Petronas Tower, Ringitt, Penanga.

- (A) Thailand
- (B) Indonesia
- (C) Myanmar
- (D) Malaysia

44. The famous dish 'Pizza' originated from ......

- (A) France
- (B) Italy
- (C) Germany
- (D) Japan

45. The official mascot of 2020 Olympic Games was

- ..... (A) Hodori
- (B) Soohorong
- (C) Leopard
- (D) Miraitowa

### **Section 6: Extrapolative Questions**

- 46. There were 200 men in a fort and they had provisions that could last 30 days. After 10 days, 40 men left the fort. How long will the remaining provisions last if the remaining men consumed them at the same rate?
  - (A) 20 days
- (B) 150 days
- (C) 37.5 days
- (D) 25 days
- 47. Raju has 100 rhombus-shaped cardboard pieces of the same size that he wants to use for an activity. The diagonals of each rhombus measure 6 cm and 9 cm. The top surface of each rhombus needs to be pasted with a yellow-coloured paper which costs Rs 16 per 100 sq. cm. Find the total cost of the yellow-coloured paper required for all the rhombus-shaped cardboard pieces.
  - (A) Rs 432
- (B) Rs 1600
- (C) Rs 650
- (D) Rs 1200
- 48. **Assertion:** Mercury is used in laboratory thermometers.

**Reason**: Mercury is silvery in colour and is attractive in appearance.

(A) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.

- (B) Both Assertion and Reason are true and Reason is NOT the correct explanation of Assertion
- (C) Assertion is true but Reason is false
- (D) Assertion is false but Reason is true
- 49. Iron rim is made slightly smaller than the wooden wheel. The rim is usually heated before fixing into the wooden wheel, because on heating the iron rim
  - (A) Expands and fits onto the wooden wheel
  - (B) Contracts and fits onto the wooden wheel
  - (C) No change in the size takes place.
  - (D) Expands first, then on cooling contracts and fits onto the wooden wheel
- 50. Find out true statement/s from the following.
  - i. Euglena is an animal
  - ii. Euglena is a plant
  - iii. Euglena is neither animal nor plant
  - iv. Euglena acts as plant and animals.
  - (A) i and ii only
- (B) ii and iii only
- (C) iv only
- (D) i, ii and iii only.

Model Paper I Class - 7