

## RAISE

(Reynott Academics and Intelligence Scholarship Examination)

### SAMPLE PAPER

#### GENERAL INSTRUCTIONS :

1. All questions are compulsory.
  2. Blank paper, clipboard, log tables, calculators, cellular phones and electronic gadgets in any form are not allowed inside the examination hall.
  3. Use only Black/Blue Ball Pen for filling the OMR. Do not use Gel/ Ink/ Felt pen as it might smudge the OMR.
  4. For each right answer you will be **awarded 4 marks** if you darken the bubble corresponding to the correct answer and zero marks if no bubble is darkened. In case of bubbling of incorrect answer, **NO NEGATIVE MARK** will be awarded.
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#### SCIENCE

1. What are the building blocks of all the matter ?  
A. potential and kinetic energy  
B. heat and electricity  
C. atoms and molecules  
D. crystals and compounds
2. Which gives shape and support to the human body?  
A. brain  
B. heart  
C. skeleton  
D. stomach
3. Which food group provides the best source of carbohydrates?  
A. meat and poultry  
B. fruits and vegetables  
C. breads and cereal grains  
D. dairy product

Use the menus below to answer question 4.

MENU 1
Fried chicken
Cola soda
Potato chips
Vanilla ice cream

MENU 2
Peanut butter sandwich
Apple juice
Pretzel sticks
Fruit salad

MENU 3
Egg salad sandwich
Apple juice
Carrot sticks
Strawberry yogurt

MENU 4
Turkey sandwich
Milk
Grapes
Vanilla pudding

4. Which of the four menus is the least healthy?

- A. Menu 1
- B. Menu 2
- C. Menu 3
- D. Menu 4

5. Stone Mountain in Georgia is a granite dome that formed deep underground. Over time, uplift and erosion exposed the granite. What natural activity is MOST responsible for breaking down the mountain today?

- A. faulting
- B. weathering
- C. stream erosion
- D. lightning

6. Which is washed away MOST EASILY by erosion?

- A. topsoil
- B. subsoil
- C. bedrock
- D. magma

7. Mr. Greenway gave his students a test tube, a cork stopper, a tablet that fizzes in water, and some water. He told them to put the tablet in the test tube, add water, and then immediately put the stopper on the test tube. What should each class member do before starting this activity?

- A. get fire extinguishers and a fire blanket
- B. carefully wash their hands
- C. place earplugs in their ears
- D. put on their laboratory goggles

8. John measured the time it took for the cart to roll to the bottom of the ramp. He did this with an empty cart and again with different-sized blocks in the cart. What question is John trying to answer with this experiment?

- A. Which block weighs more?
- B. Which block has more gravity?
- C. How does weight change the speed of the cart?
- D. How long does it take for the cart to get to the bottom

9. Alice did an investigation to see if exercise affected the number of times her heart beat in 15 seconds. In her investigation she took her pulse after doing jumping jacks. The table below shows what she found.

Number of Jumping Jacks	Number of Heartbeats in 15 Seconds
0	20
5	26
10	28
15	32
20	36

From her investigation, Alice can conclude that the number of heartbeats

- A. decreases as exercise increases.
- B. increases as exercise increases.
- C. stays the same as exercise increases.
- D. is not related to the amount of exercise.

10. . A doctor kept records of breathing rates of people when they were resting. He made the chart below.

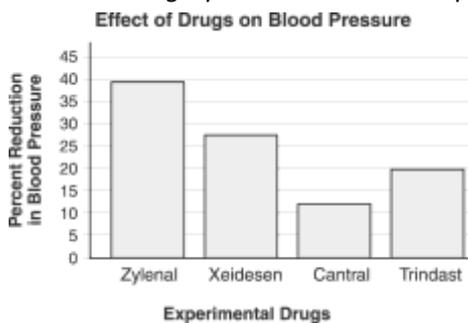
**Breathing Rates**

Person	Breaths in a Minute
Baby boys	38
7-year-old girls	25
7-year-old boys	25
10-year-old boys	20
Mothers	16

The chart suggests that

- A. boys breathe faster than girls.
- B. girls breathe faster than boys.
- C. older people breathe faster than younger people.
- D. younger people breathe faster than older people.

Use the graph below to answer question 11.



11. Which drug is LEAST effective in reducing blood pressure?

- A. Zylenal
- B. Xeidesen
- C. Cantral
- D. Trindast

12 . Which is a device that is used to gather information about formations on the ocean bottom?

- A. Sonar
- B. Radar
- C. MRI
- D. Laser

13 . The formation of a gorge is MOST LIKELY a result of

- A. Earthquakes.
- B. Volcanoes.
- C. Water erosion.
- D. Plate tectonics

14 .A valuable ocean resource that is obtained by evaporating ocean water is

- A. coal.
- B. iron.
- C. oil.
- D. salt.

15 . The Sun's gravity holds each planet in its orbit. Pluto is farther away from the Sun than Earth is. How does the

effect of the Sun's gravity on Pluto compare with the effect of the Sun's gravity on Earth?

- A. The Sun has the same gravitational pull on all planets that are in orbit.
- B. The Sun has more gravitational pull on Pluto because it is smaller.
- C. The Sun has less gravitational pull on Earth because it is closer.
- D. The Sun has less gravitational pull on Pluto because it is farther

### MATHEMATICS

16. What is the sum of first two prime numbers

- A. 1
- B. 5.
- C. 9
- D. 15

17 . What is the smallest odd prime number?

- A. 9
- B. 15
- C. 3
- D. 19.

18 . What should be added to 20 to get the sum 42 ?

- A. 17
- B. 19
- C. 22.
- D. 29

19 . What are the factors of prime numbers ?

- A. 9
- B. 13
- C. 25
- D. 1

20 . What will be the side of a square with area 64 sq.cm.?

- A.5 cm
- B. 8 cm
- C. 15 cm
- D. 29 cm

21. What is the L.C.M. of 16 and 64?

- A. 16
- B. 20
- C. 64
- D. 87

22. What is the value of  $45 \div 15 \times 0$  ?

- A. 0
- B. 5
- C. 9
- D. 19.

23. How many litres are there in 1.5 kilolitres ?

- A. 900
- B. 1300
- C. 1500
- D. 2500

24. The ratio of 1 hour to 300 seconds is

- A. 1 : 12
- B. 12 : 1
- C. 1 : 5
- D. 3:5

25.  $30^{\circ}\text{C} = \underline{\hspace{2cm}}^{\circ}\text{F}$

- A.  $76^{\circ}\text{F}$
- B.  $86^{\circ}\text{F}$
- C.  $70^{\circ}\text{F}$
- D.  $97\text{F}$

26. One half the product of base  $b$  and height  $h = ?$

- A.  $b + h/2$
- B.  $(bh) / 2$
- C.  $2bh$
- D. none of the above

27. Hari runs at a speed of 20 km/hr. how far will he run in 6 hrs?

- A. 12 km
- B. 120 km
- C. 60 km
- D. 197 km

28. Riya obtained 65, 67, 76, 82 and 5 out of 100 in different subjects. What will be the average?

- A. 75
- B. 74
- C. 76.
- D. 87

29. Average of 45, 45, 44, 44, 43, 43 =                     

- A. 44.
- B. 45
- C. 35

D. 49

30. Average of first 3 multiples of 14 = \_\_\_\_\_

- A. 25
- B. 28
- C. 35
- D. 65.

### MENTAL APPTITUDE TEST

31. In some language, "EXAM" is coded as "FYBN". In the same language, how will we code "RESULT"?

- A. SFTVMU
- B. REPTUY
- C. ERICCART
- D. KYLEBROW

32. In a certain code, we write the word "SUSHI" as "RTRGH". How will you write the sentence "Who are you" in it?

- A. Vgn zqd xnt
- B. Vec bqd xmy
- C. Njg hhd kdd
- D. Vgx xbg jak

33. If in a code language, COULD is written as BNTKC and MARGIN is written as LZQFHM, how will MOULDING be written in that code ?

- A. CHMFINTK
- B. LNKTCHMF
- C. LNTKCHMF
- D. NITKHCMF

34. If FRIEND is coded as HUMJTK, how can CANDLE be written in that code?

- A. EDRIRL
- B. ESJFME
- C. DCQHQB
- D. DEQJQM

35. If April 11, 1911 was a Tuesday, what was the day on September 17, 1915?

- A. Friday
- B. Thursday
- C. Sunday
- D. Tuesday

36. Amir was born on Feb 29th of 2012 which was a Wednesday. If he lives to be 101 years old, how many birthdays would he celebrate on a Wednesday?

- A. 3
- B. 4
- C. 5
- D. 1

37. If REASON is coded as 5 and BELIEVED as 7, then what is the code for GOVERNMENT?

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

38. CYD, FTH, IOL, LJP, ?

- A. PET
- B. OET
- C. OEY
- D. PEV

39 . ZGL, XHN, VIQ, TJU, ?

- A. RKX
- B. RKY
- C. RLZ
- D. RKZ

40 . 2B, 4C, 8E, 14H, ?

- (A) 22L
- (B) 24L
- (C) 22K
- (D) 2 M

41 . If ADARSHI is coded as 53, SCHOOL is coded as 66 then the word STUDENT will be coded as

- (A) 90
- (B) 97
- (C) 89
- (D) 96

42. In a certain code KAMAL is written as 29894, VIJAY is written as 35196, then the word VIMAL will be coded as

- A. 29196
- B. 35894
- C. 35194
- D. 35196

43. If DEAR is coded as 7 and BEARS as 9, what should be the code for WAX ?

- A. 10
- B. 12
- C. 16
- D. 10

44. Mr Deepak Mohan walks 5 km towards the south and then turns to the right. After walking 3 km he turns to the left and walks 5 km. What direction is he facing right now?

- A. West
- B. South
- C. North-East
- D. South-West

45. Sowmya Krishnan walked 20 m towards the north. Then she turned right and walks 30 m. Then she turns right and walks 35 m. Then she turns left and walks 15 m. Finally she turns left and walks 15 m. In which direction and how many meters is she from the starting position?

- A. 15 m West
- B. 30 m East
- C. 30 m West
- D. 45 m East

46 . Mrs.Veena wants to go to the Krishna Rajendra market. She moved northwards and after covering some distance turned left and moved 4 km and reached a crossing. The road in front of her led to Jaynagar while the road on to her left led to Bangalore Medical College and the road on to her right led to the Krishna Rajendra market. In which direction the Krishna Rajendra market is located with reference to the starting point?

- A. West
- B. North-West
- C. South-West
- D. East

47 . If April 11, 1911 was a Tuesday, what was the day on September 17, 1915?

- A. Friday
- B. Thursday
- C. Sunday
- D. Tuesday

48 . If it was Thursday on Aug 15, 2012, then what was the day on June 11, 2013?

- A. Wednesday
- B. Monday
- C. Saturday
- D. Tuesday

49 . Pinky was born on 29th, Feb 2016 which happened to be a Monday. If she lives to be till 2099, how many birthdays would she celebrate on a Monday?

- A. 1
- B. 2
- C. 3
- D. 5

50 . **How many squares in the figure?**

- A. 16
- B. 17
- C. 26
- D. 30

