### ALL KERALA BHAVAN'S SCHOLARSHIP EXAMINATION 2021-22

STD: IX Duration: 2hrs

Max. Marks: 100

#### **GENERAL INSTRUCTIONS**

Read the instructions carefully before answering

- 1. Please fill up your Roll No. and class in the box provided on the OMR sheet.
- 2. This question booklet contains 50 questions and 5 Tie Breaker questions. All questions including 'Tie Breaker Questions are mandatory.

Tie Breaker questions will be evaluated only in case of a Tie.

- 3. Each question carries 2 marks.
- 4. Each question has 4 answer choices a,b,c,d.
- 5. For each question, select the best/correct option and darken the bubble completely against the corresponding question in the OMR sheet provided.
- 6. Use a blue/black ball point pen to darken the bubble.
- 7. Darken only one bubble against each question.
- 8. There will be no negative marking.

Choose the correct answer from the options given.

| 1) My aunt, who is _ | _engineer works for _ | _European company. |
|----------------------|-----------------------|--------------------|
| \ .11                | 1.)                   |                    |

a) the, an

b) a, an

c) an, a

d)an, an

- 2) Timely action often prevents some great loss or harm that could occur in the future. 'Choose the apt proverb for the above explanation.
- a) A stitch in time saves nine
- b) Time and thinking tame the strongest grief
- c) Time flies when you're having fun
- d) Time heals all wounds

- 3) I'm 'on cloud nine' when I heard the news that the school will reopen soon. The underlined phrase means
- a) to be extremely sad or depressed
- b) to be extremely happy or delighted
- c) to fly an aeroplane
- d) to take a short flight
- 4) Read the following passage and select the correct option

The police was completely clueless. No one could give them any lead in the case. Sahil returned back to normal and looked at the video intently. He could see the number plate clearly....

- a) The word 'back' should be changed to the 'way'
- b) The word 'back' should be deleted
- c) The word 'clearly' should be deleted
- d) The word 'completely' should be changed to 'finally'
- 5) Choose the correctly spelt word.
- a) reccomendation
- b) reccommendation
- c) recomendation
- d) recommendation
- 6) Choose the right option.

Vijay's partner threw cold water on his scheme.

- encouraged a)
- discouraged b)
- appreciated c)
- disagreed d)
- 7) Tired of *playing second fiddle*, she resigned and started her own company.
- a) to be happy, cheerful and healthy
- b). to do back seat driving
- c) to support the role and view of another person
- d) to reduce importance of one's senior
- 8) Which of the following equations represent a line parallel to Y axis
  - a) 2y=5x

| 10)   | 10) $\frac{x}{y} + \frac{y}{x} = -1$ (x, y \neq 0) then the value of $x^3 - y^3$ is |                       |                      |                    |              |              |         |  |
|---|---|-----------------------|----------------------|--------------------|--------------|--------------|---------|--|
|   | a)1/2   | b)1                   | c)-1                 | d)0                |              |              |         |  |
| 11\   | TI :  | . C 1                 | 1 : 20               | 10                 | C : 4        | 1. 1 .       |         |  |
| 11)   | -   |                       | mbus is 20 cn        | n. II one          | OI IIS       | diagonais i  | s ocm,  |  |
|   | then its are  | a 1S                  |                      |                    |              |              |         |  |
|   | a) 28cm <sup>2</sup>  | b) 36cn               | $n^2$ c) $2^2$       | 4cm <sup>2</sup> d | ) 20c        | $m^2$        |         |  |
|   |   |                       |                      |                    |              |              |         |  |
| 12)   | Degree of   | zero polyno           | omial is             |                    |              |              |         |  |
|   | a) 0 h  | o) 1 c)               | Any natural          | numbe              | r d)         | Not defir    | ned     |  |
|   | <b></b> , • •   | ., -                  | 1 111) 11000101      |                    |              | 1,000        |         |  |
| 13)   | If the mea  | sure of an a          | angle is twice       | the mea            | sure of      | f its supple | mentary |  |
|   |   |                       |                      |                    |              |              |         |  |
|   | angle, the  | n the measu           | are of the angl      | le 1S              |              |              |         |  |
|   | a) 60° b  | o) 90° c              | e) 120° d)           | 130°               |              |              |         |  |
|   |   |                       |                      |                    |              |              |         |  |
| 1.4   | • • • •   | . 2 4) 1:             |                      | 1                  | <b>T</b> , • |              | *.1     |  |
| 14)   | A point (x-   | +2,x+4) lies          | s in the first qu    | uadrant.           | Its mir      | ror image    | With    |  |
| respect to x-axis is $(5,-7)$ . The value of x is |   |                       |                      |                    |              |              |         |  |
|   | a)-9  | b)3                   | c)-3                 |                    | d)7          |              |         |  |
|   |   |                       |                      |                    |              |              |         |  |
| 15)   | Find the va   | alue of $\sqrt[3]{2}$ | $16 - \sqrt[3]{125}$ |                    |              |              |         |  |

d) 2

16) If the area of an equilateral triangle is  $16\sqrt{3}$  cm<sup>2</sup>, then the perimeter of the triangle is

c) 12 cm d) 306cm A A A A

9) One of the factor of  $(16y^2-1)+(1-4y)^2$  is

b) (4-y) c) (4y+1) d) 8y

a) (4+y)

a) 1

a) 48 cm

b) 0

c) -1

b) 24 cm

17) A Ball of mass m<sub>1</sub> travelling with a velocity u<sub>1</sub> collides with another Ball B of mass m<sub>2</sub> at rest. After collision the velocity of Ball A changes to v<sub>1</sub> and velocity of Ball B changes to v<sub>2</sub>. If the momentum is conserved, which option correctly relates the momentum before and after the collision?

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a) (m_1.u_1) + (m_1.v_1) = (m_2.v_2)
b) (m_1.u_1) = (m_1.v_1) + (m_2.v_2)
c) (m_1.v_2) - (m_1.u_1) = (m_1.v_1)
d) (m_1.u_1) = (m_1.v_1) - (m_2.v_2)
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- 18) Himanshu wants to separate two photosynthetic pigments P and Q from the plant extract. He uses paper chromatography for the separation of these pigments and observes pigment P is separated first. What can be a likely reason for the same?
  - a) Pigment P has the low density.
  - b) Pigment Q has the high density.
  - c) Pigment P is more soluble in water and rises faster.
  - d) Pigment Q is more soluble in water and rises slower.
- 19)The formula of hydrogen carbonate of a metal M is M(HCO<sub>3</sub>)<sub>2</sub>. Give the formula of metal carbonate
  - a) MCO<sub>3</sub>
  - b)  $M_2CO_3$
  - c)  $M(CO_3)_2$
  - d)  $M_3CO_3$
- 20) During summer, leaves of a potted plant droop when the soil becomes dry. Which cell organelle makes the leaves droop?
  - a) Nucleus, as it stops making DNA
  - b) Cell wall, as it starts to shrink
  - c) Lysosome, as it releases the digestive enzymes
  - d) Vacuole, as it loses all the water

| 21)  | 11) In desert plants, rate of water loss gets reduced due to the presence of:     |                  |                  |                    |                                 |  |  |  |
|--|---|------------------|------------------|--------------------|---------------------------------|--|--|--|
|  | a) Cuticle  | b) Stomata       | c) Lignin        | d) Suberin         |                                 |  |  |  |
| 22)  | 2) What can you say about the motion of an object whose distance -time graph is a |                  |                  |                    |                                 |  |  |  |
|  | straight line parallel to the time axis?  |                  |                  |                    |                                 |  |  |  |
|  | a) The object is at rest  |                  |                  | b) The object      | b) The object has uniform speed |  |  |  |
|  | c)The object undergoes uniform acceleration                                       |                  |                  | d) No              | d) None of the above            |  |  |  |
| 23   | ) A sample of a   | mmonia contain   | ns 9g of hydrogo | en and 42g of ni   | itrogen. Another sample         |  |  |  |
|  | contains 5g o   | f hydrogen. Cal  | culate the amou  | int of nitrogen is | n the second sample.            |  |  |  |
|  | a) 22.7g  | b)24.2g          | c) 23            | 3.3 g              | d) 21 g                         |  |  |  |
| <ul> <li>24) While doing work and running, you move your organs like hands, legs etc. Which among the following is correct?</li> <li>a) Smooth muscles contract and pull the ligament to move the bones.</li> <li>b)Smooth muscles contract and pull the tendons to move the bones</li> <li>c)Skeletal muscles contract and pull the ligament to move the bones</li> <li>d) Skeletal muscles contract and pull the tendon to move the bones</li> <li>25)The principal behind the rocket propulsion is</li> </ul> |   |                  |                  |                    |                                 |  |  |  |
|  | a) Law of cons  | servation of mor | mentum           |                    |                                 |  |  |  |
| b) Gravitational law   |   |                  |                  |                    |                                 |  |  |  |
|  | c) Newton's second law  |                  |                  |                    |                                 |  |  |  |
|  | d) Newton's third law.  |                  |                  |                    |                                 |  |  |  |
| 26) The successor of Lenin was   |   |                  |                  |                    |                                 |  |  |  |
|  | a) Stalin   |                  |                  |                    |                                 |  |  |  |
|  | b) Kerenskii  |                  |                  |                    |                                 |  |  |  |
|  | c) Trotskii   |                  |                  |                    |                                 |  |  |  |
|  | d) Louis Blanc  |                  |                  |                    |                                 |  |  |  |
|  |   |                  | BVM              |                    | AKKARA                          |  |  |  |

| 27) When on election duty, under whose control does the government officers work?           |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| a) Central Government   |  |  |  |  |  |  |
| b) Election Commission  |  |  |  |  |  |  |
| c) District Magistrate  |  |  |  |  |  |  |
| d) District Court   |  |  |  |  |  |  |
| 28) Majuli is a riverine island located in the river  |  |  |  |  |  |  |
| a) Ganga b) Brahmaputra c) Yamuna d) Kaveri   |  |  |  |  |  |  |
| 29) National Anthem of France is  |  |  |  |  |  |  |
| a) Vande Mataram  |  |  |  |  |  |  |
| b) Roget de L' Isle   |  |  |  |  |  |  |
| c) Le Moniteur Universal  |  |  |  |  |  |  |
| d) Marseilles   |  |  |  |  |  |  |
| 30) What is the aim of Sarva Siksha Abhiyan?  |  |  |  |  |  |  |
| a) To provide elementary education  |  |  |  |  |  |  |
| b) To provide elementary education to the rural poor  |  |  |  |  |  |  |
| c) To provide elementary education to all children in the age group 6-14 years.             |  |  |  |  |  |  |
| d) To provide elementary education to the urban poor.                                       |  |  |  |  |  |  |
| 31) The Northern plains has been formed by the interplay of three major river system namely |  |  |  |  |  |  |
| a) The Indus- Ganga- Brahmaputra  |  |  |  |  |  |  |
| b) Yamuna- Mahanadi- Narmada  |  |  |  |  |  |  |
| c) Indus – Beas – Sutlej  |  |  |  |  |  |  |
| d) Narmada – Chambal – Indus  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |

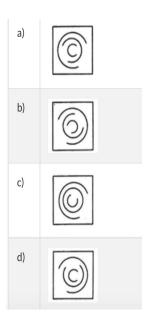
| 32) Assertion: In India, people elect their own representative.                          |
|--|
| Reason: India is a democracy.  |
| a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion |
| b)Both Assertion and Reason are true but Reason is not the correct explanation of        |
| Assertion  |
| c) Assertion is true and Reason is false   |
| d) Assertion is false but Reason is true   |
| 33) Which of the following is included in the secondary sector?                          |
| a) Poultry farming   |
| b) Manufacturing   |
| c) Transportation  |
| d)Quarrying  |
| 34) Which of the following statements is false about the Third estate?                   |
| a) The third estate was made of the poor only  |
| b) Within the Third estate some were rich and some were poor                             |
| c) Richer members of the Third estate owes the land                                      |
| d) Peasants are obligated to serve in the army, or build roads.                          |
| 35 ) Arribada is a term related to the mass migration of species                         |
| a) Snake   |
| b) Sea turtle  |
| c) Frog  |
| d) Spider  |

| 36) What is the name of the rare Martian Mineral, which has been recently         |
|---|
| discovered in Antarctic ice?  |
| a) Jarosite   |
| b) Carnotite  |
| c) Johannsenite   |
| d) Ilmenite   |
|   |
| 37) Which sports personality is leading the UNICEF Global Vaccination Initiative? |
| a) Usain Bolt   |
| b) Cristiano Ronaldo  |
| c) David Beckham  |
| d) Roger Federer  |
| 38) Where did Prime Minister Narendra Modi inaugurate 143 year old reconstructed  |
| Heritage Marie Building?  |
| a) Chandigarh   |
| b) Puducherry   |
| c) Chennai  |
| d) Jammu  |
| 39) Which country's border touches the maximum countries?                         |
| a) England  |
| b)Russia  |
| c) African  |
| d) China  |
| BVM ELAMAKKARA  |

- 40) Which of the following can be arranged into a 5-letter English word?
  - a) HRGST
- b) RILSA
- c) TOOWT d) WQRGS
- 41) Which one of the choices makes the best comparison?

PEACH is to HPECA as 46251 is to

- a) 15264
- b) 14562
- c) 14652
- d) 62541
- 42) In the following figure, choose the odd one out



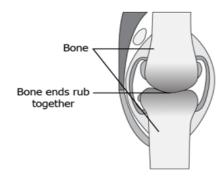
- 43) Which word does not belong with other?
  - a) Index
- b) Glossary
- c) Chapter
- d) Book
- 44) Complete the series 7,10,8,11,9,12, ....
  - a) 7
- b) 12
- c) 10
- d) 13

| 45) Poir  | nting out to a | man Rai said      | he is the sc | on of the | woman who is the   | mother of the  |  |  |
|---|----------------|-------------------|--------------|-----------|--------------------|----------------|--|--|
| 45) Pointing out to a man, Raj said, he is the son of the woman who is the mother of the  |                |                   |              |           |                    |                |  |  |
| nust  | ana oi my m    | other. Who is t   | ne man to i  | Kaj?      |                    |                |  |  |
| a) (  | Grand Son      | b) Son            | c) Brothe    | er        | d) Uncle           |                |  |  |
| 46) Hov   | v many 6'S ar  | re there in the f | following s  | equence   | which are preceded | d by 8 but not |  |  |
| imm   | ediately follo | owed by 4.        |              |           |                    |                |  |  |
|   | 475637         | 86916847          | 3 4 8 6 3 9  | 6786      | 4735861            |                |  |  |
| a)  | 5              | b) 4 c            | )3 d         | ) 6       |                    |                |  |  |
| 47) If 3 is called 9, 9 is called 27, 27 is called 81, 81 is called 243, 243 is called 729, 729 is called 2187. Then which of the following is the cube of 9? |                |                   |              |           |                    |                |  |  |
| a)  | 243            | b) 729            | c) 2187      |           | d) 27              |                |  |  |
| 48) Which of the following letter groups will replace the question mark (?) in the series given below   |                |                   |              |           |                    |                |  |  |
| CY DS FN IJ?  |                |                   |              |           |                    |                |  |  |
| a)K   | J b)           | MG c)             | MH           | d) I      | LG                 |                |  |  |
|   | a certain cod  |                   | AP' is code  | ed as 'K  | MZBOQ' then how    | will 'NOTE'    |  |  |
|   | MONPSUFE       |                   | PUSDF        | c) M      | INOPSUDF           | d). MONPSUDF   |  |  |
|   |                | ,                 |              | ,         |                    | ,              |  |  |
| 50) The diagram given below represents owner, broker and worker. Identify the region which represents all the three ie. Owner, broker and worker.             |                |                   |              |           |                    |                |  |  |
| Wn  | ich represei   | nts all the three | e ie. Owner, | , broker  | and worker.        |                |  |  |
|   |                | Owner             | L M          | Broker    |                    |                |  |  |



#### TIE-BREAKER

- 51)The day before yesterday I was 25. Next year I will be 28. This is true only one day in a year. What day is my Birthday?
  - a) Dec 31
- b) Feb 28
- c) Jan 1
- d) Jun 9
- 52) Which of the following state has launched the Annapurna Rasoi Yojna for providing quality meals to the weaker section at subsidized rates?
  - a ) Uttar Pradesh
  - b) West Bengal
  - c) Rajasthan
  - d) Madhya Pradesh
- 53) Where is Kalahari desert situated?
  - a) African
- b)American c)Asia
- d)Europe
- 54) A student observes image of the knee bones of a person who is suffering from a condition called arthritis due to inflammation of joints. Which connective tissue can be corrected between the bones to ease the movement of joints?



- a) Blood as it contains proteins b) Areolar tissue as it repairs the tissue
- c) Ligament as it joins the two bones easily d) Cartilage as it smoothens surface of the bones
- 55) Complete this series of numbers:

If 
$$9 = 4$$
,  $21 = 9$ ,  $24 = 10$ ,  $8 = 5$ ,  $100 = 7$ , then  $16 = 10$ 

- a) 12
- b) 6
  - c) 11
- d) 7

