

RIMC SCHOLARSHIP EXAM – Set - A

DECEMBER 2024

SUBJECT: ENGLISH

TIME: 2Hrs

MM: 125

A) Reading section: 20 marks

B) Writing section: 50 marks

C) Grammar: 55 marks

Section A: Reading (MM 20)

Q1. Read the following passage carefully and answer the questions that follow:

(MM: 10)

Delhi-NCR wakes up to a smog filled morning after every year's Diwali festivities. Air pollution levels were found to have hit a record high on November 4, 2016. The levels of particulate matter (PM) 10 and 2.5 (the two deadliest components of air pollution) were recorded as almost 10 times above the safe limit, by the Union Government's System of Air Quality and Weather Forecasting and Research (SAFAR), a day after Diwali. The air Delhiites are breathing is lethal. Breathing is harmful for health now. People with already existing respiratory conditions face an even larger health risk. The fine particulate matter can settle deep in the lungs and get into the bloodstream, leading to respiratory problems, cardiovascular diseases and even lung cancer.

These conditions do not deserve a knee-jerk reaction, but a sustained effort and a foolproof mechanism in place to check such occurrences in the future. The city of about 20 million, which claims to be global and futuristic, also happens to rank among the world's top cities with foul air, according to World Health Organisation (WHO).

Policies and initiatives have to be taken by the government and citizens to ensure that everyone does their bit to avert this environmental emergency. Unsustainable agricultural practices, urban lifestyles and irresponsible use of polluting resources must be denounced at the earliest. It's never too late to wake up and take action provided the action is sustained and in the right direction.

A. Answer the following questions:

(i) Do you think Delhi faces the problem of air pollution only after Diwali?

(ii) Why is the air Delhiites breathe lethal?

(iii) Why is the fine particulate matter more dangerous?

(iv) What is the population of Delhi?

(v) What steps should be taken at the earliest to curb air pollution?

B. Write the synonyms of the following words from the passage:

(i) Deadly: _____

(ii) Decry: _____

C. Write two adjectives from the chapter:

(i) _____

(ii) _____

Q2. Read the following poem carefully and answer the questions that follow:

(MM: 10)

In January

I go to the park,

I see a tree –

a crooked, grey tree

It has no leaves.

What an ugly tree!

In February

I go to the park,

The ugly tree –

is it on fire?

No its covered with flowers –

red and orange flowers.

It is a Dhak tree,

the flame of the Forest

How beautiful it looks!

A. Given below is the summary of the poem. Complete it by writing the missing word against the correct blank number in your answer sheet.

The poet goes to a (a) _____ in January and sees a tree. But the tree is (b) _____ with no (c) _____. Again in (d) _____ he goes there and finds the same tree, (e) _____ with red and orange flowers. It looks very (f) _____

B. On the basis of your understanding of the above poem, answer the following questions. Write the answers in your answer sheet against the correct blank number.

(i) Why does the tree appear to be on fire?

(ii) How does the tree look in January?

Section B: Writing (MM 50)

Q3. Write a message for your room-mate that you would be away from the hostel tonight because you are going to attend the marriage of your cousin who lives in the same city. You will return tomorrow evening. (50 Word)

(MM 10)

Q 4. Write a letter to your mother expressing your concern and happiness on improvement in her health (120 Words)

(MM10)

Q 5. The given poster shows people mercilessly cutting down trees without caring for its consequences. You are moved to see the plight of the poor tree which is source of life to the world and decide to make a speech urging upon the people to plant more and more trees. Using ideas from the visual below, write the speech in not more than 150 words.

(MM 15)



PLANT TREES

because they :

- provide us wood ● prevent drought & flood ● reduce pollution
- help in bringing rain ● provide sweet & tasty fruits

Q 6. Write a paragraph in not more than 150 – 200 words on how films are both a source of entertainment and knowledge. (MM 15)

- cartoon, comedy make us laugh.
- music, songs, stunts provide entertainment.
- locations, relationships, conflict add to our knowledge of the world and life.
- films promote national integration, brotherhood and cause of women.
- condemn untouchability, casteism, poverty, corruption.

Section C: Grammar (MM 55)

Q7. Rewrite the following sentences using suitable punctuation marks wherever required.

(MM 3)

i. Shivani bought a pen a notebook an eraser and a pencil

ii. We ordered our favourite bread and butter rice and curry

iii. When I was a child I liked to eat eggs

Q8. Rewrite the sentences by changing the tense of the verbs as directed.

(MM 7)

i. She has knitted a fine sweater for me. (simple past)

ii. They talk loudly over the mobile. (present continuous)

iii. The fruitseller sold his fruits just in two hours. (future perfect)

iv. I will meet you tomorrow evening. (present perfect)

v. Mother takes care of the baby. (present perfect continuous)

vi. She had been lying to him all the while. (simple past)

vii. You have worked as a post master for two years. (present perfect continuous)

Q9. Fill in the blanks with correct option given in brackets.

(MM 8)

- i. The eggs _____ kept in the refrigerator. (is/are)
ii. I bought a pair of _____ from the shop. (scissor/scissors)
iii. His _____ were looking dirty. (trouser/trousers)
iv. This gentleman _____ no money. (has/have)
v. The gentry in my locality _____ peace loving. (is/are)
vi. The police _____ looking into the matter. (is/are)
vii. _____ the news true? (is/are)
viii. I have washed my _____ . (cloth/clothes)

Q10. Fill in the blanks with a, an or the.

(MM 7)

- i. I have bought _____ apartment in _____ posh locality.
ii. _____ octopus has eight legs.
iii. _____ cow is _____ domestic animal.
iv. _____ Pushkar fair is _____ festive occasion.

Q11. Fill in the blanks with suitable personal pronouns.

(MM 5)

- i. Amrit is my best friend. Everyone says that _____ is intelligent.
ii. My pet hamster is missing. Have you seen _____?
iii. Why don't _____ cultivate a hobby? An idle man is a devil's workshop.
iv. Ahmed is taller than _____
v. Don't you know _____? _____ am your class teacher.

Q12. Form adjectives from these nouns:

(MM 6)

- i. wood _____
ii. care _____
iii. Italy _____
iv. faith _____
v. Japan _____
vi. hero _____

Q13. Write the kinds of following sentences.

(MM 5)

- i. May our country win the war.
- ii. What a nonsense!
- iii. Are you willing to join our team?
- iv. They have applied for passport.
- v. How silly the question is!

Q14. Tick (✓) the correct preposition of time in the brackets.

(MM 5)

- i. You should wait here (by / until) I return.
- ii. Her birthday falls (in / on) December.
- iii. I used to play (for / by) two hours every day.
- iv. Your train is scheduled to arrive (at / on)/8 p.m.
- v. We will go to Goa (on / in) winter.

Q15. Join the two independent clauses in each case, using the correlative conjunction given in the brackets.(MM 4)

- i. Today is Sunday. Today is Monday. (either...or)

- ii. She is good at studies. She is good at sports. (not only...but also)

- iii. My mother is coming. My grandmother is coming. (both...and)

- iv. We didn't go to Shimla. We didn't go to Mussoorie. (neither...nor)

Q16. Use the following verbs in the to-infinitive form of verb to make sentences:

(MM 5)

- i. go: _____
- ii. allow: _____
- iii. force : _____
- iv. solve: _____
- v. grow : _____

RIMC SCHOLARSHIP EXAM – Set - B

DECEMBER 2024

SUBJECT: ENGLISH

TIME: 2 HRS

MM: 125

A) Reading section: 20 marks

B) Writing section: 50 marks

C) Grammar: 55 marks

Section A: Reading (MM 20)

Q1. Read the following passage carefully and answer the questions that follow:

(10 Marks)

WALKING - A COMPLETE EXERCISE

(1) There are many reasons why walking can be considered a classic exercise. There is no refuting the fact that walking is easy. Since man assumed a standing posture, our body has adapted itself to walking. Each of us walks from the time our first steps give a divine pleasure to our parents, when we are around one. We rarely experience any exertion during normal walking. Walking is usually injury-free.

(2) There is a rhythm in our walk. Without perceiving it, we need to do a fair bit of balancing during walking. Rhythm and balance are the basics of aerobic exercises. Aerobic exercises help, but walking may be a better and easier alternative.

(3) Walking is inexpensive. It does not need any expensive gadgets. What one needs is a pair of good comfortable walking shoes. Walking shoes need not bear any fancy label. They should fit well and be adequately padded and hence comfortable.

(4) Everyone in the family can do this exercise. Age, sex and diseases are no deterrents to walking. Old and young alike can walk to remain in shape. All can walk together.

(5) Walking may be good for patients with heart and lung diseases. It helps the heart to pump better and work better. Cardiac efficiency improves. It helps in lowering blood pressure and in control of cholesterol levels.

(6) Walking reduces weight. It is not as hectic as swimming and running, hence can be done over a longer period with better effects. It is an ideal way to relieve stress. It relaxes and reactivates tormented nerves. A slow walk perhaps in a garden or lawn, especially with one's friend, can definitely alleviate the effects of an exhausting day at home or office. So, friends, walk and be happy and live a longer, stress-free life.

A. On the basis of your reading of the above passage, answer the following questions as briefly as possible. Write the correct answers against the correct blank number in your answer sheet.

(a) Walking is a classic exercise because:

(i) _____ (ii) _____ (iii) _____ (iv) _____ (v) _____ (vi) _____

(b) Walking is aerobic because:

(i) _____ (ii) _____

(c) Walking is good for patients of heart and lung diseases because:

(i) _____ (ii) _____

(d) Walking is an ideal way to relieve stress. How?

B. Find words from the passage which mean the same as the following from the paragraphs indicated. Write the correct answers in your answer sheet against the correct blank number.

(a) disprove / deny (Para 1): _____

(b) lighten; lessen (Para 6): _____

(c) to be aware of something through senses (Para 2): _____

(d) to prevent the occurrence of (Para 4): _____

Q2. Read the following poem carefully and answer the questions that

(MM 10)

DISTRACTED THE MOTHER SAID TO HER BOY

(1) Distracted the mother said to her boy
'Do you try to upset and perplex and annoy?
Now, give me four reasons - and don't play the fool -
Why you shouldn't get up and get ready for school.'

(2) Her son replied slowly, 'Well, mother, you see,
I can't stand the teachers and they detest me;
And there isn't a boy or a girl in the place
That I like or, in turn, that delights in my face.'

(3) 'And I'll give you two reasons,' she said, 'Why you ought
Get yourself off to school before you get caught;
Because, first, you are forty and, next, you young fool,
You're the head of the school.'

A. On the basis of your reading of the above passage, answer the following questions as briefly as possible. Write the answers in your answer sheet against the correct blank number.

- (a) The mother was upset because _____
(b) The four reasons the son gives to his mother for his funny behaviour are:
(i) _____ (ii) The teachers hate me
(iii) He doesn't like the boys and girls at school
(iv) _____
(c) What two arguments does the mother give in support of her view?
(d) The above poem is a conversation between a _____ and _____
(e) The poem makes us laugh because it tells us about _____
(f) Was 'the son' very popular at school? Give a reason in support of your answer.

Section B: Writing (MM 50)

Q3. Wars bring untold miseries to humanity. They leave behind desolated fields, factories, homes and towns. Modern wars are a danger to civilization. Write an article in about 150-200 words for your school magazine on 'Horrors of War'.

(MM 15)

Q4. Write a paragraph in about 150 words about 'Brave People'. You can talk about the brave soldiers who risk their lives to protect and save the country. You may also like to appreciate the bravery of workers, cancer patients, handicapped people etc. Conclude your paragraph that life is always worth living.

(MM 15)

Q5. Write a letter to your uncle thanking him for the birthday gift you have received from him.

(MM 10)

Q6. Write a letter to Wish Your Friend on his Birthday

(MM 10)

Section B: Grammar (MM 55)

Q7. Correct the following sentences:

(MM 4)

- (i) Sarita go to office at 10 A.M. daily.
(ii) She has been cooking meal from 7 A.M.
(iii) Nisha is playing Tabla for two hours.
(iv) Rani have just come from college.

Q8. Combine the following pairs of sentences:

(MM 4)

- (i) (a) Are you an editor? (b) Are you an author?
(ii) (a) She is very weak. (b) She can't climb up the hill.
(iii) (a) He will pass. (b) It is certain.
(iv) (a) She is a thief. (b) She was sentenced to prison.

Q9. Write the letter a, b, c, or d of the correct answer in brackets: (MM 5)

(i) My wife always _____ in the evening.

- (a) cooks (b) cook (c) has cooked (d) is cooking

(ii) I _____ a coat because it is very cold today.

- (a) wears (b) wear (c) am wearing (d) have worn

(iii) The sun rises in the east and _____ in the west.

- (a) is setting (b) sets (c) set (d) setting

(iv) Look there, he _____ after the thief.

- (a) running (b) runs (c) run (d) is running

(v) An iron ball _____ on water.

- (a) not float (b) does not float (c) not floats (d) do not float

Q10. Rewrite the sentences after filling the blanks with articles wherever necessary. (MM 12)

(i) Who are _____ men that are standing there in _____ lane?

(ii) _____ tallest gentlemen is _____ teacher, _____ man who has _____ stick in his hand is _____ teacher's uncle. He lives in Chennai. He has come here to attend _____ wedding. I don't know who _____ third man is. I know _____ person sitting beside _____ teacher.

(iii) I'm sorry to have detained you. Are your going to _____ blank?

Q11. Make sentences using the following conjunctions. (MM 6)

- i. because : _____
ii. while : _____
iii. whenever : _____
iv. although : _____
v. when : _____
vi. after : _____

Q12. Write suitable adjectives for the following nouns. (MM 8)

- i. elephant _____ ii. fox _____
iii. soldier _____ iv. ice _____
v. rose _____ vi. snake _____
vii. princess _____ viii. fort _____

Q13. Change the following sentences to future tense. (MM 3)

- i. I am going to appear in the test tomorrow. _____
ii. Father is going to buy a plot next month. _____
iii. They are going to raise this issue. _____

Q14. Fill in the blanks with suitable form of verbs from the brackets. (MM 5)

- i. A pair of tongs _____ brought by him. (was/were)
ii. Every leaf and flower _____ plucked off the plant. (was/were)
iii. Each of the criminals _____ arrested. (was/were)
iv. She and I _____ going to the museum. (am/are)
v. People _____ unhappy with the leader. (is/are)

Q15. Add question tag to the following sentences: (MM 8)

1. It's very hot today, _____?
2. You like him, _____?
3. Kishore will come, _____?
4. We must hurry, _____?
5. He will never give up, _____?
6. Your father is a doctor, _____?
7. You have tea for breakfast, _____?
8. I didn't hurt you, _____?

RIMC SCHOLARSHIP EXAM – Set - C

DECEMBER 2024

SUBJECT: ENGLISH

TIME: 2 Hrs

MM: 125

A) Reading section: 20 marks

B) Writing section: 50 marks

C) Grammar: 55 marks

Section A: Reading (MM 20)

Q1. Read the following passage carefully and answer the questions that follow:

(MM 10)

(1) For millions of years the Earth's atmosphere has not changed very much. Layers of gases have shielded the Earth from the harmful effects of the sun's rays. But now things are changing. Every day we burn huge amounts of wood, coal, oil and gas. When they burn, these fuels give off a gas called carbon dioxide.

(2) Plants use CO₂ to make food, but there's already too much for them to use. So the extra gas just stays in the atmosphere. Carbon dioxide acts like a greenhouse roof. It lets the heat of the sun through to the Earth, but doesn't let it escape back into space. The heat is trapped, and the Earth warms up. This warming is called the greenhouse effect. There's another reason for Earth's warming up. The ozone layer is being damaged. Ozone is a kind of gas in the atmosphere. A layer of ozone protects the Earth from the harmful rays of the sun. Chemicals used in aerosol sprays, refrigerators, some plastic and other products drift up to the ozone layer. These chemicals damage the ozone layer so that more of the heat and harmful rays from the sun can reach the Earth.

(3) If the Earth goes on warming up, some of the ice at the North and South Poles could melt. There could be flooding of low-lying land, and many living things would not be able to get used to a warmer climate. Scientists believe the ozone layer will eventually repair itself if we stop using harmful chemicals. The most important thing is to make sure less carbon dioxide goes into the atmosphere. That way, the North and South Poles will stay icy cold.

A. On the basis of your reading of the above passage, answer the following questions as briefly as possible. Write the answers in your answer sheet against the correct blank number.

(a) The earth is warming up. This is happening due to the following reasons:

(i) _____ (ii) _____

(b) Extra CO₂ is piling up in the atmosphere because _____

(c) How is the ozone layer being damaged?

(d) The melting of the polar ice will cause the following disasters:

(i) _____ (ii) _____

(e) The ozone layer can repair itself if we stop the ____.

(f) "That way" (second last line of Para 3). Which way is the author referring to?

B. Find words from the passage which mean the opposite of the following from the paragraphs indicated. Write the answers against the correct blank number in your answer sheet.

(a) tiny / small (Para 1) : _____

(b) freed/released (Para 2): _____

C. Find words from the passage which mean the same as the following from the paragraphs indicated. Write the answers against the correct blank number in your answer sheet.

(a) protected (Para 1) : _____

(b) carried away slowly (Para 2): _____

Q2. Read the following poem carefully and answer the questions that follow:

(MM 10)

STORY OF A COIN

My story is strange,
To understand it, you need brains
I was a coin with lot of shine
Therefore, I looked perfect and fine.
Firstly, I went into the hands of a man
Who kept me in a can.
The darkness gave me the creeps
And I was lying on top of the heap
Somehow I was given to a young guy
Who tossed me in air and made me fly.
Then I was given to an old lady
She kept me in a place that was very shady
I noticed I had lost my shine
And I didn't look young and fine
That is because I had grown old
Now, I knew my life's story was told.

A. On the basis of your understanding of the above poem, answer the following questions as briefly as possible.

Write the answers in your answer sheet against the correct blank number.

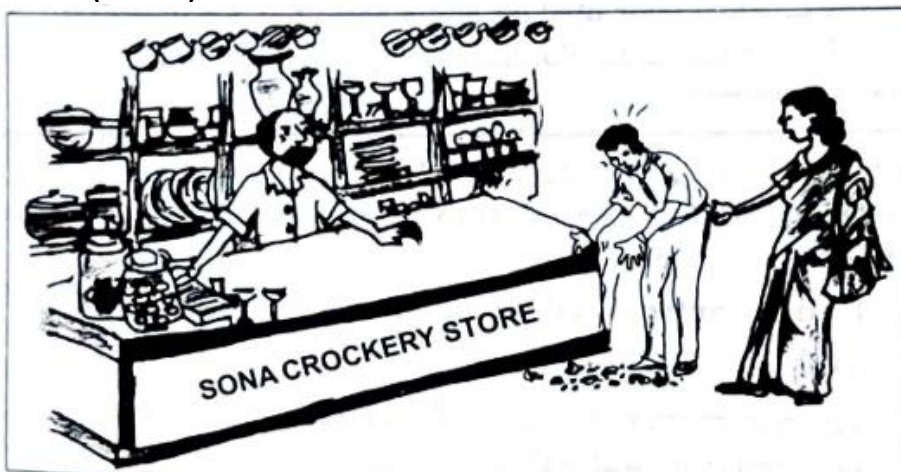
- (a) How did the coin look initially?
- (b) The coin travelled from _____ to a young guy and then to _____
- (c) How did the coin feel when it was kept in a can?
- (d) What did the young boy do with the coin?
- (e) Write two pairs of rhyming words from the poem.

Section B: Writing (MM 50)

Q3. Write an article on 'My Favourite Teacher'. Include points why you like her. Use ideas from the input given. brilliant teacher - qualities of head and heart - honest and sincere, kind and loving believes in simple living, high thinking - willingness to help everybody etc. (120 Words) (MM 10)

Q4. One cold evening when it was getting dark, you were returning home after attending your friend's birthday party. You saw an old lady being robbed of her purse and gold bangles by two persons on a scooter. The lady rose alarm, but no one including you, could help her. Make a diary entry of your helplessness and rage. (120 Words) (MM 10)

Q5. You were at the Sona Crockery Store with your mother when the following incident took place. Describe what actually happened. Give your description an interesting end. (200 Words) (MM 15)



Q6. Some mothers complain that their children don't eat anything. Others have a problem that their children eat too much. Children these days love to eat junk food. They just hate good nutritious home-made food. Is it good for children's health? What do you think? Write what your views are in the form of an article 'Junk Food and Children'. (200 Words) (MM 15)

Section C: Grammer (MM 55)

Q7. Put a or an:

(MM 5)

- (i) _____ orange.
- (ii) _____ year.
- (iii) _____ animal.
- (iv) _____ high wall.
- (v) _____ Indian leader.

Q8. Complete the following conversation by filling in the blanks with appropriate pronouns:

(MM 7)

Neena : I (a) _____ have opened the door.

Neha : But, where is (b) _____ brother?

Neena : (c) _____ for has just gone out to the market to buy a new bicycle for (d) _____

Neha : Why? What has happened to the old one?

Neena : (e) _____ one is lost.

Neha : How?

Neena : Yesterday I went to the market and parked (f) _____ outside the shop. But when I came out it was not there. Though I had locked it yet everyone is blaming (g) _____

Neha : So sad to hear that.

Q9. Fill in the blanks with the correct form of the adjectives given in brackets:

(MM 10)

- (a) Soloman was the _____ king. (wise)
- (b) This house is _____ than that. (nice)
- (c) I think she is the _____ girl in the class. (intelligent)
- (d) The first sum is _____ than the second. (easy)
- (e) This is the _____ place in the region. (hot)

Q10. Look at the words and phrases below. Rearrange them to form meaningful sentences. Write the corrected sentences in your answer sheet against the correct blank number.

(MM 4)

- (a) is a/pleasant/time/ very / the morning
- (b) best/is/nature/its/at
- (c) cool/fresh/and/ is / the air
- (d) at such/a walk/is/very refreshing / a time

Q11. Read each sentence. Draw a box around each noun.

(MM 5)

- i. The girl went to the dance.
- ii. She fed her horse an apple.
- iii. Her happy horse ran across the field.
- iv. Her friendship means a lot to me.
- v. The horse likes sugar cubes.

Q12. Underline the verbs in each sentence.

(MM 4)

- 1. James ate two pieces of cake.
- 2. Mary runs to school every day.

Q13. Write the correct form of the verbs in the brackets to complete the sentence.

(MM 5)

- i. We _____ to school this morning. (hurry)
- ii. The baby _____ last night. (cry)
- iii. Yesterday father _____ me a new bicycle. (give)
- iv. Mrs. Brown _____ a song last Sunday. (sing)
- v. Pastor Jones _____ for the sick women. (pray)

Q14. The letters of the words below are jumbled. Figure out what the word is and write it on the blank line provided. (Do any Five)

(MM 15)

- i. LDYA _____
- iii. WORTH _____
- v. IDHERCLN _____
- vii. VERAC _____
- ix. ONPD _____
- ii. HCIDT _____
- iv. SECAEP _____
- vi. EOHRTN _____
- viii. SMRTO _____
- x. EFILD _____

RIMC SCHOLARSHIP EXAM Set – A

DECEMBER 2024

SUBJECT: MATHEMATICS

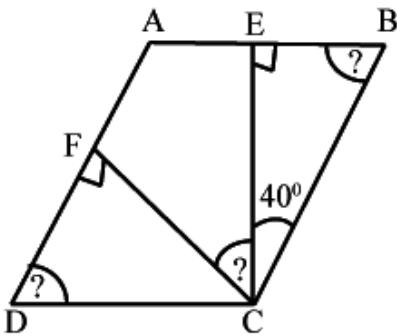
TIME: 1:30 Hrs

MM: 200

PART – A (1 to 20)

• Each question five marks:

1. Write the units digit of the cube of each of the following numbers: 31, 109, 388, 833, 4276, 5922, 77774, 44447, 125125125
2. If sum of the number 985 and two other number obtained by arranging the digits of 985 in cyclic order is divided by 111, 22 and 37 respectively. Find the quotient in each case.
3. Divide: $\left(\frac{1}{4}x^2 - \frac{1}{2}x - 12\right)$ by $\left(\frac{1}{2}x - 4\right)$
4. The numerator of a rational number is 3 less than the denominator. If the denominator is increased by 5 and the numerator by 2, we get the rational number $\frac{1}{2}$. Find the rational number.
5. A group of 3 friends staying together consume 54 kg of wheat every month. Some more friends join this group and they find that the same amount of wheat lasts for 18 days. How many new members are there in this group now?
6. A dealer bought two tables for Rs.3120. he sold one of them at a loss of 15% and the other at a gain of 36%. Then, he found that each table was sold for the same price. Find the cost price of each table.
7. Some toffees are bought at a rate of 11 for Rs.10 and the same number at the rate of 9 for Rs.10. if the whole lot is sold at one per toffee, find the gain or loss percent on the whole transaction.
8. In the middle of a rectangular field measuring 30m x 20m, a well of 7 m diameter and 10 m of depth is dug. The earth so removed is evenly spread over the remaining part the field. Find the height through which the level of the field is raised.
9. Find the angles marked with a question mark shown in Fig.



10. In a parallelogram ABCD, AB = 10 cm, AD = 6 cm. The bisector of $\angle A$ meets DC in E, AE and BC produced meet at F. Find the length CF.
11. Find the values of x in each of the following:
 - (i) $2^{5x} \div 2^x = \sqrt[5]{2^{20}}$
 - (ii) $(2^3)^4 = (2^2)^x$
12. Simplify:
 - (i) $\frac{3\sqrt{2}-2\sqrt{3}}{3\sqrt{2}+2\sqrt{3}} + \frac{\sqrt{12}}{\sqrt{3}-\sqrt{2}}$
13. If $x = 3 + \sqrt{8}$, find the value of $x^2 + \frac{1}{x^2}$

14. The value of $\left(1 + \frac{1}{x}\right)\left(1 + \frac{1}{x+1}\right)\left(1 + \frac{1}{x+2}\right)\left(1 + \frac{1}{x+3}\right)$ is:
15. A fraction becomes $\frac{1}{3}$ when 1 is subtracted from both the numerator and the denominator. The same fraction becomes $\frac{1}{2}$ when 1 is added to both the numerator and the denominator. The sum of numerator and denominator of the fraction is
16. If $x = \sqrt{3} + \sqrt{2}$ then the value of $x^3 - \frac{1}{x^3}$ is:
17. The L.C.M. of two numbers is 20 times their H.C.F. The sum of H.C.F. and L.C.M. is 2520. If one of the number is 480, the other number is:
18. A milkman makes 20% profit by selling milk mixed with water at ₹ 9 per litre. If the cost price of 1 litre pure milk is ₹ 10, then the ratio of milk and water in the mixture is
19. The average of 30 results is 20 and the average of other 20 results is 30. What is the average of all the results?
20. The mean high temperature of the first four days of a week is 25°C whereas the mean of the last four days is 25.5°C. If the mean temperature of the whole week is 25.2°C then the temperature on the 4th day is

PART – B (21 to 30)

• **Each question ten marks:**

21. A tradesman marks his goods at such a price that after allowing a discount of 15%, he makes a profit of 20%. What is the marked price of an article whose cost price is ₹ 170?
22. In a factory 60% of the workers are above 30 years and of these 75% are males and the rest are females. If there are 1350 male workers above 30 years, the total number of workers in the factory is
23. A trader purchases a watch and a wall clock for ₹ 390. He sells them making a profit of 10% on the watch and 15% on the wall clock. He earns a profit of ₹ 51.50. The difference between the original prices of the wall clock and the watch is equal to
24. At a certain rate of simple interest, a certain sum of money becomes double of itself in 10 years. It will become treble of itself in
25. The simple interest on a sum of money is $\frac{8}{25}$ of the sum. If the number of years is numerically half the rate percent per annum, then the rate percent per annum is
26. 60 men could complete a work in 250 days. They worked together for 200 days. After that the work had to be stopped for 10 days due to bad weather. How many more men should be engaged to complete the work in time?
27. Two pipes A and B can separately fill a cistern in 60 minutes and 75 minutes respectively. There is a third pipe in the bot- tom of the cistern to empty it. If all the three pipes are simultaneously opened, then the cistern is full in 50 minutes. In how much time the third pipe alone can empty the cistern?
28. On a journey across Kolkata, a taxi averages 50 km per hour for 50% of the distance, 40 km per hour for 40% of it and 20 km per hour for the remaining. The average speed (in km/hour) for the whole journey is:
29. A man can row at 5 kmph. in still water. If the velocity of current is 1 kmph. and it takes him 1 hour to row to a place and come back, how far is the place?
30. The LCM of four numbers is 60. The sum of the first two numbers is equal to the fourth number. What is the sum of four numbers?

RIMC SCHOLARSHIP EXAM Set – B

DECEMBER 2024

SUBJECT: MATHEMATICS

TIME: 1:30 Hrs

MM: 200

PART – A (1 to 20)

• Each question five marks:

1. Find ten rational numbers between $\frac{1}{4}$ and $\frac{1}{2}$

2. By what number should $\left(\frac{1}{2}\right)^{-1}$ be multiplied so that the product may be equal to $\left(-\frac{4}{7}\right)^{-1}$?

3. Which of the following numbers are perfect squares?

(i) 484

(ii) 1728

(iii) 9000

(iv) 1369

(v) 2116

4. Observe the following pattern:

$$(1 \times 2) + (2 \times 3) = \frac{2 \times 3 \times 4}{3}$$

$$(1 \times 2) + (2 \times 3) + (3 \times 4) = \frac{3 \times 4 \times 5}{3}$$

$$(1 \times 2) + (2 \times 3) + (3 \times 4) + (4 \times 5) = \frac{4 \times 5 \times 6}{3} \text{ and,}$$

find the value of $(1 \times 2) + (2 \times 3) + (3 \times 4) + (4 \times 5) + (5 \times 6)$

5. The volume of a cube is 9261000 m^3 . Find the side of the cube.

6. Given that the number $35a64$ is divisible by 3, where a is a digit, what are the possible values of a ?

7. Multiply: $\left(\frac{x}{7} + \frac{x^2}{2}\right)\left(\frac{2}{5} + \frac{9x}{4}\right)$

8. Multiply: $(x^3 - 2x^2 + 5x - 7)(2x - 3)$

9. Divide: $(a^2 + 2ab + b^2) - (a^2 + 2ac + c^2)$ by $(2a + b + c)$

10. In 10 days, the earth picks up 2.6×10^8 pounds of dust from the atmosphere. How much dust will it pick up in 45 days?

11. Aasheesh can paint his doll in 20 minutes and his sister Chinki can do so in 25 minutes. They paint the doll together for 5 minutes. At this juncture they have a quarrel and Chinki withdrawn from painting. In how many minutes will Aasheesh finish the painting of the remaining doll?

12. A cistern has two inlets A and B which can fill it in 12 hours and 15 hours, respectively. An outlet can empty the full cistern in 10 hours. If all the three pipes are opened together in the empty cistern, how much time will they take to fill the cistern completely?

13. Rs.3500 is to be shared among three people so that the first person gets 50% of the second, who in turn gets 50% of the third. How much will each of them get?

14. Mariam bought two fans Rs.3605. she sold one of them at a profit of 15% and the other one at a loss of 9%. If Mariam obtained the same amount for each fan, find the cost price of the each of the fans.

15. Toshiba bought 100 hens for Rs.8000 and sold 20 of these at a gain of 5%. At what gain percent she must sell the remaining hens so as to gain 20% on the whole?

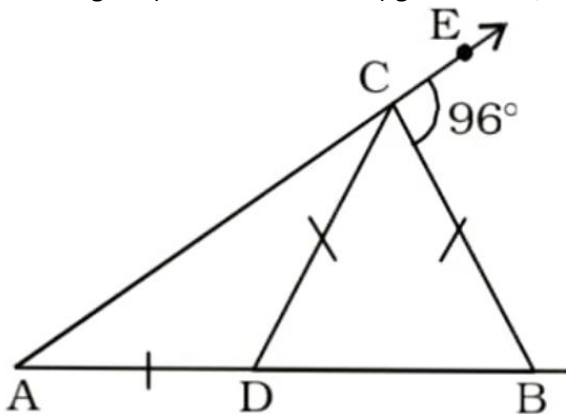
16. A shopkeeper marks his goods at 40% above the cost price but allows a discount of 5% for cash payment to his customers. What actual profit does he make, if he receives Rs.1064 after paying the discount?

17. A shopkeeper offers 10% off-season discount to the customers and still makes a profit of 26%. What is the cost price for the shopkeeper on a pair of shoes marked at Rs.1120?
18. A refrigerator is available for Rs. 13750 including VAT. If the rate of the VAT is 10%, find the original cost of the furniture.
19. Rohit deposited Rs 8000 with a finance company for 3 years at an interest of 15% per annum. What is the compound interest that Rohit gets after 3 years?
20. A playground has the shape of a rectangle, with two semi-circles on its smaller sides as diameters, added to its outside. If the sides of the rectangle are 36 m and 24.5 m, find the area of the playground. (Take $\pi = \frac{22}{7}$).

PART – B (21 to 30)

• **Each question ten marks:**

21. A cuboidal vessel is 10 cm long and 5 cm wide. How high must it be made to hold 300 cm^3 of a liquid?
22. The sum of the radius of the base and height of a solid cylinder is 37 m. If the total surface area of the solid cylinder is 1628 m^2 , find the circumference of its base.
23. A die is thrown. Find the probability of getting: (i) a prime number (ii) 2 or 4 (iii) a multiple of 2 or 3.
24. The maximum number of students among whom 1001 pens and 910 pencils can distributed in such a way that each student gets same number of pens and same number of pencils, is :
25. If A and B are in the ratio 3 : 4, and B and C in the ratio 12 : 13, then A and C will be in the ratio
26. The average of the marks obtained in an examination by 8 students was 51 and by 9 other students was 68. The average marks of all 17 students was :
27. A train is travelling at the rate of 45km/hr. How many seconds it will take to cover a distance of $\frac{4}{5} \text{ km}$?
28. A sum of money lent at simple interest amounts to ₹ 880 in 2 years and to ₹ 920 in 3 years. The sum of money (in rupees) is
29. If $\frac{a}{3} = \frac{b}{4} = \frac{c}{7}$ then $\frac{a+b+c}{c}$ is equal to:
30. In the figure (not drawn to scale) given below, if $AD = DC = BC$ and $\angle BCE = 96^\circ$, then $\angle DBC$ is :



RIMC SCHOLARSHIP EXAM Set – C

DECEMBER 2024

SUBJECT: MATHEMATICS

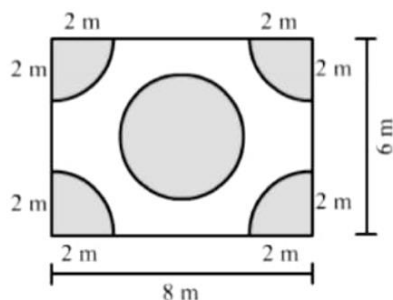
TIME: 1:30 Hrs

MM: 200

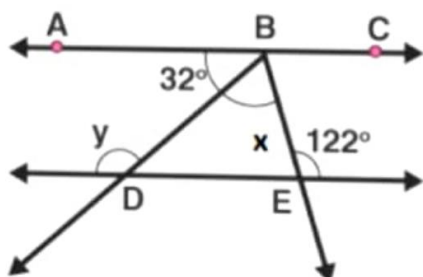
PART – A (1 to 20)

• Each question five marks:

1. Reema took a loan of ₹ 8000 from a money lender, who charged interest at the rate of 18% per annum. After 2 years, Reema paid him ₹ 10400 and wrist watch to clear the debt. What is the price of the watch?
2. Shikha deposited ₹ 2000 in a bank which pays 6% simple interest. She withdrew ₹ 700 at the end of first year. What will be her balance after 3 years?
3. In Fig., the radius of quarter circular plot taken is 2 m and radius of the flower bed is 2 m. Find the area of the remaining field.



4. A rectangular field is 48 m long and 20 m wide. How many right triangular flower beds, whose sides containing the right angle measure 12 m and 5 m can be laid in this field?
5. In right $\triangle ABC$, the lengths of the legs are given. Find the length of the hypotenuse
(i) $a = 6$ cm, $b = 8$ cm
(ii) $a = 8$ cm, $b = 15$ cm
6. In Fig., line $AC \parallel DE$ and $\angle ABD = 32^\circ$, Find out the angles x and y if $\angle E = 122^\circ$



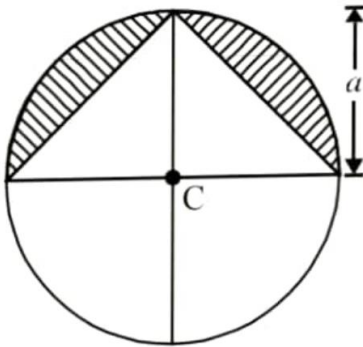
7. By selling an article for ₹ 240, a man makes a profit of 20%. What is his C.P.? What would his profit percent be if he sold the article for ₹ 275?
8. In an orchard, $16\frac{2}{3}\%$ of the trees are apple trees. If the number of trees in the orchard is 2403 find the number of other type of trees in the orchard.
9. The yield of wheat from 6 hectares is 280 quintals. Find the number of hectares required for a yield of 225 quintals.
10. An electric pole casts a shadow of length 20 meters at a time when a tree 6 meters high casts a shadow of length 8 meters. Find the height of the pole.
11. The difference in age between a girl and her younger sister is 4 years. The younger sister in turn is 4 years older than her brother. The sum of the ages of the younger sister and her brother is 16. How old are the three children?
12. Simplify: $-a - [a + \{a + b - 2a - (a - 2b)\} - b]$
13. Write the following numbers in the expanded exponential forms:
(i) 20068
(ii) 420719
14. The product of two rational numbers is $-\frac{8}{9}$. If one of the numbers is $-\frac{4}{15}$ find the other.
15. In mid-day meal scheme $\frac{3}{10}$ liter of milk is given to each student of a primary school. If 30 liters of milk is distributed every day in the school, how many students are there in the school?
16. Shikha plants 5 saplings in a row in her garden. The distance between two adjacent saplings is $\frac{3}{4}$ m. Find the distance between the first and the last sapling.

17. In 10 days, the earth picks up 2.6×10^8 pounds of dust from the atmosphere. How much dust will it pick up in 45 days?
18. Find the value of x : $[(2x + 3) + (x + 5)]^2 + [(2x + 3) - (x + 5)]^2 = 10x^2 + 92$
19. 8 men working 9 hours a day can complete a task in 20 days. How long will 7 men working 10 hours a day take to complete the same task.
20. On selling 21 articles for Rs. 1620 a man get the loss of cost price of 3 articles. Find the cost price of 1 article

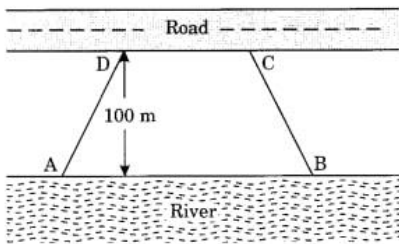
PART – B (21 to 30)

• **Each question ten mark**

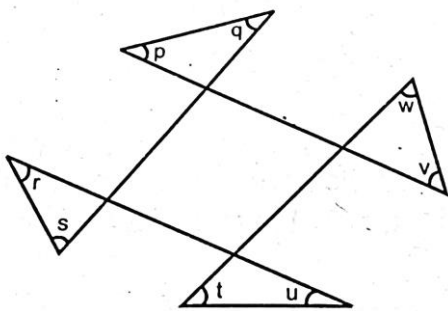
21. A man spends 75% of his income his income increased by 20% and expenses also increased by 10%. What is the net increased percent in his savings.
22. After two successive discount each of $x\%$ on marked price of on article, a customer buy it for Rs. 3610. If marked price of the article is Rs. 4000. Find value of x .
23. The area of the shaded region in the figure given below is



24. Mohan wants to buy a trapezium-shaped field. Its side along the river is parallel and twice the side of the road. If the area of this field is 10500 m^2 and the perpendicular distance between the two parallel sides is 100 m, find the length of the side along the river.



25. Three years ago, the population of a town was 50000. If the annual increase during three successive years be at the rate of 4%, 5% and 3% respectively, find the present population.
26. Cycle wheel is 84cm in diameter. How many revolutions does it make in 1km? if this wheel makes 28 revolution in 12 seconds. Find the speed of the cycle in km/hr
27. Find the sum of p, q, r, s, t, u, v and w



28. There are two rooms A and B at a centre of Sukhoi Academy entrance examination. If 10 candidates are sent from room A to room B, the number of candidates in each room is the same. If 20 candidates are sent from room B to room A, the number of candidates in A is double the number of candidates in B. Find the number of candidates in rooms A and B.
29. Find the smallest number by which 180 must be multiplied so that the product is a perfect square.
30. Divide the sum of $\frac{65}{12}$ and $\frac{12}{7}$ by their difference. Find the number.



SUKHOI ACADEMY

(RIMC Scholarship Test – December 2024) Set – A

GENERAL KNOWLEDGE

CANDIDATE NAME :

State: Roll No :

1. Who looted Delhi in 1739 and took away the Peacock throne?

- (A) Mohd. Gori (B) Nadir Shah
(C) Babar (D) Changez Khan

2. Which river in Karnataka make the Jog falls?

- (A) Narmada (B) Saraswati
(C) Kaveri (D) Godavari

3. Which is the largest fresh water lake in India?

- (A) Wullar (B) Chillika
(C) Pichola (D) Kolleru

4. Which country is the largest producer of gold in the world?

- (A) Britain (B) America
(C) South Africa (D) Kuwait

5. Name the line which join places of equal temperature?

- (A) isotherms (B) isobars
(C) isohyets (D) isomers

6. During whose rule did Vijaynagar attain the height of its glory?

- (A) Jaimal (B) Raja Ram II
(C) Krishnadeva Rai (D) None of these

7. Which of the following river does not flow into the Arabian sea?

- (A) Krishna (B) Ganga
(C) Sabarmati (D) Godavari

8. By which constitutional amendment was the voting age reduced from 21 to 18 years?

- (A) 42nd (1976) (B) 61st (1989)
(C) 45th (1980) (D) None of these

9. _____ was the first woman judge of the Supreme Court of India.

- (a) Mary Joseph (b) Leila Seth
(c) Fatima M. Beevi (d) Kiran Bedi

10. Name the Indian state which has given four Noble prize winners.

- (A) U.P. (B) Bihar
(C) West-Bengal (D) Tamil Nadu

11. Where did Prime Minister Lal Bahadur Shastri die?

- (A) Delhi (B) London
(C) Taskent (D) Moscow

12. Name the strait which connects the Arabian sea and the Bay of Bengal.

- (A) Palk strait (B) Folk strait
(C) Bering strait (D) None of these

13. After sailing round Africa where in India did Vasco- de-Gama reach in 1498.

- (A) Surat (B) Panaji
(C) Mumbai (D) Calicut

14. Which of the following is the largest employer in India?

- (A) Post and telegraph
(B) Steel Authority of India
(C) Indian Railways
(D) State Banks

15. On the bank of which river is Sri Nagar located?

- (A) Jhelum (B) Ravi
(C) Yamuna (D) Chenab

16. Which of the following is the most toxic gas?

- (A) Ammonia
(B) Carbon monoxide
(C) Carbon dioxide
(D) Nitrogen

17. In which part of the plant does photosynthesis take place?

- (A) Flowers (B) Leaves
(C) Fruits (D) Roots

18. Which was the first living creature to go into space?

- (A) Dog (B) Rat
(C) Cat (D) Monkey

19. Name the unit in which frequency is measured?

- (A) Faraday (B) Hertz
(C) Poise (D) None of these

20. What does Entomology deal with?

- (A) Plants (B) Insects
(C) Animals (D) Chemicals

21. Gautam Buddha was born at

- (A) Pataliputra (B) Lumbini
(C) Sarnath (D) Kapilvastu

22. Quit India resolution was passes by the Indian National Congress in its

- (A) Lahore session (B) Kolkata session
(C) Lucknow session (D) Mumbai session

23. The southern most ranges in India known as
(A) Aravalli Hills (B) Anamalai Hills
(C) Nilgiri Hills (D) Cardamom Hills

24. Elephanta caves is in --

(A) Kolkata (B) Patna
(C) Pune (D) Mumbai

25. Famous Lingaraj temple is located in

(A) Bihar (B) Odisha
(C) Uttarakhand (D) Chhattisgarh

26. Philology is the

(a) Study of bones
(b) Study of Muscles
(c) Study of architecture
(d) Science of language

27. Which state is the largest producer of silk in India?

(A) Andhra Pradesh (B) Madhya Pradesh
(C) Punjab (D) Karnataka

28. Name of the space craft for India's Mission Moon is

(A) Chandrayaan-I (B) Lakshya
(C) Antariksha (D) None of these

29. Formation of ozone hole is maximum over

(A) Asia (B) Europe
(C) Antartica (D) Africa

30. National Defence Academy is in

(A) U.P. (B) M.P.
(C) Maharashtra (D) Odisha

31. Who was the first person to deliver speech in Hindi at the United Nations General Assembly?

(a) Atal Bihari Vajpayee
(b) Manmohan Singh
(c) Shashi Tharoor
(d) Narendra Modi

32. Qutubuddin Aibak was an important ruler of

(A) Mughal dynasty (B) Khilji dynasty
(C) Slave dynasty (D) None of these

33. 'War and Peace' was written by

(A) Maxim Gorky (B) Leo Tolstoy
(C) John Ruskin (D) Mahatma Gandhi

34. Currency of Argentina is

(A) Rouble (B) Dinar
(C) Peso (D) Pound

35. The lower chamber of human heart is called

(A) Auricle (B) Ventricle
(C) Appendicitis (D) Larynx

36. The largest tea producing state India is

(A) Arunachal Pradesh (B) Assam
(C) Tamil Nadu (D) Kerala

37. In India battle tanks are manufactured at

(A) Mumbai (B) Avadi
(C) Nasik (D) Kanpur

38. Diesel engines for locomotives are manufactured at

(A) Chennai (B) Kolkata
(C) Varanasi (D) Raipur

39. On which date Air force day is celebrated in India

(A) January 15 (B) June 5
(C) March 15 (D) October 8

40. What is the name of the tropical cyclones in the China Sea?

(a) Hurricanes (b) Tornado
(c) Twister (d) Typhoon

41. Amphibians are animals which live

(A) In water only
(B) On plain surface only
(C) Both on land and in water
(D) On hills only

42. The hardest thing in the human body is

(A) Right hand bone (B) Thigh bone
(C) Enamel (D) None of these

43. A gastrologist is a doctor who specialises in the diseases of the

(A) Heart (B) Lungs
(C) Liver (D) Stomach

44. The author of 'Bhagwad Gita' is

(A) Kalidas (B) Tulsidas
(C) Surdas (D) Ved Vyas

45. Lotus temple or Bahai temple is situated in

(A) Haridwar (B) Prayagraj
(C) Delhi (D) Badri Nath

46. Cricket and Football were originated in

(A) India (B) Australia
(C) England (D) New Zealand

47. Thomas Cup is associated with

(A) Table Tennis (B) Badminton
(C) Golf (D) Boxing

48. The nucleus of an electron consist of

(A) Electrons and Neurons
(B) Electrons and protons
(C) Protons and neutrons
(D) All of the above

49. Night blindness is caused due to lack of—

(A) Vitamin C (B) Vitamin A
(C) Vitamin D (D) Vitamin B

50. Who wrote the book 'A Suitable boy?'

(A) Kushwant Singh (B) Naini Palkhivala
(C) Vikram Seth (D) Arundati Roy

51. Diabetes is caused due to deficiency of

(A) thyroxine (B) adrenaline
(C) insulin (D) None of these

52. is used of disinfecting.

(A) oxygen (B) sulphur
(C) hydrogen (D) chlorine

53. is not biodegradable.

(A) Paper (B) Plastic bag
(C) wool (D) wood

54. Dry ice is

(A) Solid ice without water
(B) Benzoic acid
(C) Glacial Acetic Acid
(D) Solid carbon dioxide

55. Which of the following helps in clotting of blood?

- (A) Vitamin B (B) Vitamin C
(C) Vitamin A (D) Vitamin K

56. Which one of the following planet Rotates east to west ?

- (A) Venus (B) Mercury
(C) Mars (D) Earth

57. When were the first Commonwealth Games held?

- (a) 1920 (b) 1890 (c) 1930 (d) 1934

58. Who is known as the father of Homeopathy?

- (a) Aristotle (b) Hahnemann
(c) Hippocrates (d) Kent

59. The symbol Gold is

- (A) G (B) Au (C) Ag (D) Al

60. In which year the satellite Arya Bhatta Was launched?

- (A) 1970 (B) 1975 (C) 1978 (D) 2001

61. The canal which links Atlantic ocean with Pacific Ocean

- (a) Suez (b) Malacca
(c) Panama (d) Gibraltar

62. Saare Jahan se Acchcha' was composed by

- (A) R. N. Tagore
(B) Ram Dhari Singh Dinkar
(C) Mohd. Iqbal
(D) None of these

63. Solar cells convert solar energy into

- (A) Chemical energy
(B) Heat energy
(C) Electricity
(D) None of these

64. Acid rain mainly contains

- (a) Phosphates, nitrates
(b) Sulphur di oxide, Nitrogen di oxide
(c) Hydrochloric acid
(d) Carbonic acid

65. The Universal acceptor blood group is

- (A) A (B) B
(C) AB (D) O

66. Which of the following is the poorest conductor of heat?

- (A) Silver (B) Gold
(C) Copper (D) Lead

67. Which National Park preserve Lions?

- (A) Giri (B) Keoladeo
(C) Periyar (D) Corbett

68. Who discovered the vaccine for small pox ?

- (A) Louis Pasteur
(B) Alexander Fleming
(C) Edward Jenner
(D) Charles Darwin

69. Largest Producer of Petroleum is

- (A) China (B) U.S.A.
(C) Saudi Arabia (D) Japan

70. The amount of L.P.G. in domestic cylinder is about

- (A) 14.2 kg (B) 13.2 kg
(C) 12.2 kg (D) 11.2 kg

71. The sound heard after reflection from a rigid obstacle is called

- (A) Infrasonic sound
(B) Ultrasonic sound
(C) Echo
(D) All of these

72. At high altitude the water boils at temperature—

- (A) Lower than at sea level
(B) Higher than at sea level
(C) Same temperature which is at sea level
(D) Above 100°C

73. Malaria is caused by

- (A) Virus (B) Protozoa
(C) Bacteria (D) Fungi

74. The next nearest star to earth other than the sun is

- (A) Aurore Australis
(B) Alpha Centuri
(C) Proxima Century
(D) None of these

75. The only non-metal which is liquid in state at room temperature is

- (A) Boron (B) Iodine
(C) Bromine (D) Chlorine



SUKHOI ACADEMY

(RIMC Scholarship Test – December 2024) Set – B

GENERAL KNOWLEDGE

CANDIDATE NAME :

State: Roll No :

1. The railway line was established during the reign of which Governor-General in India?

- (a) Lord Curzon
- (b) Lord Mountbatten
- (c) Lord Dalhousie
- (d) Lord Lytton

2. Most of the atmospheric Ozone is found in which layer of atmosphere?

- (a) Thermosphere
- (b) Stratosphere
- (c) Mesosphere
- (d) Troposphere

3. Which of the following is absent in milk?

- (a) Calcium (b) Protein
- (c) Vitamin C (d) Vitamin D

4. The first woman IPS officer of India is:

- (a) Isha Basant Joshi
- (b) Anna George
- (c) Kiran Bedi
- (d) Merin Joseph

5. Where did the Gautama Buddha gave his first sermon?

- (a) Pataliputra (b) Lumbini
- (c) Sarnath (d) Rajgriha

6. IST is based on Longitude 82°30' E. Which is the city through which it passes?

- (a) Lucknow (b) Prayagraj
- (c) Varanasi (d) New Delhi

7. Suez Canal lies between ?

- (a) Arabian Sea and Red Sea
- (b) Red Sea and North Sea
- (c) Mediterranean Sea and North Sea
- (d) Mediterranean Sea and Red Sea

8. Which of the following rivers of India flows in rift-valley?

- (a) Kaveri (b) Tapti
- (c) Son (d) Ken

9. Tehri Dam is located in which of the following states?

- (a) Himachal Pradesh
- (b) Uttar Pradesh
- (c) Madhya Pradesh
- (d) Uttarakhand

10. What is the full form of AIDS?

- (a) Advancement in developing syndrome
- (b) Acquired Immune Deficiency Syndrome
- (c) Active Immune Divide Signal
- (d) All Immune Down Syndrom

11. Which among the following is a good source of animal protein?

- (a) Almond (b) Soyabean
- (c) Cheese (d) Walnut

12. Blood groups were first discovered by:

- (a) Robert Koch
- (b) Karl Landsteiner
- (c) Paul Ehrlich
- (d) Antonie van Leeuwenhoek

13. Who among the following was the first Vice President of India?

- (a) Sardar Vallabhbhai Patel
- (b) Jawaharlal Nehru
- (c) Rajendra Prasad
- (d) Sarvepalli Radhakrishnan

14. Which instrument is used for measuring the humidity of air?

- (b) Hydrophone
- (a) Hydrometer
- (d) Hygrometer
- (c) Manometer

15. Who introduced the 'Doctrine of Lapse'?

- (a) Lord Lytton
- (b) Lord Dalhousie
- (c) Lord Wellesley
- (d) Lord Canning

16. Which place in India receives the highest rainfall?

- (a) Bengaluru (b) Mysore
- (c) Srinagar (d) Mawsynram

17. Kangchenjunga is located in which state?

- (a) Uttarakhand (b) Arunachal Pradesh
- (c) Himachal Pradesh (d) Sikkim

18. Which cricket ground is known as the 'Home of cricket'?

- (a) Melbourne Cricket Ground
- (b) Eden Garden's
- (c) Adelaide Oval Cricket Ground
- (d) Lord's Cricket Ground

19. Where does the Brahmaputra river originates from?

- (a) Kailash range in Tibet
- (b) Himalayan range of Nepal
- (c) Hindu-Kush mountain range
- (d) Hills of Darjeeling

20. Clove is obtained from which part of the plant:-

- (a) Root
- (b) Stem
- (c) Fruit
- (d) Flower bud

21. Which country is called the "sugar bowl" of the world?

- (a) Cuba
- (b) Argentina
- (c) Brazil
- (d) India

22. Which one of the following is Not one of the principal organs of the U.N.O?

- (a) Security Council
- (b) International Court of Justice
- (c) International Labour Organization
- (d) Economic & Social Council

23. Which state is the largest producer of tea in India?

- (a) Tripura
- (b) Assam
- (c) Sikkim
- (d) West Bengal

24. Arundhati Roy won the Man Booker Prize for which of the following books?

- (a) The Ministry of Utmost Happiness
- (b) The God of Small Things
- (c) Unhappy India
- (d) 2 States

25. International Labour Organization is situated in

- ...
- (a) Geneva
- (b) London
- (c) New York
- (d) Washington DC

26. 'Hornbill Festival' is a cultural festival celebrated in which state/UT?

- (a) Assam
- (b) Nagaland
- (c) West Bengal
- (d) Bihar

27. When did India win the World Cup in Cricket?

- (a) 1983
- (b) 1975
- (c) 1979
- (d) 1991-92

28. Malaria and Kala Azar are caused by:

- (a) bacteria
- (b) fungi
- (c) protozoa
- (d) virus

29. Which among the following is the second highest peak of the Himalayas after Mt. Everest and third highest peak in the world?

- (a) Dhaulagiri
- (b) Makalu
- (c) Kangchenjunga
- (d) K2

30. Which one of the following states has the largest area under forest cover?

- (a) Madhya Pradesh
- (b) Arunachal Pradesh
- (c) Assam
- (d) Himachal Pradesh

31. The members of the Rajya Sabha are elected for the duration of:

- (a) 3 years
- (b) 4 years
- (c) 5 years
- (d) 6 years

32. Which among the following is not matched correctly?

- (a) Sania Mirza - Tennis
- (b) Jeev Milkha Singh - Football
- (c) Saina Nehwal- Badminton
- (d) Viswanathan Anand - Chess

33. The FIFA World Cup 2026 will be held in

- (a) Argentina
- (b) US and Canada
- (c) Qatar
- (d) Russia

34. The 1st of December is celebrated every year internationally by displaying a red ribbon. What is this day known as?

- (a) International AIDS Day
- (b) World AIDS Day
- (c) National AIDS Day
- (d) World HIV Day

35. Which of the following is the equivalent rank in the Army of the Naval rank of Captain?

- (a) Colonel
- (b) Major
- (c) Brigadier
- (d) Captain

36. is the smallest bone in the human body.

- (a) Rib cage
- (b) Scapula
- (c) Stapes
- (d) Coxal bone

37. The world's largest lake is

- (a) Lake Victoria
- (b) Baikal Lake
- (c) Caspian Sea
- (d) Dead Sea

38. Which among the following sets of planets are known as the terrestrial planets or the inner planets?

- (a) Mercury, Venus, Earth and Mars
- (b) Venus, Neptune and Uranus
- (c) Saturn, Jupiter, Neptune and Uranus
- (d) Earth, Mars, Jupiter and Saturn

39. Who was the first Indian to become a member of British Parliament?

- (a) Surendranath Banerjee
- (b) Gopal Krishna Gokhale
- (c) Mahatma Gandhi
- (d) Dadabhai Naoroji

40. The National song of India, 'Vande Mataram' authored by Bankim Chandra Chatterjee has been taken from which book?

- (a) Rajni
- (b) Anand Math
- (c) Neel Darpan
- (d) Gitanjali

41. The national flower of India is

- (a) Sunflower
- (b) Rose
- (c) Lotus
- (d) Marigold

42. Synagogue is a holy place for

- (A) Hindus
- (B) Buddhist
- (C) Muslims
- (D) Jews

43. Which country has the maximum number of volcanoes?

- (A) Denmark (B) Japan
(C) Indonesia (D) Cuba

44. The light of Sun takes how much time to reach to Earth

- (a) 8 hours 20 seconds
(b) 8 minutes 20 seconds
(c) 8 seconds
(d) 20 seconds

45. Amartya Sen was awarded Nobel Prize in which field?

- (a) Economics (b) Science
(e) Maths (d) Literature

46. Which of these animals are not found in Antarctica?

- (a) Penguins (b) Whales
(c) Polar bears (d) Seals

47. Which planet has the fastest rotation time i.e. 9.8 hours in the solar system?

- (a) Saturn (b) Jupiter
(c) Mars (d) Venus

48. Which airport of India is recently named after Shaheed Bhagat Singh?

- (a) Ahmedabad (b) Jaipur
(c) Chandigarh (d) Kolkata

49. Nikhat Zareen, Nitu Ghanghas and Amit Panghal are associated with which sport?

- (a) Boxing (b) Badminton
(c) Table tennis (d) Paralympics

50. Who is the Governor of Maharashtra?

- (a) Phagu Chauhan
(b) Satya Pal Malik
(c) Kalraj Mishra
(d) Bhagat Singh Koshyari

51. Which of the following is valid storage type?

- (a) CPU (b) Keyboard
(c) Pen Drive (d) Track Ball

52. Who was the Prime Minister of India during Indo- Pak war 1971-72 ?

- (A) Lal Bahadur Shastri
(B) Indira Gandhi
(C) Jawahar Lal Nehru
(D) Rajeev Gandhi

53. Which Mughal Emperor built Red Fort as a part of his new capital city?

- (a) Akbar (b) Babur
(e) Humayun (d) Shah Jahan

54. Which is the heaviest metal among the following?

- (a) Gold (b) Silver
(c) Iron (d) Copper

55. In which colour of light, photosynthesis is maximum?

- (a) Red (b) Blue
(c) Violet (d) Same in all

56. Dronacharya Award is given for which of the following purpose?

- (a) Shooting
(b) Sports development
(c) Outstanding contribution of coaches
(d) Outstanding performance in sports

57. The rib cage

- (a) protects the stomach
(b) provides attachment for the lungs
(c) protects the heart and lungs
(d) protects the spinal cord

58. A figure with 8 sides is called?

- (a) Octagon (b) Hexagon
(c) Heptagon (d) Decagon

59. How much of the Earth's surface is covered with water?

- (a) About two-third
(b) About one-fourth
(c) About three-fourth
(d) About one-third

60. Ryder cup is associated with which of the following sports?

- (a) Golf (b) Cricket
(c) Table tennis (d) Hockey

61. What is the name the National Intelligence Agency of United Kingdom?

- (a) CIA (b) FSB
(c) Mossad (d) MI-6

62. Prime meridian is the line that represents

- (a) 0° longitude
(b) 90° longitude
(e) 180 longitude
(d) 360 longitude

63. Which of the following temples was built by Eastern Ganga dynasty in 13th century?

- (a) Konark Sun Temple
(b) Vaishno Devi Temple
(c) Lingaraja Temple
(d) Kamakhya Temple

64. RK Narayan is famous for his book

- (a) The Room on the Roof
(b) Two Livers
(c) Malgudi Days
(d) A suitable Boy

65. Who among the following was the first Indian woman President of the Indian National Congress?

- (a) Annie Besant
(b) Mira Behn
(c) Sarojini Naidu
(d) Indira Gandhi

66. Who is the current Governor of Reserve Bank of India?

- (a) Shaktikanta Das
(b) U.K. Sinha
(c) Raghuram Rajan
(d) Nandan Nilekeni

67. Which is the largest flower in the world?

- (a) Rafflesia
- (b) Lotus
- (c) Rose
- (d) Wolffia

68. The functional unit of the kidney is called

- (a) Medulla (b) Cortex
- (c) Nephron (d) Artery

69. is an irreversible change.

- (a) Burning of coal
- (b) Melting of wax
- (c) Melting of ice
- (d) Formation of ice

70. Rukmini Devi Arundale is associated with which classical dance form?

- (a) Bharatanatyam
- (b) Kuchipudi
- (c) Kathak
- (d) Kathakali

71. What is the full form of PSLV?

- (a) Public Satellite Launch Vehicle
- (b) Polar Satellite Launch Vehicle
- (e) Polar Service Launch Vehicle
- (d) Public Service Launch Vehicle

72. Rocks formed by solidification of molten magma are called

- (A) Igneous rocks
- (B) Metamorphic rocks
- (C) Sedimentary rocks
- (D) None of these

73. _____ is/are responsible for water transportation in plants.

- (a) Chloroplast (b) Phloem
- (c) Veins (d) Xylem

74. Which of the following is also known as Asia's Nobel Prize?

- (a) Ramon Magsaysay Award
- (b) Michelin Star
- (c) Pulitzer Prize
- (d) Grammy Award

75. Which amongst the following is the highest producer of tea in the world?

- (a) India (b) Russia
- (c) China (d) Sri Lanka



SUKHOI ACADEMY

(RIMC Scholarship Test – December 2024) Set – C

GENERAL KNOWLEDGE

CANDIDATE NAME :

State : Roll No :

1. A person suffering from goitre has:

- (a) a swollen chest
- (b) swollen legs
- (c) a swollen neck
- (d) a bulging belly

2. The last court of appeal in India is

- (a) High Court
- (b) Criminal Court
- (c) Supreme Court
- (d) Civil Court

3. Which animal is referred to as 'Ship of the Desert'?

- (a) Yak
- (b) Horse
- (c) Deer
- (d) Camel

4. Which organ purifies our blood?

- (a) Liver
- (b) Kidney
- (c) Lungs
- (d) Pancreas

5. Saina Nehwal is associated with which sport?

- (a) Badminton
- (b) Lawn Tennis
- (c) Table Tennis
- (d) Cricket

6. Madhubani, a style of folk paintings, is popular in which of the following states in India?

- (a) Bihar
- (b) Uttar Pradesh
- (c) West Bengal
- (d) Odisha

7. Which gas commonly known as laughing gas?

- (a) Nitrogen Trioxide
- (b) Nitrogen Dioxide
- (c) Nitrous Oxide
- (d) Nitric Oxide

8. Who was the first female Governor of an Indian State?

- (a) Padmaja Naidu
- (b) Vijayalakshmi Pandit
- (c) Sarojini Naidu
- (d) Sharda Mukherjee

9. The movement of the Earth around the Sun is known as:

- (a) Rotation
- (b) Revolution
- (c) Inclination
- (d) None of the above

10. The planet known as the 'Earth's Twin' is:

- (a) Jupiter
- (b) Saturn
- (c) Venus
- (d) Uranus

11. Scurvy is caused due to the deficiency of:

- (a) Vitamin A
- (b) Vitamin B
- (c) Vitamin C
- (d) Vitamin D

12. Which of the following is not an air borne disease?

- (a) Chicken pox
- (b) Common cold
- (c) Malaria
- (d) Measles

13. Which is India's largest freshwater lake?

- (a) Dal Lake
- (b) Wular Lake
- (c) Chilika Lake
- (d) Shakambari Jheel

14. Elon Musk is the owner of which of the following car companies?

- (a) Toyota Motors
- (b) General Motors
- (c) Tesla
- (d) Hyundai Motor company

15. Which Continent is known as Dark Continent?

- (a) Belgium
- (b) Egypt
- (c) Australia
- (d) Africa

16. Kelvin is a unit of:

- (a) Temperature
- (b) Light intensity
- (c) Sound intensity
- (d) Electric current

17. Which Indian State is called the Sugar Bowl of India?

- (a) Punjab
- (b) Andhra Pradesh
- (c) Uttar Pradesh
- (d) Haryana

18. World health day is celebrated on

- (a) April 1 (b) May 1
- (c) April 7 (d) May 7

19. The cycle of seasons is caused due to:

- (a) Rotation
- (b) Revolution
- (c) Gravitation
- (d) None of these

20. Which State of India has the longest coastline?

- (a) Gujarat
- (b) Goa
- (c) Tamil Nadu
- (d) Andhra Pradesh

21. The Kharif crops are sown in which months?

- (a) March-April
- (b) July-October
- (c) October-November
- (d) January-February

22. The process of conversion of water vapour in to water is called:

- (a) condensation
- (b) decantation
- (c) sedimentation
- (d) evaporation

23. Rickets is caused due to the deficiency of:

- (a) Vitamin A
- (b) Vitamin B1
- (c) Vitamin C
- (d) Vitamin D

24. When is Earth Day celebrated?

- (a) 21 April (b) 22 April
- (c) 23 April (d) 24 April

25. Which State in India is called the 'Land of Five Rivers'?

- (a) Uttar Pradesh
- (b) Punjab
- (c) Haryana
- (d) Bihar

26. Tansen was the court musician of which emperor?

- (a) Shah Jahan
- (b) Jahangir
- (c) Akbar
- (d) Bahadur Shah

27. Gautama Buddha was born in?

- (a) Bodha Gaya
- (b) Lumbini
- (c) Patliputra
- (d) Vaishali

28. What does Good Friday symbolise?

- (a) Festival of Jews
- (b) Beginning of Jewish New Year
- (c) End of Spring
- (d) Death of Christ

29. Where are the Ellora Caves located?

- (a) Tamil Nadu
- (b) Haryana
- (c) Gujarat
- (d) Maharashtra

30. The name of which Union Territory means a hundred thousand islands in Sanskrit?

- (a) Lakshadweep
- (b) Delhi
- (c) Chandigarh
- (d) Puducherry

31. gets easily destroyed by heat during cooking.

- (a) Vitamin A
- (b) Vitamin B
- (c) Vitamin C
- (d) Vitamin D

32. Minimum age limit for the President of India is:

- (a) 30 years
- (c) 45 years
- (b) 35 years
- (d) None of the above

33. Which country has won the most Football World Cups?

- (a) Brazil
- (b) Argentina
- (c) Spain
- (d) England

34. How long is a cricket pitch?

- (a) 21 yards
- (b) 22 yards
- (c) 23 yards
- (d) 24 yards

35. Who has written national anthems of both India and Bangladesh?

- (a) Rabindranath Tagore
- (b) Bankimchandra Chattopadhyaya
- (c) Subramanyam Bharti
- (d) Abul Bashar

36. The Olympics Games are held every year.

- (a) second
- (b) third
- (c) fourth
- (d) sixth

37. Which of the following is the outermost layer of the Earth's atmosphere ?

- (a) Troposphere
- (b) Stratosphere
- (c) Mesosphere
- (d) Exosphere

38. What is the name of the first satellite launched by India?

- (a) Insat-1A
- (b) Bhaskara-1
- (c) Aryabhata
- (d) Kalpana-1

39. Which is the smallest bird in the world?

- (a) Ostrich
- (b) Sarus Crane
- (c) Hummingbird
- (d) Common Kingfisher

40. Which is the most literate state in India?

- (a) Andhra Pradesh (b) Tamil Nadu
- (c) Telangana (d) Kerala

41. What is the position of Earth in our Solar system?

- (a) First (b) Second
- (c) Third (d) Fourth

42. Who is empowered to declare National Emergency?

- (a) Prime Minister of India
- (b) President of India
- (c) Governors of State
- (d) Parliament

43. Which fort did Shah Jahan build?

- (a) Red Fort (b) Janjira Fort
- (c) Amber Fort (d) Bangalore Fort

44. Which river is known as the 'Sorrow of Bihar'?

- (a) Hooghly river
- (b) Mahanadi river
- (c) Sabarmati river
- (d) Kosi river

45. What does the Saffron colour in our National Flag symbolise?

- (a) Strength and courage
- (b) Peace and growth
- (c) Fertility, growth and auspiciousness
- (d) Hinduism

46. Cataract is the disease of which organ?

- (a) Kidneys (b) Liver
- (c) Eyes (d) Brain

47. The lightest gas is:

- (a) Hydrogen
- (b) Helium
- (c) Nitrogen
- (d) Oxygen

48. When was the first Battle of Panipat fought?

- (a) 1526
- (b) 1556
- (c) 1661
- (d) 1761

49. The first Muslim ruler to introduce the system of price control was:

- (a) Alauddin Khilji
- (b) Muhammad-bin-Tughlaq
- (c) Jalaluddin Khilji
- (d) Balban

50. Who appointed the Chief Justice and other Judges of the Supreme Court of India?

- (a) President of India
- (b) The Governor of the concerned State
- (c) The Chief Minister of the concerned State
- (d) Prime Minister of India

51. WWW stands for ?

- (a) World Whole Web
- (b) Wide World Web
- (c) Web World Wide
- (d) World Wide Web

52. Ajanta and Ellora caves are located in which state of India?

- (a) Madhya Pradesh (b) Bihar
- (c) Maharashtra (d) Goa

53. The purest form of iron is

- (a) steel (b) pig iron
- (c) cast iron (d) wrought iron

54. Which of the following forests is known as the 'Lungs of the Earth'?

- (a) Congo Rain Forest
- (b) Amazon Forest
- (c) Tropical Deciduous Forest
- (d) Temperate Evergreen Forest

55. The prize considered equivalent to Nobel Prize for Mathematics is

- (a) Fields Medal
- (b) Newton Medal
- (c) Ramanujan Medal
- (d) Pythagoras Medal

56. Which organ in the human body helps to maintain balance?

- (a) Heart (b) Liver
- (c) Ear (d) Tongue

57. Heptagon have how many sides?

- (a) 6 (b) 5 (c) 8 (d) 7

58. Which vessels carry CO₂ rich blood from all parts of the body back to the heart?

- (a) Arteries (b) Veins
- (c) Capillaries (d) Arterioles

59. Baseball is the national game of:

- (a) Canada (b) France
- (c) USA (d) England

60. Uber cup and Thomas cup are associated with:

- (a) Chess (b) Cricket
- (c) Badminton (d) Table Tennis

61. The largest coral reef in the world, the Great Barrier Reef is located in which continent/country?

- (a) Europe (b) Russia
- (c) South Africa (d) Australia

62. The capital of the Andaman and Nicobar islands is

- (a) Kavaratti (b) Port Blair
- (c) Delhi (d) None of these

63. Who said, "Swaraj is my birthright and I shall have it"?

- (a) Bipin Chandra Pal
- (b) Aurobindo Ghosh
- (c) Bal Gangadhar Tilak
- (d) Subhash Chandra Bose

64. Where was the provisional government of Independent India (Azad Hind) formed in 1943 by Subhash Chandra Bose?

- (a) South Africa (b) London
- (c) Berlin (d) Singapore

65. In which state of India is the famous Sanchi Stupa located?

- (a) Andhra Pradesh
- (b) Maharashtra
- (c) Madhya Pradesh
- (d) Jharkhand

66. How many Grand Slam tournaments are played in a year in tennis?

- (a) 3 (b) 5 (c) 4 (d) 6

67. Google was founded in 1998 by Larry Page and

- (a) Peter Thiel
- (b) Sergey Bryn
- (c) Steve Wozniak
- (d) Elon Musk

68. Chemical Formula of water is

- (a) O₂H (b) OH (c) HO (d) H₂O

69. Lavani is a folk dance of which of the following states?

- (a) Odisha
- (b) Maharashtra
- (c) Uttar Pradesh
- (d) Rajasthan

70. Which of the following is a stem?

- (a) Turnip (b) Ginger
- (c) Carrot (d) Potato

71. In humans, kidneys are organs of which of the following systems?

- (a) Nutrition
- (b) Transportation
- (c) Excretion
- (d) Respiration

72. In which year will Gaganyaan be launched by ISRO?

- (a) 2034 (b) 2029
- (c) 2023 (d) 2024

73. Which of the following city is the cleanest city of India ?

- (a) Gwalior (b) Bhopal
- (c) Indore (d) Rewa

74. Which neighbouring country of India lies to the south of Lakshadweep islands?

- (a) Sri Lanka (b) Bangladesh
- (c) Myanmar (d) Indonesia

75. Grammy Award is given in which of the following field?

- (a) Music
- (b) Journalism
- (c) Environment
- (d) Medicine