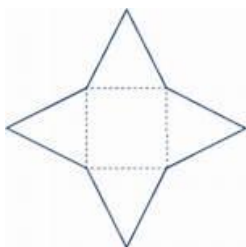# Olympiad 2019

Class 8

Important Information

- All questions carry equal weightage.
- 10 minutes are provided for filling the OMR sheet and reading the instructions.
- Exam duration is 1 hour only.
- Please ensure that this question paper has 50 questions.
- It is divided into the following sections –
  - For class 1st to 5th: Mathematics, Science, English and General Knowledge
  - For class 6th to 10th: Mathematics, English, Science, General Knowledge and Logical Reasoning
- Every question has one correct answer.
- Please read the instructions for answering given on the OMR sheet.
- Candidates must submit a completely filled OMR sheet before leaving the hall.
- There is no negative marking.

Section A – Mathematics

1. What is 150% of 64?

   64 का 150% क्या है?

   a. 96
   b. 42
   c. 9.6
   d. 4.2

2. Which solid would be formed with the given net?

   a. Triangular Pyramid

b. Square Pyramid
c. Hexagonal Pyramid
d. Rectangular Pyramid

दिएगएजालकेसाथकौनसीठोसआकृतिबनेगी?
a. त्रिकोणीयपिरामिड
b. वर्गपिरामिड
c. हेक्सागोनलपिरामिड
d. आयताकारपिरामिड

3. To reduce a rational number in its standard form, we divide its numerator and denominator by their_____
   a. L.C.M.
   b. H.C.F.
   c. Product
   d. Multiple

अपनेमानकरूपमेंएकपरिमेयसंख्याकोकमकरनेकेलिए, हमउनकेअंशऔरहरकोउनके _____ सेविभाजितकरतेहैं।

a. लघुत्तमसमापवर्त्य
b. महत्तमसमापवर्त्य
c. उत्पाद
d. गुणक

4. Vandana's grandmother is 70 years old and Vandana is 22 years old. How many years ago was her grandmother 5 times as old as her?
   a. 10 years
   b. 12 years
   c. 14 years
   d. 16 years

वंदनाकीदादी 70 सालकीहैंऔरवंदना 22 सालकीहैं।कितनेसालपहलेउसकीदादीउसकीउम्रसे 5 गुनाबड़ीथी?

a. 10 साल
b. 12साल

c. 14 साल

d. 16 साल

5. If the distance traveled by car in one hour is 180 km, then the distance traveled by the same car with the same speed in 60 seconds is _____.

यदिएकघंटेमेंकारद्वारायात्राकीगईदूरी 180 किमीहै, तोउसीकारद्वारा 60 सेकंडमेंसमानगतिसेकीगईयात्रा की दूरी _____ है।

a. 1080 m

b. 3000 m

c. 4800 m

d. 5400 m

6. An electrician purchased 100 bulbs for₹ 15 each. However, 5 bulbs had to be returned as they were defected. The remaining bulbs were sold at₹ 18 each. Find the gain or loss percent.

a. 10% gain

b. 14% gain

c. 12% loss

d. 8% loss

एकइलेक्ट्रीशियनने 100 बल्बखरीदे, जहांप्रत्येकबल्बकीकीमत₹ 15 रुपयेहै।हालाँकि, 5 बल्ब लौटाने पड़े क्योंकिवेख़राबहोगएथे।शेषबचेप्रत्येकबल्बकेलिएइलेक्ट्रीशियनने₹ 18 रुपयेकाशुल्कलिया।लाभयाहानिप्रतिशतज्ञातकरें।

a. 10% लाभ

b. 14% लाभ

c. 12% नुकसान

d. 8% नुकसान

7. The length and the breadth of a rectangular field are 24 m and 18 m, respectively. What is the length of the largest straight line that can be drawn on the floor of the field?

a. 24 m

b. 28 m

c. 30 m
d. 34 m

एकआयताकारमैदानकीलंबाईऔरचौड़ाईक्रमशः 24 m और 18 m है।सबसेबड़ीसीधीरेखाकीलंबाईक्याहैजोमैदानकेफर्शपरखींचीजासकतीहै?

    a. 24 मी
    b. 28 मी
    c. 30 मी
    d. 34 मी

8. At the airport, there is a moving walkaway 500 meters long, which moves at a speed of 4 km/hour. Aditya and Ravi step on the walkaway at the same time. Aditya walks at a speed of 6 km/hour on the walkaway, while Ravi stands still. When Aditya comes to the end of the walkaway, how far is he ahead of Ravi.
    a. 300 m
    b. 260 m
    c. 280 m
    d. 200 m

हवाईअड्डेपर, 500 मीटरलंबाएकचलताहुआवॉकवेहै, जो 4 किमी / घंटेकीगतिसेचलताहै।आदित्यऔररविएकहीसमयमेंवॉकवेपरकदमरखतेहैं।आदित्यवाल्कवेपर 6 किमी / घंटेकीगतिसेचलताहै, जबकिरविअभीभीखड़ाहै।जबआदित्यवाल्कवेकेअंतमेंआताहै, तोवहरविसेकितनाआगेहै?

    a. 300 मी
    b. 260 मी
    c. 280 मी
    d. 200 मी

9. Priyanka borrows ₹12500 at 12% per annum for 3 years at simple interest and Raima borrows the same amount for the same time period at 10% per annum, compounded annually. Who pays more interest and by how much?

प्रियंकासाधारणब्याजपर 3 सालकेलिए 12% प्रतिवर्षकिहिसाबसे₹12500 रुपयेउधारलेतीहैऔरराइमाचक्रवृद्धिब्याज पर 10% प्रतिवर्षकिहिसाबसेसमानअवधिकेलिएसमानराशिउधारलेतीहै।कौनअधिकब्याजदेताहैऔरकितना?

a. Priyanka ,₹275
b. Raima ,₹215
c. Raima ,₹374
d. Priyanka ,₹362.5

10. Rhea had to add 36 to a certain number. Instead, she subtracted 36 and obtained -26. What number should she have obtained?

रियाकोएकनिश्चितसंख्यामें 36 जोड़नाथा।इसकेबजाय, उसने 36 घटायाऔरप्राप्तकिया -26। उसेक्यानंबरमिलनाचाहिएथा?

a. 36
b. 24
c. 40
d. 46

Section B – Science

11. The voice of which of the following is likely to have the lowest frequency among the following?
    a. Baby girl
    b. Baby boy
    c. A man
    d. A woman

निम्नलिखित में से किसकी आवाज़ की आवृत्ति सबसे कम होने की संभावना है?

a. शिशु कन्या
b. शिशु बालक
c. एकआदमी
d. एकऔरत

12. A glass rod is rubbed with a piece of silk cloth, the rod _____.
    a. And the cloth both acquires positive charge.

b. Becomes positively charged, while the cloth has a negative charge.

c. And the cloth both acquires a negative charge.

d. Becomes negatively charged, while the cloth has a positive charge.

एककांचकीछड़कोरेशमीकपड़ेकेटुकड़ेसेरगड़ाजाताहै, छड़ _____

a. औरकपड़ादोनोंसकारात्मकचार्जअधिग्रहणकरतेहैं

b. सकारात्मकचार्जहोजाताहै, जबकिकपड़ेएकनकारात्मकचार्जहै

c. औरकपड़ादोनोंएकनकारात्मकचार्जप्राप्तकरतेहैं

d. नकारात्मकचार्जहोजाताहै, जबकिकपड़ेमेंसकारात्मकचार्जहोताहै

13. Some basic steps are needed in agricultural practice, which are listed here from 1 to 7.
Which of the following options shows the right sequence?

(1) Preparation of the soil   (2) Harvesting   (3) Irrigation

(4) Broadcasting   (5) Tilling   (6) Weeding

(7) Manuring

कृषिमेंकुछबुनियादीकदमोंकीजरूरतहैअभ्यास, जोयहां 1 से 7 तकसूचीबद्धहैं।
निम्नलिखितमेंसेकौनसाविकल्पसहीअनुक्रमदिखाताहै?

(१) मिट्टीतैयारकरना   (२) कटाई   (३) सिंचाई

(४) बिखेरना   (५) टीलिंग   (६) निराई

(७) खाद डालना

a. 1, 5, 7, 4, 3, 6, 2

b. 1, 3, 5, 6, 4, 2, 7

c. 1, 3, 5, 2, 4, 6, 7

d. 1, 5, 6, 2, 4, 7, 3

14. As soon as the table is tilted, a ball kept on it starts rolling.
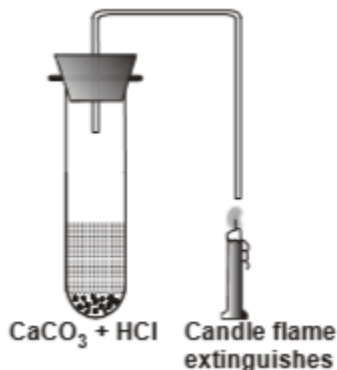Which is the force that causes this motion?

a. Friction

b. Push by table

c. Rolling force

d. Gravitational pull by the earth

जैसेहीतालिकाकोझुकायाजाताहै,
उसपररखीगईएकगेंदलुढ़कनेलगतीहै।वहकौनसाबलहैजोइसगतिकाकारणबनताहै?

a. टकराव
b. तालिकासेपुश
c. रोलिंगबल
d. पृथ्वीद्वारागुरुत्वाकर्षणखिंचाव

15. What happens in the test tube that causes the candle flame to extinguish?

CaCO$_3$ + HCl   Candle flame extinguishes

a. Evolution of O$_2$ gas
b. Evolution of CO$_2$ gas
c. Formation of Ca(OH)$_2$
d. Formation of CaCl$_2$

टेस्टट्यूबमेंक्याहोताहैजोमोमबत्तीकीलौकोबुझानेकाकारणबनताहै?

a. O$_2$गैसकाविकास
b. CO$_2$गैसकाविकास
c. Ca(OH)$_2$ कागठन
d. CaCl$_2$ कागठन

16. Why reproduction is considered the most important characteristic of a living organism?
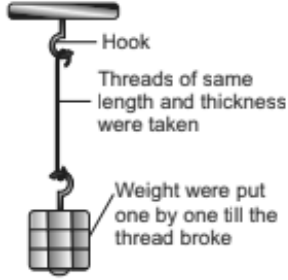a. It allows an organism to be immortal.
b. It reduces competition among organisms for various resources.
c. It is essential for the continuation of the species.
d. It is essential for the growth and development of an organism.

प्रजननकोजीवितजीवकीसबसेमहत्वपूर्णविशेषताक्योंमानाजाताहै?

a. यहएकजीवकोअमरहोनेकीअनुमतिदेताहै।
b. यहविभिन्नसंसाधनोंकेलिएजीवोंकेबीचप्रतिस्पर्धाकमकरदेताहै।
c. यहप्रजातियोंकीनिरंतरताकेलिएआवश्यकहै।

d. यहकिसीजीवकीवृद्धिऔरविकासकेलिएआवश्यकहै।

17. Anirudh has set up an experiment to compare the strength of different fibres. He arranged the set-up as shown in the figure :

Arrange these threads in order of their increasing strength.
   a. Nylon < Silk < Cotton
   b. Silk < Cotton < Nylon
   c. Cotton < Nylon < Silk
   d. Cotton < Silk < Nylon

अनिरुद्धनेविभिन्नतंतुओंकीताकतकीतुलनाकरनेकेलिएएकप्रयोगकियाहै।उन्होंनेचित्रमेंदिखाएअनुसारसेट-अपकीव्यवस्थाकी:

इनधागोंकोउनकीबढ़तीताकतकेक्रममेंव्यवस्थितकरें।

   a. नायलॉन<रेशम<कपास
   b. रेशम<कपास<नायलॉन
   c. कपास<नायलॉन<रेशम
   d. कपास<रेशम<नायलॉन

18. When a body is immersed in a fluid, it experiences an upward thrust which depends on
   a. The weight of the fluid displaced by it
   b. The volume of the body
   c. The mass of the body
   d. All of these

जबएकशरीरकोएकतरलपदार्थमेंडुबोयाजाताहै, तोयहऊपरकीओर,एक जोरकाअनुभवकरताहै जो
_____ पर निर्भरकरताहै

   a. इसकेद्वाराविस्थापितद्रवकाभार

b. शरीरकाआयतन
c. शरीरकाद्रव्यमान
d. येसभी

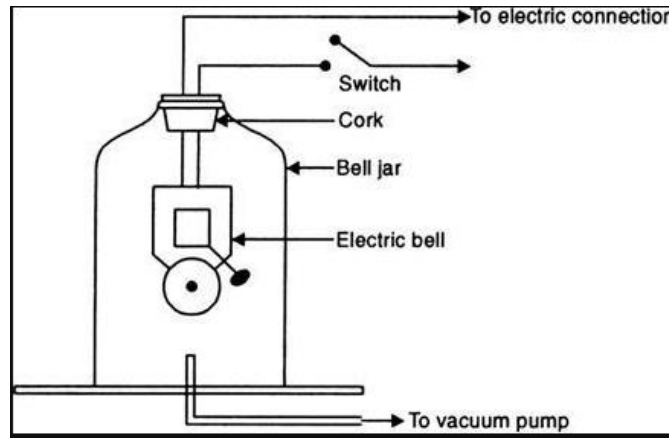19. How does the conversion of energy take place when we use biogas to produce electricity?
    a. Chemical to electrical energy
    b. Kinetic to electrical energy
    c. Nuclear to electrical energy
    d. Muscular to electrical energy

जबहमबायोगैसकाउपयोगबिजलीउत्पादनकेलिएकरतेहैंतोऊर्जाकारूपांतरणकैसेहोताहै?

    a. रासायनिक से विद्युत ऊर्जा
    b. गतिज ऊर्जा से विद्युत ऊर्जा
    c. परमाणु ऊर्जा से विद्युत ऊर्जा
    d. मांसपेशियों की ऊर्जा से विद्युत ऊर्जा

20. In the bell jar experiment, the loudness of the sound of the bell gradually increases with
    _____.

    a. Increase in the atmospheric pressure

b. Decrease in quantity of air
c. Increase in quantity of air
d. Decrease in the atmospheric pressure

बेलजारप्रयोगमें, घंटीकीआवाज़धीरे-धीरे _____ केसाथबढ़जातीहै।

a. वायुमंडलीयदबावमेंवृद्धि
b. हवाकीमात्रामेंकमी
c. हवाकीमात्रामेंवृद्धि
d. वायुमंडलीयदबावमेंकमी

Section C – English

21. "He will have all the facilities". This sentence is in which tense?
    a. Simple future tense
    b. Future continuous tense
    c. Future perfect tense
    d. None of these
22. Choose the odd pair.
    a. Annoy: Irritate
    b. Comprehend: Understand
    c. Spectator: Onlooker
    d. Reserve: Supply

23. The broadcast of the Chief Minister's speech remained _____ interrupted.
    a. Mis
    b. Dis
    c. Un
    d. Non

24. Soumya and Rupesh _____ for five years.
    a. Has been married
    b. Have been married
    c. Are married
    d. Is married

25. Change the active voice into passive voice.
"The teacher will not explain these questions.
    a. These questions will not be explained.
    b. These questions will not be explained by the teacher.
    c. These questions will be explained by the teacher.
    d. None of these

26. Find the type of pronoun in the sentence.
"I **myself** locked the door."
    a. emphatic
    b. reflective
    c. relative
    d. none of these

27. Select the synonym (similar) of the given word : CROOKED
    a. gentle
    b. peaceful
    c. twisted
    d. colorful

28. Change the sentence from direct to indirect speech.
"He will file a report".
    a. A report would be filed by him.
    b. A report will be filed by him.
    c. A report is filed by him.
    d. A report was filled by him.

29. Sonia: Did the magician take a _____ out of a _____.
    Ajay: No, no. He took out a _____ out of a _____.
    a. habit, rat, rabbit, hat
    b. hare, hat, rabbit, rat
    c. habit, rat, rabit, hat
    d. habbit, rat, rabbit, hat

30. The flight _____, when he reached the airport.
   a. has departed
   b. will be departing
   c. is departing
   d. had already departed

Section D – General Knowledge

31. NDA won General Election 2019 in India with 354 seats. What is the full form of NDA?
   a. National Defiance Alliance
   b. National Democratic Agency
   c. National Defiance Agency
   d. National Democratic Alliance

   NDA ने 354 सीटोंकेसाथभारतमेंआमचुनाव 2019 जीता। NDA कापूर्णरूपक्याहै?

   a. राष्ट्रीयअवतरणगठबंधन
   b. राष्ट्रीयलोकतांत्रिकएजेंसी
   c. राष्ट्रीयअवहेलनाएजेंसी
   d. राष्ट्रीयजनतांत्रिकगठबंधन

32. How many fundamental duties are there in the Indian Constitution?

   भारतीयसंविधानमेंकितनेमौलिककर्तव्यहैं?

   a. 7
   b. 11
   c. 15
   d. 21

33. Who wrote "*Sare Jahan Se Accha*" song?
   a. Rabindranath Tagore
   b. Muhammed Iqbal

c. Lala Lajpat Rai

d. Chandrashekhar Azad

"सारे जहां से अच्छा" गीत किसने लिखा है?

a. रविंद्रनाथ टैगोर

b. मुहम्मद इकबाल

c. लाला लाजपत राय

d. चंद्रशेखर आजाद

34. Which is the most popular search engine of the world?
   a. Yahoo
   b. Safari
   c. Navigator
   d. Google

विश्व का सबसे लोकप्रिय खोज इंजन कौन सा है?

a. याहू

b. सफारी

c. नाविक

d. गूगल

35. According to a survey in 2019, which is the happiest country in the world?
   a. Finland
   b. Ireland
   c. Poland
   d. Switzerland

2019 में एक सर्वेक्षण के अनुसार, दुनिया का सबसे खुशहाल देश कौन सा है?

a. फिनलैंड

b. आयरलैंड

c. पोलैंड

d. स्विट्जरलैंड

36. Who has the authority to remove the governor in India?
    a. The Judiciary
    b. The Chief Justice of India
    c. The President
    d. The Prime Minister

भारत में राज्यपाल को हटाने का अधिकार किसके पास है?

    a. न्यायपालिका
    b. भारतकेमुख्यन्यायाधीश
    c. राष्ट्रपति
    d. प्रधानमंत्री

37. Noble Prize is awarded in how many areas?

नोबेलपुरस्कारकितनेक्षेत्रोंमेंप्रदानकियाजाताहै?

    a. 6
    b. 5
    c. 9
    d. 11

38. What is the unit of Pressure?
    a. Pascal
    b. Watt
    c. Joules
    d. Newton

दबावकीइकाईक्याहै?

    a. पास्कल
    b. वाट
    c. जूल
    d. न्यूटन

39. Who is the founder of Wipro Limited?
    a. Mukesh Ambani
    b. Kamal Nath
    c. Bharti Mittal
    d. M.H. Hasham Premji

विप्रोलिमिटेडकेसंस्थापककौनहैं?

    a. मुकेशअंबानी
    b. कमलनाथ
    c. भारतीमित्तल
    d. एम एच हशम प्रेमजी
    e.

40. What is the name of Jawahar Lal Nehru's autobiography?
    a. Toward Freedom
    b. Wings on Fire
    c. Children of Men
    d. The White Tiger

जवाहरलालनेहरूकीआत्मकथाकानामक्याहै?

    a. भारतकीखोज
    b. आगपरपंख
    c. चिल्ड्रनऑफ़मेन
    d. दव्हाइटटाइगर

Section E – Logical Reasoning

41. Find the missing term in the sequence: 4, 8, 32, 192, _____.

अनुक्रममेंलापतासंख्याज्ञातकरें: 4, 8, 32, 192, _____
    a. 384
    b. 768
    c. 1536
    d. 1920

42. Find the missing character to complete the pattern.

पैटर्नकोपूराकरनेकेलिएलापतासंख्याकापतालगाएं।

40	18	72
20	3	?
2	6	4

    a. 18
    b. 36
    c. 24
    d. 16

43. Choose the odd one out.

विषमचुनें।

    a. 4211
    b. 3302
    c. 6110
    d. 5430

44. If the day, before yesterday was Thursday, when will Sunday be?
    a. Tomorrow
    b. Today
    c. Day after tomorrow
    d. None of these

यदिकलसेपहलेकादिनगुरुवारथा, तोरविवारकबहोगा?
    a. आनेवालाकल
    b. आज
    c. परसों
    d. इनमेसेकोईनहीं

45. Select the option which represents three out of five alternative figures which when fitted into each other would form a complete square.

उसविकल्पकाचयनकरें, जोपांचवैकल्पिकआंकड़ोंमेंसेतीनकाप्रतिनिधित्वकरताहै, जोएकदूसरेमेंफिटहोनेपरएकपूर्णवर्गबनातेहैं।

(1)   (2)   (3)   (4)   (5)

   a. 2, 4, 5
   b. 1, 4, 5
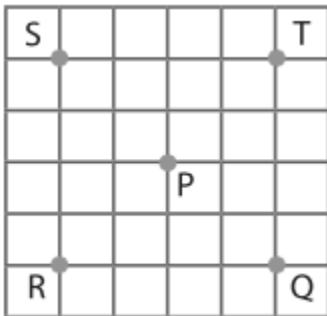   c. 1, 2, 3
   d. 2, 3, 4

46. Find the missing term.

लापतासंख्याकापतालगाएं।

1, 4, 9, 16, _____, 36.
   a. 21
   b. 25
   c. 27
   d. 30

47. Which point is south west of P?

P केदक्षिणपश्चिममेंकौनसाबिंदुहै?

a. P
b. Q
c. R
d. S

48. A is B's sister.

C is B's mother.

D is C's father.

E is D's mother.

Then, how is A related to D?
   a. Grandfather
   b. Grandmother
   c. Daughter
   d. Granddaughter

A, B कीबहनहै।

C, B कीमाँहै।

D, C कापिताहै।

E, D कीमाँहै।

फिर, A, D सेकैसेसंबंधितहै?

   a. दादा
   b. दादीमा
   c. बेटी
   d. पोती

49. A man is facing north-west. He turns 90° in the clockwise direction, then 180° in the anticlockwise direction and then another 90° in the same direction. Which direction is he facing now?
   a. South West
   b. South East
   c. South
   d. East

एकआदमीउत्तर-पश्चिमकीओरमुंहकरकेखड़ाहै।वहघड़ीकीदिशामें, 90°घूमताहै।वहफिरसेघड़ीकीविपरीतदिशामें180°घूमताहैऔरफिरउसीदिशामेंएकऔर90°कादूसरा मोड़लेताहै।वहअबकिसदिशाकीओरमुंहकरकेखड़ाहै?

   a. दक्षिणपश्चिम
   b. दक्षिणपूर्व
   c. दक्षिण
   d. पूर्व

50. Today is Arpit's birthday. One year from today, he will be twice as old as he was 12 years ago. How old is he today?

आजअर्पितकाजन्मदिनहै।आजसेएकसालबाद, वह 12 सालपहलेकीतुलनामेंदोगुनाहोगा।आजवहकितनेसालकाहै?

   a. 20
   b. 22
   c. 25
   d. 27