**AMRIT INDO CANADIAN ACADEMY**

**SUMMER HOLIDAYS ASSIGNMENT**

**Max. Marks: 100**

**CLASS-XII ( ENGLISH )**

**Section-A ( READING )**

**1. Read the passage given below and answer the questions that follow:**  **20**

 1. All of Earth’s oceans share one thing in common: plastic pollution. Discarded plastic bags, cups, and bottles make their way into the sea. Today, it seems that no part of the ocean is safe from plastic trash. In recent years, oceanographers have searched in vain for a pristine marine environment. They have found plastic everywhere they have looked. “It is a common global problem, we can’t point to a single habitat or location with no plastic.”

 2. Plastic harms wildlife and introduces dangerous chemicals into marine ecosystems — communities of organisms interacting with their surroundings. Once plastic enters the environment, it lasts a long time. Scientists are working to prevent plastic pollution from entering the sea.

 3. When people litter, or when trash is not properly disposed of, things like plastic bags, bottles, straws, foam beverage cups get carried to the sea by winds and waterways. About 80 percent of ocean plastic originates on land. The rest comes from marine industries such as shipping and fishing.

 4. In 2015, engineer Jenna Jambeck at the University of Georgia and other researchers calculated that at least 8 million tons of plastic trash is swept into the ocean from coasts every year. That’s the equivalent of a full garbage truck of plastic being dumped into the sea every minute. If current trends in plastic production and disposal continue, that figure will double by 2025. A report published by the World Economic Forum last year predicts that by 2050, ocean plastic will outweigh all the fish in the sea.

 5. In today’s world, plastic is everywhere. It’s found in shoes, clothing, household items, electronics, and more. There are different types of plastics, but one thing they all have in common is that they’re made of polymers – large molecules made up of repeating units. Their chemical structure gives them a lot of advantages: they’re cheap and easy to manufacture, lightweight, water-resistant, durable, and can be moulded into nearly any shape.

6. Unfortunately, some of the properties that make plastics great for consumer goods also make them a problem pollutant. Plastic’s durability comes in part from the fact that unlike paper or wood, it doesn’t biodegrade, or break down naturally. Instead it just fragments, or breaks into tiny pieces over time. These tiny pieces, known as microplastic, can potentially stick around for hundreds or perhaps even thousands of years.

 7. Another problem with plastics is the other chemicals they contain, like dyes and flame retardants. When plastic isn’t disposed of properly, these additives end up in the environment. Plastic also tends to absorb harmful chemicals from its surroundings. “It’s like a sponge for persistent organic pollutants.” These long-lasting, toxic substances include pesticides and industrial chemicals. If plastic absorbs the chemicals, and marine organisms eat the plastic, they may be exposed to higher concentrations of these contaminants.

 8. One of the biggest impacts of plastic pollution is its effect on sea life. Seals, sea turtles, and even whales can become entangled in plastic netting. They can starve to death if the plastic restricts their ability to move or eat. Or the plastic can cut into the animals’ skin, causing wounds that develop severe infections.

 9. Sea turtles eat plastic bags and soda-can rings, which resemble jellyfish, their favourite food. Seabirds eat bottle caps or chunks of foam cups. Plastic pieces may make an animal feel full, so it doesn’t eat enough real food to get the nutrients it needs. Plastic can also block an animal’s digestive system, making it unable to eat.

 10. Plastic and its associated pollutants can even make it into our own food supply. Scientists recently examined fish and shell-fish bought at markets in California and Indonesia. They found plastic in the guts of more than a quarter of samples purchased at both locations. In organisms that people eat whole, such as sardines and oysters, that means we’re eating plastic too. In larger fish, chemicals from plastic may seep into their muscles and other tissues that people consume.

11. One way to keep the ocean cleaner and healthier is through cleanup efforts. A lot of plastic waste caught in ocean currents eventually washes up on beaches. Removing it can prevent it from blowing out to sea again. Beach clean-up is ocean clean-up.

 12. Cleanup efforts can’t reach every corner of the ocean or track down every bit of microplastic. That means it’s critical to cut down on the amount of plastic that reaches the sea in the first place. Scientists are working toward new materials that are safer for the environment. For example, Jambeck and her colleagues are currently testing a new polymer that breaks down more easily in seawater.

 13. “Individual actions make a big difference,” says Jambeck. Disposing of plastic properly for recycling or trash collection is a key step. “And simple things like reusable water bottles, mugs, and bags really cut down on waste,” she says. Skipping straws or using paper ones helps too. Ocean pollution can seem overwhelming, but it’s something everyone can help address. This is a problem we can really do something about.

 1.1 On the basis of your understanding of the above passage, answer each of the questions given below by choosing the most appropriate option: 1 x 5 = 5

 (i) Percentage of ocean plastic that originates from land is :

 (a) 20% (b) 50%

 (c) 80%. (d) 25%

 (ii) In which year did Jenna Jambeck and other researchers calculate that at least 8 million tons of plastic trash is swept into ocean every year ?

 (a) 2018 (b) 2015

 (c) 2005 (d) 2010

 (iii) Plastic is not biodegradable because it is made up of :

 (a) low atomic particles (b) tiny particles

 (c) strong big particles (d) large molecule polymers

(iv) Sea turtles eat :

 (a) plastic bottles (b) plastic bags and soda-can rings

 (c) bottle caps (d) chunks of foam cups

 (v) Scientists bought fish and shell-fish for examination at markets in :

 (a) China and Russia (b) Pakistan and Afghanistan

 (c) California and Indonesia (d) Australia and Brazil

 1.2 Answer the following questions briefly : 1 x 6 = 6

 (i) Which articles made of plastic generally cause pollution in the sea ?

 (ii) How does plastic in oceans harm marine ecosystems ?

 (iii) How is microplastic formed ?

 (iv) Why is plastic compared to a sponge ?

 (v) What is the biggest impact of plastic pollution on sea life ?

 (vi) How are scientists trying to reduce the plastic pollutants ?

 1.3 Answer any three of the following questions in 25-30 words each : 2 x 3 = 6

 (i) How does plastic waste enter the oceans ?

 (ii) How is it true to say that plastic is everywhere in today’s world ?

 (iii) Which property of plastic makes it a problem pollutant ?

 (iv) What has scientist Jambeck suggested for having cleaner and healthier

oceans ?

 1.4 Pick out the words/phrases from the passage which are similar in meaning to the

following : 1 x 3 = 3

 (i) unspoiled (para 1)

 (ii) long lasting (para 5)

 (iii) people working together (para 12) **2. Read the passage given below an answer the questions that follow:**  **8**

 1. Getting enough sleep is as important as taking time out to relax. A good night’s sleep is essential for preserving the health of your brain and gives you the best chance to meet the coming day with a razor-sharp mind. An average person needs about six to eight hour sleep a night – although it is also true that you need slightly less than this, as you grow older-another advantage of aging stress and sleep deprivation often feed on each other, since stress tends to make it harder for you to fall asleep at night and sleep deprivation in itself causes stress.

 2. Eventually, too little sleep can dramatically interfere with the performance of your memory – something you obviously want to prevent. If you are not getting enough sleep, try going to bed 30 to 60 minutes earlier than your normal bed time for a few days. Lie down on the bed and try to relax by dissociating yourself from your daily routine work. This is normally enough to catch up on any sleep deprivation.

 3. If, however, you suffer from insomnia you should seek the advice of your doctor. The chances are it is already affecting your ability to remember and recall information – and if you are struggling to improve your memory scores, this could be at the root of your problem. Prolonged periods of insufficient sleep can deplete your immune system, make you more accident prone and even cause depression – this can also reinforce a more negative outlook on life, which can contribute to your stress burden. The good news is that your memory and mood should automatically improve once you improve your sleep patterns. Tackle your sleep issues and everything else should fall into place.

 4. Because stress management is so essential to maximize your brain power, if you are not in the habit of setting aside time to relax, make it a priority to do so. Even a minute or two of deep breathing can start to work wonders. Often the best ideas and memories can come to you when you are in a state of relaxation as it is during these moments that your brain stores, processes and plays with the information it has received. 5. Meditation has long been part of religious and spiritual life, especially in Asia. Today, more and more people are adopting it in Western countries also, for its value in developing peace of mind and lowering stress. There is some evidence that regular meditation can have real sleep gain and health benefits particularly in terms of protecting your brain against aging.

 **2.1**. On the basis of your understanding of the above passage, make notes on it using headings and subheadings. Use recognizable abbreviations (wherever necessary – minimum four) and a format you consider suitable. Also supply an appropriate title to it. 5

**2.2** Write a summary of the above passage in about 100 words.

**Section-B (WRITING)**

**3.** You are Principal of National Public School, Jaipur. You require a TGT (Mathematics) for your school. Draft a suitable advertisement in not more than 50 words for the ‘Situations Vacant’ column of ‘The National Times’ stating essential and desirable qualifications, experience etc of the candidates. **4**

**OR**

 Draft a poster on the topic ' Save Tigers'

**4.** You have realized the necessity of education and financial independence of women for their family, society and in turn for the nation. Write a letter to the Editor, ‘The National Times’ highlighting your ideas on the importance of education of women leading to a better status for them. You are Tarun/Taruna, B-7/9, Mall Road, Delhi. (100 – 125 words) **6**

**OR**

You visited an elementary school in a slum recently. Write a letter to the editor of a newspaper sharing views about the poor infrastructure of the school and the pathetic physical condition of the children and what can be done for the upliftment of such children.

**5.**  Write a debate in 150 – 200 words either for or against the motion: ‘Lockdown was a necessary step taken by the Government of India'.. **10**

**OR**

 Regular practice of yoga is useful in maintaining good health. It is also important for good concentration and peace of mind. You are Shivam/Shabnam. Write a speech in 150 – 200 words to be delivered in the morning assembly of your school, highlighting the impact of yoga in our life.

**6.**  Hard work and punctuality are essential for a happy and successful life. They help in meeting the desired targets of our life. You are Kavya/Kanha. Write an article in 150 – 200 words highlighting the importance of hard work and punctuality in a student’s life. **10**

**OR**

 In your locality a blood donation camp was organized by an NGO – ‘For Your Health’. Many people visited the camp and donated blood. Write a report in 150 – 200words for a local newspaper covering the arrangements, doctors’ team, refreshment served etc.

**7.** Write paragraph on the topic **' A Great Day with a Friend'.** And underline the adjectives and encircle the adverbs used in the paragraph. **10**

**Section-C ( LITERATURE )**

**8. Read the extract given below and answer the questions that follow : 4 × 2 = 8**

**(A)** ‘‘What do you say now?’’ he demanded. ‘‘Your majesty may kill ninety-nine tigers in exactly the same manner. But...’’ the astrologer drawled. ‘‘But what? Speak without fear.’’ ‘‘What if the hundredth tiger were also killed?’’ ‘‘Then I will tear up all my books on astrology, set fire to them, and…’’. ‘‘And…I shall cut off my tuft, crop my hair short and become an insurance agent,’’ the astrologer finished on an incoherent note. “But you must be very careful with the hundredth tiger.’’

Name the chapter and its author.

Who is the speaker in the above extract?

What is the prediction being made?

How does the astrologer challenge the king about his prediction?

**(B)** …… The stunted, unlucky heir

 Of twisted bones, reciting a father’s gnarled disease,

 His lesson, from his desk. At back of the dim class

 One unnoted, sweet and young. His eyes live in a dream,

 Of squirrel’s game, in tree room, other than this.

 (i) Who is the unlucky heir?

 (ii) What has he inherited?

 (iii) Who is sitting at the back of the dim class?

 (iv) How is he different from rest of the class?

**9. Answer the following questions by choosing the correct option and also write the reason behind choosing that particular option.**  **3 × 1= 3**

 (i) M. Hamel blamed for the neglect of learning French.

 a) Students. b) Parents

 c) Himself. c) All of them

 (ii) Charley experienced the existence of the third level because

He went mad. b) It was a waking dream wish fulfilment

c) He really found the way to the third level. d) None of these.

(iii) The tiger king married a princess because

He loved her. b) He was eyeing her father’s property.

C) He wanted to hunt tigers in her father’s kingdom. d) She proposed her for marriage.

**10. Answer the following questions in 40-50 words.**   **3 × 3 = 9**

 (i) Why is the author embarrassed when Saheb enquires about her school?

 (ii) What made the chief astrologer place his finger on his nose?

 (iii) Do you see an intersection of time and space in the story ' The Third Level'?

 **11. Answer any one of the following in 120-150 words :**   **6**

(i) What message does the story ' Deep Water ' convey?

(ii) What do you know about the married life of the Tiger King?

**12. Answer any one of the following in 120 – 150 words :**   **6**

(i) 'Lost Spring' and 'An Elementary School Classroom in a Slum' have common themes. Discuss.

(II) “Charley was a modern man who was haunted by insecurity, war and worry and who could not get over fear even at the third level”. Comment.

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 **Mathematics (041) Class XII** M.M:100

**\*All questions are compulsory:**

**\*All questions in section A are to be answered in one word, one sentence or as per the exact requirement of the question.**

**\*Multiple choice questions must be answered properly with proper reason of why that option is correct.**

**\*Use of calculator is not permitted.**

**MULTIPLE CHOICE QUESTIONS**

**1. The total revenue from the sale of x units of a product is given by R(x) = 13 x2 + 26x + 15.**

**The marginal revenue when x = 7 is**

 **(a) 840 (b) 802 (c) 208 (d) none of these. (1)**

**2. If a > 0 , then the function f(x) = ax + b is**

 **(a) strict increasing (b) strict decreasing (c) neither increasing nor decreasing**

 **(d) both increasing and decreasing (1)**

**3. The values of ‘a’ , for which f(x) = a( x + sin x) ) + a is an increasing function lie in**

 **(a) ( -) (b) ( 0 , ) (c) ( -1 , 1) (d) [ -1 , 1] (1)**

**4. Sum of (2,3)th entry and (3,2)th entry in the matrix is**

 **(a) -2 (b) 3 (c) 1 (d) none of these (1)**

**5. If y = sin-1 (cos (sin-1x)) + cos-1 (sin (cos-1x)), then =**

 **(a) 0 (b) 1 (c) -1 (d) none of these. (1)**

**6. The value of sin-1( sin ()) is**

 **(a) (b) (c) (d) - (1)**

**7. If = , then the value of x and y are (1)**

**(a) x = 3 and y = 1 (b) x = 2 and y = 3 (c) x = 2 and y = 4 (d) x = 3 and y = 3**

**8. Find the point on the curve y = x2 – 2x + 3, where the tangent is parallel to x – axis . (1)**

**9. Find the value of c in Rolle’s theorem for the function (2)**

**(𝒙) = 𝒙3 − 𝟑𝒙 𝒊𝒏 [−√𝟑, 𝟎].**

**10. Find A and B if 2A + 3B = and A – 2B = (2)**

**11. Show that function (𝒙) = |𝒙 − 𝟑|, 𝒙 𝝐 ℝ, (2)**

**Is continuous but not differentiable at 𝒙 = 𝟑.**

**12. Find 2 x 2 matrix B , such that (2)**

**13. Find the value(s) of x for which [x(x – 2 )]2 is an increasing function. (2)**

**14. A is a square matrix of order 3 and IAI = 7. Write the value of I adj AI. (2)**

**15. 𝐈𝐟 𝐲 = 𝐬in(𝐬𝐢𝐧 𝐱) , 𝐩𝐫𝐨𝐯𝐞 𝐭𝐡𝐚𝐭 y’’ + 𝐭𝐚𝐧 𝐱( y’) + 𝐲 𝐜𝐨𝐬2 𝐱 = 𝟎 (2)**

**16. Prove that the function f(x) = [ is an increasing function of x in (0 , ).o (2) (**

**17. Prove that tan-1 = cos -1 ( ) , x (2)**

**18. Find the intervals of increase and decrease of the function f(x) = (4)**

**19. Differentiate the following function with respect to 𝒙 ∶**

**(𝐥𝐨𝐠 𝒙)x + 𝒙logx  (4)**

**20. Determine the value of the constant ‘k’ so that the function**

**Is continuous at x = 0 (4)**

**21. By using elementary transformations, find A-1 , where A = (6)**

**22.Verify Rolle’s theorem for the following functions on indicated intervals , f(x) = log(x2 + 2) – log 3 on [ -1 , 1] (4)**

**23. 𝐈𝐟 𝒙 = 𝒂 𝒔𝒊𝒏 𝒕 𝒂𝒏𝒅 𝒚 = 𝒂 (𝒄𝒐𝒔 𝒕 + 𝐥𝐨𝐠 ), 𝐟𝐢 its second order derivative. (4)**

**24. Find the equations of the tangents to the curve 3x2 – y2 = 8 which passes through the point ( , 0) (4)**

**25. Solve for x , the equation determinant of = 0 (4)**

**26. Prove the following:**

**𝒄𝒐𝒕-1 {(√𝟏 + 𝒔𝒊𝒏𝒙 + √𝟏 − 𝒔𝒊𝒏 𝒙)/(√𝟏 + 𝒔𝒊𝒏𝒙 − √𝟏 − 𝒔𝒊𝒏 𝒙)} = 𝒙/𝟐 , 𝒙 𝝐 (𝟎, 𝝅/𝟒) (4)**

**27. Differentiate the following function w.r.t. 𝒙:**

 **𝒙sinx + (𝒔𝒊𝒏 𝒙)cosx (4)**

**28 Find the equation of the tangents to the curve y = x2 – 8x + 5 which will pass through the point ( 2, -8). (4)**

**29. If y = xn – 1 log x , prove that y(d2y/dx2) + ( 2 – n )( n – 1 )xn – 2  (4)**

**30. Find the equations of the normals to the curve 3 x2 – y2 = 8 which are parallel to the line x + 3y = 4. (4)**

 **31. Find the value of p,q so that the system of equations**

 **2x + py + 6z = 8 , x + 2y + qz = 5 , x + y + 3z = 4 may have**

**(i) a unique solution (ii) infinitely many solutions (iii) no solution (6)**

**32. If A = , show that A2 – 4A + 7I = 0. Hence evaluate A5  (4)**

**33. Mathematics teacher of class XII in a school gave the following problem to two students Pranav and Amrit : “ evaluate ( log x2) and state the range of the values of x for which the result is valid”**

**Pranav obtained the result as for all x 0 and Amrit obtained the same result for x > 0.**

**Mathematics teacher gave full marks to Amrit and zero to Pranav.**

**(i) Why Pranav wrote the range of values of x as - {0}**

**(ii) Is the teacher justified in awarding 0 score to Pranav?**

**(iii) Comment on the behaviour of the teacher. (4)**

**33.The following matrix depicts the number of students of a school who were awarded for discipline, attendance and obedience**

 **Discipline attendance obedience**

**If the prize money for the three value were respectively Rs. 500,Rs 200, and Rs 300, find ( using matrix multiplication)**

**(i) The total prize money received by girls.**

**(ii) The total prize money received by boys.**

**(iii) Who is more careful about the ethical values, girls or boys? (6)**

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 **CLASS- XII( PHYSICS)**

 **ASSIGNMENT ( JUNE, 2020) M. M. 100**

1. \_\_\_\_\_\_\_\_ is the current which can flow even in the absence of electric charge. **(1)**

2. The SI unit of the electric polarization vector P is \_\_\_\_ and justify your answer **(2)**

3.Two particles have equal momenta then the ratio of their de-Broglie wavelengths is \_\_\_\_\_\_\_\_\_\_ and show your calculations **(2)**

4.A charge q is placed at the point of intersection of body diagonals of a cube. The electric flux passing through any one of its faces is

(a) q/(6εo)

(b) 3q/εo

(c) 6q/εo

(d) q/3εo

Justify. **(2)**

5**.** The work done to move a charge along an equipotential from A to B



Justify. **(2)**

6. A point positive charge is brought near an isolated conducting sphere (Fig. 1.2). The electric field is best given by



(a) Fig (i) (b) Fig (ii) (c) Fig (iii) (d) Fig (iv)

Justify your answer. **(2)**

7. An electron is accelerated through a potential difference of 100 V , then de-Broglie wavelength associated with it is approximately \_\_\_\_\_\_\_\_\_\_\_\_angstrom. Show your calculations. **(2)**

8.(a) Define electric dipole moment. Is it scalar or a vector? Derive the expression for the electric field of a dipole at a point on the equatorial plane of the dipole.

(b) Draw the equipotential surfaces due to an electric dipole. Locate the points where the potential due to the dipole is zero. **(2+2)**

9. Deduce the expression for the torque acting on a dipole moment p in the presence of uniform electric field E⃗.**(3)**

**10.** Equipotential surfaces

(a) are closer in regions of large electric fields compared to regions of lower electric fields.

(b) will be more crowded near sharp edges of a conductor.

(c) will be more crowded near regions of large charge densities.

(d) will always be equally spaced

Justify  **(2)**

11. Derive an expression for the electric field at any point on the **axial**  and on the **equatorial** line of an electric dipole. **(3+3)**

12. Derive an expression for the torque on an electric dipole placed in a uniform electric field. Hence define dipole moment.**(3+1)**

13. State and prove Gauss's law with the help of a well labelled diagram. **(3)**

14. Apply Gauss's theorem to calculate the electric field on the following cases:-

a) on a thin infinitely long straight line of charge, with uniform charge density

b) due to an infinite plane sheet of charge.

c) for a spherical shell ( inside, outside and at the surface) **(2+2+3)**

15. Why no work is done in moving a test charge over an equipotential surface? **(2)**

16. Why electric field is always normal to the equipotential surface at every point? **(2)**

17. Two particles A1 sand A2 of masses m1, m2 (m1 > m2) have the same de Broglie wavelength. Then

(a) their momenta are the same.

(b) their energies are the same.

(c) energy of A1 is less than the energy of A2.

(d) energy of A1 is more than the energy of A2.

Justify your answer. **(2)**

18. In Fig.1.1, two positive charges q2 and q3 fixed along the y axis, exert a net electric force in the + x direction on a charge q1 fixed along the x axis. If a positive charge Q is added at (x, 0), the force on q1.



(a) shall increase along the positive x-axis.

(b) shall decrease along the positive x-axis.

(c) shall point along the negative x-axis.

(d) shall increase but the direction changes because of the intersection of Q with q2 and q3q3.

Justify your answer. **(2)**

19. A particle is dropped from a height H. The de Broglie wavelength of the particle as a function of height is proportional to

(a) H

(b) H 1/2

(c) H0

(b) H -1/2

Justify. **(2)**

20. In the circuit shown in Fig. 2.4. initially key K1 is closed and key K2 is open. Then K1 is opened and K2 is closed (order is important).

[Take Q1′ and Q2′ as charges on C1 and C2 and V1 and V2 as voltage respectively.]



(a) charge on C1 gets redistributed such that V1 = V2

(b) charge on C1 gets redistributed such that Q1′ = Q2′

(c) charge on C1 gets redistributed such that C1V1 + C2V2 = C1 E

(d) charge on C1 gets redistributed such that Q1′ + Q2′ = Q

Justify your answer **(2)**

21.A proton, a neutron, an electron and an α-particle have same energy. Then their de Broglie wavelengths compare as

(a) λp = λn > λe > λα

(b) λα < λp = λn > λe

(c) λe < λp = λn > λα

(d) λe = λp = λn = λα

Justify. **(2)**

22. A dipole is placed in a uniform electric field, its potential energy will be minimum when the angle between its axis and field is

a) zero b) 180 c) 90 d)360

Justify your answer. **(2)**

23. An arbitrary surface encloses a dipole. What is the electric flux through this surface? **(2)**

24. Two charges q and –3q are placed fixed on x-axis separated by distance ‘d’. Where should a third charge 2q be placed such that it will not experience any force? **(3)**

25. Fig. 1.11 shows the electric field lines around three point charges A, B and C.



(a) Which charges are positive?

(b) Which charge has the largest magnitude? Why?

(c) In which region or regions of the picture could the electric field be zero? Justify your answer.

(i) near A, (ii) near B, (iii) near C, (iv) nowhere. **(1+2+2)**

26. Do free electrons travel to region of higher potential or lower potential? **(2)**

27. Can there be a potential difference between two adjacent conductors carrying the same charge?**(2)**

28. Sketch the electric field lines for a uniformly charged hollow cylinder shown in Fig 1.8 **(1)**



29. The dimensions of an atom are of the order of an Angstrom. Thus there must be large electric fields between the protons and electrons. Why, then is the electrostatic field inside a conductor zero. **(2)**

30. Five charges, q each are placed at the corners of a regular pentagon of side ‘a’ (Fig. 1.12).



(a) (i) What will be the electric field at O, the centre of the pentagon?

(ii) What will be the electric field at O if the charge from one of the corners (say A) is removed?

(iii) What will be the electric field at O if the charge q at A is replaced by –q?

(b) How would your answer to (a) be affected if pentagon is replaced by n-sided regular polygon with charge q at each of its corners? **(1+1+1+2)**

31. A metallic spherical shell has an inner radius R1 and outer radius R2 . A charge Q is placed at the centre of the spherical cavity. What will be surface charge density on (i) the inner surface, and (ii) the outer surface? **(3)**

32. There are materials which absorb photons of shorter wavelength and emit photons of longer wavelength. Can there be stable substances which absorb photons of larger wavelength and emit light of shorter wavelength.**(2)**

33. Consider Fig.11.1 for photo emission. How would you reconcile with momentum-conservation? Note light (photons) have momentum in a different direction than the emitted electrons

i) In the explanation of photo electric effect, we assume one photon of frequency ν collides with an electron and transfers its energy. This leads to the equation for the maximum energy Emax of the emitted electron as Emax = hν – φ0 where φ0 is the work function of the metal. If an electron absorbs 2 photons (each of frequency ν ) what will be the maximum energy for the emitted electron?

(ii) Why is this fact (two photon absorption) not taken into consideration in our discussion of the stopping potential? **(3+2)**

34. a) In a quark model of elementary particles, a neutron is made of one up quarks [charge (2/3) e] and two down quarks [charges –(1/3) e]. Assume that they have a triangle configuration with side length of the order of 10–15 m. Calculate electrostatic potential energy of neutron and compare it with its mass 939 MeV.

(b) Repeat above exercise for a proton which is made of two up and one down quark. **(3+3)**

35. A student performs an experiment on photoelectric effect, using two materials A and B. A plot of Vstop vs ν is given in Fig. 11.2.

(i) Which material A or B has a higher work function?

(ii) Given the electric charge of an electron = 1.6 × 10–19 C, find the value of h obtained from the experiment for both A and B.

Comment on whether it is consistent with Einstein’s theory: **(2+2)**



 Amrit Indo Canadian academy

Class- XII

 Subject-Chemistry

 June vacation Assignment M.M: 100

Section: A

Q:1 Which of the following unit is useful in relating concentration of solutions with its vapour pressure and Why?

 Parts per million

Mole fraction

 Normality

Molarity [1]

Q:2 Extent of physisorption of a gas increases with \_\_\_\_\_\_\_\_\_\_\_ and why?.

(a) increase in temperature.

(b) decrease in temperature.

(c) decrease in surface area of adsorbent.

(d) decrease in strength of van der Waals forces. [1]

Q:3 Give Reason: 2-Bromobutane is optically active but 1-bromobutane is optically inactive. [1]

Q:4 State reason for the following:
Ortho-nitrophenol is more acidic than ortho-methoxyphenol. [1]

Q;5 how does sprinkling of salt helps in cleaning the snow covered roads in hilly areas. Explain the phenomena involved in this process. [2]

Q:6 State reasons for:

(i) p-dichlorobenzene has a higher melting point than its o- and m-isomers.

(ii) Alkyl halides, though polar, are immiscible with water. [1 1]

Q:7 (i) Diphenyls are potential threat to the environment. How are these produced from alkyl halides.

(ii) How can you obtain iodoethane from ethanol when no other iodine containing reagent expects NaI is available in laboratory? [1 + 1]

Q:8 Define:

Kolbe’s Reaction

 Reimer-Tiemann Reaction [1 + 1]

Q:9 Explain the term ideal and non-ideal solutions in the light of forces of interactions operating between molecules in liquid solutions. [3]

Q:10 Give one example of each:

Oil in water emulsion

 Water in oil emulsion [1/2 +1/2]

Q:11 (i) Which of the following is more effective in congulation of positively charged methylene blue sol?

Na2SO4  (b) K4[Fe(CN)6] (c) Na3PO4

(ii) Artifical rain is caused by sprying salt over clouds. Explain. [1+1]

Q:12 What is an adsorption isotherm? Explain Freundlic adsorption isotherm. [1+ 2]

Q:13 How can the following conversions be carried out?

(i) Methyl magnesium bromide to 2-methyl- propan-2-ol

(ii) Benzyl chloride to benzyl alcohol

(iii) Benzene to p-chloronitrobenzene [1 + 1 + 1]

Section: B

Q:1 **Note:** In the following question a statement of assertion followed by a statement of reason is given. Choose the correct answer out of the following choices.
(i) Assertion and reason both are correct and the reason is correct explanation of assertion.
(ii) Assertion and reason both are correct but reason does not explain assertion.
iii) Assertion is correct but reason is incorrect.
(iv)Both assertion and reason are incorrect.
(v) Assertion is incorrect but reason is correct.

**Assertion:** Coagulation power of Al3+ is more than Na+.
**Reason:** Greater the valency of the flocculating ion added, greater is its power to cause precipitation (Hardy Schulze rule). [1]

Q:2 Which of the following alkyl halides will undergo SN1 reaction most readily and why?

(a) (CH3)3C—F

(b) (CH3)3C—Cl

(c) (CH3)3C—Br

(d) (CH3)3C—I [1]

Q:3 What is the correct order of reactivity of alcohols in the following reaction?



1° > 2° > 3°

1° < 2° > 3°

3° > 2° > 1°

3° > 1° > 2°

Give reason for the same. [1]

Q:4 The components of the binary mixture of two liquids A and B were being separated by distillation. After sometime separation of components stopped and components of vapour phase become same as that of liquid phase. Both the components started coming in the distillate. Explain why this happened. [1]

Q:5 Identify ‘A’ in the following reaction:

 [1]

Q:6 Suggest a reagent for the following conversion

  [1]

Q:7 Haloalkanes react with KCN to form alkyl cyanide as a main product while AgCN form alkyl isocyanide as a chief Product. Explain [2]

Q:8 (i) On mixing liquid X and Y, the volume of resulting mixture increases. What type of the deviations from Raoult’s Law shown by the resulting mixture. What change in temperature would you observe after mixing liquids X and Y?

(ii) What happen when we place the blood cell in water (hypotonic solution)?
 [2 + 1]

Q:9 2-Chloro-3-methylbutane on treatment with alcoholic KOH gives 2-Methyl-2-butane as a major product? Which rule helps you out to reach out the product? Explain your answer by giving suitable chemical equations [1 + 2]

Q:10 Explain what is observed:

(i) When a beam of light is passed through a colloidal sol.

(ii) An electrolyte, NaCl is added to hydrated ferric oxide sol.

(iii) Electric current is passed through a colloidal sol? [1 + 1 + 1]

Q:11 Preparation of alcohols from alkenes involves the electrophilic attack on alkene carbon atom. Explain its mechanism [1 +1+1 each step]

Q:12 (i) In Kolbe’s reaction, instead of phenol, phenoxide ion is treated with carbon dioxide. Why?

ii) Preparation of ethers by acid dehydration of secondary or tertiary alcohols is not a suitable method. Give reason. [1 + 2]

Q:13 Answer the Following:

Physical and chemical adsorptions respond differently to the rise in temperature?

 Do the vital functions of the body such as digestion affected by fever? Explain

Why some medicines are more effective in the colloidal form. [2+2+1]

Section: C

Q:1 On the basis of the following reaction



Which of the following statements is/are correct about the mechanism of this reaction?

(i) A Carbocation will be formed as an intermediate in the reaction.

(ii) OH– will attach the substrate (b) from one side and Cl– will leave it simultaneously from other side.

(iii) An unstable intermediate will be formed in which OH– and Cl– will be attached by weak bonds.

(iv) Reaction proceeds through SN1 mechanism. [1]

Q:2 Aryl chlorides and bromides can be easily prepared by electrophilic substitution of arenes with chlorine and bromine respectively in the presence of Lewis acid catalysts. But why does preparation of aryl iodides requires presence of an oxidizing agent? [1]

Q:3 The carbon-oxygen bond in phenols is slightly stronger than C-O bond in alcohols. Explain on the basis of resonance structures. [1]

Q:4 Arrange the following in order of increasing solubility in n-octane based upon the solute-solvent interactions.
Cyclohexane, KCl, CH3OH, CH3CN. [1]

Q:5 How much of sucrose is to be added to 500 g of water such that it boils at 100°C if the molar elevation constant for water is 0.52 K kg mol-1 and the boiling point of water at 750 mm Hg is 99.63°C. [2]

Q:6 The following is not an appropriate reaction for the preparation of t-butyl ethyl ether.



What would be the major product of this reaction?

 Write a suitable reaction for the preparation of t-butylene ethers. [1 + 1]

Q:7 Explain the fact that in aryl alkyl ethers:

 (i) the alkoxy group activates the benzene ring towards electrophilic substitution and
(ii) it directs the incoming Substituents to ortho and para positions in benzene ring. [1 + 1]

Q:8 Give Reason :

Bleeding caused by nick from razor during shaving can be stopped by rubbing with alum.

Finely divided substances are more effective as an adsorbent. [1 + 1]

Q:9 Elimination reactions (especially -elimination) are as common as the nucleophillic substitution reaction in case of alkyl halides. Specify the reagents used in both cases and also mention the reason why you use different reagent in both cases. [½+ ½ + 1]

Q:10 On dissolving 0.25 g of a non-volatile substance in 30 mL benzene (density 0.8 g/mL), its freezing point decreases by 0.40oC. Calculate the molecular mass of non-volatile substance (Kf = 5.12 K kg mol−1). [3]

Section: D

Q:1 Arginine vasopressin is a pituitary hormone. It helps to regulate the amount of water in the body by reducing the flow of urine form kidneys. An aqueous solution containing 21.6 mg of vasopressin in 100 mL of solution had an osmotic pressure of 3.70 mm Hg at 25oC. What is molecular weight of hormone? [3]

Q:2 What modifications can you suggest for Hardy-Schulz rule? [1]

Q:3 Show how would you synthesise the following alcohols from appropriate alkenes.

 [1 + 1]

Q:4 Write the names of reagents and equations for the preparation of the following ethers by Williamson’s synthesis :

1-Propoxypropane

1-Methoxyethane [½ + ½ + ½ + ½]

Q:5 When 3-methylbutan-2-ol is treated with HBr, the following reaction takes place:



Give a mechanism for this reaction.

[Hint : The secondary carbocation formed in step II rearranges to a more stable tertiary carbocation by a hydride ion shift from 3rd carbon atom.] [1 + 1 +1]

Q:6 Give two reactions that show the acidic nature of phenol. Compare acidity of phenol with that of ethanol. [2 + 1]

Q:7 (i) Gold Number of Gelatin and hemoglobin are 0.005 and 0.03 respectively. Which of them is a better protecting colloid?

Adsortion of a gas on the surface of solid is generally accompanied by decrease in entropy but still it is spontaneous in nature. Why? [1 + 2]

Q:8 Compound ‘A’ with molecular formula C4H9Br is treated with aq. KOH solution. The rate of this reaction depends upon the concentration of the compound ‘A’ only. When another optically active isomer ‘B’ of this compound was treated with aq. KOH solution, the rate of reaction was found to be dependent on concentration of compound and KOH both.

Write down the structural formula of both compounds ‘A’ and ‘B’.

 Out of these two compounds, which one will be converted to the product with inverted configuration? [1 + 1]

 Or

Q: (i) Draw other resonance structures related to the following structure and find out whether the functional group present in the molecule is ortho, para directing or meta directing.

 [1 + 1]

Q:9 Some halogens containing compounds are useful in daily life. Some compounds of this class are responsible for exposure of flora and fauna to more and more of UV lights which causes destruction to a great extent. Name the class of these halo compounds. In your opinion, what should be done to minimize harmful effects of these compounds? [2 + 2]

 Section: E

Q:1 (i) Aryl halides are extremely less reactive towards nucleophilic substitution. Predict and explain the order of reactivity of the following compounds towards nucleophilic substitution:



ii) tert-Butyl Bromide reacts with aq. NaOH by SN1 mechanism while n-butyl bromide reacts by SN2 mechanism. Why?

Cyanide ion acts as an ambident nucleophile. From which end it acts as a stronger nucleophile in aqueous medium? Give reason for your answer

Although Chlorine is an electron withdrawing group, yet it is *ortho-*, *para*- directing in electrophillic aromatic substitution reactions why?
 [1 + 1 + 1 +2]

Q: 2 (i) You are given benzene, conc. H2SO4 and NaOH. Write the equation for the preparation of phenol using this reagent.

While separating a mixture of ortho- and para-nitrophenols by steam distillation, name the isomers which will be steam volatile. Give reason.

(CH3)3C—O—CH3 on reaction with HI gives CH3OH and (CH3)3C—I as the main products and not (CH3)3 C—OH and CH3I.

Distinguish between 1-Propanol and 2-Propanol on the basis of victor Meyer Test. [1 + 1 + 2 + 1]

|  **AMimRq ieMfo knyfIAn AkYfmI**  **lwdIAW Kurd, luiDAwxw**  **mwisk ,AsweInmYNt jUn 2020** **ku`l AMk- 100 jmwq bwrHvIN ivSw- pMjwbI**  |
| --- |

| **ApRYl –meI mhIinAW dOrwn krvwey islybs dw lyKw-joKw**  |
| --- |

| **ApRYl meI ivc kIqy pwTW dw vyrvw** **BweI vIr isMG** **DnI rwm cwiqRk****sUlI au`qy ltky pl****guAwicAw muMfw (ikSor nwvl0** **gurmiq kwiv-Dwrw**  |
| --- |

**Bwg- a (igAwn prK)**

**hyT ilKy pRSnW dy au`qr ilKo[ 1\*10=10**

qRyl qupkw kivqw iks duAwrw ilKI hoeI hY?

 iqMn idn dw byeImwn khwxI dw lyKk kOx hY?

(e) siqMdr nwQ dy swry pYsy gwieb ikauN ho gey sn?

 (s) siqMdr nwQ ny bYNk dy bwbU koloN hoeI glqI bwry ikauN nhIN d`isAw?

 (h) siqMdr nwQ sO rupey nMU pwp dI jVH ikauN mMndw hY?

 (k) Gogy dy dosqW dy nW kI kI sn?

 (K) DUxI vwly swD dy hulIey (srIirk bxqr) qoN jwxU krvwE[

 (g) Gogy dI mW ikho ijhI iesqrI sI?

 (G) son kwto Gogy leI kI sI?

() son kwto nMU l`Bx leI Gogw ikMnW ikMnW QwvW ‘qy jWdw hY?

**2. hyT ilKy pRSnW dy sMKyp iv`c au`qr ilKo[ 2\*5=10**

kMbdI klweI kivqw dw kyNdrI Bwv ilKo[

 DnI rwm cwiqRk ny ivswKI dw mylw kivqw ivc kudrqI vwqwvrn iv`c AweI qbdIlI nMU ikvyN ibAwn kIqw hY? sMKyp ivc ilKo[

 (e) qRyl qupkw ArUpo rUp Aqy rUpo ArUp ikvyN huMdw hY?

 (s) jdoN Gogy dI mW ny ausdy PylH hox dw kwrn bhuqw tI. vI. dyKx nMU d`isAw qW Gogy ny kI jvwb id`qw?

**(h) kruxw nMU ikhVy mwnisk sMkt ivcoN lMGxw pY irhw sI Aqy ikauN?**

**3**. **hyT ilKy lMmy au`qrW vwly pRSnW dy au`qr ivsQwr ivc ilKo[ 30**

(a) sUlI au`qy ltky pl khwxI dw plwt Awpxy SbdW ivc ibAwn kro[

(A) Gogy dw pqwr icqrn kro[

(e) smyN dI bhwr kivqw dw ivSw/vsqU Awpxy SbdW ivc ilKo[

(s) ivswKI dw mylw kivqw iv`c kudrqI vwqwvrn dw izkr krn qoN bwAd kvI ny myly dw jo icqr pyS kIqw hY Awpxy SbdW ivc ilKo[

**(h) hyT ilKIAW sqrW dI pRsMg sihq ivAwiKAw ilKo[**

**(i) dUr dUr QwEN vxjwry Awey ny , suhxy suhxy kuMjW qy PIqy ilAwey ny[**

 **gjirAW qy vMgW dw nW AMq koeI ey, mMfI JUTy gihixAW dI l`gI hoeI ey[**

 **h`tIAW hzwrW hlvweIAW lweIAW, sYNkVy sugwqW nwly hor AweIAW[**

 **h`tI h`tI SMNkIAW dI BIV K`lI ey, c`l nI prymIey ivswKI c`lIey**

| **ii) ipClI ho geI g`l purwxI, nivAW CohI nvIN khwxI[** **ipCly lIhW nwl Klo gey, nvyN inSwn Agyry ho gey[** **bdl igAw sMswr smyN dI nivEN nvIN bhwr[**  |
| --- |

**4. *hyT ilKy bhu ivklpI pRSnW dy shI ivklp cuxo[* 1\*4=4**

**(**a) kivqw smyN dI bhwr ivc ‘bwby’ iks nMU ikhw igAw hY?

(a) bzurg nMU (A) dwdy nMU (e) purwqn soc dy ivAkqI nMU [

(A) kruxw dy pqI dw nW kI sI?

(1) AwnMd (2) Amn (3) rwhul

(e) Gogw ikhVI jmwq ivcoN Pst AwieAw sI?

(1) CyvIN (2) A`TvIN (3) s`qvI

**(s)** BweI vIr isMG jI ikhVI kwiv Dwrw dy kvI hn?

(1) gurmiq kwiv-Dwrw (2) AwDuink kwiv Dwrw (3) sUPI kwiv Dwrw

5.  **Axif`Tw pYrHw pVH ky pRSnW dy au`qr ilKo[ 5**

aus smyN ihMd vwsI gweIAW dy ie`k v`g vWg inh`Qy Aqy inqwxy sn Aqy aunHW ‘qy koeI nw koeI Syr Aw pYNdw sI[ ienHW dy bcwE leI keIAW ny jqn kIqy[ keIAW ny ienHW dy duAwly jwq- pqw qy CUq Cwq dIAW kMDW auswr ky vrn AwSrm dI iklyHbMdI kr id`qI[ ieh swD mu`dqW q`k ihMdUAW nMU KyrMU KyrMU hox qoN bcwauNdy rhy[ pr jdoN vI ieh gaUAW iklHy qoN bwhr AwauNdIAW , iksy nw iksy Syr dw iSkwr bx jWdIAW[ guru nwnk dyv jI ny ie`k s`cy AwgU dI qrHW ienHW dy bcwau dw iKAwl kIqw, qW ik AMdrIAW –bwhrIAW kmzorIAW dUr ho ky hr qrHW dy hmlwvrW qoN bc ky rihx dw hIAw kr skx[ is`K ieiqhws iv`c kOmI auswrI dw izkr hY ik ies qrHW inmwxIAW gaUAW vrgy lok au`pr Q`lI ds AwgUAW dI AmlI is`iKAw qoN AgvweI nwl qkVy huMdy hoey vI sMn 1699 ivc guru goibMd isMG jI dy h`QoN AMimRq Ck ky sj gey, Bwv gaUAW Syr bx geIAW[

ikhVy ikhVy swDn ihMdUAW nMU lMmw smW KyrMU KyrMU hox qoN bcwauNdy rhy?

 guru nwnk dyv jI ny kI slwh id`qI?

(e) gaUAW nMU iks guru ny Syr bxn leI ikhw Aqy ikvyN?

(s) pYrHy dw Fu`kvW isrlyK ilKo[

(h) SbdW dy ArQ ilKo:- AnMq, sOr inrmwx ,ADwrhix

6. Awpxy smwj iv`c AnuswSn dy suDwr dI bhuq loV hY[ ies ivSy ‘qy iksy AKbwr dy sMpwdk nMU p`qr ilKo5

7**. hyT ilKy muhwvirAW dy shI ivklp cuxo[** 3

(a) pYrW ‘qy -------nw pYx dyxw [

(1) pwxI (2) g`l (3) du`D

(A) bilhwry jwxw muhwvrw dw shI ArQ cuxo[

(1) mr jwxw (2) pws ho jwxw (3) kurbwn jwxw

(e) vwl dI ---------lwhuxw muhwvrw pUrw kro[

(1) K`l lwhuxw (2) vrdI (3) g`l

**hyT ilKI vwrqk-tu`kVHI ‘qy ivSrwm icMnH lgwE[** (2+2=4)

mnmohn ny mYfm nMU pu`iCAw mYfm jI ijhVy b`cy skUlW ivc nhIN pVH skdy auh iPr is`Kdy ik`QoN ny

mYN ij`Qy vI irhW hW nyknwmI hI leI hY bdnwmI nhIN ies sMbMDI qusIN myry iksy jwxkwr pwsoN vI pqw kr skdy ho vYsy mYnMU JUT bolx dI kI loV hY

**hyT ilKy muhwvirAW dy ArQ ilK ky vwk bxwE[ 5**

n`k v`txw (A) vwl vwl b`cxw (e) byVw pwr lGwauxw

(s) Bwr lwhuxw (h) mrn dI ivhl nw hoxI

10. **hyT iliKAW ivcoN shI Sbd cuxo**[ 4

(i) (a) soxw (A) sOxw (e) sOnw (s) sauxw

(ii) (a) JwVU (A) jwrU (e) jwVU (s) JwrU

(iii) (a) myhnq (A)imhnq (e) mIhnq (s) mihnq

(iv) SYhr (A) Shr (e) Sihr (s) Shir

11**. hyT ilKy SbdW nMU Su`D krky ilKo**[ 2

(a) sohrw (A) gYhxw (e) syhq (s) KYhVw

12**. hyT ilKy vwkW nMU Su`D krky ilKo[** 3

(a) qMU, mYN Aqy auh Kwxw Kwx jwvygw[

(A) ijhVy ivAkqI AwlsI huMdy hnauh kdy kwmXwb nhIN huMdw[

(e) kwlw GoVw dOVH irhw hY bhuq qyz[

13. gurmiq kwiv Dwrw dy inkws Aqy ivkws bwry qusIN kI jwxdy hO? gurmiq kwiv Dwrw dIAW ivSySqwvW dsdy hoey iesdy kvIAW bwry jwxkwrI vI idE[ 5

 **14. iksy ie`k ivSy ‘qy pRBwvSwlI lyK ilKo[ 5**

iqVkdy smwijk irSqy (A) AjokI is`iKAw pRxwlI (e) nOjvwn pIVHI smwj dI isrjk

 smyN smyN ‘qy smwj iv`c PYldIAW mhWmwrIAW kwrn grIb vrg nMU bhuq muSklW dw swhmxw krnw pYNdw hY[ AmIr vrg Aqy m`DvrgI vrg qW b`c jWdw hY pr grIb vrg nMU ijAwdw muSklW dw swhmxw krnw pYNdw hY[ ies sMbMDI qusIN Awm nwgirk hox dy nwqy srkwr nMU kI suJAw idEgy qW jo grIb vrg dI mdd ho sky[

#  AMRIT INDO CANADIAN ACADEMY

 **Assignment of Painting**

 **Class – XII**

 **Section – A (6)**

**Mention name of the painter of famous miniature painting of the Mughal school ‘Birth of Salim', included in your course of study :**

**Miskin b) Ustad Mansoor c) Ramdas**

**Who painted the famous miniature painting of Pahari School Nand, Yashoda and Krishna with Kinsmen going to Vrindavan:**

**Manaku b) Purkhoo c) Nainsukh**

**Which persian bird is depicted in paintings of Jahangir ‘s era?**

 **a Falcon b) Peacock c) Pigeon**

**In which medium painting Krishna with Gopies was depicted?**

**Tempera b) Oil colors c) Mineral colors**

**To which school the painting Maru Ragini is located?**

 **a Pahari school b) Mughal school c) Rajasthani school**

**Mention the title of painting done by painter Nihal Chand?**

**Radha b) Krishna with Gopies c) Maru Ragini**

 **Section – B (10)**

**On which mythological book, the famous miniature painting Bharat Meets Rama at Chitrakuta is based?**

 **a Geet Govinda b) Ramayana c) Rasikpriya**

**During which mughal emperor’s era artist migrated to pahari areas due to sought patronage of painting?**

**a Jahangir b) Aurangzeb c) Akbar**

**In which sub school the famous miniature painting ‘Chand Bibi Playing Polo is made ?**

 **a Bijapur b) Golconda c) Hyderabad**

 **10.Mention the name of miniature painting done by Miskin ?**

 **a Ragini Pathamsika b) Chaugan Players c) Krishna lifting**

 **Mount Goverdhan**

 **11.Evaluate the compositional arrangement of any three of the**

 **following artworks from each part, duly based on aesthetic**

 **parameters briefly :**

**a Maru Ragini b) Marriage Procession of Data Shikoh**

**c Ragini Pathamsika d) Krishna with Gopies**

 **Section – C (10)**

**12.In which sub school wooden panel The Coronation of Ram is**

 **made?**

 **a Hyderabad b) Tanjore c) Bijapur**

**13. In which school of Rajasthani art series Chaurapanchshika is**

 **made ?**

 **a Bundi b) Kishangarh c) Mewar**

 **14. Why do you like or dislike any four from the following**

 **Miniature paintings? Justify your answers with appropriate**

 **reasons?**

 **a Kabir and Raidas b) Krishna lifting Mount Goverdhan c)**

 **Raja Anirudh Singh Hara d) Chaugan Players e) Krishna**

 **On Swing**

 **Section - D (12)**

**15. Identify any relevant painting included in your course of study**

 **Comprising of the following features and explain them in the**

 **painting accordingly:**

**a In tthe paintings of Rajasthani school, the glowing colours are**

 **used in deep harmonious contrast and these are applied flatly**

 **within definite outlines of forms, which strike most with the**

 **intensities.**

**b Depiction of tthe Krishna -Lila tthemes in abundance in Pahari**

 **Paintings.**

 **Section – E (12)**

**16. Appreciate any two of the following Indian paintings included**

 **In the course of study, duly based on its i) Name of painter,**

 **ii) Medium & technique, iii) Subject matter, v) Composition.**

**a Radha b) Birth of Salim c) Hazrat Nizamuddin Auliya and**

 **Amir Khusro**

 **AMRIT INDO CANADIAN ACADEMY**

Ladian, Ludhiana

Sub: Physical Education Class: 12th M.M :100

Assignment for Holidays Homework

Multiple Choice Questions:

1.The total no. of matches in a knock out tournament of 34 terms are:

a31 b.32 c.33 d.34

2 The primary goal of intern mural competition is

To provide opportunity for mass participation of students

To participate in inter school competition

To provide inter school completion

All of the above

3 The food component portent in sugar is

Fats b. Protein c. Vitamin d. Carbohydrates

4 The main source of vitamin c is

Guava b. Egg c. Milk d. Banana

5Which asana is helpful in maintaining normal Blood Pressure :

Shav asna b. Pad asana c. shalabh asana d. Varun Asana

6Gomukhasana, chakrasna and matsyasana are helpful in which disease:

Diabetes b. Back pain c. Asthama d. obesity

7When child is not able to digest with in is society or having no friend, is suffering from

ADHD b. ASD c. ODD d. OCD

8Obsive compulsive disorder is open

Argumentative disaster

Anxiety dis order

Receiving & responding dis order

All of these.

 9Cognitive disability may cause difficulty in which of the following activity:

Reading b. Writing c. mathematics d. All of the above

10Explain the procedure for giving bye?

11What is league tournament?

12Name the asana which help in reducing diabetes?

13What is the full form of ADHD?

14What is the full form of ODD?

15What do you mean by disability?

16What is balanced diet?

17What do your mean by food intolerance?

18What do you mean by disability etiquettes?

19Write down the name of different types of disorder?

20What is the meaning of yoga?

21Discuss in detail any on disorder.

22What do you mean by food myths?

23What are the pit falls of dieting?

24Write briefly about the objectives of intramural.

1Proteins are essential component of diet how?

2Explain any four micro nutrients.

3List the types of tournaments.

4Which asana will you suggest for back pain. Explain the procedure & benefits.

5Sarita devi refused to accept the prone medal in ceremony. The international body which regulate being as take a stringent action against sarita devi and coaches.

1Do you agree with else decision of sarita devi justify your answer?

2 What value do you sarita devi not shown by her behavior during the medal distribution ceremony.

6How can we help children to develop motivational mental process leads to positive behavior change.

1Draw a picture of sis teams on league basis in cyclic method.

2Draw a knockout picture for 25 terms with all steps involved.

3How physical activities helpful for children with special needs. Explain stratagems to make physical activities assessable for them.

4Write briefly a notes on inclusive education.

 1. League Tournament is better way to judge the best team of the tournament comment.

2Answer can be used as a preventive measure comment.

3Give your views on the advantages disadvantages of organizing and playing sports in school.

4Critically explain the use of dietary supplements is heavy for longer duration 4jusify your answer with two suitable explain.

1Give your outlook on participation of Indian women in sports.

2How various committees of formed for tournaments.