



DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI
QUALIFYING EXAMINATION (2021-2022)

Class:-XII
Time- 3 Hrs.

Subject:- English
M.M.-80

General Instructions:

1. Read all the questions carefully.
2. All questions are compulsory to be attempted.
3. Separate instructions are given in each part, wherever necessary. Read these instructions very carefully and follow them faithfully.
4. The question paper is divided into two parts.
Part A: Objective (Reading & Literature) 40marks (20+20)
Part B: Subjective (Writing Skills & Literature) 40marks (16+24)
5. Do not exceed the prescribed word limit while answering the questions.

PART- A: 40 MARKS (Reading Comprehension: 20Marks)

1. Read the passage given below. (1x10 = 10)
 1. In 1732, I first published my year book, under the name of Richard Saunders; it was continued by me for about twenty-five years. I endeavoured to make it both entertaining and useful and it accordingly came to be in such demand, that I reaped considerable profit from it, selling annually about ten thousand. I observed that it became very popular. Hardly any neighbourhood in the province was without it. So I considered it as a proper vehicle for conveying instructions among the common people, who bought scarcely any other books.
 2. I therefore filled all the little spaces that occurred between important days in the year book with proverbial sentences, which taught hard work and frugality, as the means of procuring wealth. It is more difficult for a man in want, to act always honestly, as, to use here one of those proverbs, ' it is hard for an empty sack to stand upright'.
 3. These proverbs, which contained the wisdom of many ages and nations, I assembled and put into a preface added to the year book of 1757, as the lecture of a wise old man. Bringing all these scattered proverbs thus into focus enabled them to make greater impression. The piece, being universally approved, was copied in all the newspapers of the Continent; reprinted in Britain on a broad sheet, to be stuck up in houses; two translations were made of it in French, and great numbers bought by the clergy and gentry, to distribute free of charge among their poor parishioners and tenants.
 4. In the conduct of my newspaper, I carefully excluded all personal abuse, which is disgraceful to our country. Whenever I was solicited to insert anything of that kind, and the writers pleaded, as they generally did, the liberty of the press, and that a newspaper was like a stagecoach, in which anyone who would pay had a right to a place, my answer was, that I would print the piece separately if desired and the author might have as many copies as he pleased to distribute himself, but that would not take upon me to spread his biased opinion.

5. In 1733, I sent one of my trainees to Charleston, South Carolina, where a printer was required. I furnished him with a press and letters, on an agreement of partnership, by which I was to receive one-third of the profits of the business, paying one-third of the expense. He was a man of learning, and honest but ignorant in matters of accounts and, though he sometimes made me remittances, I could get no account from him, nor any satisfactory state of our partnership while he lived.
6. On his decease, the business was continued by his widow, who, being born and bred in Holland, where, as I have been informed, the knowledge of accounts makes a part of female education, she not only sent me as clear a state as she could find of the transactions past, but continued to account with the greatest regularity and exactness every quarter afterwards, and managed the business with such success, that she not only brought up reputably a family of children, but, at the expiration of the term, was able to purchase of me the printing-house, and establish her son in it.
7. I mention this affair chiefly for the sake of recommending that branch of education for our young females, as likely to be of more use to them and their children, in case of widowhood, than either music or dancing, by preserving them from losses by imposition of crafty men, and enabling them to continue, perhaps, a profitable mercantile house, till a son is grown up, fit to undertake and go on with it, to the lasting advantage and enriching of the family.

1.1 On the basis of your understanding of the above passage answer **ANY TEN** questions from the eleven given below by choosing the most appropriate option:-

- (i) When did the narrator send one of his trainees to Charleston?
a) In 1733 (b) In 1732 (c) In 1757 (d) In 1725
- (ii) Why could the narrator not get any account statement from his business partner?
 - a) He was uneducated
 - b) He was dishonest
 - c) He did not know much about accounts
 - d) It was not written in the agreement
- (iii) Who gave the narrator a regular and exact detail of all accounts?
 - a) Richard Saunders
 - b) The trainee he sent to Charleston
 - c) His partner's widow
 - d) His partner's son
- (iv) What does the author want to chiefly recommend through this passage?
 - a) The importance of education
 - b) The inclusion of accounts as part of female education
 - c) The means of running business successfully
 - d) Conversion of trainees into partners

- (v) When did the narrator first publish the year book and for how many years?
- (a) 1762, continued for about 25 years (b) 1732, continued for about 30 years
(c) 1730, continued for 40 years (d) 1733, continued for about 25 years
- (vi) How was the year book of 1757 different?
- a) Had an additional preface
b) Had an additional author
c) Had an additional cover
d) Had an additional chapter
- (vii) The narrator's reaction to solicitations to publish abusive reports in his magazine was that of.....
- (a) biased thinking for abusive report
(b) stark support for abusive report
(c) honest with a pinch of selfishness for abusive report
(d) strictly and honestly against abusive report
- (viii) Why did the narrator send one of his trainees to Charleston?
- (a) As an actor was required (b) As a helper was required
(c) As a printer was needed (d) As a substitute writer was needed
- (ix) Why was the narrator appreciative of the widow of his business partner?
- (a) Because she could read and write
(b) Because she was honest
(c) Because she could manage the business successfully and take care of her children
(d) Because she could provide the detailed statement of all accounts and manage the business successfully
- (x) Find a word from the passage which means the opposite of 'extravagance' (Para 1)
- (a) bounty (b) plenty (c) frugality (d) riches
- (xi) Find a word from the passage which means the same as 'cunning' (Para 7)
- (a) crafty (b) encouraged (c) demoralized (d) downhearted

Q.2 Read the passage and choose the correct answer for the questions given below:

1. To ensure its perpetuity, the panther is well held by the ground both in space and in time. It enjoys a much wider distribution over the globe than its bigger cousins, and procreates sufficiently, profusely to ensure its continuity for all time to come.

2. There seems to be no particular breeding season of the panther, although its roaring and caterwauling is more frequently heard during winter and summer. The gestation period is about ninety to hundred days (Whipsnade, ninety-two days.) The litter normally consists of four cubs, rarely five. Of these, generally two survive and not more than one reaches maturity. I have never come across more than two cubs at the heels of the mother. Likewise, graziers in the forest have generally found only two cubs hidden away among rocks, hollows of trees, and other impossible places.

3. Panther cubs are generally in evidence in March. They are born blind. This is a provision of Nature against their drifting away from the place of safety in which they are lodged by their mother, and exposing themselves to the danger of their being devoured by hyenas, jackals, and other predators. They generally open their eyes in about three to four weeks.

4. The mother alone rears its cubs in seclusion. It keeps them out of the reach of the impulsive and impatient male. As a matter of fact the mother separates from the male soon after mating and forgets all about their tumultuous union. The story that the male often looks in to find out how the mother is progressing with her cubs, has no foundation except in what we wish it should do at least.

5. The mother carries its cubs about by holding them by the scruff of their neck in its mouth. It trains them to stalk and teaches them how to deliver the bite of death to the prey. The cubs learn to treat all and sundry with suspicion at their mother's heels. Instinctively the cubs seek seclusion, keep to cover and protect their flanks by walking along the edge of the forest.

6. I have never had an opportunity to watch mother panther train its cubs. But in Pilibhit forests, I once saw a tigress giving some lessons to its little ones. I was sitting over its kill at Mala. As the sun set, the tigress materialized in the twilight behind my machan. For about an hour, it scanned and surveyed the entire area looking and listening with the gravest concern. It even went to the road where my elephant was awaiting my signal. The mahout spotted it from a distance and drove the elephant away.

2.1 On the basis of your understanding of the above passage, answer ANY TEN questions from the eleven given below: (1x10=10)

(i) To protect its cubs the mother panther hides them

- | | |
|----------------------------|----------------------------------|
| (a) among rocks | (b) in the branches of the trees |
| (c) behind the tree trunks | (d) at its heels |

(ii) The male panther

- | | |
|-------------------------------|--|
| (a) is protective of its cubs | (b) watches the progress of the mother |
| (c) trains its cubs | (d) is impulsive and impatient |

- (iii) How many cubs does the mother panther rarely deliver?
 (a) 4 (b) 5 (c) 3 (d) 2
- (iv) What may happen if the panther cubs are not born blind?
 (a) they may start howling and spoil the kill
 (b) they trip the mother by keeping at her heels
 (c) they may become prey to the predators
 (d) they will be killed by elephants
- (v) Why did the mahout drive his elephant away?
 (a) the author told him to
 (b) he saw the panther stalking the elephant
 (c) he didn't want the cubs to be afraid
 (d) none of the above
- (vi) The cubs are not taught to
 (a) stalk (b) seek seclusion
 (c) deliver the bite of death (d) walk at the mother's heels
- (vii) The caterwauling indicates
 (a) the panther has found its prey (b) the panthers are mating
 (c) the panther is warning its cubs (d) the male is leaving its mate
- (viii) Why does the panther not face the risk of extinction?
 (a) It is a protected species (b) it cleverly avoids extinction
 (c) it cannot be hunted easily (d) it procreates profusely
- (ix) Catewauling means
 (a) catapulting (b) long wailing cries
 (c) walking and stalking (d) bringing up the cubs
- (x) Find a word from the passage which means the same as 'endless'. (Para 1)
 (a) Perpetuity (b) casualty (c) fixity (d) continuity
- (xi) Find a word from the passage which means the opposite of 'favour'. (Para 3)
 (a) goodwill (b) approval (c) kindness (d) against

LITERATURE (20 Marks)

Q.3 Read the extracts given below and attempt "**ANY TWO**" of the three given by answering the questions that follow: (4+4=8)

(A) 'All we have to fear is fear itself'

(i) Who said these words ?

- (a) William Douglas (b) The instructor (c) Franklin Roosevelt (d) Mrs Douglas

- (ii) When did Douglas recall these lines?
- (a) While swimming in the pool
 - (b) While swimming across the lake to Stamp Act Island
 - (c) After his near drowning at the pool
 - (d) After swimming across and back in Warm Lake

- (iii) Douglas first started dreading water
- (a) After the waves knocked him down at the beach
 - (b) After he nearly drowned at the YMCA pool
 - (c) When he tried to swim in The Tieton
 - (d) While swimming in Bumping river

- (iv) He had tried to overcome his fear by
- (a) Swimming everyday in the lake
 - (b) Swimming in the pool
 - (c) Taking the help of a swimming instructor
 - (d) Taking the help of his friends

(B) " I was amazed to see how well I understood it. All he said seemed so easy, so easy! that I had never listened so carefully, and that he had never explained everything with so much patience. It seemed almost as if the poor man wanted to give us all he knew before going away, and to put it all into our heads at one stroke."

(i) Who said these words?

- (a) M Hamel (b) The Mayor (c) The Postmaster (d) Little Franz

(ii) The speaker felt for not being attentive in the class

- (a) Elated (b) Sorry (c) Emotionless (d) None of these

(iii) What is the feeling of the speaker?

- (a) Sarcasm (b) Sadness (c) Indignation (d) Appreciative

(iv) Find a word from the extract that means 'the ability to stay calm'

- (a) Stoicism (b) restrain (c) patience (d) Serenity

(C) "He stops at the door of one such house, bangs a wobbly iron door with his foot, and pushes it open. We enter a half-built shack. In one part of it, thatched with dead grass, is a firewood stove over which sits a large vessel of sizzling spinach leaves."

(i) Who banged a wobbly door with his foot?

- (a) Anees Jung (b) Saheb (c) Mukesh (d) Savita

- (ii) 'We' refers to.....
- | | |
|---------------------------|--------------------------------|
| (a) Mukesh's family | (c) Mukesh's sister-in-law |
| (b) The author and Mukesh | (d) Mukesh and his grandmother |
- (iii) What does the description of half-built shack signify?
- | | |
|-------------------|--------------|
| (a) prosperity | (c) equality |
| (b) stark poverty | (d) justice |
- (iv) What does the title 'Lost Spring' symbolise?
- | | |
|-------------------|-----------------------------|
| (a) Autumn season | (c) Lost blooming childhood |
| (b) Lost age | (d) Lost money |

Q4. Read the extract and attempt **ANY ONE** of the two given by answering the questions that follow: (1X4=4)

A.and felt that old
Familiar ache, my childhood's fear,
But all I said was, see you soon, Amma,
All I did was smile and smile and smile...

- (i) The parting words of the poet suggest
- | | |
|---------------|-------------|
| (a) optimism | (b) freedom |
| (c) happiness | (d) passion |
- (ii) What does the poet's smile signify in the poem?
- | | |
|----------------------------------|------------------|
| (a) happy times | (b) carelessness |
| (c) attempt to hide helplessness | (d) party time |
- (iii) What is the universality of the theme of the poem?
- | | |
|----------------------------------|-----------------------|
| (a) Life is a reality | (b) everyone is happy |
| (c) death is an undeniable truth | (d) to show old age |
- (iv) Which Rhyme scheme is used in the poem?
- | | |
|-------------------|---------------------|
| (a) Coupled rhyme | (b) Alternate rhyme |
| (c) mono rhyme | (d) free verse |

B.

On their slag heap, these children
Wear skins peeped through by bones
and spectacles of steel with mended glass

- (i) Who is the poet of "An Elementary School Classroom in a Slum"?
- | | |
|---------------------|------------------------|
| (a) John Donne | (b) William Wordsworth |
| (c) Stephen Spender | (d) John Keats |

- (ii) What image does the poet use to convey/describe abysmal condition of the slum?
- (a) Slag heap (c) bones
(b) Mended glass (d) spectacles of steel
- (iii) What is the meaning of 'slag heap'?
- (a) All the healthy things (c) hunger stricken bodies
(b) heap of sand (d) industrial waste, toxic filth and squalor
- (iv) Why are their bones peeping through their skins?
- (a) They are malnourished (c) They are strong
(b) They are well fed (d) all of these

5. Attempt **ANY EIGHT** questions from the ten given below: (1X8=8)

- (i) Sadao had been a victim in America, of.....
- (a) Racial prejudice
(b) Satirical dialogues
(c) Impartial teachers
(d) Unruly mob
- (ii) Choose the statement that is NOT TRUE with reference to Douglas
- (a) Douglas's fear kept him away from leisurely activities in water.
(b) The fall in the pool at YMCA taught Douglas a life lesson.
(c) The fear of drowning was the source of Douglas's anxiety and terror.
(d) Douglas decided to practice alone,relentlessly to overcome his depression.
- (iii) Spender's use of imagery in "His eyes live in a dream, of squirrel game, in the room other than this", brings out
- (a) the similarity between the frail bodies of a squirrel and the children in the classroom
(b) the contrast between studying in the dreary classroom and playing outside freely
(c) the comparison of the dingy home of the squirrel and the dreary classroom
(d) the difference between the games of the squirrel and those of the children
- (iv) What specific difference did Charley notice at The Third Level of the Central Station?
- (a) Everything was weird
(b) Everything was too big
(c) Everything was shining
(d) Everything was old styled
- (v) Concluding his last lesson by writing 'Vive la France!' on the blackboard shows that M. Hamel
- (a) was overwhelmed with emotions
(b) wanted to distract all attending class that day
(c) was keen on not leaving the country
(d) wanted to teach French participles through it
- (vi) The literary device in 'slums as big as doom' is
- (a) simile (c) alliteration
(b) metaphor (d) personification
- (vii) The General, in not sending the assassins, had been.....
- (a) unpatriotic (b) patriotic (c) pleasant (d) selfish

- (viii) What does Sam's letter to Charley represent?
 (a) a crime (b) an acceptance to visit
 (c) a proof of his friendship (d) a blend of reality with fantasy
- (ix) Saheb's discarded and worn out shoes are:
 (a) an indication to procure different ones (b) a dream come true amidst poverty
 (c) a dream come true and celebrations (d) an insult to the sports itself
- (x) In the poem, *My Mother at Sixty-six*, 'Children spilling out' is a.....
 (a) simile
 (b) metaphor
 (c) personification
 (d) transferred epithet

PART -B (16 MARKS)
Advanced Writing Skills

Q6. Attempt **ANY ONE** of the following: (1x3=3)

Analysis, using appropriate format and fluency, appropriacy of style and tone

(A) You are Secretary of Fine Arts Club of Maharana Pratap Sr. Secondary school, Pune. A visiting Russian Ballet Troupe has been invited to give a performance in your school on the occasion of its Golden Jubilee Celebrations. As Vibha/Vaibhav write a notice in about 50 words, informing the students about this event. Include other necessary details.

OR

(B) Shehnaz Ali wants to start her Yoga Centre for school children at her residence, 234, New Colony Allahabad. Draft a classified advertisement to be published in a local daily giving all the relevant details.

Q7. Attempt **ANY ONE** of the following: (1x3=3)

Analysis, using appropriate format and fluency, appropriacy of style and tone

(A) You are Sharad/Sangita, School Captain of Kabir Model School, Rohtak. Write a notice on behalf of your school asking students to practice utmost honesty and sincerity while taking online examination during pandemic time.

OR

(B) Your company ELITE PENS Pvt. Ltd. Is launching a range of gel pens, designer pens, etc. Draft a commercial advertisement for this purpose.

Q8. Attempt **ANY ONE** of the following: (1x5=5)

Analysis, using appropriate format and fluency, appropriacy of style and

(A) Vineet/ Vani Prasad of 29, Rajpur Road, Ambala, is concerned about the reports that domestic violence and child abuse have increased during the pandemic and decides to write a letter to the editor of a national daily highlighting the issues and the dire need for creating awareness about these issues. Using your own ideas, write Vineet's/ Vani's letter in not more than 120-150 words.

OR

(B) You are Prem/ Parul, of 16, TT Nagar, Bhopal. You would like to apply for the post of the Marketing Manager in a reputable firm in Mumbai. Write a letter to the Public Relations Officer, Chaitanya Enterprises, Mumbai, applying for the job. Write the letter in 120-150 words giving your biodata.

Q9. Attempt **ANY ONE** of the following: (1x5=5)

evaluation, using appropriate format and fluency, appropriacy of style and tone

(A) You are the staff reporter of The Hindustan Times, New Delhi. You have witnessed a clash between a group of college students and State Transport bus crew, which finally ended up in stoning the buses and bus crew calling for a bus strike. Write the report about the incident in 120-150 words.

OR

(B) You are Vivek/Vamika, a student of 12A. Lately you have been reading a lot about Vocational training. Write an article in 120-150 words for your school magazine on "Vocational Training-as a part of the School Curriculum".

LITERATURE (24 Marks)

Q10. Answer **ANY FIVE** of the following six questions in 30-40 words each: (2x5=10)

- (i) Why had the villagers occupied the back benches of the class that day in the chapter 'The Last Lesson'?
- (ii) What are the different connotations of the word 'Garbage' to the children and ragpickers of Seemapuri?
- (iii) How is the portrait of Shakespeare wicked and the map a bad example for the children of the school in a slum?
- (iv) What was Kamala Das's childhood fear?
- (v) Why are the young trees described as 'sprinting'?
- (vi) How was Saheb's life at the tea stall?

Q11. Attempt **ANY TWO** out of the three questions given below in 30-40 words each: (2x2=4)

- (i) Does Charley agree that stamp collecting habit is a way of escapism in the chapter 'The Third Level'?
- (ii) In what condition did Dr Sadao find the American at the sea shore in the story 'The Enemy'?
- (iii) Why was Dr Sadao not sent abroad along with the troops?

Q12. Attempt **ANY ONE** of the following questions in 120-150 words: (1x5=5)

- (A) The story 'Deep Water' talks about Douglas's attempt to overcome his fear of water. The story can also be viewed as a figurative manifestation of life's many challenges. Explain in your own words relating with Douglas's narrative.

OR

- (B) Franz thinks, "Will they make them sing in German, even the pigeons?" After reading the chapter, you realize that man has an intense desire to subjugate others. You feel that in the modern world there is a strong need for brotherhood. Write how suppression is wrong in context of the chapter 'The Last Lesson'?

Q13. Attempt **ANY ONE** out of the following questions in 120-150 words: (1x5=5)

- (A) Dr Sadao was compelled by his duty as a doctor to help the enemy soldier. What made Hana, his wife, sympathetic to him in the face of open defiance from the domestic staff?

OR

- (B) Do you see an inter-section of time and space in the lesson 'The Third Level' Elaborate with examples.



DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
QUALIFYING EXAMINATION (2021-2022)

Class:- XII
Time – 3 Hrs.

Subject:- Physics
F.M. :- 70

General Instructions:

Read the following instructions very carefully and strictly follow them.

1. There are 33 questions in the question paper. All questions are compulsory.
2. This question paper comprises five sections A, B, C, D and E.
3. Section A contains ten very short answer questions and four assertion-reasoning MCQs of 1 mark each.
4. Section B has two case based questions of 4 marks each.
5. Section C contains nine short answer questions of 2 marks each.
6. Section D contains five short answer questions of 3 marks each and
7. Section E contains three long answer questions of 5 marks each.
8. There is no overall choice in the question paper. However internal choice has been provided . You have to attempt only one of the choices in such questions.

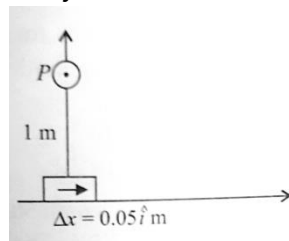
Section -A

1. Define electric flux. Give it's S.I. unit.
2. A potential difference V is applied across the ends of a copper wire of length l and diameter D . What is the effect on drift velocity of electrons if
 - (i) l is doubled
 - (ii) D is halved?

OR

Mention one advantage of the potentiometer over a voltmeter.

3. An element of $0.05 \hat{i}$ m is placed at the origin , as shown. It carries a current of 10 A. What will be the magnetic field intensity at a distance of 1 m in the perpendicular direction?



4. The dielectric constant for a metal is

OR

A parallel plate capacitor is made by placing 'n' equally - spaced plates connected alternatively. If the capacitance between any two adjacent plates is C, the resultant capacitance in terms of C, will be

5. A germanium wire is heated from 250 K to 300 K. Show, graphically, the variation of resistivity with temperature.
6. Give one point of similarity and one point of difference between Coulomb's law and Biot-Savart's law.
7. Find the electric flux of the electric field $\vec{E} = \hat{i} + \sqrt{2} \hat{j} + \sqrt{3} \hat{k}$ (N/C) through a square surface of side 1000 cm, lying in the XY plane.

OR

A charge of $24 \mu\text{C}$ is given to a hollow, metallic sphere of radius 0.4 m. Find the potential at 0.2 m from the centre of the sphere.

8. What is meant by 'temperature - coefficient of resistance'? What is its dimensional formula?

OR

The resistance of a wire is $R \Omega$. If it is melted and stretched to n times its original length, what will be its new resistance?

9. A current of one ampere is passed through a straight wire of length 2 m. Find the magnetic field at a point in air, at a distance 3m from one end of the wire, but lying on the axis of the wire.
10. Plot graphs, showing the variation of Coulomb's force (F) versus $\left(\frac{1}{r^2}\right)$, where r is the distance between the two charges of each pair: $(1\mu\text{C}, 2\mu\text{C})$ and $(2\mu\text{C}, -3\mu\text{C})$.

For Question No. 11, 12, 13 and 14 two statements are given -one labelled Assertion (A) and the other labelled Reason (R). Select the correct answers to these questions from the codes (a), (b), (c) and (d) as given below.

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true but R is not the correct explanation of A
- (c) A is true but R is false
- (d) Both A and R are false

11. ASSERTION (A) : For good conductors, the I-V graph is perfect straight line inclined to the current axis .

REASON (R) : By Ohm's law, the voltage across the ends of a conductor is directly proportional to the resistance of the conductor.

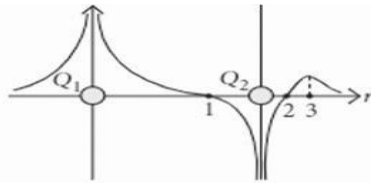
12. ASSERTION (A) : The energy of a charged particle moving in a uniform magnetic field does not change.
 REASON (R): Work done by the magnetic field on a charged particle is zero.
13. ASSERTION (A) : Increasing the charge on the plates of a capacitor means increasing its capacitance.
 REASON (R) : Capacitance is directly proportional to charge.
14. ASSERTION (A) : Drift velocity is independent of time.
 REASON (R) : Electrons are accelerated in the presence of an electric field.

SECTION - B

Q.15 and Q.16 are case study based questions and are compulsory. Attempt any four sub-parts from each question. Each question carries one mark.

15. **Potential of two point charges:**

The potential at any observation point P of a static electric field is defined as the work done by the external agent (or negative of work done by the electrostatic field) in slowly bringing a unit positive charge from infinity to the observation point. Figure shows the variation of potential along the line of charges. The two point charges Q_1 and Q_2 lie along a line, at a distance from each other.



- (i) At which of the points 1, 2 and 3 is the electric field zero?
 (a) 1
 (b) 2
 (c) 3
 (d) Both (a) and (b)
- (ii) The signs of charges Q_1 and Q_2 respectively are :-
 (a) positive and negative
 (b) negative and positive
 (c) positive and positive
 (d) negative and negative
- (iii) Which of the two charges is greater in magnitude?
 (a) Q_2
 (b) Q_1
 (c) Same magnitude for both
 (d) Can't be determined

(iv) Which of the following statements is not true?

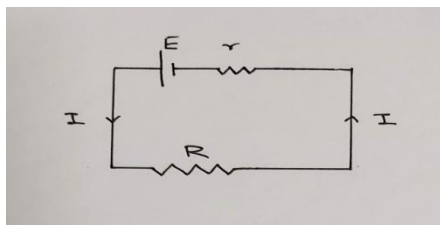
- (a) Electrostatic force is a conservative force
- (b) Potential energy of charge q at a point is the work done per unit charge in bringing a charge from any point to infinity.
- (c) When two like charges lie infinite distance apart, their potential energy is zero
- (d) Both (a) and (c)

(v) Positive and negative point charges of equal magnitude are kept at $(0, 0, \frac{a}{2})$ and $(0, 0, -\frac{a}{2})$ respectively. The work done by the electric field when another positive point charge is moved from $(-a, 0, 0)$ to $(0, a, 0)$ is :-

- (a) positive
- (b) negative
- (c) zero
- (d) depends on the path connecting the initial and the final positions.

16. Relation between E , V and r of a cell:

EMF of a cell is the maximum potential difference between the electrodes of the cell when no current is drawn from the cell. Internal resistance is the resistance offered by the electrobyte of a cell, when the electric current flows through it. For a freshly prepared cell, the value of the internal resistance is generally low and goes on increasing as the cell is put to more and more use. The potential difference between the two electrodes of a cell in a closed circuit is called terminal potential difference and it's value is less than the EMF of the cell during discharge.



(i) The terminal potential difference is equal to the EMF of the cell when :-

- (a) $I \neq 0$
- (b) $I = 0$
- (c) both (a) and (b)
- (d) neither (a) nor (b)

(ii) A cell of emf E and internal resistance r gives a current of 0.5 A with an external resistance of 12Ω and a current of 0.25 A with an external resistance of 25Ω . What is the value of the internal resistance of the cell ?

- (a) 5Ω
- (b) 1Ω
- (c) 7Ω
- (d) 3Ω

(iii) Choose the wrong statement :-

- (a) Potential difference across the terminals of a cell in a closed circuit is always less than its EMF
- (b) Internal resistance of a cell decreases with the decrease in temperature of the electrolyte.
- (c) Potential difference versus current graph for a cell is a straight line with a negative slope.
- (d) Terminal potential difference of the cell when it is being charged is given as $V=E+Ir$

(iv) An external resistance R is connected to a cell of internal resistance r . The maximum current flows in the external resistor when

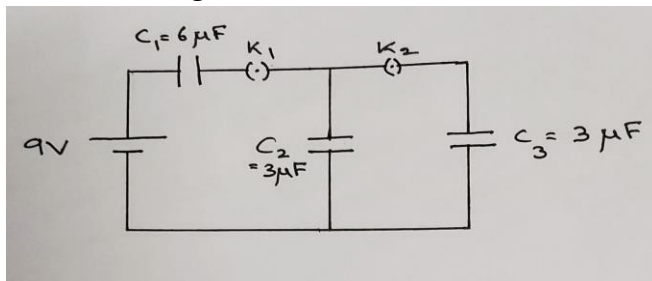
- (a) $R=r$
- (b) $R<r$
- (c) $R>r$
- (d) $R = 1/r$

(v) If the external resistance connected to a cell has been increased to five times, the potential difference across the terminals of the cell increases from 10V to 30V. Then the EMF of the cell is :-

- (a) 30 V
- (b) 60V
- (c) 50 V
- (d) 40V

Section - C

17. In the circuit given



- (i) What is the charge on each capacitor if K_1 is closed and K_2 is open?
- (ii) What will be the charge on the capacitors if K_1 is opened and K_2 is closed, in the order?

18. A cell of emf (E) and internal resistance (r) is connected across a variable resistance (R). Plot graphs to show the variation of:-

- (i) E with R
- (ii) Terminal voltage (V) with R

Justify.

19. Protons and deuterons are accelerated through the same potential difference before they enter a region of uniform magnetic field applied perpendicular to their motion. If protons describe a circle of radius 10 cm, what will be the radius of the circle of a deuteron?

OR

A uniform magnetic field \vec{B} is set up along the +X axis. A particle of charge q and mass m , moving with a velocity \vec{v} enters the field at the origin in the X-Y plane such that it has velocity components both along and perpendicular to the magnetic field \vec{B} . Trace the trajectory followed by the particle. Derive the expression for the distance moved by the particle, along the magnetic field, in one rotation.

20. Two charges q and $-3q$ are fixed on the X axis at coordinates $(0,0)$ and $(d,0)$ respectively. Where should a third charge, $2q$, be placed from A such that it will not experience any force?

OR

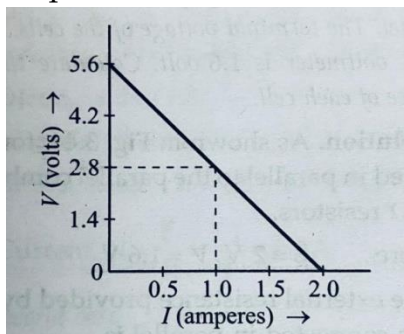
An infinitely long, positively charged straight wire has a linear charge density $\lambda \text{ Cm}^{-1}$. An electron is revolving around the wire, with a point on the wire as it's centre with a constant velocity in a circular plane perpendicular to the wire. Deduce the expression for it's kinetic energy. Plot a graph of kinetic energy as a function of λ .

21. Two cells of Emfs $4V$ and $2V$ and internal resistances 2Ω and 1Ω respectively are connected in (i) series (ii) parallel. What should be the external resistance in the circuit so that the current through the resistance is the same in the two cases?

22. Using the relation $I = neAv_d$ (where the rotations have their usual meaning), deduce Ohm's law.

OR

4 cells of identical emf E and internal resistance r , are connected in series to a variable resistor. The graph shows the variation of the terminal voltage of the combination with the current output.

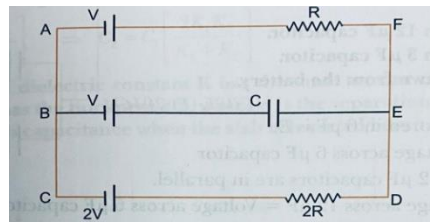


- (i) What is the emf of each cell and it's internal resistance?
 (ii) For what current from the cells, does the maximum power dissipation occur in the circuit?

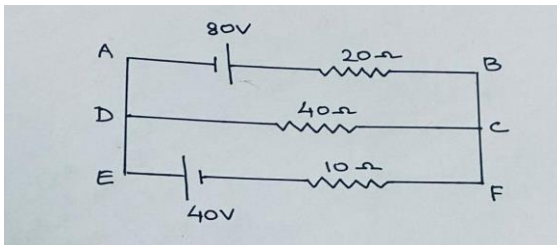
23. A long wire carrying a steady current is bent into a circular loop of one turn. The magnetic field at the centre of the loop is B . It is then bent into a circular coil of n turns. What will be the magnetic field at the centre of this coil of n turns in terms of B ?
24. Draw equipotential surfaces for
 (i) an electric dipole
 (ii) a non-uniform electric field, whose magnitude is decreasing along $+X$ axis.
25. Write an expression for the magnetic Lorentz force in vector notation. Use it to define the S.I. unit of magnetic field intensity.

Section -D

26. In the given circuit in the steady state, obtain an expression for:-



- (a) the potential drop
 (b) the charge
 (c) the energy stored in the capacitor C .
27. Using Kirchoff's rules, calculate the current through the 40Ω and 20Ω resistors in the given circuit.



28. What is meant by a 'dielectric'? Derive an expression for the capacitance of a parallel plate capacitor when a dielectric slab is inserted between its plates.
29. A heater boils 1 kg of water in t_1 time and another heater boils the same water in t_2 time. If both the heaters are connected in parallel, in what time will the combination boil the water?

OR

The supply voltage to a room is 120V. The resistance of the lead wires is 6Ω . A 60W bulb is already switched on. What is the decrease in the voltage across the bulb, when a 240 W heater is switched on in parallel to the bulb?

30. Derive an expression for the net electric field intensity at an axial point of an electric dipole. Draw a graph showing the variation of the net electric field intensity with distance from the dipole.

OR

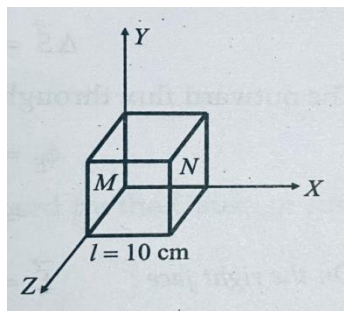
An electric dipole is held in a uniform electric field. Using suitable diagram show why there is no translational motion. Derive an expression for torque acting on it.

Section - E

31. State Gauss's theorem. Derive an expression for the electric field intensity due to a thin, infinite, plane sheet of charge, using the theorem.

Electric field is directed along +X axis and is given by $E_x = 5Ax + 2B$

where E is in NC^{-1} and x is in metres. A and B are constants with dimensions.



Taking $A = 10\text{NC}^{-1}\text{m}^{-1}$ and $B = 5\text{NC}^{-1}$,

- calculate (i) electric flux through the cube
(ii) net charge enclosed within the cube

OR

Derive expressions for (a) energy and (b) energy density stored in a parallel plate capacitor, with air in between its plates.

Keeping the voltage of the charging source constant, what would be the percentage change in the energy stored in a parallel plate capacitor if the plate separation was to be decreased by 10%?

32. State the principle of a potentiometer. With a labelled diagram, explain briefly, how it can be used to measure the internal resistance of a cell. Mention two ways of increasing the sensitivity of a potentiometer.

OR

With the aid of neat, labelled diagram, explain the method of determining an unknown resistance with a Metre Bridge.

In a Metre Bridge, resistances R and S are connected to the left and right gaps respectively. The null point is found at 40 cm from the zero end (taken on the left). If a resistance of 12Ω is connected, in parallel, with S, the null point shifts by 10 cm. Determine the values of R and S.

33. (a) A straight, long thick wire of uniform cross section of radius a is carrying a steady current I , which is uniformly distributed across the cross-section. Use Ampere's circuital law to obtain a relation showing the variation of the magnetic field (B_r) inside and outside the wire with distance r , ($r \leq a$) and ($r > a$) of the field point from the centre of its cross-section. Plot a graph showing the nature of this variation.
- (b) Calculate the ratio of the magnetic field at a point $\frac{a}{2}$ above the surface of the wire to that at a point $\frac{a}{2}$ below its surface.

OR

State Biot-Savart's law. Write the mathematical form vectorially. Using the law, derive an expression for the magnetic field at an axial point of a circular current-carrying loop of N turns; the axial point being radius distance away from the centre of the loop.



DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
QUALIFYING EXAMINATION (2021-2022)

Class: XII
Time:3 Hours

Subject: Chemistry
Max Marks :70

General Instructions:

- (i) Question paper comprises of four sections A,B,C and D.
- (ii) There are 33 questions in the question paper and all questions are compulsory.
- (iii) Section A: Q1 to Q2 are case based questions, having four MCQs or Reason-Assertion type, based on given passage, each carrying 1 mark.
- (iv) Section A:Q3 to Q16 are MCQs, Reason –Assertion type and one sentence type questions, carrying 1 mark each.
- (v) Section B:Q17 to Q25 are short answer questions and carry 2 marks each.
- (vi) Section C:Q26 to Q30 are short answer questions and carry 3 marks each.
- (vii) Section D:Q31 to Q33 are long answer questions carrying 5 marks each.
- (viii) There are No overall choice. However internal choices have been provided.
- (ix) Use of calculators and log table, are not permitted.

SECTION - A

1. Read the passage given below and answer the following questions: [1 X 4=4]

No Crystal is found to be perfect at room temperature. The defects present in the crystals can be stoichiometric or non-stoichiometric. Due to non-stoichiometric defects, the formula of the ionic compound is different from the ideal formula. For example, the ideal formula for ferrous oxide should be FeO, but actually in one sample, it was found to be Fe_{0.93}O. This is because the Crystal may have some ferric ions in place of ferrous ions. These defects change the properties of the crystals. In some cases, defects are introduced to have crystals of desired properties as required in the field of electronics. Doping of elements of group 14 with these of Gr 13 or 15 is most common. In ionic compounds, usually impurities are introduced in which the cation has higher valency than the cation of the present crystal.

Following questions are Multiple Choice Questions. Choose the correct Answer:

- I. Which kind of defects are introduced by doping?
 - a. Dislocation defect
 - b. Schottky defect
 - c. Frenkel defects
 - d. Electronic defect

- II. Which of the following is true about the charge acquired by p-type semiconductors?
- Positive
 - Neutral
 - Negative
 - Depends on concentration of p-impurity.

- III. Which type of 'defect' has the presence of cations in the interstitial sites?
- Schottky defect.
 - Vacancy defect
 - Frenkel defect
 - Metal deficiency defect.

- IV. The crystal with metal deficiency defect is:
- NaCl
 - FeO
 - KCl
 - ZnO

2. Read the passage given below and answer the following questions: [1 X 4= 4]

Electrolysis is the decomposition of an electrolyte on passing current & it involves the migration of the ions of the electrolyte towards oppositely charged electrodes. Reduction occurs at cathode by the gain of electrons while oxidation at the anode by the loss of electrons. The electrical conductivity of an electrolyte increases upon dilution as well as with the increase in temperature. The nature of the products formed at the respective electrodes depend upon the nature of the electrolyte whether in molten state or in aqueous solution. The mass of the substance deposited at a particular electrode is guided by the Faraday's Law.

Choose the correct answer out of the following choices:

- Assertion and reason both are correct statements and reason is correct explanation for assertion.
 - Assertion and reason both are correct statements but reason is not the correct explanation for assertion.
 - Assertion is correct statement but reason is wrong statement.
 - Assertion is wrong statement but reason is correct statement.
- I. Assertion: Conductivity of all electrolytes decreases on dilution.
Reason: On dilution number of ions per unit volume decreases
- II. Assertion: If aqueous solution of NaCl is electrolysed, the product obtained at Cathode is H₂ and not Na
Reason: Gases are liberated faster than the metals

- III. Assertion: Neither pure H_2SO_4 nor pure HClO_4 conduct electric current but a mixture of two does.
Reason: Both are strong acid
- IV. Assertion: In Daniell cell if concentration of Cu^{2+} and Zn^{2+} ions are doubled, the emf of the cell does not change.
Reason: If the concentration of the ions in the contact with the metal is doubled, the electrode potential will be also doubled.

Following questions from 3 to 11 are multiple choice questions carrying 1 mark each.

3. Which of the following is true about the value of the refractive index of quartz glass?
- Same in all directions
 - Different in different directions
 - Cannot be measured
 - Always zero
4. In which pair most efficient packing is present?
- hcp and bcc
 - hcp and ccp
 - bcc and ccp
 - bcc and simple cubic cell
5. Which of the following compound is metallic and ferromagnetic?
- CrO_2
 - VO_2
 - MnO_2
 - TiO_2
6. The unit of rate of reaction and rate constants are the same for a:
- Zero order reaction
 - First order reaction
 - Second order reaction
 - None of These
7. Half lives for first order and a zero order reactions are same. The ratio of initial rates of first order reaction and zero order reaction is:
- $1/0.693$
 - 2×0.693
 - 0.693
 - 6.93

8. The decomposition of PH_3 on Tungsten at low pressure is a first order reaction. It is because:
- Rate is independent of surface coverage
 - Rate of decomposition is very low
 - Rate is proportional to the surface coverage
 - Rate is inversely proportional to the surface coverage
9. Which of the following statement is not correct for the catalyst?
- It catalyses the forward and backward reactions to the same extent.
 - It alters ΔG for the reaction.
 - It is a substance that does not change the equilibrium constant of the reaction
 - It provides an alternative mechanism by reducing activation energy.
10. Higher order (>3) reactions are rare due to:
- Low probability of simultaneous collisions of all the reacting species.
 - Increase in entropy and activation energy as more molecules are involved
 - Shifting of equilibrium towards reactants due to elastic collisions
 - Loss of active species on collision
11. The activation energy of a chemical reaction can be determined by:
- Evaluating rate constants at two different temperatures
 - Changing concentrations of reactants
 - Evaluating rate constants at standard temperature
 - Evaluating velocities of reaction at two different temperatures

In the following questions (12 to 16) a statement of assertion followed by a statement of reason is given. Choose the correct answer out of the following choices.

- Assertion and reason both are correct statements and reason is correct explanation for assertion.
 - Assertion and reason both are correct statements but reason is not the correct explanation for assertion.
 - Assertion is correct statement but reason is wrong statement.
 - Assertion is wrong statement but reason is correct statement.
12. Assertion: Benzene-toluene mixture forms ideal solution at low concentrations
Reason: Components with structural similarity forms ideal solution in general
13. Assertion: Greater the value of Henry's constant of a gas in a particular solvent, greater is the solubility of the gas at the same pressure and temperature.
Reason: Solubility of a gas is directly proportional to the Henry's constant at the same pressure and temperature.

14. Assertion: If red blood cells are removed from the body and placed in pure water, pressure inside the cells increases.
Reason: The concentrations of the salt content in the cells increases.
15. Assertion: Molar mass of benzoic acid as determined by depression in freezing point method in benzene is different from that in water
Reason: Water is polar solvent whereas benzene is non-polar solvent
16. Assertion: Out of various colligative properties, osmotic pressure is used for determination of molecular masses of polymers
Reason: Polymer solutions do not possess constant boiling point or freezing point

SECTION - B

[2 x 9 = 18]

17. How do paramagnetic substances differ from ferromagnetic? (Write two points)
18. Define reverse osmosis. Give one use of it.

OR

Under what condition do non-ideal solution show negative deviation? Explain with an example.

19. Write the cell reaction of a lead storage battery when it is discharged. How does the density of the electrolyte change when the battery is discharged?
20. Give Reasons:
- Rusting of iron pipe can be prevented by joining it with a piece of magnesium
 - Conductivity of an electrolyte solution decreases with decrease in concentration
21. When acidulated water (dil. H_2SO_4) is electrolysed, will the pH of the solution be affected? Justify your answer.
22. For a reaction: $2\text{NH}_3(\text{g}) \xrightarrow{Pt} \text{N}_2(\text{g}) + 3\text{H}_2(\text{g})$
- Write the order and molecularity of this reaction.
 - Write the unit of rate constant for the above reaction.
23. Define the following terms:
- Activated complex
 - Collision frequency

OR

What is activation energy? How is rate constant related to activation energy?

24. Why is molecularity applicable only for elementary reaction and order applicable for elementary as well as complex reaction?
25. Explain the difference between instantaneous rate of reaction and average rate of reaction.

SECTION - C

[3 x 5 = 15]

26. A first order reaction is 20% complete in 10 minutes. Calculate the time for the completion of 75% of the reaction.

OR

The rate constant for a first order reaction increases from 4×10^{-2} to 8×10^{-2} when the temperature changes from 27°C to 37°C . Calculate energy of activation.

27. On the basis of band model theory explain the electrical properties of solid.

28. Answer the following questions:

- A mixture of acetone and carbon disulphide boils at 312K . Which type of azeotrope is this? Explain with reason. [B.P. of acetone = 329K , B.P. of carbon disulphide = 320K]
- Additions of HgI_2 to an aqueous solution of KI increases its vapour pressure. Why?

29. Explain the following phenomena with the help of Henry's law:

- Painful condition known as bends
- Feeling of weakness and discomfort in breathing at higher altitude
- Aquatic species are more comfortable in cold water in comparison to warm water.

30. State the Faraday's First Law of Electrolysis. How many electrons can flow through a metallic wire if a current of 0.5 ampere is passed for 2 hours? [$1\text{F} = 96500\text{C/mol}$]

SECTION - D

[3 x 5 = 15]

31. I) Give the type of intermolecular forces present in the solid of each of the following substances: Ar , NH_3 , I_2 , CO [0.5 x 4 = 2]

II) Chromium metal crystallizes with a body centred cubic lattice. The length of the unit cell edge is found to be 287pm . Calculate the atomic radius of Chromium and density in gm/cc . [Atomic mass of Chromium is 52gm/mol] [3]

OR

I) Give the reason for the following:

- ZnO turns yellow on heating
- AgCl shows Frenkel defect while NaCl does not [2]

II) An element has atomic mass 93gm/mol and density 11.5gm.cm^3 . If the edge length of its unit cell is 300pm . Identify the type of unit cell. [3]

32. I) What do you mean by abnormal molecular mass? Explain the factors with suitable examples which bring about abnormality? [2]

II) Phenol associates in benzene to certain extent to form a dimer. A solution containing 20 gm of phenol in 1.0 Kg of benzene has its freezing point lowered by 0.69 K. Calculate the fraction of Phenol that has dimerized? [Given K_f for Benzene = 5.1 K mol^{-1}] [3]

OR

I) The molecular masses of polymers are determined by osmotic pressure method and not by measuring other colligative properties. Give two reasons. [2]

II) Calculating the boiling point elevation for a solution prepared by adding 10 gm of CaCl_2 in 200 gm of water. (K_b for water = $0.512 \text{ K Kg mol}^{-1}$, Molar mass of CaCl_2 = 111 gm/mol) [3]

33. I) The standard reduction potential values of three metallic cations X, Y, Z are 0.52, - 3.03, - 1.18V respectively. What will be the order of reducing power of corresponding metals? Write reason.

II) Why does dry cell become dead after long time, even if it has not been used?

III) Calculate the emf for the given cell at 25°C .

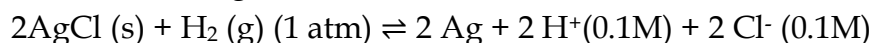


[Given: $E^0_{\text{Cr}^{3+}/\text{Cr}} = -0.74\text{V}$, $E^0_{\text{Fe}^{2+}/\text{Fe}} = -0.44\text{V}$] [1+1+3=5]

OR

I) Write two points of differences between metallic and electrolytic conductors.

II) For the following reaction, calculate emf of the cell:



$\Delta G^0 = -43600 \text{ J}$ at 25°C [2+3=5]



**DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
QUALIFYING EXAM 2021-2022**

CLASS XII

SUBJECT: MATHEMATICS

Time: 3 Hrs.

M.M: 80

General Instructions:-

- This question paper contains two **parts A and B**.
- Each part is compulsory.
- Part A carries **24**marks and Part B carries **56** marks
- **Part-A** has Objective Type Questions.
- **Part -B** has Descriptive Type Questions.
- Both **Part A** and **Part B** have choices.

Part - A:

- It consists of two sections- **I and II**.
- Section **I** comprises of 16questions of very short answer type questions.
- Section **II** contains **2** case studies.
- Each case study comprises of 5 case-based MCQs. An examinee is to attempt **any 4 out of 5 MCQs**.
- Internal choice is provided in **3** questions of section - I.

Part - B:

- It consists of three sections- **III, IV and V**.
- Section **III** comprises of 10 questions of **2 marks** each.
- Section **IV** comprises of 7 questions of **3 marks** each.
- Section **V** comprises of 3 questions of **5 marks** each.
- Internal choice is provided in **3** questions of Section -III, **2** questions of Section- IV and **3**question of Section-V. You have to attempt only one of the alternatives in all such questions.

PART A (SECTION I) 16x1=16marks

Section I has 16 questions of 1 mark each. Internal choice is provided in 3 questions.

1. Corner points of the feasible region for an L.P.P are : (0,2), (3,0) , (6,0) , (6,8) and (0,5). Let $Z = 4x+6y$ be the objective function. Then find Max Z –Min Z.
2. If $A = [a_{ij}]$ is a square matrix of order 2 such that $a_{ij} = i^2 - j^2$ then write A and write whether A is symmetric or skew -symmetric.
3. If $A = \begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$, write $A \cdot A^T$.

OR

Find an example of two non-zero 2x2 matrices A and B such that $AB=O$.

4. If $A = \begin{bmatrix} \cos \theta & -\sin \theta \\ \sin \theta & \cos \theta \end{bmatrix}$, $A^T + A = I_2$, where I_2 is the identity matrix of order 2.

Then find the value of θ .

5. Evaluate : $\begin{vmatrix} a + ib & c + id \\ c - id & a - ib \end{vmatrix}$.
6. Find the equation of the line joining the points (3,1) and (9,3) using determinant.
7. Find the maximum value of

$$\Delta = \begin{vmatrix} 1 & 1 & 1 \\ 1 & 1 + \sin \theta & 1 \\ 1 + \cos \theta & 1 & 1 \end{vmatrix} \text{ where } \theta \text{ is real.}$$

8. If $\vec{a} = 3\hat{i} - \hat{j} - 4\hat{k}$, $\vec{b} = -2\hat{i} + 4\hat{j} - 3\hat{k}$ and $\vec{c} = \hat{i} + 2\hat{j} - \hat{k}$ find $|3\vec{a} - 2\vec{b} + 4\vec{c}|$.
9. Find a unit vector $\perp r$ to both $\hat{i} + \hat{j}$ and $\hat{j} + \hat{k}$.

OR

Find λ and μ , if $(\hat{i} + 3\hat{j} + 9\hat{k}) \times (3\hat{i} - \lambda\hat{j} + \mu\hat{k}) = \vec{0}$.

10. The vectors $3\hat{i} - \hat{j} + 2\hat{k}$, $2\hat{i} + \hat{j} + 3\hat{k}$ and $\hat{i} + \lambda\hat{j} - \hat{k}$ are coplanar, find the value of λ .
11. Write the equation of y - axis in space.
12. Find the $\perp r$ distance of the point. P(1,2,3) from the line $\frac{x-6}{3} = \frac{y-7}{2} = \frac{z-7}{-2}$.
13. If A is a non-singular square matrix such that $A^{-1} = \begin{bmatrix} 5 & 3 \\ -2 & -1 \end{bmatrix}$, then find $(A^T)^{-1}$
14. Use elementary column operation $C_2 \rightarrow C_2 + 2 C_1$ in the following matrix equation.
- $$\begin{bmatrix} 2 & 1 \\ 2 & 0 \end{bmatrix} = \begin{bmatrix} 3 & 1 \\ 2 & 0 \end{bmatrix} \begin{bmatrix} 1 & 0 \\ -1 & 1 \end{bmatrix}$$
15. A die is thrown three times, find the probability that 4 appears on the third toss if it is given that 6 and 5 appear respectively on first two tosses.
16. If A and B are two events such that $P(A) = \frac{1}{4}$, $P(B) = \frac{1}{2}$, and $P(A \cap B) = \frac{1}{8}$ find
P (not A and not B).

OR

In two successive throws of a pair of dice, determine the probability of getting a total of 8 each time.

PART - A (SECTION II) 2 x 4 =8marks

Case study based questions are compulsory. Attempt any four sub parts of each question. Each subpart carries 1 mark

17. Given vector $\vec{a} = 4\hat{i} + 3\hat{j} + \hat{k}$ and $\vec{b} = \hat{i} - 2\hat{k}$

(i) Then $|\vec{b} \times \vec{a}|$ is

- a) $\sqrt{204}$ b) $26\sqrt{5}$ c) $\sqrt{504}$ d) none of these

(ii) Angle between \vec{a} and \vec{b} is

- a) 90° b) $\cos^{-1} \frac{2}{\sqrt{13}}$ c) $\cos^{-1} \frac{2}{\sqrt{130}}$ d) None of these

(iii) $|\vec{a} \times \vec{b}|$ is

- a) $3\sqrt{14}$ b) $14\sqrt{3}$ c) $\sqrt{162}$ d) None of these

iv) Projection of \vec{b} on \vec{a} is

- a) $\frac{2}{\sqrt{5}}$ b) $\frac{2}{\sqrt{26}}$ c) $\frac{-2}{\sqrt{5}}$ d) $\frac{-2}{\sqrt{26}}$

v) Unit vector in the direction of the resultant of \vec{a} and \vec{b} is

- a) $\frac{5\hat{i}-\hat{k}}{\sqrt{26}}$ b) $\frac{5\hat{i}+3\hat{j}-\hat{k}}{\sqrt{35}}$ c) $\frac{5\hat{i}+3\hat{j}+\hat{k}}{\sqrt{26}}$ d) None of these

18. Let matrix $A = \begin{bmatrix} 5 & 10 & 3 \\ -2 & -4 & 6 \\ -1 & -2 & b \end{bmatrix}$

i) A is non singular if b =

- a) -3 b) 3 c) 0 d) None of these

ii) The value of M_{32} is

- a) 0 b) 36 c) -36 d) None of these

iii) The value of $A_{21} a_{21} + A_{22} a_{22} + A_{23} a_{23}$

- a) A^T b) A^{-1} c) $|A|$ d) None of these

iv) The value of $A_{21} a_{11} + A_{22} a_{12} + A_{23} a_{13}$ is always

- a) $|A|$ b) A^{-1} c) A^T d) 0

v) Find the value of $A_{13} a_{31} + A_{23} a_{32}$

- a) 23 b) 36 c) 0 d) None of these

PART B (SECTION III) 10X2=20marks

Section III has 10 questions of 2 marks each. Internal choice is provided in 3 questions.

19. If A and B are two matrices such that $AB = B$ and $BA = A$ then write $A^2 + B^2$ in terms of A and B .
20. Show that the matrix $B'AB$ is symmetric or skew symmetric according as A is symmetric or skew symmetric.
21. If $A = \begin{bmatrix} \cos \theta & \sin \theta \\ -\sin \theta & \cos \theta \end{bmatrix}$, then for any natural number n , find the value of $|A^n|$.
22. Area of a triangle with vertices $(k, 0)$, $(1, 1)$ and $(0, 3)$ is 5 sq units. Find the values of k .
23. Given $A = \begin{bmatrix} 1 & 1 \\ 1 & 1 \end{bmatrix}$ and $A^{100} = 2^k A$, then find k .
24. Find the projection of $\vec{b} + \vec{c}$ on \vec{a} where $\vec{a} = 2\hat{i} - 2\hat{j} + \hat{k}$, $\vec{b} = \hat{i} + 2\hat{j} - \hat{k}$ and $\vec{c} = 2\hat{i} - \hat{j} + 4\hat{k}$.

OR

L and M are two points with position vectors $2\vec{a} - \vec{b}$ and $\vec{a} + 2\vec{b}$ respectively. Write the position vector of a point N which divides the line segment LM in the ratio $2 : 1$ externally

25. A line makes angles 60° and 45° with the x and y -axes respectively, find the angle which it makes with the z -axis.

OR

The x -coordinate of a point P on the line joining the points $Q(2, 2, 1)$ and $R(5, 1, -2)$ is 4. Find its z -coordinate

26. Find the Cartesian equation of the line which passes through the point $(-2, 4, -5)$ and is parallel to the line $\frac{x+3}{3} = \frac{4-y}{5} = \frac{z+8}{6}$.
27. Three numbers are chosen from 1 to 30, find the probability that the three chosen numbers are consecutive.

28. The probability of simultaneous occurrence of at least one of the two events A and B is p .

If the probability that exactly one of A, B occurs is q , then prove that $P(A') + P(B') = 2 - 2p + q$.

OR

If $P(A) = \frac{3}{5}$, $P(B) = \frac{1}{5}$ find $P(A \cap B)$ if (i) A and B are mutually exclusive
(ii) A and B are independent.

PART B (SECTION IV) 7X3=21marks

Section IV has 7 questions of 3 marks each. Internal choice is provided in 2 questions.

29. Maximise $Z = 8x + 9y$ subject to the constraints given below:

$$2x + 3y \leq 6; 3x - 2y \leq 6; y \leq 1; x, y \geq 0$$

30. Using elementary transformation find the inverse of the matrix, if it exists

$$\begin{bmatrix} 2 & -3 & 3 \\ 2 & 2 & 3 \\ 3 & -2 & 2 \end{bmatrix}$$

OR

For the matrix $A = \begin{bmatrix} 2 & -1 & 1 \\ -1 & 2 & -1 \\ 1 & -1 & 2 \end{bmatrix}$, show that $A^2 - 5A + 4I = O$.

Hence find A^{-1} .

31. If $A = \begin{bmatrix} 1 & -1 \\ 2 & -1 \end{bmatrix}$, $B = \begin{bmatrix} a & 1 \\ b & -1 \end{bmatrix}$

and $(A + B)^2 = A^2 + B^2$, then find the values of a and b .

32. Using properties of determinants prove that

$$\begin{vmatrix} -bc & b^2 + bc & c^2 + bc \\ a^2 + ac & -ac & c^2 + ac \\ a^2 + ab & b^2 + ab & -ab \end{vmatrix} = (ab + bc + ca)^3.$$

33. If $\vec{\alpha} = 3\hat{i} + 4\hat{j} + 5\hat{k}$ and $\vec{\beta} = 2\hat{i} + \hat{j} - 4\hat{k}$, then express $\vec{\beta}$ in the form $\vec{\beta} = \vec{\beta}_1 + \vec{\beta}_2$, where $\vec{\beta}_1$ is parallel to $\vec{\alpha}$ and $\vec{\beta}_2$ is perpendicular to $\vec{\alpha}$.

OR

Vectors \vec{a} , \vec{b} and \vec{c} are such that $\vec{a} + \vec{b} + \vec{c} = \vec{0}$ and $|\vec{a}| = 3$, $|\vec{b}| = 5$ and $|\vec{c}| = 7$.

Find the angle between \vec{a} and \vec{b} .

34. Find x such that the four points $A(4, 1, 2)$, $B(5, x, 6)$, $C(5, 1, -1)$ and $D(7, 4, 0)$ are coplanar.

35. Find the equation of a line passing through the point $(1, 2, -4)$ and perpendicular to two lines

$$\vec{r} = (8\hat{i} - 19\hat{j} + 10\hat{k}) + \lambda(3\hat{i} - 16\hat{j} + 7\hat{k}) \text{ and}$$

$$\vec{r} = (15\hat{i} + 29\hat{j} + 5\hat{k}) + \lambda(3\hat{i} + 8\hat{j} - 5\hat{k}).$$

PART B (SECTION V) 3X5=15M

Section V has 3 questions of 5 marks each. Internal choice is provided in 3 question.

36. A dealer wishes to purchase a number of fans and sewing machines. He has only Rs.5760 to invest and has space for at the most 20 items. A fan costs him Rs.360 and a sewing machine costs him Rs.240. He expects to sell a fan at a profit of Rs.22 and a sewing machine at a profit of Rs.18. Assuming that he can sell all the items that he buys, how should he invest his money to maximize his profit? Solve it graphically.

OR

A farmer plant up to 10 hectares with cabbages and potatoes. He decides to grow at least 2 but not more than 8 hectares of cabbages and at least 1 but not more than 6 hectares of potatoes. If he can make a profit of Rs.1,500 per hectare on cabbage and Rs.2000 per hectare on potatoes, how should he plan his farming so as to get the maximum profit?

37. A shopkeeper has 3 varieties of pens 'A', 'B' and 'C'. Meenu purchased 1 pen of each variety for a total of Rs.21. Jeevan purchased 4 pens of 'A' variety, 3 pens of 'B' variety and 2 pens of 'C' variety for Rs.60. While Shikha purchased 6 pens of 'A' variety, 2 pens of 'B' variety and 3 pens of 'C' variety for Rs.70. Using matrix method, find the cost of each variety of pen.

OR

Given $A = \begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$ verify that $BA = 6I$,

use the result to solve the system of equations

$$x - y = 3, 2x + 3y + 4z = 17, y + 2z = 7.$$

38. Find the image of the point $(1, 6, 3)$ in the line $\frac{x}{1} = \frac{y-1}{2} = \frac{z-2}{3}$.

OR

Show that the lines $\frac{x-1}{2} = \frac{y-2}{3} = \frac{z-3}{4}$ and $\frac{x-4}{5} = \frac{y-1}{2} = z$ intersect. Also find the point of their intersection.



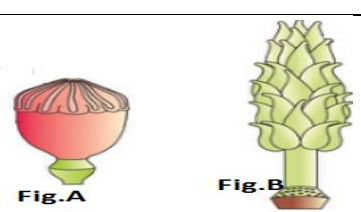
DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
QUALIFYING EXAMINATION (2021-2022)

Class:- XII
Time:- 3 Hrs.

Subject:- Biology
F. M:- 70

General Instructions:

- (i) All questions are compulsory.
- (ii) The question paper has four sections: Section A, Section B, Section C and Section D. There are 33 questions in the question paper.
- (iii) Section–A has 14 questions of 1 mark each and 02 case-based questions. Section–B has 9 questions of 2 marks each. Section–C has 5 questions of 3 marks each and Section–D has 3 questions of 5 marks each.
- (iv) There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.
- (v) Wherever necessary, neat and properly labeled diagrams should be drawn.

SECTION A		
	Questions	Marks
1.	To sustain animal visits the flowers have to provide rewards to their visitors. Write the name of any such reward which is related to support the visitors for safe breeding place with example.	1
2.	Write the name of transformation form of central cell just after triple fusion and fate of such transformation.	1
3.	Justify the statement from supporting fig. that “all syncarpous are multicarpellary but all multicarpellary are not syncarpous” 	1
4.	Write the name of the process for morphogenesis of spermatids and mention the process of releasing of spermatozoa from seminiferous tubules.	1
5.	(i) Who proposed ‘ <i>Competitive Exclusion Principle</i> ’? (ii) <i>Enumerate the theory which denied above principle.</i>	1
6.	Write the name of the parts of flower which is known as “tassels of corn cob” and mention the junction between ovule & funicle	1
7.	What stimulates Hypothalamus & pituitary to release the hormone responsible for parturition? Write the name of hormone responsible for milk ejection.	1
8.	(i) Write the term used by conservationists where very high levels of species richness and high degree of endemism can be observed. (ii) Write the name of such area in India.	1
9.	How do you justify that Predation, Parasitism and commensalism share a common characteristic.	1
10.	Point out the experimental approach of David Tilman for stability of a community.	1

11.	<p>Assertion: In animals, the organism, if unable to migrate, might avoid the stress by escaping in time and make their conformation in perfect environment.</p> <p>Reason: Non migratory nature turned them as conformers or escape their stress full environment as regulator.</p> <p>a Both assertion and reason are true, and the reason is the correct explanation of the assertion.</p> <p>b Assertion false, but the reason is correct</p> <p>c Assertion is true but reason is false.</p> <p>d Both assertion and reason are false</p> <p style="text-align: center;">OR</p> <p>Assertion: In special conditions the population density immediately depend on two factors Immigration and emigration but not in normal condition.</p> <p>Reason: If a new habitat is just being colonised, immigration may contribute more significantly to population growth than birth rates and in a stagnant population density is more dependable on emigration than death rate.</p> <p>a Both assertion and reason are true, and the reason is the correct explanation of the assertion.</p> <p>b Both assertion and reason are true, but the reason is not the correct explanation of the assertion.</p> <p>c Assertion is true but reason is false.</p> <p>a Both assertion and reason are false</p>	1
12.	<p>(v) Assertion: Inbreeding depression plays a significant role in crop breeding and in the evolution of out crossing mating systems.</p> <p>Reason: Homozygosity lead into lack of viability and reduces the genetic variation</p> <p>(a)Both assertion and reason are true, and reason is the correct explanation of assertion.</p> <p>(b)Both assertion and reason are true, but reason is not the correct explanation of assertion.</p> <p>(c)Assertion is true but reason is false.</p> <p>(d)Both assertion and reason are false</p>	1
13.	<p>Assertion: Stability of a biological community based on species richness and lead to less variation in productivity from year to year.</p> <p>Reason: Stable community have the power of resistant or resilient to occasional disturbances (natural or man-made), and it is also resistant to invasions by alien species.</p> <p>a Both assertion and reason are true, and the reason is the correct explanation of the assertion.</p> <p>b Both assertion and reason are true, but the reason is not the correct explanation of the assertion.</p> <p>c Assertion is true but reason is false.</p> <p>d Both assertion and reason are false</p>	1

14.	<p>Assertion: Spermatogenesis in human male start very early stage of life but Oogenesis in female start at onset of puberty</p> <p>Reason: Differentiation of spermatogonia takes place in the stimulation of ICSH where as differentiation of Oogonium through androgen hormone.</p> <p>(a)Both assertion and reason are true, and reason is the correct explanation of assertion.</p> <p>(b)Both assertion and reason are true, but reason is not the correct explanation of assertion.</p> <p>(c)Assertion is true but reason is false.</p> <p>(d)Both assertion and reason are false.</p>	1
15.	<p><u>Read the following and answer any four questions from 15(i) to 15(v) given below:</u></p> <p>In a case study on the population of Ranchi indicate that in 2000 at the time of its separation from combined Bihar as a capital of Jharkhand there was less significant population only 5 millions. But after 10 years population shows great changes in to 10 million as well as 2020 it turned into further double as 20 million. Due to exponential growth of population now most of the agricultural and tribal land completely occupied by apartment and large building followed by crisis of ground water and intensity of pollution increase day by day.</p>	4
i.	<p>Nature of growth model will be</p> <p>(a) 'J' shaped/ Verhulst-pearl / Lag-Log phase / $\frac{dn}{dt} = rN$</p> <p>(b) Sigmoid 'S' shaped / exponential/Lag-log-lag phase</p> <p>(c) Logistic growth curve/ Exponential / $\frac{dn}{dt} = rN \left(\frac{K - N}{K} \right)$</p> <p>(d) Exponential growth model/ $N_t = N_0 e^{rt}$</p>	
ii.	<p>Which of the following is/are correct about regulation or control of such population growth.</p> <p>(a) Population explosions will be limited in naturally through its natural restrain (Carrying capacity)</p> <p>(b)Jharkhand Govt. use some restrain to control population</p> <p>(c) CNT act where no one can purchase tribal land(except tribal) and Domicile policy</p> <p>(d) All of these</p>	

iii.	<p>Which of the following justify the statement “No population of any species in nature has at its disposal unlimited resources to permit exponential growth”.</p> <p>(a) Natural selection theory by Charles Darwin (b) Exponential growth model (c) Verhulst-Pearl Logistic growth model (d) Logistic growth model/ $N_t = N_0 e^{rt}$</p>	
iv.	<p>Assertion: Expert of Population dynamics prove that logistic growth model is considered a more realistic one than exponential growth model. Reason: Since resources for growth for most animal populations are finite and become limiting sooner or later.</p> <p>a. Both assertion and reason are true, and the reason is the correct explanation of the assertion. b. Both assertion and reason are true, but the reason is not the correct explanation of the assertion. c. Assertion is true but reason is false. d. Both assertion and reason are false</p>	
v.	<p>Viewing the nature of growth of population in Ranchi the present intrinsic rate of increase (r) of such population will be:</p> <p>(a) 0.13 (b) 0.26 (c) 0.06 (d) 0.23</p>	
16.	<p><u>Read the following and answer any four questions from 16(i) to 16(v) given below:</u></p> <p>A study on menstrual hygiene practices and problems amongst adolescent girls in Udaipur, Rajasthan, 2018</p> <p>Adolescence in girls has been recognized as a special period in life cycle. This period is marked with onset of menarche. It is linked with several perceptions and practices, which sometimes results in adverse health outcomes. So, this study was carried out to assess practices of menstruation in adolescent girls, to find out its related problems and socio-cultural beliefs. Methods: A cross sectional study was carried out during January-February 2018 in two schools of Udaipur using convenient sampling method with 440 sample size. Participants were adolescent girls of 9 to 12 standard. Girls were asked to fill a pre formed, pre tested semi-structured questionnaire. Results: Here 68.41% girls gave history of abdominal pain as premenstrual symptoms (PMS). School absenteeism was found 44.54% due to menstruation related problems. Sanitary Napkins were used by 50.22% girls. And 66.54% girls were using water to clean genitals during menstruation. Restriction from attending religious functions was high (91.59%). Associations of absorbents used by participants with absorbents used by their mothers and sisters were statistically significant. Conclusions: Abdominal pain was main PMS. Restrictions due to menstruation were very highly imposed. There were all chances that same types of the adsorbent were used by the adolescent girls, which were used by their mothers and sisters.</p>	4

i.	<p>Menstrual Hygiene is one of the significant health factor for every puberty attended girls. Under this health factor which is not recommended:</p> <ul style="list-style-type: none"> (a) Maintenance of hygiene & sanitation during menstruation (b) Use sanitary napkins only other than clean homemade pads. (c) Change sanitary napkins after every 4-5 hrs. (d) Disposal of used napkins should be properly wrapping with a used paper. 	
ii.	<p>Which of the following is/are accepted justification for the lack of Menstruation:</p> <ul style="list-style-type: none"> (a) Menstruation only occurs if the released ovum is not fertilized (b) Lack of menstruation may be indicative of pregnancy (c) Excess stress, Poor health- Proper diet, lack of nutritious food, anemia (d) All of the above 	
iii.	<p>Which of the following is main indication of Premenstrual symptom[PMS]</p> <ul style="list-style-type: none"> (a) Breakdown of endometrial lining of the uterus and its blood vessels (b) High level of progesterone than estrogen (c) Lowering body temperature (d) Abdominal pain 	
iv.	<p>Which of the following hormones increase gradually during the follicular phase.</p> <ul style="list-style-type: none"> (a) Estrogen and progesterone (b) Estrogen only (c) LH and FSH (d) Only LH 	
v.	<p>After the study of above case study what is the most common observation :</p> <ul style="list-style-type: none"> (a) School absenteeism is very common during menstruation period (b) Use of Sanitary Napkins (c) using water to clean genitals during menstruation. (d) Restriction from attending religious functions 	

SECTION – B

17.	What do you mean by acclimatization? Explain with suitable example. OR Egrets are often seen along with grazing cattle. What do you refer to this interaction? Give a reason for this association.	2
18.	In the term of (i) Population interaction & (ii) “Evil quartet” how you justify or correlated the excess growth of <i>Eichhornia crassipes</i> .	2
19.	According to ‘Rivet popper’ hypothesis which rivet control the major function of an ecosystem? What will be the result of popping by such rivet?	2
20.	What are the last refuges in Meghalaya for rare and threatened plants. Mention two more places where such structure are found in India.	2
21.	(i) Which pollination is invariably autogamous (ii) Mention advantage and disadvantage of such pollination?	2
22.	(i) How are pea seeds different from castor seeds with respect to endosperm? (ii) Differentiate between perisperm and endosperm.	2
23.	Differentiate between Parthenogenesis and apomixes.	2
24.	(i) Why mother’s milk considered very essential for the healthy growth of infants? (ii) What is the milk called that is produced in the initial days of lactation?	2
25.	How naturally polyspermy can be prevented by ovum in human? OR Spermatogenesis in human is a hormone regulated process. Justify.	2

SECTION – C

26.	(i) Which is desirable for maximising fitness of a species? (ii) How did Darwin explain fitness of organisms? (iii) What is the way of measurement of such fitness?	3
27.	Explain obvious and non obvious or not so obvious reason of conservation of Biodiversity.	3
28.	(i) Justify ‘The Evil quartet’ is the sobriquet used to describe the causes of biodiversity losses. (ii) What do you mean by endemism? Give one example. OR <i>Differentiate between on site and off site conservation with example.</i>	3
29.	Draw a diagram of a section of anatropous ovule of an angiosperm and label its different parts.	3
30.	(i) Give reasons for the following: (a) The human testes are located outside the abdominal cavity. (b) Human male haploid gametes are motile but female haploid gamete is non motile. (c) In respect of single ovum numerous spermatozoa are involved in human fertilization.	3

SECTION - D

31.	<p>(i) Mention the event that induces the completion of the meiotic division of the secondary oocyte.</p> <p>(ii) Trace the journey of the ovum from the ovary, its fertilization and further development until the implantation of the embryo</p> <p>(iii) Comment on the role of placenta as an endocrine gland.</p> <p style="text-align: center;">OR</p> <p>(a) Enumerate the events in the ovary of a human female during</p> <p style="padding-left: 40px;">(i) Follicular phase (iii) luteal phase of menstrual cycle.</p> <p>(b) Draw a labeled diagram and point out different layers found in a human ovum.</p>	5
32.	<p>(i) Draw a labeled diagram of a section of an enlarged view of microsporangium of an angiosperm.</p> <p>(ii) Write the changes a fertilized ovule undergoes within the ovary in an angiosperm plant.</p> <p style="text-align: center;">OR</p> <p>(i) Why do flowering plants need to develop out breeding devices? Explain any three such devices developed by flowering plants.</p> <p>(ii) Define apomixis and its advantage.</p>	5
33.	<p>(i) What is an age pyramid?</p> <p>(ii) Name three representative kinds of age pyramids for human population and list the characteristics for each one of them.</p> <p style="text-align: center;">OR</p> <p>(i) Name the two growth models that represent population growth and draw the respective growth curves they represent.</p> <p>(ii) Which one of the curves represents the human population growth at present? Do you think such a curve is sustainable?</p>	5



Delhi Public School, Ranchi

Qualifying Examination (2021-2022)

Class-XII.

Subject: Computer Science (083)

Time Allowed: 03 Hours.

Maximum Marks: 70

General Instructions:

This question paper contains two parts : 'A' and 'B'. Each part is compulsory. Both Part 'A' and Part 'B', may have choices.

Part-A has 2 sections:

- Section-1 is short answer questions, to be answered in: one word or one line or MCQ type.
- Section-II has two case-studies questions. Each case study question carries 4 marks. An examinee is supposed to answer both questions, with its subparts.

Part-B is descriptive paper.

Part-B has 3 sections:

- Section-I, is short answer questions of 2 marks each.
- Section-II, is long answer questions, which carries 3 marks each.
- Section-III, is very long answer questions, which carries 5 marks each.

All programming questions are to be answered using Python Language only. Technically, Informative answers will be appreciable.

PART – A [Section – I]

[1 * 15 = 15 Marks]

Select the most appropriate option out of the options for each question. Attempt any 15 questions from question no 1 to 21.

- 1** (i) Suppose $L1 = [0.5 * \text{for } A \text{ in range } (0, 4)]$, then L1 is : 1
(a) [0, 1, 2, 3] (b) [1, 1.5, 2.0, 2.5] (c) [0.0, 0.5, 1.0, 1.5] (d) [1.0, 1.5, 2.0]
- (ii) Which of the following statement converts a tuple into a list?
(a) len(string) (b) list(string) (c) tup(list) (d) dict(string)
- 2** (i) What will be the value of the expression? 1
 $(2+9 * ((3 * 12 - 8) / 12 ** 2))$
(a) 3.25 (b) 2.25 (c) 3 (d) 3.75
- (ii) What will be the value of the expression?
 $(21 + (12 \% 10 \% 3) ** 4 / 2)$
(a) 34 (b) 29 (c) 38 (d) 12

3. (i) Following set of commands is executed in shell, what will be the output? 1
`print("corona virus" [4 : 8]) :`
 (a) ona (b) na v (c) coro (d) ona v
- (ii) Following set of commands is executed in shell, what will be the output?
`print("corona virus" [2: 5:3]) :`
 (a) n (b) r (c) i (d) o
4. (i) What is the use of `split()` function? 1
 (ii) What is the use of `ceil()` function?
5. (i) A tuple is declared as `T1 = (51,19,20,35)` What will be the output of `print(sum(T1)+min(T1))` ? 1
 (ii) A tuple is declared as `T1 = (5,15,20,-35)` What will be the output of `print(max(T1)+min(T1))` ?
6. (i) A list is given as `Age=[10, 20, 35, 40, 50, 55, 60]` , What will be displayed as `Age[:2] + Age[2:]` 1
 (ii) A list is given as `Age=[10, 20, 30, 40, 58, 60]` , What will be displayed as `Age[-3] + Age[1]`
7. (i) In SQL, what is the use of `DISTINCT` keyword?
 (ii) In SQL, what is the use of `IS NULL` keyword? 1
8. (i) Identify the valid variable names from the following: `Roll No`, `10marks`, `sum#`, `Nname_2` 1
 (ii) Identify the valid identifier from the following : `x+y` , `xy2xy`, `x2y2x`, `_x_y`
9. With this Code snippet, Find the length of the following tuple : 1
`>>> T = ((('a', 1), 'b', 'c'), 'd', 2), 'e',3)`
 a) 8 (b) 4 (c) 3 (d) 7
10. Which of the following function call, will cause Error, while invoking the below 1
 function definition ?
`def test (a ,b ,c ,d) :`
 (a) `test (1,2,3,4)` (b) `test (a=1,2,3,4)`
 (c) `test (a= 5, b=2, c=3, d =6)` (d) `test (a=1, b=2, c=3, d=4)`

- 11.** (i) Provide Result of the expression : $2+9*((3*12)-8)/10$ 1
 (a) 25.4 (b) 27.2 (c) 72.0 (d) 7.40
- (ii) What will be the value of the expression? $37 \% 5^{**}2$
 (a) 4 (b) 14 (c) 2 (d) 10
- 12.** (i) What do you mean by a foreign key? 1
 (ii) Expand the term : RDBMS?
- 13.** (i) Identify the valid declaration of test: test=['Python' ,10, 'Good', 25.45] : 1
 (a) Tuple (b) Dictionary (c) List (d) String
 (ii) Identify the valid declaration of test: test=['Python' ,10, 'Good', 25.45,[12,22,43]] :
 (a) nested Tuple (b) nested Dictionary (c) nested List (d) nested String
- 14** (i) In SQL, Which command is used to see the list of databases? 1
 (ii) In SQL, Which command is used to see the sum of a column of databases?
- 15** (i) Write a statement to declare a dictionary whose keys are 'Apple', 'Mango', 'Banana' and values are 100, 250, 60. 1
 (ii) Write a statement to declare a nested list whose first values are 'Guava', 'Mango', 'Grapes' and second values are 100, 250, 60.
- 16** Fill the Blank : A ----- is a subprogram that acts on data and often returns a value. 1
- 17** Identify the wrong statement(s) in the following code: 1
- ```

T1=(14, 17, 29, 33, 31) #Line 1
T2=(29, 18, 27, 38, 44) #Line 2
T1[1] = 12 #Line 3
T1=T2 #Line 4
T1[0]=T2[0] #Line 5
T3=T1+T2 #Line 6

```
- 18** Identify the valid relational operator(s) in Python from the following: 1  
 (a) = (b) == (c) >= (d) =+



- 19 (i) INSERT INTO command is a DML command. (True/False) 1  
(ii) Alter command is a DML command. (True/False)
- 20 What will the following function Janch ( ) return when the values of both 'A' and 'B' are equal to 5 ? 1  
def Janch ( A , B ) :  
if B == 1 :  
return -A  
else :  
return ( A + 1 ) + Janch ( A + 1 , B - 1 )
- (a) 15 (b) 26 (c) 21 (d) 23
- 21 (i) Write short note with example on GROUP BY command. 1  
(ii) What will be the length of the following tuple?  
T = ('A', 'B', 'C', 'd', 'E', 'F'), 'G', 'H'

**PART – A [ Section – II ]**

**[ 2 \* 4 = 08 Marks ]**

**Both the case study based questions are compulsory. Attempt both Questions: 22 & 23. Each question carries 4 marks.**

- 22 A store in an office, named as "Stationary", is considering, maintaining their inventory using SQL to store data. The manager of the store Ms. Alia has taken the following details into the account:
- Name of the database - "Office"
  - Name of the table - Stationary
  - Attributes of the table - Stationary are as follows:
    - ItemNo – numeric.
    - ItemName - character of size 20.
    - Suppcode – numeric.
    - Qty – numeric.
- Consider the table Stationary given below:

**Table : Stationary**

| Item No | ItemName  | Suppc ode | Qty |
|---------|-----------|-----------|-----|
| P001    | Ball Pen  | 5501      | 50  |
| P002    | Ink Pen   | 5501      | 25  |
| E001    | Eraser    | 6012      | 40  |
| P003    | Pencil    | 6012      | 100 |
| P004    | Gel Pen   | 5501      | 100 |
| M005    | Marker    | 4401      | 50  |
| S001    | Sharpener | 6012      | 25  |

- (a) Identify the primary key and justify the reason for the same.
- (b) If Ms. Alia removed one column and insert two more records in table Stationary then, what will be the degree and cardinality of the table Stationary?
- (c) Identify the errors and rewrite the correct statement:  
Insert into Stationary (R001, "Ruler", 6012, 20) values(ItemNo, Itemname, suppcode, qty);
- (d) Ms. Alia wants to increase the quantity by 5 of all the items of the Stationary. Help her to write the query to do the same.

**OR**

- (e) Now Alia wants to remove the two columns of a table. Which command out of these will be used to do so?
- (i) Update            (ii) Drop            (iii) Alter            (iv) Truncate

**23** Now a day, with High speed Vehicles, Cars etc, Traffic accidents occur frequently, for various reasons. While problems with roads or safety facilities lead to some accidents, majority of the road accidents are caused by the drivers' failure to abide by traffic rules, consider pedestrians, and acknowledge dangerous behaviors.

"Gem XII CompSc Students Ltd ", deals in the manufacture and installation of traffic lights, so as to minimize the risk of accidents. Keeping in view the requirements, traffic simulation is to be done. Write a program that simulates a traffic light. The Python program should perform the following tasks :

- (a) Develop a user-defined module/function TrafficLight( ) that accepts input

from the user, displays an error message if the user enters anything other than RED, YELLOW, and GREEN. Function Light() is called and following is displayed depending upon return value from light().

- “STOP, Life is more important than speed” if the value returned by Light() is 0.
- “Please GO SLOW, till the light is Green” if the value returned by Light() is 1.
- “You may GO NOW” if the value returned by Light() is 2.

(b) A user-defined function Light() that accepts a string as input and returns 0 when the input is RED, 1 when the input is YELLOW and 2 when the input is GREEN. The input should be passed as an argument.

(c) Display “BETTER LATE THAN NEVER” after the function TrafficLight () is executed.

## PART – B [ Section – I ]

[ 2 \* 10 = 20 Marks ]

**24** Evaluate the following expressions:

- a)  $2 * 45 // 5 + 10 ** 2 - 25 + 12 \% 5 * 3$   
b)  $15 > 9 > 34 > 56$  or  $90 > 60$  and not  $21 > 10$  and  $-8 > -10$

**25** What will be the following command display ?

```
print (" fractional string to int : ", int ("3.4"))
```

State the reason for getting the output & what is required to be done ?

**26** (i) What will be the output of the following Program segment ?

```
>>> i = 5
>>> while True :
 if i % 009 == 0 :
 break
 print (i)
 i += 1
```

- (a) 1 2 3 4 5 6                      (b) 5 6 7 89      (c) 5678 910                      (d) Error

(ii) What will be the output of the following Program segment ?

```
>>> L = [100,900,300,400,500]
>>> ST = 1
>>> S = 0
>>> for c in range (ST,4):
 S = S + L[c]
 S = S + L[0]*10
>>> print(S)
```

- (a) 4600      (b) 4500                      (c) 4400                      (d) 2200

**27**

- (i) Declare a dictionary in Python to print your Qualifying Examination Date-sheet. Use subjects as a key and dates as values.
- (ii) In Python, which value will be returned by floor (num) function?
- (a) smallest integer not less than num.
  - (b) largest integer not greater than num.
  - (c) absolute value of num.
  - (d) square root of num

**28**

- (i) Select the correct sequence after 3rd pass of Bubble sort :

L = [15,6,28,45,31,-1,5,1 ]

- (a) [ 6, 15, -1, 5, 1, 28, 31, 45]    (b) [ 6, -1, 5, 1, 15, 28, 31, 45]  
(c) [-1, 5, 1, 6, 15, 28, 21, 45]    (d) [-1, 1, 5, 6, 15, 28, 31, 45]

- (ii) Predict the output of this code snippet :

A = [1, 2, 3, 4, 5 ]

print (A[3:0:-1])

- 29** Underline the Bugs in the given python code snippet. Rewrite the debugged / corrected code, with your justification :

```
def Alpha (n, string = 'xyz' , k=10)
 return Beta (string)
 return n
def Beta (string)
 Return string == str (n)
print (Alpha ("Mother's Day "):)
print (Beta (string = 'true'))
print (Alpha (n=5, "Good-Bye"):)
```

**30**

- (i) Differentiate between Drop and Delete command with suitable example.  
(ii) In SQL, write the command to display the structure of table in a database.

- 31** (i) Differentiate the use of read () and readline () functions with suitable example?  
(ii) Identify the output of the following code:  
wish= "stay safe dear"  
print (wish.title( ) )
- 32** (i) What is use of 'union' keyword in SQL? Explain with suitable example.  
(ii) Which of the following is not a function used with alter command?  
(a) INSERT (b) DROP (c) ADD(d) MODIFY
- 33** (i) Find and write the output of the following Python code:  
def fun(s)  
K = len(s)  
m=""  
for i in range(0,k):  
if(s[i].isupper()):  
m=m+s[i].lower()  
elif(s[i].isalpha()):  
m=m+s[i].upper()  
else:  
m=m+'###'  
print(m)  
fun('Charles@Babbage')
- (ii) Predict the output of the following Python Code :  
num = 1  
def MyFun ( ) :  
num = 10  
return num  
print (num)  
print MyFun ( ) )  
print (num)

**PART – B [ Section – II ]**  
**[ 4 \* 3 = 12 Marks ]**

- 34** Write a function Swap (num, n) in Python, which accepts, a list 'num' of numbers and n is the number of elements. The function will interchange every alternate value. Trace your code, too. Example :  
If the list num contain: [11, 21, 31, 41, 51, 61]  
Then Resultant Output: [21, 11, 41, 31, 61, 51]

35 (i)

```
import random
P = random.random()
Q = random.randint(0, 4)
print(int(P), ":", Q + int(P))
```

(a) 0 : 8 (b) 1 : 6 (c) 2 : 4 (d) 0 : 3

(ii) From the given Python snippets, Select the possible Output from alternative options :

```
import math
import random
print(math.ceil(random.random()))
```

(a) 0.0 (b) 1.0 (c) 2.0 (d) 1.5

(iii) What is Python module? Mention its Significance.

36 Write the SQL queries (a) to (c) based on the following Table 'CABHUB' :

| VCODE | VNAME  | MAKE     | COLOR  | CAPACITY | CHARGES |
|-------|--------|----------|--------|----------|---------|
| 100   | INNOVA | TOYOTA   | WHITE  | 7        | 15      |
| 102   | SX4    | SUZUKI   | BLUE   | 4        | 14      |
| 104   | CLASS  | MERCEDES | RED    | 4        | 35      |
| 105   | A-STAR | SUZUKI   | WHITE  | 3        | 14      |
| 108   | INDIGO | TATA     | SILVER | 3        | 12      |

(a) To display the names of all the white colored vehicles.

(b) To display name of vehicle, make and capacity of vehicles in ascending order of their seating capacity.

(c) To display the highest charges at which a vehicle can be hired from CABHUB.

37 Along with an example in Python, briefly discuss Function. Mention its Usefulness.

**PART- B [ SECTION-III ]**  
**[ 3\*5 =15 Marks ]**

38 Suppose, a list is given as Lst =[ 69, 96, 5, 45, 54, 98, 89, 0, 95, -7, 83 ]. Apply Bubble sort technique, in exhibiting diagrammatic presentation of all Passes, to sort the Lst in ascending order. Also, Write a Python Program / Function for the same.

39 Consider the following tables SCHOOL and ADMIN and answer this question :

Table : SCHOOL

| CODE | TEACHER NAME | SUBJECT   | DOJ        | PERIODS | EXPERIENCE |
|------|--------------|-----------|------------|---------|------------|
| 1001 | Ravi Shankar | English   | 12/3/2000  | 24      | 10         |
| 1009 | Priya Rai    | Physics   | 03/09/1998 | 26      | 12         |
| 1203 | Lisa Anand   | English   | 09/04/2000 | 27      | 5          |
| 1045 | Yashraj      | Maths     | 24/08/2000 | 24      | 15         |
| 1123 | Ganan        | Physics   | 16/07/1999 | 28      | 3          |
| 1167 | Harish B     | Chemistry | 19/10/1999 | 27      | 5          |
| 1215 | Umesh        | Physics   | 11/05/1998 | 22      | 16         |

Table: Admin

| Code | Gender | Designation    |
|------|--------|----------------|
| 1001 | Male   | Vice Principla |
| 1009 | Female | Co-ordinator   |
| 1203 | Female | Co-ordinator   |
| 1045 | Male   | HOD            |
| 1123 | Male   | Senior Teacher |
| 1167 | Male   | Senior Teacher |
| 1215 | Male   | HOD            |

Write SQL statements for the following: (Any Four ):

- To display TEACHERNAME, PERIODS of all teachers whose periods are more than 25.
- To display all the information from the table SCHOOL in descending order of experience.
- To display DESIGNATION without duplicate entries from the table ADMIN.
- To display TEACHERNAME, CODE and corresponding DESIGNATION from tables SCHOOL and ADMIN of Male teachers.

To display all the information from the table SCHOOL and ADMIN have same CODE.

- 40 (i) DPS Ranchi, Kid's wing, where cute kids also bloom with Enchanting Flowers. It is a play-way Junior Wing of our School, that focuses on 'Play and Learn' strategy that helps toddlers understand concepts, in a fun way. Being a senior programmer, you have taken responsibility to develop a program using user-defined functions to help children, differentiate between uppercase and lowercase letters/ English alphabets in a given sentence. Make sure that, you perform a careful analysis of the type of alphabets and sentences that can be included as per age and curriculum.

Write a Python program that accepts a string and calculates the number of uppercase and lowercase letters.

- ii) Differentiate between a Local Variable & Global Variable. Provide relevant Python code to illustrate both.

#####



# DELHI PUBLIC SCHOOL

SAIL Township, Ranchi

QUALIFYING EXAMINATION 2020

Class: XII

Max Marks: 70

Subject: Informatics Practices

Time: 3 Hrs.

=====

**General Instructions:**

- This question paper contains two parts, A and B. Each part is compulsory.
  - Both Part A and Part B have choices.
  - **Part A** has two sections:
    - ✓ **Section-I** is short answer questions, to be answered in one word or one line (Any 20 questions).
    - ✓ **Section-II** has two case study questions. Each case study has 5 case-based sub-parts.
  - **Part B** is Descriptive Paper, has three sections:
    - ✓ **Section-I** is short answer questions of 2 marks each in which two questions have internal options.
    - ✓ **Section-II** is long answer questions of 3 marks each in which two questions have internal options.
    - ✓ **Section-III** is very long answer questions of 5 marks each in which one question has internal options.
- =====

## PART-A: Section-I

[Attempt any 20 questions]

1. **Output of the following code is:** (1)

```
x = ["Car", "Bike", "Bus", "Train"]
x.pop()
print(x)
```

- [a] ["Bike", "Bus", "Train"]
- [b] ["Car", "Bus", "Train"]
- [c] ["Car", "Bike", "Train"]
- [d] ["Car", "Bike", "Bus"]

2. **What is the result of the following code?:** (1)

```
x = {1: "Car", 2: "Bike", 3: "Bus"}
for i in x:
 print(x[i], ":", i)
```

- |            |         |            |         |            |          |            |          |
|------------|---------|------------|---------|------------|----------|------------|----------|
| <b>[a]</b> | 1: Car  | <b>[b]</b> | 1: Bus  | <b>[c]</b> | Car : 1  | <b>[d]</b> | Bus : 1  |
|            | 2: Bike |            | 2: Bike |            | Bike : 2 |            | Bike : 2 |
|            | 3: Bus  |            | 3: Car  |            | Bus : 3  |            | Car : 3  |



3. See this dictionary functions and pick the output: (1)

```
xy={'A': 10, 'B': 20 }
a= xy.len()
b= xy.get('A')
c= xy.keys()
d= xy.values()
print(a,b,c,d)
```

- [a] 10 2 [A , B] [10 , 20]
- [b] [10 , 20] [A ,B] 10 2
- [c] 2 10 [A , B] [10 , 20]
- [d] [A ,B] 10 2 [10 , 20]

4. The output of the following code is: (1)

```
x={'a': "Africa", 'b': "Britain", 'c': "Canada", 'd': "Denmark"}
import pandas as pd
s = pd.Series(data)
print (s)
```

| [a]       | [b]       | [c]         | [d]         |
|-----------|-----------|-------------|-------------|
| a Africa  | 0 Africa  | 'a' Africa  | All (a,b,c) |
| b Britain | 1 Britain | 'b' Britain |             |
| c Canada  | 2 Canada  | 'c' Canada  |             |
| d Denmark | 3 Denmark | 'd' Denmark |             |

5. In Pandas, emp is a Series that stores the names of the employees. (1)

```
emp=pd.Series(["Archana", "Tiya", "Manit", "Sanskaar"])
Which command is used to assign the index as ("Emp1", "Emp2", "Emp3", "Emp4") explicitly?
```

- [a] emp\_index=('Emp1', 'Emp2', 'Emp3', 'Emp4')
- [b] emp.index=('Emp1', 'Emp2', 'Emp3', 'Emp4')
- [c] emp.index=['Emp1', 'Emp2', 'Emp3', 'Emp4']
- [d] emp[index]=('Emp1', 'Emp2', 'Emp3', 'Emp4')

6. ....Refers to tabular data saved as plain text where data values are separated by commas.(1)

7. A ..... is a set of one or more columns of a table that uniquely identifies a record in a database table but accepts only one null value. (1)

8. Write the output of the following code: (1)

```
import pandas as pd
Ser1=pd.Series(range(8),index=['A','B','C', 'D', 'E', 'F', 'G', 'H'])
print(Ser1)
```

9. Write the output of the following code: (1)

```
import pandas as pd
Marks=pd.Series({'Rahul':80,'Aarush':98,'Shobhit':89, 'Krish':90})
print(Marks[Marks>85])
```

10. .... command is used to see the structure of the table. (1)

11. Write the output of the following code: (1)

```
import pandas as pd
a=pd.Series([78,45,89,98])
b=pd.Series([67,87,90])
student={"English":a,"Hindi":b}
df=pd.DataFrame(student)
print(df)
```

**[a]**

|   | English | Hindi |
|---|---------|-------|
| 0 | 78      | 67.0  |
| 1 | 45      | 87.0  |
| 2 | 89      | 90.0  |
| 3 | 98      | NaN   |

**[b]**

|   | English | Hindi |
|---|---------|-------|
| 1 | 78      | 67.0  |
| 2 | 45      | 87.0  |
| 3 | 89      | 90.0  |
| 4 | 98      | NaN   |

**[c]**

|   | Hindi | English |
|---|-------|---------|
| 0 | 67.0  | 78      |
| 1 | 87.0  | 45      |
| 2 | 90.0  | 89      |
| 3 | NaN   | 98      |

**[d]**

|   | Hindi | English |
|---|-------|---------|
| 1 | 67.0  | 78      |
| 2 | 87.0  | 45      |
| 3 | 90.0  | 89      |
| 4 | NaN   | 98      |

12. Find the output of the following code is: (1)

```
temp=[22, 23, 24, 21, 25]
n=len(temp)
for i in range(0 , n, 2):
 print(temp[i])
```

**[a]**

|    |
|----|
| 22 |
| 23 |
| 24 |
| 25 |

**[b]**

|    |
|----|
| 22 |
| 24 |
| 25 |

**[c]**

|    |
|----|
| 22 |
| 24 |

**[d]**

|    |
|----|
| 22 |
| 23 |
| 24 |

13. Write the code to update 'Bike' by 'Motorbike' in the following dictionary: (1)

```
x = {1: "Car", 2: "Bike", 3: "Bus", 4: "Train"}
```

14. Find the output: (1)

```
import numpy as np
arr1 = np.array([[1, 2], [3, 4]])
arr2 = np.array([[5, 6], [7, 8]])
arr = np.concatenate((arr1, arr2), axis=0)
print(arr)
```

**[a]**

|            |
|------------|
| [[1 2 5 6] |
| [3 4 7 8]] |

**[b]**

|        |
|--------|
| [[1 2] |
| [3 4]  |
| [5 6]  |
| [7 8]] |

**[c]**

|            |
|------------|
| [[5 6 1 2] |
| [7 8 3 4]] |

**[d]**

|        |
|--------|
| [[5 6] |
| [7 8]  |
| [1 2]  |
| [3 4]] |

**15. Predict the output:** (1)

```
import numpy as np
data = np.array([5,2,7,3,9])
print (data[:])
print(data[1:3])
print(data[:2])
print(data[-2:])
```

- |            |             |            |             |            |             |            |             |
|------------|-------------|------------|-------------|------------|-------------|------------|-------------|
| <b>[a]</b> | [5 2 7 3 9] | <b>[b]</b> | [3 9]       | <b>[c]</b> | [5 2 7 3 9] | <b>[d]</b> | [5 2 7 3 9] |
|            | [3 9]       |            | [5 2]       |            | [5 2]       |            | [2 7]       |
|            | [5 2]       |            | [2 7]       |            | [2 7]       |            | [5 2]       |
|            | [2 7]       |            | [5 2 7 3 9] |            | [3 9]       |            | [3 9]       |

**16. See this dictionary functions and pick the output:** (1)

```
xy={'A': 10, 'B': 20 }
a= xy.items()
b= xy.get('A')
c= xy.keys()
d= xy.values()
print(a)
print(b)
print(c)
print(d)
```

- [a]** dict\_items([('A', 10), ('B', 20)])  
10  
dict\_keys(['A', 'B'])  
dict\_values([10, 20])
- [b]** dict\_items([('B', 20), ('A', 10)])  
10  
dict\_keys(['B', 'A'])  
dict\_values([20, 10])
- [c]** dict\_items([(10, 'A'), (20, 'B')])  
20  
dict\_keys(['A', 'B'])  
dict\_values([20, 10])
- [d]** dict\_items([('B', 10), ('A', 20)])  
20  
dict\_keys(['B', 'A'])  
dict\_values([10, 20])

**17. Find the output of the following code:** (1)

```
import pandas as pd
s = pd.Series([1,2,3,4,5] ,index = ['a','b','c','d','e'])
print (s [['a','c','d']])
```

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| <b>[a]</b>   | <b>[b]</b>   | <b>[c]</b>   | <b>[d]</b>   |
| a 1          | 1 a          | a 1          | a 1          |
| b 3          | 3 c          | b 2          | c 3          |
| c 4          | 4 d          | c 3          | d 4          |
| dtype: int64 | dtype: int64 | dtype: int64 | dtype: int64 |

18. Write any one main difference between iloc and loc is \_\_\_\_\_ (1)

19. The output of the following code is: (1)

```
import pandas as pd
data = {'a' : 0., 'b' : 1., 'c' : 2.}
s=pd.Series(data, index=['b','c','a','x'])
print(s)
print(s.dtype)
```

|                |                |                |                |
|----------------|----------------|----------------|----------------|
| <b>[a]</b>     | <b>[b]</b>     | <b>[c]</b>     | <b>[d]</b>     |
| b 1.0          | a 1.0          | a 0.0          | b 1.0          |
| c 2.0          | b 2.0          | b 1.0          | c 2.0          |
| a 0.0          | c 0.0          | c 2.0          | a 0.0          |
| x NaN          | dtype: float64 | x NaN          | dtype: float64 |
| dtype: float64 | float64        | dtype: float64 | float64        |
| float64        |                | float64        |                |

20. Find the correct statement: (1)

- [a] If data in Series is a scalar value, an index is provided then the value will be repeated n times.
- [b] If data in Series is a scalar value, an index is provided then the values will be increases by 1.
- [c] If data in Series is a scalar value, an index is provided then the value will be repeated to match the index.
- [d] All are false.

21. One main difference between axis=0 and axis=1 is: \_\_\_\_\_ (1)

22. Find the correct statement: (1)

- [a] To import csv file to dataframe command we use: df.read\_csv('emp1.csv')
- [b] To export csv file to dataframe command we use: pd.to\_csv('emp1.csv')
- [c] All are ture.
- [d] All are false.

### Part-A: Section-II

[Both the case study-based questions (23 & 24) are compulsory. Each sub-question carries 1 mark.]

23. Assume a dataframe df that contains data about IT Quiz Contest with 'SC1', 'SC2', 'SC3', 'SC4', 'SC5' as indexes shown below. Give the output of any four questions from (i) to (v).

|     | School | Total_Students | Winner | Runner-up |
|-----|--------|----------------|--------|-----------|
| SC1 | APS    | 40             | 32     | 8         |
| SC2 | KPS    | 30             | 18     | 12        |
| SC3 | KKPS   | 20             | 18     | 2         |
| SC4 | MMPS   | 18             | 10     | 8         |
| SC5 | TPS    | 28             | 20     | 8         |

- (i) >>> df.shape (1)
- (ii) >>> df1[2:4] (1)
- (iii) >>> df.loc['SC2' : 'SC4' , 'Winner'] (1)
- (iv) >>> df.iloc[2:4] (1)
- (v) >>> df.Total\_Students (1)

24. Consider the following table Spice given below:

| S.No  | Spice_Name      | Spice_Price | Spice_Qty | Spice_Manufacturer |
|-------|-----------------|-------------|-----------|--------------------|
| SP101 | Turmeric        | 250.00      | 5         | MDH                |
| SP102 | Red Chilly      | 200.00      | 7         | Catch              |
| SP103 | Cinnamon Powder | 2500.00     | 2         | MDH                |
| SP104 | Cumin Powder    | 240.00      | 4         | TATA               |
| SP105 | Black Pepper    | 550.00      | 2         | Catch              |

- (i) To increase the price of 'Turmeric' by Rs 100. (1)
- (ii) To display the Spice Name, Spice Price and Spice Manufacturer of all the Spices in descending order of Quantity. (1)
- (iii) Insert a new row with the following values: (1)  
SP1006, Cardamom, 1450.00, 4, TATA.
- (iv) Write the output of the following command: (1)  
SELECT Spice\_Name, Spice\_Price from Spice where Spice\_Name LIKE '%Powder';
  - (a)
 

|                 |             |
|-----------------|-------------|
| Spice_Name      | Spice_Price |
| Cinnamon Powder | 2500.00     |
  - (b)
 

|                 |             |
|-----------------|-------------|
| Spice_Name      | Spice_Price |
| Cinnamon Powder | 2500.00     |
| Cumin Powder    | 240.00      |
  - (c)
 

|              |             |
|--------------|-------------|
| Spice_Name   | Spice_Price |
| Cumin Powder | 240.00      |
  - (d)
 

|              |             |
|--------------|-------------|
| Spice_Name   | Spice_Price |
| Cumin Powder | 240.00      |
| Black Pepper | 550.00      |

Now choose the correct option:

- (a) Only (i)
  - (b) Both (ii) and (iv)
  - (c) Both (i) and (iii)
  - (d) Only (ii)
- (v) Help Aarti to write command to replace Turmeric with Turmeric Powder. (1)
- (a) Select Spice\_Name="Turmeric Powder" from Spice where Spice\_Name="Turmeric";
  - (b) Replace Spice\_Name="Turmeric Powder" from Spice where Spice\_Name="Turmeric";
  - (c) Update Spice Set Spice\_Name="Turmeric Powder" where Spice\_Name="Turmeric";
  - (d) Alter Table Spice Modify Spice\_Name="Turmeric Powder" where Spice\_Name="Turmeric";

## PART-B: Section-I

[Attempt All questions]

25. Write Python code to create the following DataFrame BOOKS, using Python Pandas. Use any method of DataFrame creation that you have learnt (Give index as 'B1', 'B2', 'B3', 'B4'): (2)

| BookName                | Class  | Price |
|-------------------------|--------|-------|
| Let us C                | BCA    | 270   |
| Artificial Intelligence | B.Tech | 350   |
| Database Management     | BCA    | 450   |
| Computer Architecture   | BCA    | 550   |

26. What is a Primary Key? List the criteria for selecting a Primary key for a table. (2)
27. Write the difference between Order By and Group By SQL commands: (2)
28. Explain the relation between a Primary Key and Foreign Key? (2)
29. Write SQL commands to:  
(i) Display records of the table Spice in descending order on Spice\_Qty.  
(ii) Display different Spice\_Manufacture names present in the table.
30. Explain Wild Card of SQL. Give examples of the applications of the two symbols of the same. (2)
31. Lekishi wants to create a table STUDENT with the following fields. Write the command to create with the following fields, with suitable DataTypes and Constraints (Primary Key, Not Null, Unique, Default). (2)  
(i) Write SQL Command to create with the fields are: Regno, Name, Class, DOB, Avgmark  
(ii) Write SQL Command to enter a new record (Your choice).
32. What is the output of the following code: (2)  
import pandas as pd  
s = pd.Series([10,20,30,40,50,60,70,80,90,100])  
a=s.where(s > 50)  
print(a)
33. Find the output: (2)  
import pandas as pd  
s = pd.Series([10,20,30,40,50], index=[1,2,3,4,5])  
print(s.tail())  
print(s.head(3))
34. Write two differences between Series and DataFrame. (2)

## Part-B: Section-II

[Attempt all questions 35-38]

35. Consider the following dataframe 'df\_Student': (3)

| AdmNo | Name    | Class | Weight | Height |
|-------|---------|-------|--------|--------|
| H1001 | Tiana   | IX B  | 50     | 163    |
| H1006 | Jiya    | IX A  | 55     | 167    |
| H1009 | Shreyas | IX A  | 59     | 164    |

- (i) Write the command to add a new column 'Age' having the following data: Age= (13,15,14)
- (ii) Write a command to permanently delete the record of a student having AdmNo as H1009.
- (iii) Write a command to display records in ascending order of age (consider column has been added).

36. Explain the difference between a web hosting and web server with suitable examples. (3)

37. A dictionary 'toys' contains the following: (3)

toys={'Name': ['Talking Tom', 'Blocks', 'Number game', 'Ludo'], 'Price': [400,250, 300,150]}

Write statements for the following:

- (i) Create a DataFrame named "stock"
- (ii) Add a column called 'discount' with the following:  
data: [30, 40, 15, 25]
- (iii) Delete column discount with all values.

38. A relation Product is given below: (3)

| P_No  | Ptype       | P_Manufacturer | Price | Qty |
|-------|-------------|----------------|-------|-----|
| P1001 | Pencil      | Natraj         | 15    | 20  |
| P1002 | Ball Pen    | Reynolds       | 10    | 50  |
| P1003 | Gel Pen     | Flair          | 20    | 100 |
| P1004 | Sketch Pen  | Doms           | 50    | 35  |
| P1005 | Paint Brush | Doms           | 30    | 15  |
| P1006 | Pencil      | Natraj         | 15    | 30  |
| P1007 | Ball Pen    | Reynolds       | 10    | 10  |
| P1004 | Sketch Pen  | Doms           | 50    | 60  |
| P1005 | Paint Brush | Doms           | 30    | 85  |
| P1006 | Pencil      | Natraj         | 15    | 45  |

Write SQL commands to:

- (i) Display the Average price of each type of Product having quantity more than 30.
- (ii) Increase the price of the products manufactured by Doms by 2%.
- (iii) Display the records of quantity 10, 20 & 30 only.

OR

Assume the above table Product is an Excel spreadsheet (*take first 4 records only*). Now write the code to read this data (csv) to transfer into a DataFrame and after that print the DataFrame and show the output.

### Part-B: Section-III

[Attempt all questions 39-40]

39. Write a program in Pandas to create the following DataFrame TotalMarks from a Dictionary: (5)

[2+1+1+1]

| RollNo | Name     | TERM-I | TERM-II |
|--------|----------|--------|---------|
| 1      | Anshu    | 55     | 76      |
| 2      | Prachi   | 82     | 88      |
| 3      | Divyansh | 95     | 98      |
| 4      | Chetan   | 76     | 78      |
| 5      | Sahil    | 68     | 65      |

**Perform the following operations on the DataFrame TotalScore:**

- (i) Create a DataFrame TotalMarks.
- (ii) Add both the Marks of a Student and assign to new column "Total".
- (iii) Display the 2nd, 3rd, & 4th records of the columns Name, Term-I & Term-II
- (iv) Display the DataFrame.

**40. Write the SQL command on the Table Pharma and perform the following operations: (5X1=5)**

| Table: Pharma |        |               |        |              |                      |
|---------------|--------|---------------|--------|--------------|----------------------|
| RxID          | DrugID | DrugName      | Price  | PharmacyName | PharmacyLocation     |
| R1000         | 5476   | Amlodipine    | 100.00 | RxPharmacy   | Pitampura,Delhi      |
| R1001         | 2345   | Paracetamol   | 15.00  | RajMedicos   | Bahadurgarh,Haryana  |
| R1002         | 1236   | Nebistar      | 60.00  | MyChemist    | Rajouri Garden,Delhi |
| R1003         | 6512   | VitaPlus      | 150.00 | MyChemist    | Gurgaon,Haryana      |
| R1004         | 5631   | Levocitrezine | 110.00 | RxPharmacy   | SouthExtension,Delhi |

- (a) To increase the price of "Amlodipine" by 50.
- (b) To display the Drug ID, DrugName, and Pharmacy Name of all the records in descending order of their price.
- (c) Delete the field name PharmacyLocation.
- (d) Display the records of the price 100 & above, and less than 150.
- (e) State the command to display all the details of the drugs where the name starts with 'M' and has 'Ch' somewhere in the name.
  - (i) Select \* from Pharma where DrugName LIKE "M%ch%";
  - (ii) Select \* from Pharma where DrugName LIKE "m\_ch%";
  - (iv) Select \* from Pharma where DrugName LIKE "m ch%";
  - (iv) Select \* from Pharma where DrugName LIKE "%ch%m";

**Now choose the correct option:**

- (a) Only (i)
- (b) Both (ii) and (iv)
- (c) Both (i) and (iii)
- (d) Only (iii)

**###**

***Please E-mail your answer book to:  
srikumar.mukherjee@dpsranchi.com***





**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**QUALIFYING EXAMINATION (2021-2022)**

**Class:-XII**  
**Time- 3 Hrs.**

**Subject:- Accountancy**  
**M.M.-80**

**General Instruction:**

1. There are 32 questions in Question paper and all are compulsory.
2. Marks are indicated against each question.

**PART - A**

1. Which of the following is not a Capital Receipt? [1]
  - a) Donation for tournament
  - b) Life Membership Fee
  - c) Donation for Building
  - d) Entrance Fee
  
2. Subscription received in advance during the current year is [1]
  - a) an income
  - b) a liability
  - c) an asset
  - d) None of these
  
3. Choose NPO from the following [1]
  - a) Indian Hockey Federation
  - b) Infosys Ltd.
  - c) Reliance Industries Ltd.
  - d) Private Hospital
  
4. Which of the following items is not dealt through Profit and Loss Appropriation Account? [1]
  - a) Interest on Partner's Loan
  - b) Partner's Salary
  - c) Interest on Partner's Capital
  - d) Partner's Commission

5. Which of the following item will be shown in the credit of Profit and Loss Appropriation Account? [1]
- a) Interest on Capital
  - b) Commission to a partner
  - c) Interests on Drawings
  - d) Salary to partner
6. Interest on Capital is allowed on [1]
- a) The opening capital
  - b) The capital at the year end
  - c) Average capital of the year
  - d) The capital in the middle of the year
7. In the absence of partnership deed, interest on loan of a partner is allowed [1]
- a) @ 8% p.a
  - b) 6% p.a
  - c) 12 % p.a
  - d) No interest is allowed
8. If a partner withdrew Rs. 1000 p.m on 1<sup>st</sup> day of every month, interest on drawing @ 6% p.a at the end of the year will be [1]
- a) Rs. 390
  - b) Rs. 360
  - c) Rs. 330
  - d) None of these
9. Current Accounts of partners are maintained if [1]
- a) Capitals are fluctuating
  - b) Capitals are fixed
  - c) Capitals are fixed or fluctuating
  - d) It is decided by the partner
10. In case of Fixed Capital, partners will have [1]
- a) Credit balance or nil balance in their Capital Accounts
  - b) Debit balance in their Capital Accounts
  - c) May have credit or debit balances in their Capital Accounts
  - d) Credit balances in their Capital Accounts

11. If a partner withdrew Rs. 1000 per quarter on 1<sup>st</sup> day of every quarter. At the end of the year interest on drawings @ 6% p.a will be [1]
- a) Rs. 150
  - b) Rs. 120
  - c) Rs. 90
  - d) None of these
12. Number of partners which should not exceed for partnership business is [1]
- a) 2
  - b) 100
  - c) 50
  - d) 20
13. Following are the factors affecting goodwill except [1]
- a) Nature of business
  - b) Location of the customers
  - c) Technical knowhow
  - d) Efficiency of management
14. Under Capitalisation Method of valuation of Goodwill, the formula for calculating Goodwill is [1]
- a) Super profit multiplied by the rate of return
  - b) Average profit multiplied by the rate of return
  - c) Super profit divided by the rate of return
  - d) Average profit divided by the rate of return
15. Which of the following does not result into reconstitution of a firm? [1]
- a) Dissolution of partnership firm
  - b) Dissolution of partnership
  - c) Change in profit sharing ratio of existing partners
  - d) Death of a partner
16. If the existing profit sharing ratio among A, B and C of 5 : 3 : 2 is changed to 2 : 3 : 5 then the partner(s) whose share will be unaffected is/are [1]
- a) A
  - b) B
  - c) C
  - d) A and C

17. Revaluation Account is a \_\_\_\_\_ Account [1]
- Personal
  - Real
  - Nominal
  - None of these
18. At the time of change in profit sharing ratio, the gaining partner is \_\_\_\_\_ and the sacrificing partner is \_\_\_\_\_ for the adjustment of goodwill. [1]
- Debited, Credited
  - Credited, Debited
  - Debited, Debited
  - Credited, Credited
19. A and B are partners sharing profits and losses in the ratio of 3 : 2. They admit C as a partner and gave him 1/5<sup>th</sup> share in the profits. The new profit sharing ratio will be [1]
- 12 : 8 : 5
  - 3 : 2 : 2
  - 3 : 2 : 5
  - 2 : 1 : 2
20. At the time of admission, if the profit sharing ratio among the old partners does not change then sacrificing ratio will be [1]
- Equal
  - According to the contribution of Capital
  - Their old profit sharing ratio
  - According to new partners
21. From the following information, calculate the amount of medicines to be posted to Income and Expenditure Account of MECON Hospital for the year ending 31.03.2021 [3]

| Particulars             | 01.04.2020<br>(Rs.) | 31.03.2021<br>(Rs.) |
|-------------------------|---------------------|---------------------|
| Stock of Medicines      | 25000               | 20000               |
| Creditors for Medicines | 15000               | 28000               |

Medicines purchased during the year ended 31.03.2021 was ₹ 1000000

22. P and Q were partners in a firm sharing profits equally. Their fixed capitals were Rs. 100000 and Rs. 50000 respectively. The partnership deed provided for interest on capital @ 10% p.a for the year ended 31.03.2021 the profits of the firm were distributed without providing interest on capital. Pass adjustment entry to rectify the error. [3]

23. A, B and C are partners sharing profits in the ratio of 6 : 4 : 1. C is guaranteed a minimum profit of Rs. 200000. The firm incurred a loss of Rs. 2200000 for the year ended 31.03.2021. Pass journal entry regarding deficiency born by A and B and prepare Profit and Loss Appropriation Account. [4]

24. A and B were partners in a firm sharing profits in the ratio of 5 : 3. Their fixed capitals on 01.04.2020 were A Rs. 60000 and B Rs. 80000. They agreed to allow interest on capital @ 12% p.a and to charge on drawings @ 15% p.a. Profit of the firm for the year ended 31.03.2021 before all above adjustments was 12600. drawings made by A were Rs. 2000 and by B Rs. 4000 during the year. Prepare Profit and Loss Appropriation Account of A and B. Show your calculations clearly. Interest on Capital will be allowed even if the firm incurs loss. [4]

25. A and B were partners sharing profits and losses in the ratio of 2:1. They admitted C as a partner for 1/5<sup>th</sup> share in the profits. For this purpose the Goodwill of the firm was to be valued on the basis of three year's purchase of last five year's average profits. The profits for the last five years were [4]

| Year          | 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------------|---------|---------|---------|---------|---------|
| Profits (Rs.) | (50000) | 25000   | 75000   | 40000   | 50000   |

Calculate Goodwill of the firm after adjusting the following :

The profit of 2017-18 was calculated after charging ₹ 10000 for abnormal loss of goods sold by fire.

26. Assets Rs. 1000000, External liabilities Rs. 180000 Average Profit Rs. 100000, Normal rate of return 10%. Calculate Goodwill at 3 years purchase of Super Profit. [4]

27. A and B are partners sharing profits in the ratio of 3:2. They admitted C as partner for 1/5<sup>th</sup> share. Goodwill of the firm valued Rs. 50000. C brings 60% of his share of goodwill and Rs. 200000 as his capital through cheque. Goodwill exists in the books at Rs. 2000. Pass necessary journal entries. [4]

28. A, B and C are partners in a firm sharing profits and losses in the ratio of 2 : 3 : 1. With effect from 01.04.2021 they decided to share future profits and losses in the ratio of 3 : 2 : 1. On that date their Balance Sheet showed a debit balance of Rs. 24000 in Profit and Loss Account and a balance of Rs. 144000 in General Reserve. It was also agreed that the goodwill of the firm be valued at Rs. 180000. Land and Building ( having book value of Rs. 300000) will be valued at Rs. 480000.

Pass necessary journal entries for the above changes. [6]

29. (a) Medicines purchased for cash during the year 2020-21 Rs. 150000

|                         | 01.04.2020 (Rs.) | 31.03.2021 (Rs.) |
|-------------------------|------------------|------------------|
| Stock of Medicines      | 30000            | 40000            |
| Creditors for Medicines | 70000            | 150000           |

Calculate the amount of Medicines consumed during the year 2020-21

(b) Subscription received during the year 2020-21 Rs. 700000

|                                  | 01.04.2020<br>(Rs.) | 31.03.2021<br>(Rs.) |
|----------------------------------|---------------------|---------------------|
| Subscription Outstanding         | 20000               | 30000               |
| Subscription received in advance | 15000               | 25000               |

Calculate the amount of subscription credited to Income and Expenditure Account for the year ended 31.03.2021. [6]

30. A and B were partners in a firm sharing profits in the ratio of 4 : 3. They admitted C as a new partner for  $\frac{3}{7}$ th share in the profits of the firm. New profit sharing ratio will be 2 : 2 : 3. C brought Rs. 200000 as his capital and Rs. 60000 for his share of premium for goodwill, half of which was withdrawn by A and B from the firm. At the time of admission assets and liabilities of the firm were revalued as under:-

- i. Land and Building book value Rs. 100000 increased to Rs. 150000
- ii. A creditor of Rs. 6000 be written back

Calculate sacrificing ratio and pass necessary journal entries in the books of the firm for the above transactions. [6]

31. Balance Sheet as at 31.03.2020 [8]

| Liabilities        | Amount (Rs.)   | Assets                   | Amount (Rs.)   |
|--------------------|----------------|--------------------------|----------------|
| Outstanding Salary | 60000          | Cash                     | 150000         |
| Capital Fund       | 6940000        | Outstanding Subscription | 180000         |
|                    |                | Library Books            | 300000         |
|                    |                | Furniture                | 370000         |
|                    |                | Land and Building        | 6000000        |
|                    | <u>7000000</u> |                          | <u>7000000</u> |

Receipts and Payments Account for the year ended 31.03.2021

| Receipts                                        | Amount<br>(Rs.) | Payments               | Amount<br>(Rs.) |
|-------------------------------------------------|-----------------|------------------------|-----------------|
| To Balance b/d                                  | 150000          | By Furniture           | 180000          |
| To Sale of Old Furniture<br>(costing Rs. 60000) | 40000           | By Library Books       | 100000          |
| To Subscription                                 |                 | By Salaries            | 720000          |
| 2019-20       180000                            |                 | By General Expenses    | 180000          |
| 2020-21       600000                            |                 | By Electricity charges | 120000          |
| 2021-22 <u>120000</u>                           | 900000          | By Newspapers          | 338000          |
| To Sale of Old Newspapers                       | 108000          | By Postage and Courier | 30000           |
| To Surplus from                                 |                 | By Stationary          | 400000          |
| Entertainment event                             | 440000          | By Audit Fee           | 80000           |
| To Rent                                         | 840000          | By Balance c/d         | 330000          |
|                                                 | <u>2478000</u>  |                        | <u>2478000</u>  |

Additional information :-

- i. The Club had 500 members each paying on annual subscription of Rs. 1500
- ii. On 31.03.2021 Salaries Outstanding amounted to Rs. 12000 and Salaries paid included Rs. 60000 for the year 2019-20
- iii. Provide 5% depreciation in Land and Building . You are required to prepare Income and Expenditure Account of S.R Entertainment Club for the year ended 31.03.2021 and a Balance Sheet as on that date.

32. A and B were partners in a firm sharing profits in 3:1 ratio. On 31.03.2021 their Balance Sheet was as follows :-

[8]

| Liabilities              | Amount<br>(Rs.) | Assets            | Amount<br>(Rs.) |
|--------------------------|-----------------|-------------------|-----------------|
| Provisions for Bad Debts | 7000            | Bank              | 24000           |
| Outstanding Expenses     | 18000           | Bills Receivable  | 80000           |
| Bills Payable            | 47000           | Sundry Debtors    | 95000           |
| Sundry Creditors         | 102000          | Stock             | 14000           |
| Workmen                  |                 | Furniture         | 70000           |
| Compensation Reserve     | 55000           | Machinery         | 200000          |
| A's Capital              | 300000          | Land and Building | 196000          |
| B's Capital              | 150000          |                   |                 |
|                          | <u>679000</u>   |                   | <u>679000</u>   |

On the above date C was admitted as a new partner for 1/5<sup>th</sup> share in the profits on the following conditions:-

- i. C will bring Rs. 200000 as his capital and necessary amount for his share of goodwill premium. The goodwill of the firm on C's admission was valued at Rs. 100000.
- ii. Outstanding Expenses will be paid off Rs. 5000 will be written off as bad debts and a provision of 5% for bad and doubtful debts on debtors was to be maintained.
- iii. The liability towards Workmen Compensation was estimated at Rs. 60000.
- iv. Machinery was to be depreciated by Rs. 18000 and Land and Building was to be depreciated by Rs. 54000.

Prepare Revaluation Account, Partner's Capital Account and Balance Sheet of the firm after C's admission.

\*\*\*\*\*





# DELHI PUBLIC SCHOOL

## SAIL TOWNSHIP, RANCHI

QUALIFYING EXAMINATION (2021-2022)

Class:- XII  
Time- 3 Hrs.

Subject:- Business Studies  
M.M.-80

### General Instructions:-

There are 34 questions in Question paper and all are compulsory, (Question no.1 to 20 are very short answer type questions carrying 1 mark each. Answer should be brief and to the point and the answer of each part should be written at one place. There is no overall choice, however an internal choice has been provided in 2 questions of 6 marks. (Question 32 and 34)

- Q1. Management is considered to be an art because (1)
- (a) The principles of management have universal validity
  - (b) The principles of management have universal application
  - (c) Different principles of management are brought into effect differently by different Managers
  - (d) It is not important the practicing managers to be a member of a professional Association.
- Q2. The main task of this level of management is to determine the overall organizational Objectives and strategies for their realization. (1)
- (a) Operational management
  - (b) Middle level management
  - (c) First line managers
  - (d) Top level management
- Q3. This level of management serves as a link between top level managers and first line managers. (1)
- (a) Supervisory level management
  - (b) Operational management
  - (c) Middle level management
  - (d) None of the above
- Q4. Supervision, communication, motivation and leadership are the key elements of this function of management. (1)
- (a) Directing
  - (b) Controlling
  - (c) Planning
  - (d) Organising
- Q5. The function of Management related to placing the right person at the right job is (1)
- (a) Organising
  - (b) Staffing
  - (c) Planning
  - (d) Controlling

- Q6. Co-ordination is considered to be the essence of management because (1)
- (a) It is a common thread that runs through all the activities within the organisation
  - (b) It is implicit and inherent in all functions of the organisation
  - (c) It is a force that binds all the functions of management
  - (d) All of the above
- Q7 The principles of management (1)
- (a) Provide a straight jacket solution
  - (b) Are flexible in nature
  - (c) Are rigid in nature
  - (d) Are absolute in nature.
- Q8 Which of the following is a technique of management given by Taylor ? (1)
- (a) Espirit de corps
  - (b) Harmony, not discord
  - (c) Science, not rule of the thumb
  - (d) Time study
- Q9 The "One best way" to perform a task should be identified and implemented. Identify the technique of scientific management as defined in this sentence. (1)
- (a) Method Study
  - (b) Time Study
  - (c) Fatigue Study
  - (d) Standardisation and simplification of work
- Q.10 Which of the following statements is true about Taylor and Fayol? (1)
- (i) Taylor's principles are applicable at the top level whereas Fayol's principles are applicable at the shop floor level of management.
  - (ii) The principles of scientific management have been evolved through observation and experimentation whereas principles of general management are based on personal experiences
  - (iii) The principles of scientific management have universal application whereas principles of general management have limited applicability
  - (iv) Taylor was a mechanical engineer whereas Fayol was a mining engineer
- (a) Both (i) and (ii)
  - (b) Both (i) and (iii)
  - (c) (i) and (iv)
  - (d) (ii) and (iv)

Q11 (1)

| Column A                                                                               | Column B                                                               |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| (i) Emphasises on mental revolution                                                    | (a) Development of workers to their greatest efficiency and prosperity |
| (ii) Scientific study and analysis of each element of job                              | (b) Cooperation not individualism                                      |
| (iii) Adopt a suggestion system                                                        | (c) Harmony, not discord                                               |
| (iv) Assign job to workers as per their physical, mental and intellectual capabilities | (d) Science, not rule of Thumb                                         |

- (a) (i)-(b); (ii)-(c); (iii)-(b); (iv)-(a)  
 (c) (i)-(a); (ii)-(c); (iii)-(d); (iv)-(b)

- (b) (i)-(c); (ii)-(d); (iii)-(b); (iv)-(a)  
 (d) (i)-(d); (ii)-(c); (iii)-(a); (iv)-(b)

Q12

(1)

| Column A                                                           | Column B        |
|--------------------------------------------------------------------|-----------------|
| (i) Responsible for keeping tools and machines ready for operation | (a) Route Clerk |
| (ii) Specifies the exact sequence and route production             | (b) Repair boss |
| (iii) Checks the quality of work                                   | (c) Gang boss   |
| (iv) Ensure proper working conditions of tools and machines        | (d) Inspector   |

- (a) (i)-(b); (ii)-(c); (iii)-(d); (iv)-(a)

- (b) (i)-(c); (ii)-(a); (iii)-(d); (iv)-(b)

- (c) (i)-(a); (ii)-(c); (iii)-(d); (iv)-(b)

- (d) (i)-(d); (ii)-(c); (iii)-(a); (iv)-(b)

Q.13 According to the United Nations Environmental Agency, the world produces around 300 million tons of plastic each year, half of which constitutes single-use items. Ford is recycling over one billion plastic bottles every year to develop elements of the car's interior, reducing the amount of plastic ending up in a landfill. The American car maker has revealed that their Romanian-built Eco Sport SUVs' carpets are made using 470 recycled single-use plastic bottles. The process for making Ford Eco Sport carpets involves shredding bottles and their caps into tiny flakes and then heating them to 260° C.

Identify the related dimension of business environment.

(1)

- (a) Economic dimension

- (b) Social dimension

- (c) Technological dimension

- (d) Political dimension

Q14 The Economic Survey, 2019 suggests that the psychological biases can be used in the realm of tax compliance. It is in favour of using religious norms such "dying in debt" is a sin to improve tax compliance.

Identify the related dimensions of business environment.

(1)

- (a) Legal dimension and Social dimension

- (b) Social dimension and Economic dimension

- (c) Technological dimension and Political dimension

- (d) Political dimension and Economic dimension

- Q 15 ..... forces exert a direct and immediate influence on the working of a business firm. (1)
- Q16 The demand for two-wheelers is likely to be more in urban areas than in rural areas. The feature of business environment being described in above line is ..... (1)
- Q17 The Prime Minister has announced an economic relief package of 21 lakh crore for program titled Atmanirbhar Bharat Abhiyan. This statement is related to .....dimension of business environment. (1)

'Musk' is a well-known brand of male grooming product. The company has recently introduced a pocket-sized perfume pack called 'Musk Lite', under the premium range of body-perfumes. 'Musk Lite' is a no-gas body perfume in compact, attractive, & portable pack. Daksh has bought a pack of 'Musk Lite' for convenience, feeling refreshed and convenient.

Answer the following questions based on the above para

- Q18. From the above paragraph, product can be best described as... (1)
- Q19. Identify the generic name and brand name of the product being discussed in the paragraph. (1)
- Q20. How does packaging provide innovational opportunity for the product? (1)
- Q.21 Explain any 3 Importance of Principles of Management. (3)
- Q22 Differentiate between 'Marketing Concept' and 'Selling Concept'. (3)
- Q.23 'Study Buddy Pvt. Ltd.' is company dealing in stationery items. In order to establish standards of excellence and quality in materials and in the performance of men and machines, the company adheres to benchmarks during production. Moreover, its products are available in limited varieties, sizes and dimensions thereby eliminating superfluous diversity of products. Identify the technique of scientific management which has been adopted by 'Study Buddy Pvt. Ltd.' (3)
- Q.24 It is interesting to know that the menu items of the multinational food chains are customised to suit the general palates of the local people in the region. When McDonald's started its business in India in the year 1996, the company went through a complete localisation strategy. McDonald's changed its product menu to accommodate the vegetable burger given the large vegetarian population. It also altered its store design and even reduced the product price by close to fifteen per cent. Also, the "McAloo Tikki burger" is not available anywhere but in the Indian outlets of McDonalds.

Identify the relevant feature of business environment being discussed above and explain. (3)

Q.25 Rupali intends to start an enterprise that produces chocolates. Initially, in order to assess the taste and preferences of the people about the chocolates. She used social media and online surveys. Thereafter, she prepared a detailed SWOT (strengths, weaknesses, opportunities and threats) analysis of her enterprise to devise a strategy that will give her an edge over the competitors. Based on her analysis of the market, she decided to launch sesame and jaggery based chocolates under the brand name 'Desi Delight'. She has decided to fix up the price of chocolates relatively at lower level in the beginning and later on as the demand picks up, she may revise the prices. (4)

In the context of above case:

- (a) Identify the elements of marketing mix being taken into consideration by Rupali.
- (b) Explain briefly the functions of marketing highlighted here.
- (c) Do you think she has selected an appropriate brand name for her product? Why or why not? Give a reason for your answer.

Q.26 Arvind is planning to start a company manufacturing room fresheners. He intends to use natural fruit extracts for adding fragrance to them. He estimates an investment of 20 crores to set up the factory. As it is difficult for him to raise the entire capital amount alone, he gives a partnership offer to his school friend, Sanjay who is an angel investor. Sanjay, after being convinced about the feasibility of the project, accepts his offer. Sanjay tells Arvind that they should also focus on other important decisions related to the product 'room fresheners' besides deciding about its features, variety and quality. Branding is one of the important such decision. (4)

In the context of above case:

- (a) Name any other two important decisions related to a product.
- (b) Why is branding considered as an important function by the marketers? Give any one reason in support of your answer.
- (c) State any four features of a good brand name.

Q.27 Somya Patel, 35, a fitness trainer, woes about a popular consumer durable brand saying that "They show a lot of advertisements for their products on television, but when you go to the store, you find these things out of stock all the time. Then why should the company put advertisements when they can't meet the demand," she questions. (4)

In the context of above case:

- (a) Identify the tool of promotion mix being referred to in the above lines.
- (b) Which element of marketing mix is being overlooked by the company? Why is it considered as an important element

Q.28 Das is the Managing Director of "Gamut Ltd.", manufacturing different varieties of cheese. He has an efficient team working under him consisting of Rajat - the Production Manager, Vinay - the Marketing Manager and Adit - the Finance Manager. They understand and interpret the policies made by Das and ensure that their Departments have adequate manpower, assign them the necessary duties and motivate them to achieve the desired objectives. State one more function, other than those mentioned above, that this team may perform at the level they are working. (4)

Q.29 Mita has a successful ice cream business at Bikaner, namely St are utterly delicious. She makes ice creams from fresh milk and the same are available in wide range of flavours and packs. She sets viable business objectives and works with the same in mind in order to ensure that the customers will come back for purchasing. Having the first mover advantage her business was doing well. To earn higher profits, she started cutting costs. This would sometime lead to delay in delivery and the ice cream was not reaching the market in time. Over a period of time, the demand for her ice cream declined and because of it the competitors entered the market. She lost some of her market share to competitors. At the beginning of summer season she got back to back orders for supply of 4,000 ice cream packs of different flavours for special occasions. To ensure that the task was completed and orders delivered in time she hired additional workers. She was, thus able to produce and deliver the ice cream packs but at a high production cost. While completing activities and finishing the given task for achieving goals, Mita realized that she was ignoring one of the important aspects of management. Identify the aspects of management that has been ignored by Mita. Also explain the same with the help of an example. (4)

Q.30 Explain 'Differential Piece Wage system' with a suitable example. (4)

Q.31 Nischay, after completing his masters in computer engineering decided to start his own business. He visited his uncle Mr. Jaiprakash who has been running a successful business in web designing. He shared with Nischay that the main reason for his success in the business lies in his approach of building a life time relation with his clients. Therefore, his business is not only restricted to designing web sites according to the specifications of the clients but also providing continuous online assistance to them and handling their grievances effectively and doing all this at a profit. He provides these services at competitive prices. Anybody interested in getting the web solutions can contact him through his website. Moreover, whenever the market is sluggish he tries to create demand by offering short-term incentives to the buyers. Briefly explain the various elements of marketing mix being pursued by Mr. Jaiprakash by quoting lines from the para. (6)

Q.32 Explain any 4 Importance of Management.

OR

(6)

Explain the Objectives of Management.

Q.33 F Ltd. was engaged in the business of food processing and selling its products under a popular brand. Lately the business was expanding due to good quality and reasonable prices. Also with more people working the market for processed food was increasing. New players were also coming to cash in on the new trend. In order to keep its market share in the short run the company directed its existing workforce to work overtime. But this resulted in many problems. Due to increased pressure of work the efficiency of the workers declined. Sometimes the subordinates had to work for more than one superior resulting in declining

efficiency. The divisions that were previously working on one product were also made to work on two or more products. This resulted in a lot of overlapping and wastage. The workers were becoming undisciplined. The spirit of teamwork, which had characterized the company, previously was beginning to wane. Workers were feeling cheated and initiative was declining. The quality of the products was beginning to decline and market share was on the verge of decrease. Actually the company had implemented changes without creating the required infrastructure. (6)

a) Identify the Principles of Management ( Out of 14 given by Henry Fayol) that were being violated by the company.

b) What steps should the company management take in relation to the above Principles to restore the company to its past Glory

Q34 Briefly discuss the impact of Government Policy changes on business and Industry. (6)

**OR**

Briefly explain the following:

- (a) Liberalisation
- (b) Privatisation and
- (c) Globalisation

\*\*\*\*\*



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**QUALIFYING EXAMINATION (2021-2022)**

**Class:- XII**  
**Time- 3 Hrs.**

**Subject:- Economics**  
**M.M.-80**

General instructions:

- i) All question in both section are compulsory.
- ii) Question no. 1-10 and 18-27 are multiple choice questions carrying 1 marks each.
- iii) Question no. 11-12 and 28-29 are short-answer questions carrying 3 marks each. Answer to them should normally not exceed 60 words each.
- iv) Question no.13-15 and 30-32 are also short-answer questions carrying 4 marks each. Answer to them should normally not exceed 70 words each.
- v) Question no. 16-17 and 33-34 are long-answer questions carrying 6 marks each. Answer to them should normally not exceed 100 words each.
- vi) Answer should be brief and to the point and the above word limits should be adhered to as far as possible.

**SECTION - A**

1. Which of the following is a flow? [1]
- a) Deposits in a bank
  - b) capital
  - c) depreciation
  - d) wealth

**OR**

If the Nominal GDP =1200 and price index is 120 then Real GDP:

- a) 1100
  - b) 1500
  - c) 1000
  - d) 1800
2. Define money supply. [1]
3. Intermediate goods are still within the \_\_\_\_\_ boundary. [1]

**Read the following and answer the question numbers 4,5,6 and 7 on the basis of same:**

In an economy, the following transaction takes place:

A sells goods of RS. 20 crores to B , RS. 30 crores to C and Rs. 40 crores to households and 10 crores remain unsold. Value of inputs of firm A is assumed to be zero.

B sells his output worth Rs. 40 crores to C, Rs. 60 crores to D and Rs. 50 crores to final consumption.

C sells his output worth Rs. 100 crores to D, Rs. 100 crores to households and export Rs. 100 crores.

D sells Rs. 300 crores to household and Rs. 100 crore to government.



4. Value added by firm C is? [1]
- a) 100 crores
  - b) 230 crores
  - c) 240 crores
  - d) 130 crores
5. Total consumption expenditure will be? [1]
- a) 500 crores
  - b) 590 crores
  - c) 800 crores
  - d) 900 crores
6. Net Value added is equal to value of factor income. (true/false). [1]
7. Production for self-consumption is not included in national income. (true/ false) [1]
8. **Read the following statements – Assertion (A) and Reason (R). choose one of the correct alternatives given below:** [1]
- Assertion (A):** net demand deposits of commercial banks are included in money supply.
- Reason (R):** Inter bank deposits are the deposits held by banks on behalf of other banks and do not belong to the public.
- Alternatives**
- a) Both Assertion (A) and reason (R) are true and reason R is the correct explanation of A
  - b) Both Assertion (A) and reason (R) are true and reason R is the not the correct explanation of A
  - c) Assertion (A) is true and Reason (R) is false
  - d) Assertion (A) is false and Reason (R) is true
9. If the total deposits created by commercial banks is Rs. 10000 crores and legal reserve requirements is 40%, then amount of initial deposit will be \_\_\_\_\_. [1]
10. Which of these is not a function of central bank? [1]
- a) Accepting deposits of general public
  - b) Advancing loans to general bank
  - c) Banker's bank
  - d) Currency authority
11. How will you treat the following items in the calculation of 'Domestic income' of India? Give reasons. [3]

- a) Profits earned by branch of foreign company in India.
- b) Salaries of Indian employees working in Chinese embassy in India.
- c) Retained earnings of foreign companies from India.

**OR**

Use following information of an imaginary economy:

| Year         | 2014-15 | 15-16 | 16-17 |
|--------------|---------|-------|-------|
| Nominal GDP  | 6.5     | 8.4   | 9     |
| GDP deflator | 100     | 140   | 125   |

- i) For which year is real GDP and Nominal GDP same and why?
- ii) Calculate Real GDP for the given years. Is there any year for which Real GDP falls?

12. Explain the role of Reverse Repo rate and margin requirements in controlling the credit. [3]

13. Calculate 'Sales' from the following data: [4]

- a) Net value added at factor cost----- 2000
- b) profit----- 750
- c) Change in stock----- 500
- d) Subsidies----- 200
- e) Depreciation----- 700
- f) Intermediate cost----- 3000

14. Currency is issued by the central bank, yet we say that commercial banks create money. Explain how is the money creation by commercial banks likely to affect the national income? [4]

**OR**

'Growth of Indian economy requires investment' in this context, how Reserve Bank of India uses the instrument of Cash reserve Ratio (CRR) and Open market operation.

15. Explain the 'difficulty in storing wealth and double co-incidence of wants' problem faced in barter system of exchange. How money solve it? [4]

16. Explain the problem of double counting in estimating national income with the help of a numerical example. Also explain two alternative ways to avoiding the problem.

**OR**

How will the following be treated while estimating national income? Give reasons. [6]

- a) Payment of electricity by a firm.
- b) Imputed rent of self-occupied houses.
- c) Payment of interest by Government.
- d) Payment of excise duty by a firm.
- e) Fee to a mechanic paid by a firm.
- f) Interest paid by household

17. From the following data calculate (a) Gross domestic product at market price and (b) Factor income from abroad : [6]
- |                                               |      |
|-----------------------------------------------|------|
| a) Compensation of employees -----            | 1600 |
| b) Profits -----                              | 550  |
| c) Gross national product at factor cost----- | 3000 |
| d) Rent -----                                 | 300  |
| e) Interest -----                             | 400  |
| f) Gross fixed capital formation -----        | 700  |
| g) Net domestic capital formation -----       | 650  |
| h) Change in stock -----                      | 50   |
| i) Factor income to abroad -----              | 120  |
| j) Net indirect tax-----                      | 300  |
| k) Export-----                                | 40   |

**SECTION - B**

18. Read the following statements – Assertion (A) and Reason (R). choose one of the correct alternatives given below: [1]

**Assertion (A):** The major policy initiatives i.e land reforms and green revolution helps India to become self-sufficient in food grains production.

**Reason (R) :** the proportion of people depending on agriculture did not decline as expected.

**Alternatives**

- a) Both Assertion (A) and reason (R) are true and reason R is the correct explanation of A
- b) Both Assertion (A) and reason (R) are true and reason R is the not the correct explanation of A
- c) Assertion (A) is true and Reason (R) is false
- d) Assertion (A) is false and Reason (R) is true

19. Railways were introduced in India by the Britishers in \_\_\_\_\_ [1]

20. Read the following statements – Assertion (A) and Reason (R). choose one of the correct alternatives given below: [1]

**Assertion (A):** India became an exporter of primary products and importer of finished produce in Britain.

**Reason (R) :** Restrictive policies of commodity production, trade and tariff pursued by the colonial government adversely affected the structure, composition and volume of India’s foreign trade.

### Alternatives

- a) Both Assertion (A) and reason (R) are true and reason R is the correct explanation of A
- b) Both Assertion (A) and reason (R) are true and reason R is the not the correct explanation of A
- c) Assertion (A) is true and Reason (R) is false
- d) Assertion (A) is false and Reason (R) is true

21. Which of the following is not a public sector undertaking? [1]

- a) BHEL
- b) GAIL
- c) RBI
- d) TISCO

22. \_\_\_\_\_ refers to the number of deaths of infants before completing the age of one year in a particular year. [1]

23. Identify the correct sequences of alternative given in column I and column II by matching them in with respective terms in column I. [1]

|   | Column I                                                         |     | Column II                    |
|---|------------------------------------------------------------------|-----|------------------------------|
| A | First scientific estimate of national income during British rule | i   | Dada bhai naoroji            |
| B | Drain of Indian wealth                                           | ii  | Development of Railways      |
| C | Positive effect of colonial rule                                 | iii | Discriminatory tariff policy |
| D | Form of colonial exploitation                                    | iv  | Dr. V.K.R.V.Rao              |

Choose the correct alternatives

- a) iii, ii, i, iv
- b) ii, iv, iii, i
- c) iii, i, iv, ii
- d) iv, i, ii, iii

24. Before 1921 India was in the \_\_\_\_\_ of demographic transition. [1]

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

25. In place of Planning commission, the government of India has now constituted \_\_\_\_\_. [1]

26. In which states were land reforms successful? [1]

- a) Punjab and Haryana
- b) Kerala and West Bengal
- c) U.P and Bihar
- d) Both (a) and (b)

27. After independence, India adopted a policy of Import substitution. (true/false). [1]
28. The destruction of handicraft industry in India coincide with the industrial revolution in Britain. Was it a mere coincidence? What was the impact of destruction of Indian handicraft industry? [3]

**OR**

Explain why trade surplus during colonial rule could not benefit India?

29. Does modernisation as a planning objective create contradiction in the light of employment generation? [3]
30. Why was there a need for state-led industrial development in the country on the eve of independence? Discuss IPR 1956. [4]

**OR**

Explain how import substitution can protect domestic industry?

31. Explain the need and type of land reforms implemented in agriculture sector. [4]
32. What were the main causes of India's agriculture stagnation during the colonial period? [4]
33. While subsidies encourage farmers to use new technology, they are a huge burden on government finances. Discuss the usefulness of subsidies in the light of this fact. [6]

**OR**

Discuss the risk involved under Green revolution. Also state the steps taken by Government to overcome these risks.

34. What objective did the British intend to achieve through the policies of infrastructure development in India. Mention some of the positive impact of British rule. [6]

\*\*\*\*\*



# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI  
QUALIFYING EXAMINATION (2021-2022)

Class:-XII  
Time- 3 Hrs.

Subject:- History  
M.M.-80

## General Instructions :-

1. Answer all the questions. Marks are indicated against each question. This question paper comprises of six sections.
2. Section A: question numbers 1 to 16 are objective type questions carrying one mark and should be answered in a word or one sentence each (Attempt any 15)
3. Section B: question numbers 17 to 19 are case based bar source based having multiple choice questions. Each question has four sub-parts. Attempt any three sub-parts from each question.
4. Section C: answer to questions carrying three mark, question number 20-23, should not exceed 100 words each.
5. Section D: answer to questions carrying eight mark, question 24 to question 26, should not exceed 350.
6. Section E: question numbers 27 to 29 are source based questions carrying five marks each.
7. Section F :Question number 30 is a map question that includes the identification and location of significant test items. Attach the map with the answer script.

## Section A

1. Differentiate between burial sites of the Harappan cultures and sites of the Egyptian culture.
2. Define protoshiva
3. Which among the following is considered as the year of beginning of Gupta rule?
  - a. 320 CE
  - b. 320 BCE
  - c. 78 CE
  - d. 78 BCE
4. Read the following information And mention the context in which the statement is connected:  
“May the bird be the *haja* -bird, may its call be heard the royal palace “
5. Match the following
  - A. Alaxander cunningham
    1. Excavation in accordance with stratigraphy
  - B. R. S Bisht
    2. Announced discovery of Harappan civilisation
  - C. John Marshall
    3. First DG of ASI
  - D. REM Wheeler
    4. Excavated Dholavira

Codes

|    | A | B | C | D |
|----|---|---|---|---|
| a. | 3 | 1 | 4 | 2 |
| b. | 1 | 2 | 3 | 4 |
| c. | 3 | 4 | 2 | 1 |
| d. | 2 | 1 | 4 | 3 |

6. Correct the sentence and rewrite

‘Carnelian, the bright and red colour mineral, was obtained from shortughai in Afghanistan’

7. What is votive inscription

8. What is Epigraphy

9. Who among the following was the grand father of Ashoka?

- a. Chandra Gupta II
- b. Samudra Gupta
- c. Chandra Gupta Maurya
- d. Chandra Gupta

10. Who are nishadas?

- a. A hunting community
- b. Untouchables
- c. An inscription
- d. None of the above

11. Which of the following king rebuilt Sudarsana lake

- a. Rudradaman
- b. Ekalavya
- c. Ashoka
- d. Samudragupta

12. Nalyira prabandham was written by -----

13. Read the following statement about Mahabharata carefully.

- 1. It was completely written by sage Vedvyasa
- 2. It is divided into two narrative and didactic by sage Vedvyasa
- 3. Narrative section contains stories and didactic section contains prescriptions about social norms

Which of the above statements is/are correct?

- a. 1, 2 & 3
- b. 2 & 3
- c. Only 3
- d. 1&2

14. Assertion(A ): John marshall was the one who announced the finding of a new civilisation in the Indus valley

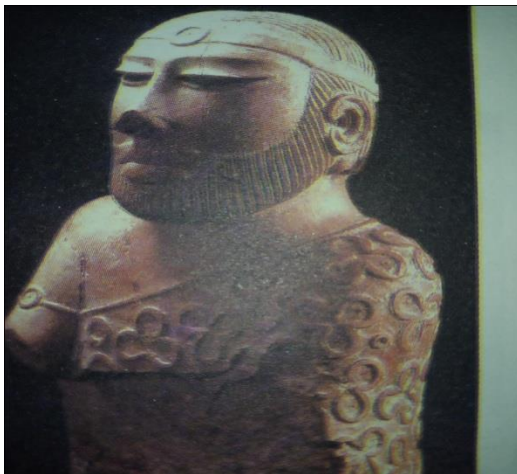
Reason (R ) :Cunningham missed the the significance of Harappa

- a. Both A and R are true. And R is the reason for A
- b. Both A and R are true. But R is not the reason for A
- c. A is correct. But R is wrong
- d. A is wrong. But R is correct

15.Which of the following grains was found in Harappan site?

- a. Wheat
- b. Rice
- c. Barley
- d. Sesame

16. Identify the below image and write its name.



### Section - B

17. Read the following extract and answer any three of the following questions

Baba Guru Nanak and the Sacred Word.

Baba Guru Nank and the Sacred Word

Baba Guru Nanak was born in Hindu merchant family in a village called Nankana Sahib near the River Ravi in the predominantly Muslim Punjab. He trained to be an accountant and studied Persian. He was married at a young age but he spent most of his time among Sufis and bhakts. He also travelled widely.



The message of Baba guru nanak is spelt out in his hymns and teachings. This suggests that he advocated a form of nirguna Bhakti. He firmly repudiated the external practises of the religions he saw around him. He rejected sacrifices, ritual baths, image worship, austerities and scripture of both Hindus and Muslims. For Baba guru nanak, the absolute or “Rab” had no gender or form. He proposed a simple way to connect to the divine by remembering and repeating the divine name, expressing his ideas through hymns called” shabad “in Punjabi, the language of the region. Baba Guru Nanak would sing this conversation in various ragas while the his attendant Mardana played the *rabab*.

Baba Guru Nanak organised his followers into a community. He set up rules for congregational workshop(Sangat) involving collective recitation.He appointed one of his disciples, Ankat, to succeed him as the perceptor(guru)and this practise was followed for nearly 200 years.

i. Choose the correct option.

Assertion(A ): Baba Guru Nanak was born in a Hindu merchant family in Nankna Sahib village.

Reason( R ): The village Nankana Sahib located near the river Ravi in Panjab state.

- a. Both A and R are true. And R is the reason for A
- b. Both A and R are true. But R is not the reason for A
- c. A is correct. But R is wrong
- d. A is wrong. But R is correct

ii. Why was Guru Nanak trained to be an accountant?

- a. Because he was born in a merchant family.
- b. He wanted to be an accountant
- c. He did not want to do any other work
- d. He loved accountancy

iii. Baba Guru nanak organised his followers into a community and set up rules for congregational worship involving collective recitation. Why?

- a. Because he thought that rab had no gender or form
- b. He liked sufis and Bhakts
- c. Both a and b
- d. None of the above

iv. What is the meaning of Shabad from the given extract?

- a. Hymns
- b. Sufi songs
- c. Regional language
- d. All of the above

18. Study the image and answer any three questions.



I. This scene is frequently depicted in painting and sculpture. With which ancient epic this scene is related?

- a. The mahabharata
- b. The Ramayana
- c. Raghuvamsha
- d. Ramacharita manas

II. The depiction of Halo around the head of Krishna suggests?

- a. Godly attributes
- b. Symbolism of a teacher
- c. Both a and b
- d. None

III. In this painting Arjuna is seen praying to the Krishna while Krishna is advising Arjuna. What did he advise to Arjuna?

- a. To follow his karma
- b. The true meaning of life
- c. Military tactics to win the battle
- d. Both a and b

IV. This advice is famous as

- a. Jayam
- b. Gita
- c. Both a and b
- d. None of the above.

19. Study the following excerpt regarding Sufi movement carefully and answer any three questions.

It was not just in Sama, that the Chishties adopted local languages. In Delhi, those associated with the Chisti silsila conversed in Hindavi, the language of the people. Other Sufis such as Baba Farid composed verses in the local language, which were incorporated in the Guru Granth Sahib. Yet others composed long poems or masnavis to express ideas of divine love using human love as an allegory. For example the prem akhyan (love story) *Padmavat* composed by Malik Muhammad Jayasi revolved around the romance of Padmini and Ratan Sen, the king of Chittor. Their trials were symbolic of the soul's journey to the divine. Such poetic conversations were often recited in hospices, usually during sama.

A different general of Sufi poetry was composed in and around the town of Bijapur, Karnataka. These were short poems in the Dakhani (a variant of Urdu) attributed to Chistie saints who lived in this region during the 17<sup>th</sup> and 18<sup>th</sup> centuries. These poems were probably sung by women while performing household chores like grinding grain and spinning. Other compositions were in the form of *lurinamas* or lullabies and *shadinama* or wedding songs. It is likely that the Sufies of this region were inspired by the pre-existing Bhakti tradition of the Kannada vachanas of the Lingayats and Marathi abhangs of the saints of Pandharpur. It is through this medium that Islam gradually gained a place in the villages of the Deccan.

I. Choose the correct option.

Assertion (A): Sufi Saints conversed as well as wrote their poetries in local languages.

Reason (R): They wanted to connect with the masses and spread the gospel of Sufism among them.

Codes.

- a. Both A and R are true. And R is the reason for A
- b. Both A and R are true. But R is not the reason for A
- c. A is correct. But R is wrong
- d. A is wrong. But R is correct

II. What was the reason behind penetration of Islam into the villages of Deccan?

- a. Sufi saints developed a new variant of Urdu to propagate their messages.
- b. Coercive tactics and forced conversion by the rulers of Bijapur
- c. Sufi saints amalgamated earlier traditions prevalent in those areas for promotion of Sufi ideas
- d. Both a and c

III. What was the main theme and characters of Padmavat written by Malik Muhammad Jayasi?

- a. Love, padmini and ratansen
- b. Courage, padmini and ratansen
- c. Justice, Baba Farid and Sheik Nizamuddin Auliya
- d. None of the above.

IV. What do you think, according to this extract is the meaning of Sama?

- a. Annual pilgrimage to the grave of of sufi saints
- b. Hospice of Sufi saints
- c. Recitation of poems, songs and dance at the Khanquah of sufinsaints
- d. All of the above

**Section- C**

3 marks each

- 20. Explain through examples, how 8<sup>th</sup> and 9<sup>th</sup> century saw the integration of various cults in the Brahmanical religion.
- 21. Discuss how archeologists reconstruct the past.
- 22. List the problems faced by epigraphists.
- 23. Discuss whether the mahabharata could have been the work of a single author

**Section - D**

8 marks each

- 24. How did historians reconstruct the history of 6<sup>th</sup> century BCE to 6<sup>th</sup> century CE?
- 25. Explain the features of Mohenjodaro
- 26. Describe the relations between the state and the Bhakti- Sufi traditions.

**Section - E**

27. Read the following passage carefully and answer the questions that follow.

Prabhavati Gupta... command the grama-kutumbins (householders peasants living in the village ) Brahmans and others living in the village of Danguna.

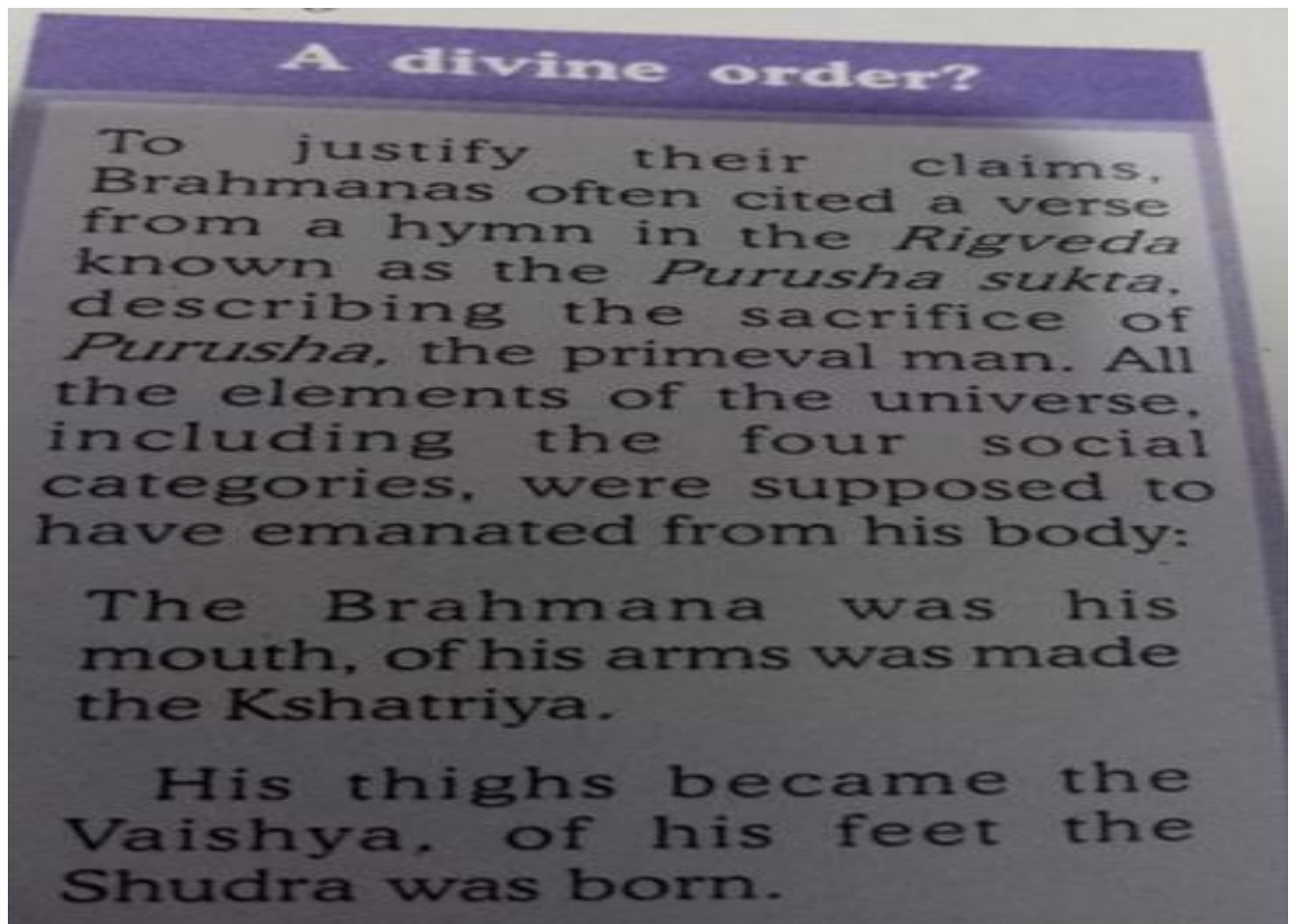
'Be it known to you that on twelfth (lunar day) of the bright (fortnight ) of Kartika, we have, in order to increase our religious merit donated this village with the pouring out of water, to the acharya -(teacher) Chanalavamin... You should obey or (his) commands... We confer on (him) the following exemptions typical of an Agrahara... (This village is )not to entered by soldiers and police men; (It is )exempt from (the obligations to provide), grass, (animal) hides as seats and charcoal (to touring royal officers); exempt from (the royal prerogative of) purchasing fermenting

liquors and digging (salt); exempt from from (the right to ) mines and khadira trees;exempt from (the obligations to supply) flowers and milk ;(it is donated ) together with (the right to) hidden treasures and deposits (and ) together with major and minor taxes...'

This charter has been written in the thirteenth (regnal) year. "

1. Who had issued this inscription? 1marks
2. Why did she want to donate the land? 1marks
- 3.What was the significance of this inscriptional evidence? 3 marks

28. Read the following passage carefully and answer the questions that follow.



1. The above source tells us about which social system 1 mark
2. Why did the Brahmins considered it as an important verse? 1 mark
3. Did the society of 6<sup>th</sup> BCE to 6<sup>th</sup> CE follow it to date? Give your opinion with example. 3marks

29. Read the following passage and answer the questions that follow.

(3+2=5)

The frontiers of the harappan civilization have little or no connection with present-day national boundaries. However, with the partition of the subcontinent and the creation of Pakistan, the major sites are now in Pakistan territory. This has spurred Indian archaeologists to try and locate sites in India. An extensive survey in Kutch has revealed a number of Harappan settlements and explorations in Punjab now have added to the list of harappan sites. While Kalibangan Lothal Rakhi garhi and most recently Dholavira have been discovered, explored and excavated as part of these efforts, fresh explorations continue.

1. What was the problem faced by Indian Archeologists after 1947? 3 marks

2. Name the settlements which have been found recently? 2 marks

**Section - F**

30. In an outline Map of India,locate and label the following places

[1×5=5marks]

Kalibangan

Chanhudaro

Mohenjodaro

Nageshwer

Dholavira

\*\*\*\*\*



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**QUALIFYING EXAMINATION (2021-2022)**

Class:- XII  
Time- 3 Hrs.

Subject:- Political Science  
M.M.-80

General Instructions:-

- i. All Questions are Compulsory.
- ii. Section A has 16 Objective Type Questions of 1 mark each.
- iii. Section B has 2 passage -based questions 17 and 18 having Multiple Choice Questions of 1x4 mark each.
- iv. Question numbers 19-22 carries 2 marks each. Answer to these questions should not exceed 40 words each.
- v. Question numbers 23-27 carries 4 marks each. Answer to these questions should not exceed 100 words each.
- vi. Question numbers 28-29 pertain to map and cartoon questions carrying 5 marks each to be answered accordingly.
- vii. Question numbers 30-32 carries 6 marks each. Answer to these questions should not exceed 150 words each.

Section - A

[1x16]

1. In which year was the film Garam Hawa released?
  - (a) 1991
  - (b) 1997
  - (c) 1979
  - (d) 1973
  
2. Who wrote the short Urdu story Kasr-e-Nafsi?
  - (a) Kaifi Azmi
  - (b) Saadat Hasan Manto
  - (c) Faiz Ahmed Faiz
  - (d) Amrita Pritam
  
3. Mohammad Ali Jinnah's presidential address to the constituent assembly was on?
  - (a) 11<sup>th</sup> August 1947
  - (b) 12<sup>th</sup> August 1947
  - (c) 14<sup>th</sup> August 1947
  - (d) 15<sup>th</sup> August 1947
  
4. After independence, on 15<sup>th</sup> of august how many ministers were inducted into country's cabinet?
  - (a) 21
  - (b) 14
  - (c) 19
  - (d) 17

5. Name the person who was a pioneer figure in the world of cartoons. A look at his life reveals the growth of political cartooning in India. He was fearless with his cartoons which invited him troubles from many quarters. He shared a much-celebrated friendship with Pandit Jawahar Lal Nehru. He featured Nehru in nearly 4000 cartoons and in most lampooning him mercilessly, but they shared a sense of mutual admiration. Nehru famously remarked "Don't spare me (name of the cartoonist)". He described Nehru ji as "great man, a truly great man."
- (a) R. K. Laxman
  - (b) Shankar
  - (c) Jayanto Banerjee
  - (d) Sudhir Dhar
6. There were how many small states prior to merger in today's Orissa?
- (a) 26
  - (b) 14
  - (c) 24
  - (d) 17
7. Name the leader of Egypt whose power collapsed in 1979 as a result of the massive democratic process.
- (a) Mohammad Kasim
  - (b) Zulfikar Mehmood
  - (c) Hosni Mubarak
  - (d) Sayed Aziz Mustafa Sheikh
8. Which one of the following nations was a Warsaw Member?
- (a) Norway
  - (b) Turkey
  - (c) Bulgaria
  - (d) Vienna
9. Which one of the following nations was a NATO Member during the Cold War?
- (a) Sweden
  - (b) Finland
  - (c) Ireland
  - (d) Italy
10. Name the US president who signed the Interim Agreement on the limitation of strategic offensive arms.
- (a) Richard Nixon
  - (b) Jimmy Carter
  - (c) George Bush (senior)
  - (d) George Bush (junior)



11. In which year did the Russia's second largest bank, Inkombank, went bankrupt?
  - (a) 1991
  - (b) 1994
  - (c) 1999
  - (d) 1998
  
12. Which one of the following was the Russian republic which faced a violent secessionist movement?
  - (a) Crimea
  - (b) Chechnya
  - (c) Chuvashia
  - (d) Karachay-Cherkessia
  
13. Name of the Russian assembly with advisory of legislative functions. The word comes from a Russian verb, which means "to think" or "to consider."
  - (a) Dura
  - (b) Duma
  - (c) Duna
  - (d) Dupe
  
14. Who amongst the following Soviet leader is associated with the Detente phase with US?
  - (a) Nikita Khrushchev
  - (b) Leonid Brezhnev
  - (c) Joseph Stalin
  - (d) Vladimir Lenin
  
15. Who among the following leaders was the President of Russia but was not in the Communist party?
  - (a) Mikhail Gorbachev
  - (b) Nikita Khrushchev
  - (c) Leonid Brezhnev
  - (d) Boris Yeltsin
  
16. Who among the following leaders was involved in the suppression of the popular rebellion of Hungary?
  - (a) Boris Yeltsin
  - (b) Leonid Brezhnev
  - (c) Nikita Khrushchev
  - (d) Mikhail Gorbachev

Section - B

17. The Berlin which has been built at hight of the cold war and was its greatest symbol, was toppled by the people in 1989. This dramatic event was followed by equally dramatic chain of events that led the collapse of second world and the end of cold war. Germany divided after the second world war was unified. One after another eight East European countries which were a part of soviet bloc replaced their communist governments as a result of mass demonstration. [1x4=4]

(I) For how many years did the Berlin Wall stood?

- (a) 24
- (b) 27
- (c) 28
- (d) 30

(II) Berlin wall was broken by the people on?

- (a) 22<sup>nd</sup> of November 1989
- (b) 9<sup>th</sup> of November 1989
- (c) 29<sup>th</sup> of November 1989
- (d) 19<sup>th</sup> of November 1989

(III) Berlin was controlled by

- (a) USSR
- (b) USA
- (c) Both of them
- (d) Neither of them

(IV) Which was the first soviet republic to declared its independence?

- (a) Lithuania
- (b) Estonia
- (c) Latvia
- (d) Russia

18. Politics, beautiful a term from Athens soil, [1x4=4]

but not without the foe of the Olive and the Trident.

The curse that followed everything it touched,  
suited itself to the guns, bombs, pens and mikes.

Over the years the feud grew,  
vaporizing men and spilling their blood for the numen of revenge.

Hunger for power and rage grew with time,  
he wanted to declare "everything mine".

When nature struck its sword seeking penance in misery,  
he constructed yet another rostrum calling for his glory.  
The largest democracy towards autocracy,  
formed privileged aristocracy at the cost of plebs.  
The premier on the podium with his band and choir,  
calls for power peerless in its compass and expanse.  
The panting man stare for care,  
but the kingpin pretends that its all fair.  
Continued songs with sermons prolonged,  
rhyming to the ailing men's cry and the last breath try.  
The still-clock men from the crematoriums and graves,  
watch the gamble of power and name and laugh loud at the lunacy of fame.  
Athena wonders sitting on her throne,  
was that olive which won! - Critique

(I) Who is the leader referred to in the above lines?

- (a) Churchill
- (b) Joseph Stalin
- (c) Narendra Modi
- (d) Hitler

(II) What are the situations referred in the poem as "nature struck its sword seeking penance in misery"?

- (a) Global warming
- (b) Covid situation
- (c) Deforestation
- (d) Destructive politics.

(III) The West Bengal legislative assembly elections were scheduled to be held in how many phases?

- (a) 6
- (b) 8
- (c) 4
- (d) 1

(IV) What the call for a "Double engine" government may result into?

- (a) Strengthen the federal system
- (b) It's a call to strengthen the union against the states and a supposed threat to the federal system with powers consolidating at the centre.
- (c) Development a of Party Cult
- (d) Magnification of power in one man's hand.

Section - C

[2x4=8]

19. What is the full form of UNCTAD? UNCTAD brought out a report in 1972 which proposed reform in the global trading system, which was entitled as?
20. Which are the two principal organizations who helped the post disintegrated soviet nations in their transition to capitalism.
21. Write the full forms of START-I and SALT-II. Mention the leaders of the US and the Soviet who signed these treaties in respective cases.
22. When and in which congress session did congress recognised the “linguistic principle” for the creation of states? what changes it brought in the structure of congress?

Section - D

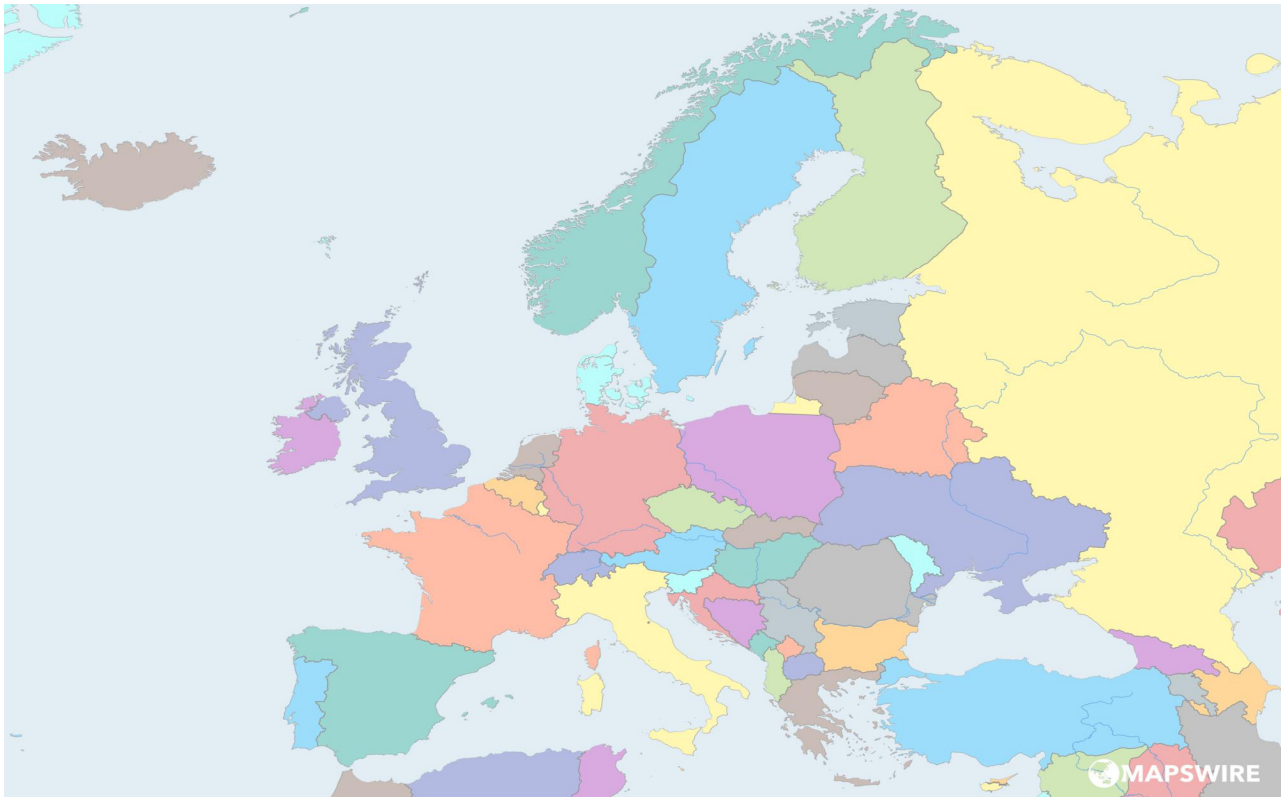
[4x5=20]

23. Discuss the process of integration of the Princely state of Hyderabad. (do mention the role of India's Deputy PM; the kind of agreement princely state had with India; the role of political parties; para-military force; and the date; conditions of accession; and the 3 present states in which some parts old Hyderabad were merged)
24. Who was Potti Sriramulu (do mention his role in the freedom struggle; for under-privileged classes and cause of death)? When was the state reorganization commission appointed and what was the consequence of its report? (do mention the year the commission gave the report and the year the act was passed)
25. Name any 4 East European states which soviet freed from fascist forces after 2<sup>nd</sup> world war and initially made them its satellite states and later brought them under the banner of WARSAW. Mention any 2 significant impact of Soviet Union on these states.
26. How was the Non-Alignment movement neither an isolation nor neutrality towards international affairs? Also mention the year and place where the 1<sup>st</sup> NAM summit was held.
27. Mention at least 8 weaknesses of the soviet political and economic institutions.

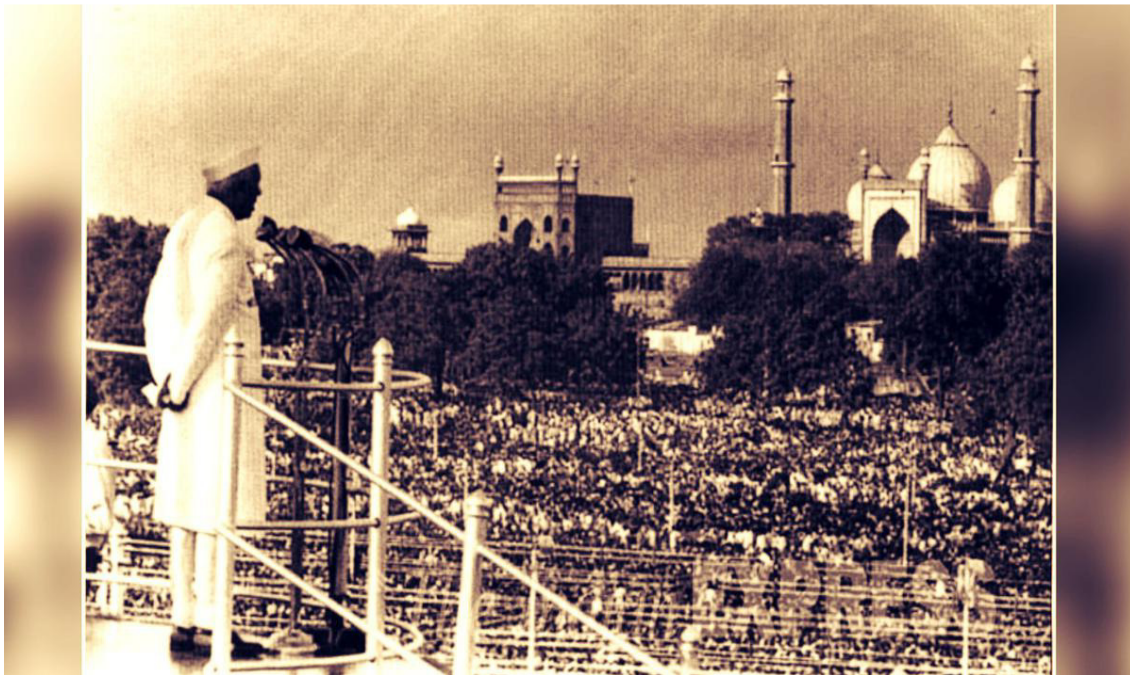
Section - E

[2x5=10]

28. Mark the states/nations on the given political map of Europe as per the information given below.
  - (a) The place where the treaty on the limitation of strategic offensive arms was signed in 1979.
  - (b) The place where the first NAM summit was held.
  - (c) Place where soviet intervened in 1956.
  - (d) 1<sup>st</sup> of the 15 soviet republics to declare its independence.
  - (e) The country with Lisbon as its capital.



29. Study the image given below and the questions that follow.



- (a) Who is depicted in the picture? Also mention the place, date and day he is addressing the gathering.
- (b) What is the 2 difference between the post-independent and pre-independent india?
- (c) Mention any two challenges faced by the newly independent state.

30. What set of conflicts occurred in the soviet republics? Explain. (In Russia, Central Asia and Eastern Europe)
31. What led to the emergence of bipolar world? What were the arenas of cold war between the two power blocs?
32. Analyse any 6 consequence of the partition of India in 1947.

\*\*\*\*\*



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP RANCHI**  
**QUALIFYING EXAMINATION (2021-2022)**

**Class-XII**  
**Time: 3 hrs**

**Subject: Engineering Graphics**  
**M.M: 70**

**GENERAL INSTRUCTIONS:** Attempt all the questions. Use both sides of drawing sheet if necessary. All dimensions are in millimeters. Missing and mismatching dimensions, if any, may be suitably assumed. Follow the SP 46.2003 revised code (with first angle method of projection). In question 2, no view of hidden edges or lines are required. In question 4, hidden edges or lines are to be shown in views without section.

**1. Answer the following multiple choice questions: [1X5=5]**

- i. The truncated lower portion of a pyramid is called:
  - a) Prism
  - b) Frustum
  - c) Cube
  - d) Cone
- ii. In case of BSW thread
  - a)  $D=0.64P$
  - b)  $D=0.96P$
  - c)  $D=0.86P$
  - d) None
- iii. In case of thread portion in bolt is
  - a)  $2D$
  - b)  $2D+10$
  - c)  $2D+6$
  - d) None
- iv. Which one is not sectioned?
  - a) Cone
  - b) Sphere
  - c) Bolt
  - d) None
- v. Material of shaft is
  - a) G.I
  - b) C.I
  - c) MS
  - d) None

- 2.
- Construct an isometric scale. **[4]**
  - A pentagonal pyramid of base side 30 mm, height 60 mm, base side parallel to the V.P. It is resting on the ground of its base. Axis is vertical. Give all the dimensions. Show the direction from viewing. Draw the isometric projections. **[7]**
  - A hexagonal prism of base side 30 mm, height 50 mm, base side parallel to the V.P. It is resting on the ground of its base. A hemisphere of 40 mm diameter is centrally placed on the top of hexagonal prism of its base. Common axis its vertical. Draw the isometric projection. Give all the dimensions. Show the direction from viewing. **[13]**

3.

- Draw to scale 1:1, the standard profile of a BSW thread, taking enlarged pitch is 40 mm. Give the standard dimension. **[8]**

**OR**

Draw to scale 1:1, the front view and side view of square headed bolt of diameter 20 mm. Keeping the axis parallel to H.P and V.P. Give the standard dimensions.

- Sketch freehand the front view and top view of a pan headed rivet of diameter 20mm. Keeping the axis vertical. Give the standard dimensions. **[5]**

**OR**

Sketch freehand the front view and top view of round head screw of diameter 20 mm. Axis perpendicular to the H.P. Give the standard dimensions.

4.

Fig-I, shows the details of parts of a 'turn buckle'. Assemble these parts correctly and then draw the following views to scale 1:1.

- Front view upper half in section **[14]**
- Right side view **[8]**

Print the title and scale used. Draw the projection symbol. Give 6 important dimensions. **[6]**







**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**QUALIFYING EXAMINATION (2021-2022)**

**Class:- XII**  
**Time- 3 Hrs.**

**Subject:- Entrepreneurship**  
**M.M.-70**

**General Instructions:-**

1. There is no overall choice, though internal choice is given.
2. Read the question carefully before attempting.

- 
1. Tata Motors manufactured a motor car NANO for common man which is very low in price. Which of the following factors of sensing opportunities was identified by Tata Motors? [1]  
(a) Ability to perceive an Idea (b) Ability to Harness  
(c) Vision and Creativity (d) None of these
  2. "It is the Process of entrepreneurship which involves the Translation of useful idea into an application which has Commercial Value." Identify the process from the following. [1]  
(a) Innovation (b) Invention  
(c) Creation (d) None of these
  3. To provide a rational basis for developing goals and strategies for business growth, an entrepreneur must do environmental scanning. Which of the following sources of information is helpful to scan the environment? [1]  
(a) Records of Companies (b) Government Publications  
(c) Verbal Information from Customers (d) All the above
  4. Which of the following is a component of Micro environment? [1]  
(a) Competitors (b) Stability of Government  
(c) Social Mobility (d) None of these
  5. Which of the following is an example of economic Environment? [1]  
(a) Disposable income (b) Levels of Education  
(c) Change of Life Style (d) None of these

6. Ritu has completed her B.Tech in Textile designing. She wants to start a readymade garments manufacturing unit. She wants to manufacture trendy garments for children below the age of one year. She approached a popular trend spotter to help her with the same. The trend spotter demanded Rs. 2,00,000 from Ritu to help her. Looking at the high fees demanded, she decided to do the Trend Spotting by herself. She decided to identify the Trend by talking to the parents of the newly born. Name the method that Ritu adopted to spot the Trend. [1]
- (a) Read Trends (b) Talk Trends  
(c) Watch trends (d) None of these
7. State true or false for the following :  
Entrepreneurial opportunities are restricted only for manufacturing industries. [1]
- 8.. \_\_\_\_\_ can be described as an economic idea which can be implemented to create a Business Enterprise and earn profits. ( Fill in the blank) [1]
9. Chain Repair, Career Counseling Centre, Sandwich and salad parlour, Family Dinner etc., are examples of \_\_\_\_\_ sources of Idea Fields. [1]
- (a) Trading related (b) Market Related  
(c) Service related (d) None of these
10. Raman wants to do a business which is very innovative, profitable and unique but he is not getting an idea about what business to start. Suggest him which of the following sources would help him to obtain ideas. [1]
- (a) Problem (b) Change  
(c) Both(a) and (b) (d) None of these.
11. Gaurav started a factory for manufacturing bags for students of Nursery and Primary classes. He made the instruction plan describing the details that were needed for the operation of machines by the workers.  
Identify the format of 'Business Plan' described above from the following. [1]
- (a) A written presentation (b) Internal operational plan  
(c) A pitch deck with oral narrative (d) None of these.
12. Mohan and Radha want to start a shop to sell Rajasthani sweets. They did not know how to enter into an agreement. Therefore, they approached a Chartered Accountant who advised them to prepare a document which may stipulate the terms and consolidation of the agreement. Name the document about which the Chartered Accountant advised Mohan and Radha. [1]
- (a) Partnership Agreement (b) Partnership Deed  
(c) Partnership Plan (d) Partnership Contract.
13. Identify the form of business organisation from the following, in which Liability of its members is limited. [1]
- (a) Partnership (b) Joint Stock Company  
(c) Sole Proprietorship (d) None of these.

14. Which of the following documents is necessary to obtain, to commence a public limited company ?
- |                                 |                                  |     |
|---------------------------------|----------------------------------|-----|
| (a) Certificate of registration | (b) Certificate of Incorporation |     |
| (c) Certificate of Commencement | (d) None of these.               | [1] |
15. Being an artificial person Company cannot sign the documents. Hence it uses \_\_\_\_ on which the name of the company is engraved which acts as an official signature of it.
- |                 |                    |     |
|-----------------|--------------------|-----|
| (a) Common Seal | (b) Common Stamp   |     |
| (c) Common Key  | (d) none of these. | [1] |
16. Minimum number of directors required to constitute a Board for a private limited company is Two, Where as the number of directors required to constitute a Board for a Public limited Company is \_\_\_\_\_
- |             |            |     |
|-------------|------------|-----|
| (a) Two     | (b) Three  |     |
| (c) Fifteen | (d) Seven. | [1] |
17. Vishal was working with Abhinav, a new entrepreneur, as a production manager. For smooth and coordinated flow of work he had to pay attention towards various elements .To ensure predetermined quality of products he had to compare the performance with established standards.
- Identify which part/component of a business plan has been discussed in the above paragraph.
- |                         |                      |     |
|-------------------------|----------------------|-----|
| (a) Production Plan     | (b) Operational Plan |     |
| (c) Organisational Plan | (d) Marketing Plan.  | [1] |
18. In case of heavy loss, creditors can claim the recovery of their dues from the personal assets of Sole proprietor. Which feature of sole proprietorship is highlighted here?
- |                             |                         |     |
|-----------------------------|-------------------------|-----|
| (a) Limited Liability       | (b) Unlimited Liability |     |
| (c) Participating Liability | (d) None of these.      | [1] |
19. Which feature of Partnership binds all the partners to the agreement signed by one partner?
- |                                   |                    |     |
|-----------------------------------|--------------------|-----|
| (a) Profit and Loss Sharing Ratio | (b) Legal Business |     |
| (c) Partnership Agreement         | (d) Mutual Agency. | [1] |
20. RohitShetty started Leader Shoe business with his brother. Both were very excited about the new venture. With meticulous planning and a lot of hard work they were able to sell 700 pairs of shoes in the first year. But they did not earn any profit. Both were happy because they were not at loss and revenue generated was equal to the cost.
- Identify the component of Financial Plan discussed above.
- |                                   |                      |     |
|-----------------------------------|----------------------|-----|
| (a) Pro forma Investment Decision | (b) Break-Even Point |     |
| (c) Pro forma Balance Sheet       | (d) None of these.   | [1] |

21. Though the Business Plan should be prepared by an entrepreneur he/she may hire the services of a consultant. Suggest which of the following professional sources would be helpful for an Entrepreneur to draw a Business Plan.
- (a) Lawyers (b) Chartered Accountants  
(c) Marketing Consultants (d) All of These. [1]
22. What is a business opportunity? List any two things that an entrepreneur has to ensure before selecting an opportunity. [2]
23. Name any two elements of a business opportunity. [2]
24. Explain 'Proforma Financing Decisions' as a component of Financial Plan. [2]
25. What do you mean by environment scanning? [2]
26. What do you mean by Innovation? List any two elements in the innovation process. [2]
27. What do you mean by SWOT analysis? Why is it important in preparing Marketing Plan? [3]
28. Vishnu started his factory for manufacturing Plastic items in Daman. As per the advice of his manager he appointed 'Medha' company to formulate a business plan for his manufacturing unit. The company in its business plan mentioned the cost of installing a waste water treatment plant within the premises of the manufacturing unit. Interpret any three Socio-Economic benefits expected to acquire from the proposed investment. [3]
29. What do you mean by problem identification?  
List any four uses of problem identification. [3]
30. Karim after completing his XII exam from his village school joined the course of electrician in an ITI in a town near his village. On completion of this course he tried for a government job but could not get the same. He, therefore decided to help as worker to a renowned electrician in that area. After working with him for two years he decided to start his own electrician shop in the village. For this he purchased equipment for Rs. 10,000 and hired a shop at a monthly rent of Rs. 2,000. He decided to manage the shop by himself.
- (a) Identify the form of business organisation started by Karim.  
(b) State any two characteristics of such form of business organisation. [4]
31. Explain any four points of importance of environment briefly. [4]
32. Explain by giving any four points, why market assessment is needed for an entrepreneur. [4]

33. What do you mean by Creativity? Explain various steps of creative process briefly. [6]
34. What is a Business Plan? Explain its importance. (Any five points) [6]
35. Geeta started her business of manufacturing designer furniture in Lonavala. Her business was a huge success and she thought of starting a designer studio involving huge capital in Mumbai as well as in Pune. Her friends wanted to join hands with her and open the same. They approached a chartered accountant and he suggested them to form a Private Ltd. company as according to him this form of organisation is more desirable.

State any six privileges of a Private Ltd. Company that make it more desirable than a Public Ltd. Company. [6]

\*\*\*\*\*



# DELHI PUBLIC SCHOOL RANCHI

QUALIFYING EXAMINATION- (2021-2022)

**Class: – XII Subject:**  
**Max. Mark:- 30**

**Fine Art- Painting / Graphics**  
**Time:- 2 Hrs**

---

**Section: First**

**(1x6=6)**

**General Instructions: Answer to be written for each question in a word or sentence.**

- (1) What is a manuscript? Give one example of a manuscript?
- (2) What is portraiture?
- (3) What is Miniature painting?
  - (a) Folk painting
  - (b) Graphics print
  - (c) Small size painting
  - (d) Landscape painting
- (4) Baraahmasa painting belongs to which school?
  - (a) Pala school of Miniature painting
  - (b) Mughal School of Miniature painting
  - (c) Rajasthani School of Miniature painting
  - (d) Jain School of Miniature painting
- (5) Which one is correct?
  - (a) Maru-Ragini was painted by Guman
  - (b) Chaugan Player was painted by Utkal Ram
  - (c) Krishna on the swing was painted by Nuruddin
  - (d) Radha (Bani-Thani) was painted by Utkal Ram
- (6) 'Different episodes are depicted in one painting' are shown in which school of the medieval period?
  - (a) Pala school
  - (b) Jain school
  - (c) Central India school
  - (d) None of them

**Section: Second**

**(2x3=6)**

**General Instructions: Answer to be written for each is about 30 words. (Any three)**

- (1) Write a short note on Utkal Ram, one of the famous artist of Bundi sub school.
- (2) What are the characteristics of the Basohli style of painting? Give example also.
- (3) What is Ragamala painting? Write a short note on Maru-Ragini'.
- (4) Write a short note on Jain school of art.
- (5) Why Pala School of art is so important in your syllabus?

**Section: Third**

(3x2=6)

**General Instructions: Answer to be written for each question in about 100 words.**

(Any two)

- (1) Write a short note on Jodhpur sub-school.
- (2) Which miniature painting is called Indian Monalisa and why?
- (3) Write about the compositional arrangement and aesthetic grandeur of the miniature painting "Krishna on the swing".

**Section: Forth**

(6x1=6)

**General Instructions: Answer to be written in about 200 words. (Any one)**

- (1) 'Nand Yashoda and Krishna with Kinsmen going to Vrindavana'. Write about its compositional arrangement, aesthetic grandeur and which human life values are shown in this miniature painting?  
OR
- (2) 'Bharat Meets Rama at Chitrakuta (Rajasthani School)'. Write about its compositional arrangement, aesthetic grandeur and which human life values are shown in this miniature painting?

**Section: Fifth**

(6x1=6)

**General Instructions: Essay to be written for in not more than 350 words . (Any one)**

- (1) Write an essay on the origin and development of the Rajasthani School or Pahari School of Miniature Paintings.  
OR
- (2) Write about the Characteristics of Rajasthani School or Pahari School of Miniature Paintings.

**Very Important Points/Tips for Fine Art Theory Exam:-**

- ▶ Distribute time according to questions and complete all answers in that time frame. 5 questions of 6 marks each, of 2 hours and Full Marks: 30.
- ▶ Underline important data and points (keywords) with dark pencil / black pen always to highlight it for the examiner.
- ▶ Change paragraph as and when required. Leave one line after one paragraph and two lines after completing the answer.
- ▶ Write the main data in starting, as the name of the painting, school, sub-school, period, artist, medium, the subject then composition/arrangement, colour & description (Fundamental-elements & principals) of artwork and in the last collection.
- ▶ Features / Characteristics should be written in points according to aesthetic parameter.
- ▶ The answer should be according to the question. Don't start the answer with 'This' or 'It'. Start as asked in question form.
- ▶ Handwriting should be good to score better marks.





**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**QUALIFYING EXAMINATION (2021-2022)**

**Class:-XII**  
**Time- 3 Hrs.**

**Subject:- Sociology**  
**M.M.-80**

---

**General Instructions: -**

1. The question paper is divided into four sections.
  2. There are 35 questions in all. All questions are compulsory.
  3. Section A includes question No. 1-16 . These are objective type questions.
  4. Section B includes question No. 17-25. These are very short type questions carrying 2 marks each. Answer to each question should not exceed 30 words.
  5. Section C includes question No. 26 to 32. These are short answer type questions Carrying 4 marks each .Answer to each question should not exceed 80 words . Question 26 and 27 are case based questions with 4 parts each carrying 1 mark , making the question of 4 marks each. Section D includes question No. 33 -35. They are long answer type questions carrying 6 marks each. Answer to each question should not exceed 200 words each. Question No. 35 is to be answered with the help of the passage.
- 

**SECTION-A**

1. Government has passed strict laws against sex determination through ultrasound techniques .Identify the act of 1996.
  - A. Determination and identification of Foetus. Act
  - B. Foetus diagnostic techniques prevention act
  - C. Pre-natal diagnostic techniques (regulation and prevention of misuse) Act
  - D. None of these .
  
2. According to the theory of the demographic transition India is falling in the category of
  - A. First stage
  - B. Second stage
  - C. Third stage
  - D. Fourth stage

3. In which decade there was a negative rate of growth of population in India
- A. 1901-11
  - B. 1911-21
  - C. 1921-31
  - D. 1931-41
4. The family planning programme suffered a setback during the years of national emergency
- A. 1973-74
  - B. 1974-75
  - C. 1975-76
  - D. 1976-77
5. The Vokkaligas are a dominant caste in---
- A. Bihar
  - B. Haryana
  - C. Karnataka
  - D. Gujarat
6. The family which consists of only one set of parents and their children is known as----
- A. Matrilocal family
  - B. Matrilineal family
  - C. Nuclear family
  - D. Extended family
7. Society where women inherit property from their mothers are called
- A. Maternal
  - B. Matriarchal
  - C. Matrilocal
  - D. Matrilineal
8. It refers to conceived opinions or attitudes held by members of one group towards another
- A. Prejudice
  - B. Prefix
  - C. Preamble
  - D. Predefined

9. Sultana's Dream written by Rokeya Shakhawat is one of the example of -- --

- A. Mythology
- B. Family drama
- C. Romantic story.
- D. Science fiction.

**OR**

The first Backward classes commission was headed by----

- A. Ram Manohar Lohia
- B. Pandit Nehru
- C. Kaka kalelkar
- D. B P Mandal

10. Patterns of unequal access to social recourse are commonly called social

- A. Stratification
- B. Exclusion
- C. Equality
- D. Inequality

11. One of the earliest law which disallowed the curtailment of rights of citizens due solely to change of their religion or caste is

- A. Prevention of Atrocities Act
- B. Caste Disabilities removal Act
- C. Abolishment of untouchability Act
- D. Legal provisions against humiliation Act

12. Stree-PurushTulana was written by----

- A. Kailash Basini Devi
- B. Tarabai Shinde
- C. Pandita Ramabai
- D. Savitri Bai Phule

13. Community identity is based on -----

- A. Birth
- B. Nation
- C. Attitude
- D. Class

**OR**

The chief architect of the constitution of India was -----

- A. Dr. B.R. Ambedkar
- B. Mahatma Gandhi
- C. Pandit Nehru
- D. Jyotiba Phule

14. Name the broad Arena which lies beyond the private domain of both state and market -----

- A. Government
- B. Army
- C. Family
- D. Civil society

15. A state is "a body that successfully claims a monopoly of legitimate force in a particular territory according to - ---

- A. Karl Marx
- B. August Comte
- C. Max Weber
- D. Jacques Rousseau

16. Term Harijan was popularised by

- A. Mahatma Gandhi
- B. Jotiba Phule
- C. Dr. B.R. Ambedkar
- D. Periyar

**SECTION – B**

17. Why is rising dependency ratio is cause of worry in many countries?

18. Define the term Demography.

19. What is dependency ratio?

20. What is Dominant caste?
21. Discuss casteism in India.

**OR**

Define Caste.

22. What are different kinds of social resources?
23. Who are known as Dalits?

**OR**

Who are called OBC's?

24. Explain practise of 'Apartheid'.
25. Who are minorities in social term?

### SECTION - C

26. Read the given passage and answer the questions that follow the passage.

....where the spirit of the Western nationalism prevails, the whole people is being taught from boyhood to foster hatred and ambitions by all kinds of means - by the manufacture of half-truths in history, by persistent misrepresentation of other races and the culture of unfavourable sentiments towards them...Never think for a moment that the hurt you inflict upon other races will not infect you, or that the enmities you saw around your homes will be a wall of protection to you for all the time to come? To imbue the minds of a whole people with an abnormal vanity of its own superiority, to teach it to take pride in its moral callousness and ill begotten wealth, to perpetuate humiliation of defeated nations by exhibiting trophies won from war, and using these schools in order to breed in children's minds contempt for others, is imitating the West where she has a festering sore.....

1. A state-nation allows for which of the following.
  - A. Inclusion and democracy
  - B. Assimilation
  - C. Integration
  - D. Exclusion

2. In the light of exclusive nationalism, which of the following ideas influenced Indian nationalism
- A. Monarchy
  - B. Humanism
  - C. Individualism
  - D. Exclusion
3. According to Tagore, exclusive nationalism created the sense of-----for one's own race and culture.
- A. Inferiority
  - B. Superiority
  - C. Equality
  - D. Inclusion
4. To be effective, the ideas of inclusive nationalism had to be built into ----
- A. Constitution
  - B. Authoritarianism
  - C. Individualism
  - D. Exclusion
27. Read the given passage and answer the questions that follow the passage.
- In India labels such as 'disability', 'handicap', 'crippled', 'blind' and 'deaf' are used synonymously. Often these terms are hurled at people as insult. In a culture that looks up to 'bodily perfection', all deviations from the perfect signify abnormality, defect and distortion. Labels such as bechara (poor thing) accentuate the victim status for the disabled person. The root of such attitude lie in the cultural conception that views an impaired body as a result of fate. Destiny is seen as a culprit, and a disabled people are the victims. The common perception views disability as retribution for past Karma (actions) from which there can be no reprieve.
1. Term such as 'Mentally challenged' came to replace the more trite negative terms such as----
- A. Retarded
  - B. Lame
  - C. Hump
  - D. None of these

2. The differently-able are not disabled, only because they are physically or mentally impaired but also because ----
- A. It is retribution for past Karma
  - B. Society is built in a manner that does not cater to their needs
  - C. A result of fate
  - D. Destiny is seen as a culprit
3. The social construction of disability has another dimension. There is a close relationship between disability and -----
- A. Poverty
  - B. Destiny
  - C. Fate
  - D. All of these
4. Here are some common features central to the public perception of disability all over the world.

CHOOSE THE INCORRECT OPTION.

- A. Disability is understood as biological given .
  - B. The disabled person is seen as victim
  - C. Disability is supposed to be linked with the disabled individual's self perception.
  - D. The very idea of disability suggests that they are not in the need of help.
28. What is meant by 'Birth rate' and 'Death rate'? Explain why the birth rate is relatively slow to fall while the death rate declines much faster.
29. What are the several factors responsible for the decline in the Child-Sex ratio?
30. Mention the isolation and integration debate on tribes.

**OR**

How have tribes been classified in India?

- 31. Explain the difference between matriliney and matriarchy.
- 32. Explain 'Regionalism in Indian context.

**SECTION-D**

- 33. Discuss the features of caste.

34. What is the relevance of Civil Society today? Mention the role and significance of Civil Society.

**OR**

What is meant by cultural diversity? Why is India considered to be a very diverse country?

35. Read the given passage and answer the following questions.

Who are these women you give such names to? Whose womb did you take your birth in? Who carried the killing burden of you for nine months? Who was the saint who made you the light in her eye. How would you feel if someone said about your mother, "That old chap's mother, you know, she's a gateway to hell'. Or your sister, "that so-and so-s' sister, she's a real storehouse of deceit'. ...Would you just sit and listen to their bad words? ...

....Then you get blessed with a bit of education and promoted to some important new office- and you start feeling ashamed of your first wife. Money works its influence on you and you begin to say to yourself, what does a wife matter after all? Don't we just give them a few rupees a month and keep them at home like any other servant, to do the cooking and look after the house? You begin to think of her like some female slave you've paid for... if of your horse died it wouldn't take long to replace it, and there's no great labour needed to get another wife either. .. The problem is Yama hasn't got time to carry off wives fast enough, or you'd probably get through several different ones in one day!

**( FROM STREE -PURUSH TULNA 1882)**

- A. Were social reform movements successful to attain equality dignity and security for women? Give reasons for your answer. (4)
- B. Name any two women social reformers. (2)

\*\*\*\*\*





## DELHI PUBLIC SCHOOL, SAIL TOWNSHIP, RANCHI

### QUALIFYING EXAM (SESSION 2021-2022)

CLASS-12th

TIME-2 HOURS

SUBJECT-HINDUSTANI MUSIC VOCAL

TOTAL MARKS-30

#### खण्ड-अ

निम्नलिखित में से किन्ही 15 (पंद्रह) प्रश्नों के सही उत्तर दीजिए।

(1X15=15)

सभी प्रश्नों के अंक समान हैं।

1. स्वरों के उतरते क्रम को.....कहते हैं।
2. एक ग्राम में .....स्वर होते हैं।
3. गमक का प्रयोग .....गायन शैली में ज्यादा किया जाता है।
4. दो स्वरों के ऊपर अर्ध चाँद लगाकर.....के स्वर को दर्शाते हैं।
5. ....की मात्राएँ 10 होती हैं।
6. 'सा रे ग म प धु नि सा' ये राग .....का आरोह है।
7. मुर्की में .....स्वरों को द्रुत गति के साथ गाया जाता है।
8. गमक के .....प्रकार माने गए हैं।
9. राग के बोलों के साथ तान का प्रयोग करना .....तान कहलाता है।
10. बागेश्री में वर्जित स्वर .....और .....है।
11. क्रम से सप्त स्वरों का आरोह अवरोह करने से.....की रचना होती है।
12. कण स्वर को.....स्वर भी कहते हैं।
13. राग भैरव में .....और .....स्वरों को आंदोलित किया जाता है।
14. बागेश्री से मिलते जुलते राग.....है।
15. सूर्योदय के समय गाया बजाया जाने वाला राग .....है।
16. श्रुति से स्वर और स्वर से .....की रचना होती है।
17. 'म' और 'सा' राग .....के वादी संवादी स्वर हैं।
18. राग .....को आश्रय राग कहते हैं।
19. झपताल में पहला व तीसरा विभाग .....मात्राओं का होता है।
20. बागेश्री में .....और .....स्वर कोमल लगते हैं।
21. जब किसी स्वर को कोष्ठ में लिखा जाए तो वह .....के स्वर कहलाते हैं।

खंड-ब

निर्देश - किन्ही तीन प्रश्नों के उत्तर दीजिए। सभी प्रश्नों के अंक समान हैं।

(5X3=15)

1. निम्न को परिभाषित कीजिए।

आलाप, अलंकार

2. 'म ग म रे सा' इन स्वर समुदाय को पहचान कर राग का नाम व तीन ताने लिखें।
3. ग्राम किसे कहते हैं? ग्राम के कितने प्रकार माने गए हैं? समझाइये।
4. झपताल में ठाह व दुगुन को लिपिबद्ध कीजिये।
5. राग भैरव में द्रुत ख्याल की स्वरलिपि लिखे।



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**QUALIFYING EXAMINATION (2021-2022)**

**Class:-XII**  
**Time- 2 Hrs.**

**Subject:- Odissi Dance**  
**M.M.-30**

**General Instructions:-**

Attempt all questions. This question paper contains 8 questions.  
Please write down the serial number of the question before attempting it.

**Q.1 Match the following pairs correctly.**

**(5)**

- |                          |                              |
|--------------------------|------------------------------|
| i. Hindu epics           | a. Nine types                |
| ii. Chhau dance          | b. Four types                |
| iii. Sitakanta Mahapatra | c. Pure dance                |
| iv. G.C.D.C              | d. Guru Kelucharan Mahapatra |
| v. U.S.M                 | e. Baripada                  |
| vi. M.C.N.P              | f. Bhubaneswar               |
| vii. Annaapurna          | g. Chhau                     |
| viii. MangalaCharan      | h. Seraikela                 |
| ix. Pallavi              | i. Chhauni                   |
| x. Tandav                | j. Martial art               |

**Q.2 State whether the following are true or false.**

**(5)**

- According to Abhinaya Darpana there are 31 types of Asanjukta hasta Mudra.
- Three types of Lasya are present.
- Guru Pankaj Charan Das learnt the art of devotional movement from Ratnaprava Devi.
- Mayurbhanj Chhau dance performer used Masks during Chhau dance performance.
- Usha was the daughter of Bana.

- Q.3 Answer the following questions. (5)**
- a. Which is the basic pose in Odissi dance?
  - b. Who had worked as a green room man and help to prepare costumes, ornament and make-up of the senior performers as well as a gate man, ticket collector and prompter?
  - c. Lord Shiva taught the art from of dance to whom?
  - d. Who had performed Natrang dance in Devi Bhasmasura dance drama?
  - e. What is the local name of Devadasi ?

Q.4 Briefly describe the music of chhau dance? (2)

Q.5 Briefly describe the Origin of Chhau dance? (2)

Q.6 Describe the term Pallavi? (3)

Q.7 State the difference between the following terms -

a) Odissi dance      b) Chhau dance (3)

**Q.8 Attempt any one question. (5)**

a. Briefly describe Guru Kelucharan Mahapatra life history.

b. What do you know about Chhau dance? Describe the Mayurbhanj Chhau dance.

\*\*\*\*\*



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**QUALIFYING EXAMINATION (2021-2022)**

**Class:- XII**  
**Time – 3 Hrs.**

**Subject:- Physical Education**  
**F.M. :- 70**

**General Instructions:**

- a. The question paper contains 30 questions and all are compulsory.
- b. Question 1 to 12 carry 1 mark each.
- c. Question 13 to 16 carry 2 marks each and shall not exceed 40-60 words.
- d. Question 17-26 carry 3 marks each and shall not exceed 80-100 words.
- e. Question 27 to 30 carry 5 marks each and shall exceed 150-200 words.

- 
- 1) A plan is a trap laid to capture the \_\_\_\_\_. [1]
- a. Programme
  - b. Training
  - c. Future
  - d. Event
- 2) In double league tournament Number of Matches is determined with the help of? [1]
- a.  $N(N-1)/2$
  - b.  $N(N-1)$
  - c.  $2(N-1)$
  - d.  $n(N+1)/2$

**OR**

One of this is not a part of Barrow three item general motor ability:

- a. Shuttle run
  - b. standing Broad jump
  - c. Zigzag run
  - d. Medicine ball put
- 3) Harvard step test was developed by Brouha and others in \_\_\_\_\_. [1]
- a. 1920
  - b. 1925
  - c. 1943
  - d. 1937

- 4) Circuit training method was designed in\_\_\_\_\_. [1]
- a. 1957
  - b. 1975
  - c. 1985
  - d. 1986

- 5) Some qualities are developed on our coordinative abilities like: [1]
- a. Accuracy
  - b. Rhythm
  - c. Flow
  - d. All of the above

**OR**

Sideward curvature of the spine is called\_\_\_\_\_

- a. Kyphosis
  - b. Lordosis
  - c. Scoliosis
  - d. Round shoulders
- 6) In this eating disorder, female athlete eats excessive amount of food and then vomits it in order not to gain weight is called: [1]
- a. Bulimia nervosa
  - b. Osteoporosis
  - c. Secondary amenorrhoea
  - d. Anonexia nervosa
- 7) Main purpose of “Eight foot up and go test” is to determine : [1]
- a. speed
  - b. Agility
  - c. Balance
  - d. All of these

**OR**

Main purpose of “medicine ball put” is to determine:

- a. arm and shoulder strength
- b. arm and leg strength
- c. leg strength
- d. None of these

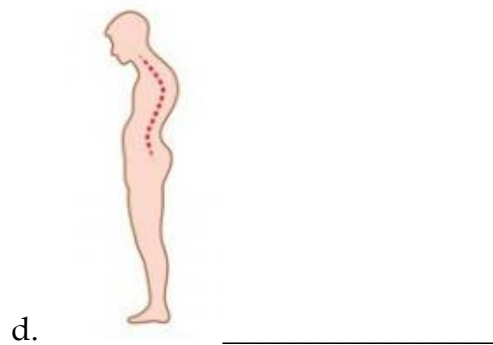
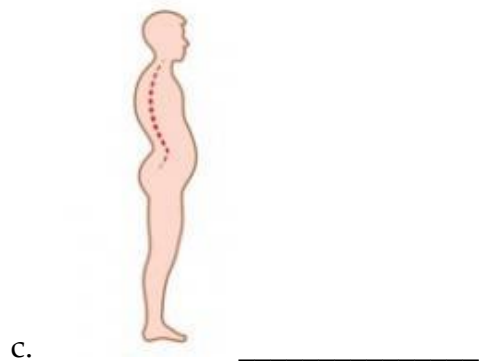
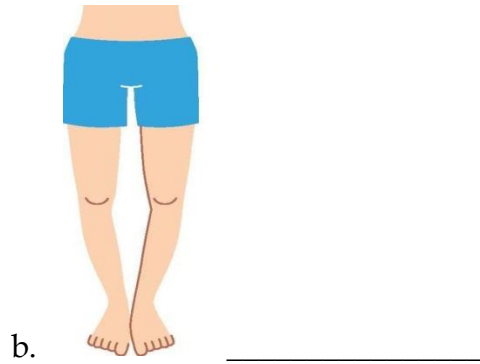
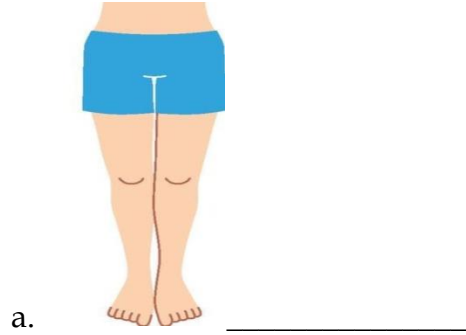
- 8) Other name of Static Strength is : [1]
- Isometric strength
  - Isotonic strength
  - Isokinetic strength
  - Explosive strength
- 9) \_\_\_\_\_ is one of the best exercises for correction of Knock-knees. [1]
- Rope skipping
  - lie down in prone position
  - Horse riding
  - walking on heels
- 10) Age of Adolescence is in between\_\_\_\_\_. [1]
- 12-18 years
  - 10-15 years
  - 13-19 years
  - above 19 years
- 11) Given below are the two statements labeled Assertion (A) and reason (R). [1]
- Assertion: Passive flexibility is always more than active flexibility  
Reason: In fact, passive flexibility is the foundation for active flexibility
- Both 'A' and 'R' are true and 'R' is the correct explanation of 'A'
  - Both 'A' and 'R' are true, but 'R' is not the correct explanation of 'A'
  - 'A' is true but 'R' is false
  - 'A' is false but 'R' is true
- 12) Match list-I with list-II and select correct answer from the code given below: [1]

| LIST-I |                 | LIST-II |                |
|--------|-----------------|---------|----------------|
| i      | Infancy         | a       | 3-7 years      |
| ii     | Early childhood | b       | 8-12 years     |
| iii    | Later childhood | c       | 1-2 years      |
| iv     | Adulthood       | d       | Above 19 years |

|   | i | ii | iii | iv |
|---|---|----|-----|----|
| A | 1 | 2  | 3   | 4  |
| B | 3 | 1  | 2   | 4  |
| C | 4 | 3  | 2   | 1  |
| D | 3 | 2  | 1   | 4  |

13) Identify the below given postural deformities and write their names:

[2]



14) Differentiate between Gross motor skill and Fine motor skill.

[2]

**OR**

Discuss any four corrective measures for Lordosis.



- 15) Explain 'Sports Day' in detail. [2]  
16) Explain Importance of tournaments. [2]

**OR**

Explain any four Objectives of Extramurals.

- 17) Explain Strength and its types. [3]  
18) Differentiate between Early and Middle childhood. [3]  
19) Explain the procedure of "Standing Broad Jump" and "Medicine ball put" in detail. [3]

**OR**

Explain "Harvard step test" in detail.

- 20) Define Speed? And explain methods to develop Speed. [3]  
21) Explain "Pre tournament responsibilities" and "Post tournament responsibilities" in detail. [3]

**OR**

Discuss type I and type II consolation tournament.

- 22) Define Lordosis? Its causes, precautions and remedies in detail. [3]  
23) Define Endurance and explain any two methods to improve endurance. [3]  
24) Define Kyphosis, and its causes and Remedies. [3]  
25) What do you mean by amenorrhoea? Discuss any two factors which enhance the chances of amenorrhoea. [3]

**OR**

Define Menarche and Menstrual Dysfunction in detail.

- 26) Discuss about flat-foot and its causes and remedies. [3]  
27) Elucidate the reasons of less participation of women's in sports. [5]  
28) Discuss the procedure of any two senior citizen fitness test. [5]  
29) Explain Coordinative abilities and its types. [5]

**OR**

Define Flexibility and explain its methods to develop Flexibility.

- 30) Draw a fixture of 11 team on the basis of Cyclic Method (League tournament). [5]

**OR**

Draw a fixture of 09 team on the basis of Knock-out Tournament .

\*\*\*\*\*