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

Class-XI   **Subject - English Core**
Time: 3 Hrs.   **Maximum Marks: 80**

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<u>**General Instructions:**</u>

(i) This paper is divided into two parts.
     PART A - 40 MARKS
     PART B - 40 MARKS
(ii) Separate instructions are given in each part , wherever necessary. Read these instructions
    very carefully and follow them faithfully.
(iii) Do not exceed the prescribed word limit while answering.

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PART –A (40 MARKS)

(READING)   **[18 Marks]**

Q.1 **Read the following passage carefully:**

Given the standing of some of its institutions of higher learning, the IITs and IIMs in India are institutes of great potential . Realising their full potential, however, is not going to be easy. The impressive strides made by the Sarva Shiksha Abhiyan (SS*A*) notwithstanding universal access to quality school education-a minimum necessary condition for any progress towards making India a 'knowledge society'(as reported by National Knowledge Commission). There is as yet no legislation at the national level to affirm the right to education, a fundamental right under the constitution. The number of school buildings for elementary and secondary education falls far short of requirements and so does the number of qualified teachers. The pressure on government budgets, which forces governments to hire teachers on contract paying a pittance, is playing havoc with quality. While the incursion of the private sector in the field is providing some competition, mechanisms to enforce the required standards are lacking. Not that there are no national standards or standards-enforcing agencies. *We* have the National Council of Educational Research and Training (NCERT) to bring out textbooks in various subjects for school education. The central government runs several model schools. The Central Board of Secondary Education (CBSE) conducts examinations for schools affiliated to it across the country. The states too have their school boards to conduct exams and enforce minimum standards. However the standards vary widely. In their anxiety to show spectacular performance, some states are overly lenient in marking answer papers.

Questions arise even over the standards applied by the CBSE, Going by the number of students scoring 90% or more in their higher secondary exam, it would appear that India is on the brink of a knowledge revolution. The numbers are so large that the cut-off point for admission to top colleges is now above 90%. However, admissions to IITs and medical colleges are not based only

on the CBSE or state board exam results. Leading undergraduate colleges offering non-professional degree courses hold their own admission tests. *Obviously, hi*gher secondary school res*ul*ts are not taken to be a reliable index of the quality of student's learning capability or potential.

It is not difficult to see why in the CBSE class XII exam, the number of successful can*d*idates securing more than 90% in Economics this year turned out to be over 8000 in Delhi region alone, in English it was above 9000. The numbers seem to be growing ever*y* year. If the country pro*duces* so many children who attain very high levels of performance even before graduation, we can expect India to produce Amartya Sens by the dozens.

While scoring high marks or even 100 out of 100 may not be out of a good student's reach in subjects like Mathematics or Physics, it is difficult to figure out the quality of the answers that fetch 90% marks in Economics or English. The standards applied by higher secondary boards like the CBSE seem to have been diluted to the point that leaves a big gap between what students learn at school and what they have to face on entering institutions of higher learning. Thriving teaching shops around the country promise to bridge that gap.

In an attempt to find a remedy for this situation, the NCERT had recently commissioned experts to rewrite textbooks on Macro and Micro Economics. Though not entirely free from blemishes, these new texts should go some way in helping beginners get acquainted with the basic concepts in the subject and their applications. Not surprisingly, their introduction is facing road blocks. Teachers don't like to be compelled to look at textbooks they are not familiar with. Those who revel in seeing students score 90% are chary of ushering in something that may stop the rush of such scores.

Lastly, even teaching shops see red as they fear loss of business if the higher secondary finalists can get their skills upgraded without buying their help.

One wonders if our Knowledge Commission is aware of these insidious impediments to India's knowledge ambitions.

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

i)   Why is quality school education a distant goal?
   a) There are no fundamental rights
   b) There is no legislation at the national level
   c) Measures to enforce the required standards are not there
   d) There are no minimum necessary conditions
ii)   What is the tone of the writer when he remarks: 'India is on the brink of a knowledge revolution'?
   a) Optimistic
   b) Imaginative
   c) Sarcastic
   d) Presumptuous

iii)   What are some states doing for ensuring good performance?
         a) Leniency in marking
         b) Following their own school boards
         c) Following the CBSE
         d) All of the above

iv)   Why do teachers oppose the new textbooks?
         a) They are not familiar with them
         b) They want students to score good marks
         c) They are happy with the old books
         d) Teaching shops would lose their business

v)   What remains a distant goal?

         a) Realising the potential of the student
         b) Making India a 'knowledge society'
         c) Making school education a quality education
         d) All of the above

vi)   The main factor that has affected the quality of education is:
         a) gap between theoretical knowledge and the real life situations
         b) lack of moral education in schools
         c) teachers hired on contract basis on a pittance are underqualified
         d) All of the above

vii)   Name the standard enforcing agencies in India.
         a) NKC
         b) SSA
         c) NCERT
         d) The CBSE for schools affiliated to it and state boards for other schools in the states

viii)   Why do leading undergraduate colleges hold their own admission tests?
         a) Because they distrust higher secondary school results
         b) Because the number of applicants is beyond the limit of available seats
         c) The money which comes from selling admission forms for tests adds to their income
         d) None of the above

ix)   What is the problem created by the results of the CBSE examinations?
         a) The CBSE has created a gap between knowledge at the school level and at the level of
             institutions of higher learning
         b) Several discrepancies are found in the CBSE examinations
         c) High percentage is quite easy to score for students
         d) None of these

x) Why does the author state, we can expect India to produce "Amartya Sens by dozens"?
   a) The level of students is quite high even in school
   b) The results of the CBSE class XII exam show *(incorrectly)* that many children attain very high levels of performance even before graduation
   c) The teaching learning pattern is perfect
   d) None of the above

xi) What is the full form of NCERT?
   a) National College of Research and Training
   b) National Centre for Research and Training

   c) National Council of Educational Research and Training
   d) None of the above

Q.2. Read the following passage carefully

1. In the classroom, broadening your thinking can mean emphasizing on something called problem-based learning. In this approach, a teacher presents a problem or question with no clear or obvious solution. Students are then asked to think broadly about how to solve it.

2. Problem-based learning can help students think like scientists, Wallace says. He cites an example from his own classroom. Last fall, he had students read about fruit flies that lack an enzyme molecule that speeds up chemical reactions to break down alcohol. "I had seven groups of students, and got seven different ways to measure," he says. "That's what I would call creativity in a science class."

3. "Creativity means taking risks and not being afraid to make mistakes," adds Andrews. In fact, she and many educators agree, when something comes out differently than expected, it provides a learning experience. A good scientist would ask "Why?" she says, and "What's happening here?"

4. Talking with others and teamwork also help with associative thinking-allowing thoughts to wander and freely associating one thing with another - that DeHaan says, contributes to creativity. Working in a team, he says, introduces a concept called distributed reasoning. Sometimes it is called brainstorming. This type of reasoning is spread out and conducted by a group of people.

5. "When you talk about creativity in science, it's not about, have you done a nice drawing to explain something," she says. "It's about, What are we imagining together? What's possible, and how could we figure that out? That's what scientists do all the time."

6. Although using arts and crafts to represent ideas can be helpful, Smith says, it is not the same as recognizing the creativity inherent in science. What we've been missing is that science itself is creative," she explains.

7. "It's a creativity of ideas and representations and finding things out, which is different from making papier-maché globe and painting it to represent the Earth," she says.

8. In the end, educators and scientists agree that anyone can learn how to think like a scientist. Too often in school, students get the
impression that science is for a specially gifted subspecies of humanity" Herschbach says. But he insists just the opposite is true.

9. Scientists don't have to be smart"- he continues. "It's all there waiting for you if you work hard at it, and then you have a good chance of contributing to this great adventure of our understanding more about the world we live in."

On the basis of your reading of the above passage, answer **ANY EIGHT** questions from the nine given below.   (1x8=8)

i)   Broadening your thinking can mean ………

    a.   fast learning

    b.   problem based learning

    c.   cumulative learning

    d.   creative learning

ii)   Problem based learning has ……

    a. obvious solution

    b. clear solution

    c. no clear or obvious solution

    d. just one solution

iii)   Wallace had his students read about …

    a. fruit flies

    b. butterflies

    c. house flies

    d. dragonflies

iv)   What does creativity mean?

    a. Finding solutions

    b. Problem solving

    c. Being afraid of mistakes

    d. Taking risks

v) Teamwork and talking with others also helps in………………..

    a. critical thinking

    b. associative thinking

    c. progressive thinking

    d. multitasking

vi) Distributed reasoning is also called ....

    a. diverse thinking

    b. problem solving

    c. brainstorming

    d. creativity

vii) An 'Enzyme' is ....

    a. an important organ.

    b. a molecule that helps start or speed up chemical reactions.

    c. a rare species of virus.

    d. a pathogen.

viii) Which word in Para 2 means "a group of atoms joined together"?

    a. Enzyme

    b. Chemical

    c. Molecule

    d. Alcohol

ix) Give a synonym for 'skilful' as used in para 8.

    a. Gifted

    b. Inept

    a. Stupid

    b. Amateur

GRAMMAR [8 Marks]

Q.3 Fill in the blanks using the correct options:(any four) (1x4=4)

    i) The train is about to……..

        a. leave

        b. leaving

        c. left

        d. have left

ii) I certainly……….. my colleague if I had been there.
        a. helped
        b. would have helped
        c. can help
        d. may help

iii) If you ……………….hard, you would have passed.
        a. work
        b. had worked
        c. working
        d. had been working

iv) Stars ……………….. in the sky at night.
        a. will twinkle
        b. twinkle
        c. twinkles
        d. have been twinkling

v) My brother usually ………… in the evening.
        a. is playing
        b. plays
        c. was playing
        d. play

Q.4.   In the following questions you are required to rearrange these parts which are labelled A,B,C and D to produce the correct sentence. (Any four)   (1x4=4)

i)   A. I wanted to tell her
        B. not to talk to him
        C. not listen to me.
        D. but she would

        a. ABCD
        b. ABDC
        c. ADBC
        d. BCAD

ii)   A. the CEO
        B. of making the right decision
        C. was not scared
        D. despite a loss in profits

        a. ABCD
        b. ABDC
        c. ACBD
        d. BCDA

iii)   A. she wondered if
        B. work hard for a living
        C. he would ever
        D. because he was so rich.

        a. ABCD
        b. ABDC
        c. ACBD
        d. BCDA

iv)   A. she danced with joy
        B. that she had topped
        C. when she found out
        D. the board examination.

        a. ABCD
        b. ABDC
        c. ACBD
        d. BCDA

v)   A. I was certain
        B. the management meeting.
        C. be allowed to attend
        D. that subordinates would not

        a. ABCD
        b. ABDC
        c. ADCB
        d. BCDA

LITERATURE   [14 Marks]

Q.5. Read the extracts given below and answer the questions that follow: (1x3=3)

    A. All three stood still to smile through their hair
        At the uncle with the camera. A sweet face
        My mother's, that was before I was before I was born.
        And the sea which appears to have changed less,
        Washed their terribly transient feet.

i)   What has not changed with the passage of time?
        a. The sea
        b. Her smile
        c. The friendship
        d. Her face

ii) Which poetic device has been used in "Washed their terribly transient feet"?

    a. Simile

    b. Personification

    c. Alliteration

    d. Both b & c

iii) What does the word transient mean?

    a. transparent

    b. transport

    c. that lasts for a short time

    d. turmoil

<div align="center">**OR**</div>

   B.   Then sleek as a lizard, and alert, and abrupt,
         She enters the thickness, and a machine starts up
         Of chitterings, and a tremor of wings, and trillings
         The whole tree trembles and thrills
         It is the engine of her family.

i) Which poetic device has been used in the first line of the extract?

    a. Alliteration

    b. Simile

    c. Personification

    d. None of the above

ii) What does the word chittering mean here ?

    a. talking in a lively manner

    b. high-pitch noise

    c. movement of the wings

    d. All of the above

iii) Name the poet

    a. Teid Hughes

    b. Ted Hughes

    c. Tedd Plath

    d. None of the above

Q.6.   Read the extracts given below and attempt any two of the three given by answering the questions that follow: (3+3=6)

  A. I need to find the right girl . I know an officer who got married only six months ago. He is about 30 and his wife is 25, I am told. They will be able to talk lovingly to each other. Let's say that I married a very young girl. She may take my words spoken in love as words spoken in anger. Recently, a troupe in Bangalore staged a play Shakuntala. There is no question of Dushyantha falling in love with Shakuntala if she were young, like the present – day brides, is there? What would have happened to Kalidasa's play? If one gets married , it should be to a girl who is mature. Otherwise, one should remain a bachelor.

i) What is the speaker trying to explain here?
a: One should marry a girl who is mature enough.
b: Marry a girl who is much younger.
c: Marry a girl for her looks.
d: Marry a girl who will understand his emotions.

ii) Which play does 'Ranga' refer to here?
a. Girija Kalyana
b. Kalidasa's play
c. Jagannatha Vijaya
d. Adventures of Hosahalli

iii) Which word in this extract means the same as group?
a. Staged
b. Remain
c. Troupe
d. Recently

B. In his defence, Carter really had little choice. If he hadn't cut the mummy free, thieves most certainly would have circumvented the guards and ripped it apart to remove the gold. In Tut's time, the royals were fabulously wealthy, and they thought- or hoped- they could take their riches them.

i) Why did Carter have to defend himself?

a. Because he was confused
b. Because he did everything in an illegal manner
c. Because he was a little shaky
d. Because he was questioned

ii) What did they think or hope regarding their life after death?

a. They could take their riches with them
b. They will not require their wealth
c. They will be born with the same power
d. Everything depends on the good deeds done by them

iii) What does the word circumvented mean?

a. Make a deep cut
b. Make a hole
c. Overcome a problem in a surreptitious way
d. To probe into a matter

C. "It's out there in front of us," they chorused, "as big as a battleship."

I rushed on deck and gazed with relief at the stark outline of Ile Amsterdam. It was only a bleak piece of volcanic rock ,with little vegetation –the most beautiful island in the world!

We anchored offshore for the night, and the next morning all 28 inhabitants of the island cheered as they helped us ashore.

i) What was in front of them?
   a. a battleship
   b. Ile Amsterdam
   c. strong gales
   d. a huge iceberg

ii) How has the island been described?
   a. A bleak piece of volcanic rock, with little vegetation.
   b. The most beautiful island in the world.
   c. An island with greenery all around
   d. Both a & b

iii) How many inhabitants were there on that island ?
   a.65
   b.150
   c.28
   d.185

Q.7. Answer the following questions choosing the most appropriate option . (any 5)   (1x5=5)

i) What made the author's grandmother unhappy about his new school?

   a. The fact that she could no longer help him with the lessons
   b. The location of the school
   c. English was the only subject taught in school
   d. The school was far away from home

ii). What was Uncle Khosrove's customary line?
   a. Ignore it ; it is no harm
   b. Forget it
   c. It is harmless; ignore it
   d. It is no harm ; pay no attention to it

iii) For how many years did Amenhotep –III rule Egypt ?
   a.5 years
   b.20 years
   c.10 years
   d. 40 years

Pg – 11 of 15

iv) What happened when the painter entered the cave ?
    a. the entrance closed behind him
    b. the painting vanished
    c. nothing happened
    d. It was only a dream

v) After reading the story "The Address" how would you describe Mrs. Dorling?
    a. materialistic
    b. selfish
    c. opportunist
    d. All of the above

vi) What does the author Masti Venkatesha Iyenger mention as a 'priceless commodity'?
    a. his native language
    b. mangoes of his village
    c. flowers of is village
    d. English language

PART-B   (40 marks)
READING

Q.8 Read the passage given below and answer the questions that follow.   (8)

Parents play a key role in a child's physical, mental and emotional development. Parenting is the way parents nurture or bring up their children. If there is conflict here, children and adolescents may drift into addictions.

But in the present scenario, most parents seem to be confused and in guilt, themselves, as they often feel that their children have gone astray because they have not been good parents. Children who are unable to cope with their numerous psychological academic, and social problems, drift into the horrifying world of addictions. Parents need to know and adopt the concept of good parenting skills to understand and bond with their children.

 Parents feel proud when their children are obedient! But as soon as children enter their teens, all hell seems to break loose. As adolescents, they try to reason and analyse situations and people. They argue as to why they should do exactly what their parents or elders ask them to do? If parents are unable to provide appropriate answers to their queries, children become unsatisfied and unhappy. As parents, we always tell our children to do things, but forget to explain them why they should or should not do so. Instead, we should explain to them the reason why they should not take drugs and cigarettes, or resort to driving fast. The questions in their minds are endless. Parents rarely try to answer the 'why or why not because either they do not know the right answer themselves or they do not know the right way to answer these tricky questions. Adolescents tend to move away from parents if they are in denial mode, and get attracted towards their peers, where they feel accepted and appreciated. This is called peer-pressure and the child will do anything to please or become like his peers whom he now considers to be his role models. He starts to mimic their behaviour, because he wants to be appreciated and accepted by them and eventually he does everything his peers tell him to do. And so, he may drift into addictions and other malpractices merely to win their approval.

To keep our children happy and away from drugs and negative behaviours the need of the hour is for parents to learn and adopt good, happy and assertive parenting skills. They should learn to communicate and bond strongly with their children, appreciate and guide them and assure them of their unconditional support whenever they falter or fail . Criticism and rebuke from parents lowers a child's self-esteem and makes him withdraw from his parents. Conversely,

love, appreciation and guidance from parents is the only solution to keep children happy, motivated and confident.

Parents should practice what they preach so that their children can look up to them with admiration and remain in high self-esteem and be assertive and resilient enough to say 'no' to peer pressure and drug abuse.

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

(b) Write a summary of the above passage in about 80 words.   (3)

WRITING SECTION   [16 Marks]

Q. 9.   You are the Head Boy / Head Girl of ABC Public School. Draft a notice in about 50 words to be put up on the notice board inviting the students to volunteer for the Blood Donation Camp which is going to be organized in your school by Rotary Club.   (3)

OR

Draft a poster in about 50 words on the theme "Each one Teach one".   (3)

Q.10.   You are the secretary of the Music Club of your school. Your school is organizing it's 5th Inter- School Music Carnival for the Students of classes(VI - X). Write a notice inviting those interested to appear for an audition in the presence of renowned singer Rehmat Ali khan. (50 words)

(3)

OR

Design a poster in not more than 50 words for your school library on the value of books and good reading habits. You may use slogan.

Q.11.   Last month you purchased a TV set from Shivam Electronics, Pushpa Vihar, Ambala. After a few days you observe it is not functioning properly. Write a letter of complaint in about 100-120 words to the Manager asking for repair or replacement. You are Amar / Amrita of M-114 Model Town Ambala .   (5)

OR

You are Rani / Raman of 52, Shah Road, Agra. You had bought a text book Hornbill for class XI from a neighbourhood book store. After browsing through the book, you realized that a few pages were missing and the print was overlapping on a few pages. Write a letter of complaint to the Manager, Prakash Books, Sadar Bazar, Agra requesting him for a replacement or refund. (100-120 words).

Q.12. You are Shweta / Shivam. You have to deliver a speech in the morning assembly on the topic: The Generation gap is destroying family life. Write her/his speech in about 100-120 words.

(5)

OR

As an active member of the Science Club of your school, write a speech on the topic Advantages of Nuclear Power, You are Raghav / Ronita of S.P. International School .(100-120 words)

LITERATURE SECTION   [16 MARKS]

Q.13. Answer any two questions in not more than 30-40 words.
(one each from prose/poetry)   (2x2=4)

  a) How did Jonathan and Suzanne show courage when disaster struck them?

  b) Why did the narrator of the story want to forget the address?

  c) How has the poet- Ted Hughes portrayed a sweet and nurturing bond between a lonely tree and a goldfinch bird?

  d) The sea 'appears to have changed less' – what is the significance of this remark?

Q.14. Answer **ANY ONE** of the following in about 40- 50 words.   (1X2=2)

  What do you think induced the boys to return the horse to its owner ?

OR

The story Ranga's Marriage brings out a sharp contrast between the old school and new yet it also corroborates the fact that despite contemporary thinking ,our culture and tradition remains deeply ingrained in us. Referring to the text justify this remark.

Q.15.   Answer ANY ONE of the following question in 100-120 words. .   (1 ×5= 5)

Elaborate on the beautiful bond of love and friendship between the author and his grandmother.

OR

Contrast the Chinese view of art with the European view with examples.

Q.16.   Answer any one of the following question in 100-120 words. .   (1 ×5= 5)

Compare and contrast the character of the narrator's mother and Mrs Dorling .

OR

The narrator has mentioned about a crazy streak running in his family. Which two characters showed this streak in their behavior and words? Write briefly about the two characters.

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DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2021-2022)

Class:- XI   **Subject:- Physics**

Time- 3 Hrs.   **M.M-70**

General Instructions :

Read the following instructions very carefully and strictly follow them :

(i)   There are 33 questions in the question paper. All questions are compulsory.

(ii)   This question paper comprises of five sections – A, B, C, D and E.

(iii) Section A contains 10 very short questions and 4 Assertion- Reasoning MCQs of one mark each.

(iv) Section B contains two case based questions of 4 marks each.

(v)   Section C contains nine short answer questions of two marks each.

(vi) Section D contains five short answer questions of three marks each.

(vii) Section E contains three long answer questions of five marks each.

(viii)   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   [1x14=14]

All questions are compulsory. In case of internal choices, attempt any one.

1.   In a given formula , which quantity should be measured more accurately?

2.   How many significant are there in the following

   (i) 750   (ii) 0.00320

OR

   If $f=x^4$, then relative error in f would be how many times the relative error in x?

3.   The displacement of a body is given to be proportional to the cube of time elapsed. What is the nature of the acceleration of the body?

4.   Two balls of different masses (one lighter and other heavier) are thrown vertically upward with same initial speed. Which one will rise to the greater height?

OR

A ball is thrown vertically upwards. Draw its velocity time graph.

5. Write an expression for distance covered in nth second for uniformly accelerated motion.

6. What will be the net effect on maximum height of a projectile when its angle of projection is changed from 30° to 60°, keeping the same initial velocity of projection?

OR

Is the maximum height attained by projectile largest when its horizontal range is maximum?

7. What is the angle made by vector , $\vec{A} = 2\,\hat{\imath} + 2\,\hat{\jmath}$ with x-axis?

8. Three vectors not lying in a plane can never end up to give a null vector, Is it true?

9. A flywheel is rotating about its axle with angular speed w. What will be the ratio of the linear velocities of two points on the wheel at a distance of R/3 and R respectively? R is the radius of fly wheel.

10. The direction of the oblique projectile becomes horizontal at the maximum height. What is the cause of it?

For questions 11,12,13 and 14, two statements are given-one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer 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 true and 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) : The dimensional method cannot be used to obtain the dependence of the work done by a force F on the angle θ between F and displacement x.

Reason (R) : All trigonometric functions are dimensionless.

12. Assertion (A) : Parallax method is used for measuring distances of nearby stars only.

Reason (R): With increase of distance of star, parallactic angle becomes too small to be measured accurately.

13. Assertion (A) : Light year and Angstrom unit both measure distance.

Reason (R) : Both have dimensions of time.

14. Assertion (A) : In y = Asin(wt – kx) , (wt – kx) is dimensionless.

Reason (R) : Because dimension of w = [M^{o}L^{o}T]
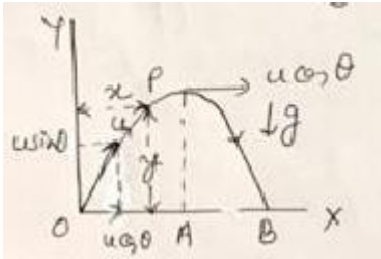
Q. 15 and 16 are case-study based questions and are compulsory. Attempt any four subparts from each question. Each subpart caries one mark.

15. Projectile Motion is a form of motion in which an object or particle is thrown with some initial velocity near the earth's surface and it moves along a curved path under the action of gravity alone. The path followed by a projectile is called its trajectory, which is shown below.

    While resolving velocity u into two components, we get u cos θ along OX and u sin θ along OY.

(i) The example of such type of motion is

   a) motion of car on a banked road

   b) motion of boat in sea

   c) a javelin thrown by an athelete

   d) motion of ball thrown vertically upward

(ii) The acceleration of the object in horizontal direction is

   a) constant

   b) decreasing

   c) increasing

   d) zero

(iii) The vertical component of velocity at point H is

   a) maximum

   b) zero

   c) double to that at O

   d) equal to horizontal component

(iv) A cricket ball is thrown at a speed of 28m/s in a direction of 30° with the horizontal. The time taken by the ball to return to the same level will be

   a) 2.0s

   b) 3.0 s

   c) 4.0 s

   d) 2.9 s

(v)   In above case, the distance from the thrower to the point where the ball returns to the same level will be

    a) 39 m

    b) 69 m

    c) 68 m

    d) 72 m

16. Friction

Starting from rest, a body slides down at $\theta = 45°$ inclined plane of length s in twice the time it takes to slide down the same distance in the absence of friction. The coefficient of friction between the body and the inclined plane is μ .

  (i) What is the expression for the acceleration of body?

    a) $a = g (\sin \theta - \mu \cos \theta)$

    b) $a = g (\cos \theta - \mu \sin \theta)$

    c) $a = g \sin \theta$

    d) $a = \mu g \cos \theta$

  (ii) Expression for time taken by body to slide down the plane is

    a) $\sqrt{\dfrac{2s}{g(\sin\theta - \mu \cos \theta)}}$

    b) $\sqrt{\dfrac{2s}{g(\sin\theta + \mu \cos \theta)}}$

    c) $\sqrt{\dfrac{2s}{g(\tan \theta - \mu)}}$

    d) None of these

  (iii) When friction is absent , time taken to slide down the plane

    a) $\sqrt{\dfrac{2s}{g \sin \theta}}$

    b) $\sqrt{\dfrac{2s}{g \cos \theta}}$

    c) $\sqrt{\dfrac{2s}{g \tan \theta}}$

    d) $\sqrt{\dfrac{2s}{g \cot \theta}}$

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(iv) Which of the following relation

  (a) $3\cos\theta = 4\,\mu\sin\theta$

  (b) $3\sin\theta = 4\,\mu\cos\theta$

  (c) $4\cos\theta = 3\,\mu\sin\theta$

  (d) $4\sin\theta = 3\,\mu\cos\theta$

(v) coefficient of friction μ is

  (a) 0.5

  (b) 0.75

  (c) 0.25

  (d) 0.35

SECTION – C   [2x9=18]

17. Using the principle of homogeneity of dimensions, find which of the following is correct :

   (i) $T^2 = \dfrac{4\,\pi^2 r^3}{G}$ (ii) $T^2 = \dfrac{4\,\pi^2 r^3}{GM}$

   where T is time period, G is universal gravitational constant, M is mass and r is radius of orbit.

18. A physical quantity x is calculated from the relation $T^2 = \dfrac{a^2 b^3}{c\sqrt{d}}$. If percentage error in a,b,c,d are 2%, 1%, 3% and 4% respectively. What is percentage error in x?

OR

   If displacement of a body is S = (200 ± 0.5) m and time taken by it is t = (20 ± 0.2) s, then find the percentage error in the calculation of velocity.

19. In the relation p= $\left(\dfrac{a}{b}\right) e^{-(az/\theta)}$, b is the pressure, z is the distance and θ is the temperature. What is the dimensional formula of p ?

OR

   Find the value of 60W on a system having 100 g, 20 cm and 1 minute as the fundamental units.

20. A car travels at a rate of 20 kmh⁻¹ for 10 minutes and then 30 kmh⁻¹ for 20 minutes. Calculate (i) Total distance travelled by car and (ii) Average speed of the car during whole journey.

21. Points P, Q and R are is a vertical line such that PQ = QR. A ball at P is allowed to fall freely. What is the ratio of the times of descent through PQ and QR?

22. A man can swim with a speed of 4km/h in still water. How long does he take to cross a river 1 km wide, if the river flows steadily at 3 km/h and he makes his strokes normal to the river current? How far down the river does he go when he reaches the other bank?

23. State parallelogram law of vector addition. Show that the magnitude of resultant of two vectors $\vec{P}$ and $\vec{Q}$ inclined at an angle θ is $R = \sqrt{P^2 + Q^2 + 2PQ\cos\theta}$

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OR

A child pulls a rope attached to a stone with a force of 60N. The rope makes an angle of 30⁰ with the

ground , then

a) Calculate effective value of pull tending to move the stone along the ground,

b) Calculate the force tending to lift the stone vertically.

24. A person of mass 50 kg stands on a weighing scale on a lift. If the lift is descending with a downward

acceleration of 9m/s^2 , what would be the reading of the weighing scale? (g=10 ms^{-2}).

25. A body constrained to move along the z-axis of a coordinate system is subject to a constant force

$\vec{F}$ given by $\vec{F}$ = (- $\hat{\imath}$ + 2$\hat{\jmath}$ + 3k) N , where $\hat{\imath}$, $\hat{\jmath}$, $\hat{k}$ are unit vectors along the x,y, and z – axes of the

system respectively. What is the work done by this force in moving the body a distance of 4m along

the z-axis?

SECTION – D   **[3x5=15]**

All questions are compulsory. In case of internal choices, attempt anyone.

26. Describe a method for measuring the molecular size of oleic acid.

OR

The shadow of a tower standing on a level plane is found to be 50 m longer when sun's altitude is

30⁰ than when it is 60⁰. Find the height of the tower.

27. Derive the following relations for uniformly accelerated motion

(i)   S = ut + $\frac{1}{2}at^2$ (ii) v^2 – u^2 = 2as

28. Read each statement below carefully and state with reasons, if it is true or false.

(i)   The magnitude of a vector is always a scalar.

(ii)   Each component of a vector is always a scalar .

(iii)   The average speed of a particle is either greater or equal to the magnitude of average
         velocity of the particle over the same interval of time.

OR

Derive an expression for the centripetal acceleration of a body moving with uniform speed v

along a circular path of radius r. Explain how it acts along the radius towards the centre of

the circular path.

29. A stream of water flowing horizontally with a speed of 15m/s gushes out of a tube of cross-sectional

area 10^{-2} m^2 and hits a vertical wall nearby. What is the force exerted on the wall by the impact of water,

assuming it does not rebound?

30. a) Define the term power. Is it a scalar or a vector quantity?

c) A car of mass 2000 kg is lifted up a distance of 30 m by a crane in 1 minute. A second crane does the same job in two minutes. Do the cranes consume the same or different amount of fuel? What is the power supplied by each crane?

<u>**SECTION – E**</u>   [5x3=15]

All questions are compulsory. In case of internal choices , attempt any one.

31. (a) Distinguish between dimensional variables and dimensional constants. Give example for each.

(b) The frequency v of vibration of a stretched string depends upon.

(i) its length l, (ii) its mass per unit length 'm' and (iii) the tension T in the string.

Obtain dimensionally an expression for frequency .

OR

a) Write four limitations of dimensional analysis.

b) Find the dimensions of the quantity q from expression $T=2\pi\sqrt{\dfrac{ml^3}{3Yq}}$, where T is the time period of a bar length l, mass m and young's modulus Y.

32. A projectile is fired upward at an angle θ with the horizontal with velocity u show that its trajectory is a parabola. Obtain expression for maximum (i) maximum height attained (ii) time of flight and (iii) horizontal range. At what value of θ is the range maximum?
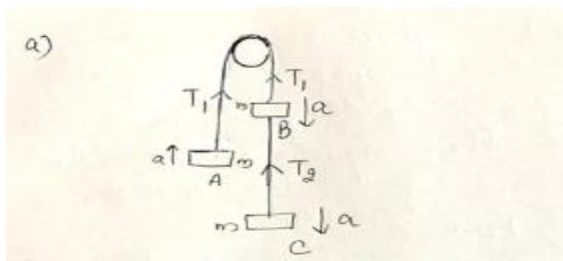
OR

a) $\hat{\imath}$ and $\hat{\jmath}$ are unit vectors along x- & y axes respectively. What is the component of a vector $\vec{A} = 2\hat{\imath} +3\hat{\jmath}$ along the direction of $\hat{\imath} - \hat{\jmath}$?

b) Show that vectors $\vec{A} = 2\hat{\imath} -3\hat{\jmath} - \hat{k}$ and $\vec{B} = -6\hat{\imath} +9\hat{\jmath} +3\hat{k}$ are parallel using cross product.

33.   a) State the laws of limiting friction.
b) Define angle of friction and angle of repose. Show that both are numerically equal.

OR

Three bodies A,B and C, each of mass m are hanging on a string over a fixed pulley as shown in Fig. What are the tensions in the strings connecting bodies A to B and B to C?

b) It is easier to pull a lawn roller then to push it? Show it.

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DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2021-2022)

Class:- XI	**Subject:- Chemistry**
Time- 3 Hrs.	**M.M-70**

General Instructions:-

Read the following instructions very carefully and strictly follow them:

1. *This question paper comprises four sections – A,B,C and D. There are 33 questions in the question paper. All questions are compulsory.*
2. *Section A - Question No.- 1 to 2 are case based questions having four MCQs or Reason - Assertion type based on given passage each carrying one mark.*
3. *Section A - Question No.- 3 to 16 are* **MCQs** *and Reason -Assertion type questions carrying 1mark each.*
4. *Section B - Question No.- 17 to 25 are short answer questions carrying 2 marks each.*
5. *Section C - Question No.- 26 to 30 are short answer questions carrying 3 marks each.*
6. *Section D - Question No- 31 to 33 are long answer questions carrying 5 marks each .*
7. *There is no overall choice in the question paper. However an internal choice has been provided. You have to attempt only one of the choices in such questions.*
8. *Use of calculators is not permitted.*

SECTION – A

1. Read the passage given below: [1x4=4]

The valence bond theory was presented by Heitler and London to explain how a covalent bond is formed. To form a covalent bond overlapping occurs between half filled valence- shell orbitals of the two atoms but it fails to account the geometry and shapes of various molecules. In order to explain them, VBT has been supplemented by the concept of hybridisation .

Now give the answer of following question .

i) Highest covalent character found in

     a) CaF_2 b) $CaCl_2$ c) $CaBr_2$ d) CaI_2
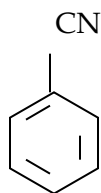
ii) Which molecule is T shaped?

     a) BeF_2 b) BCl_3 c)NH_3 d) ClF_3

iii) The type of hybrid orbitals of nitrogen in NO_2^+ , NO_3^- , and NH_4^+ respectively are :

     a) sp, sp^3 and sp^2

     b) sp, sp^2 and sp^3

     c) sp^2 ,sp and sp^3

     d) sp^2 ,sp^3 and sp

(iv) Number of sigma (σ) and pi (π) bonds in the following structure is

CN

a) $5\,\pi$, $13\,\sigma$

b) $3\,\pi$, $13\,\sigma$

c) $6\,\pi$, $10\,\sigma$

d) $3\,\pi$, $7\,\sigma$

2. Read the passage given below and answer the following questions: [1x4=4]

In Modern periodic table, elements are arranged in order of increasing atomic numbers which is related to electronic configuration. Elements gain stability by losing and gaining electrons. When an electron is being added to a neutral gaseous atom, the enthalpy change accompanying the process is called Electron gain enthalpy whereas the ability of an atom in a chemical compound to attract the shared pair of electron to itself is known as electro negativity.

In these questions a statement of assertion followed by reason is given. Choose the correct answer out of following choices:

(a) Assertion and Reason both are correct statements and reason is the correct explanation for assertion.

(b) Assertion and Reason both are correct statements but reason is not the correct explanation for assertion.

(c) Assertion is correct statement but reason is the wrong statement.

(d) Both Assertion and Reason are wrong statements.

i) Assertion: Atomic radius of inert gases are largest in the period.

   Reason: Effective nuclear charge of inert gases are minimum.

        1) a   2) b   3) c   4) d

ii) Assertion: Stable electronic configuration does not affect electronegativity.

   Reason : Electronegativity is the tendency of an atom to attract the shared pair of electrons ,not to gain electrons

        1) a   2) b   3) c   4) d

iii) Assertion: Properties (behaviour) of lithium is more similar to that of magnesium.

   Reason : Both the elements belongs to same group .

        1)a   2)b   3) c   4) d

iv)Assertion: Electron gain enthalpy of fluorine is greater than chlorine.

Reason : Ionisation potential of fluorine is less than chlorine.

1) a   2)b   3) c   4) d

Following questions (Q3-Q11) are multiple choice questions carrying 1 mark each with single correct answer:

3. The number of atoms present in one mole of an element is equal to Avogadro number .Which of
   the   following contain least number of atoms?   (Atomic Mass of He=4, Na = 23, Ca = 40)   [1]
   a) 4 g He
   b) 46 g Na
   c) 0.40 g Ca
   d) 12 g He

4. Find out the number of waves made by a Bohr electron in one complete revolution in its 4th orbit. [1]
   a) 3   b) 4   c) 2   d) 1

5. The number of radial nodes and angular nodes for 4d orbitals are   [1]
   a) 1,2   b) 2,1   c) 1,0   d) 1,3

6. The oxidation state and co-valency of sulphur in the sulphur molecule (S_8) are respectively .   [1]
   a) +6 and 8
   b) 0 and 2
   c) 0 and 8
   d) +6 and +2

7. Volume at STP of O.22gm. of CO_2 is same as that of ?   [1]
   a) 0.01 gm of hydrogen
   b) 0.085 gm of NH_3
   c) 320 mg of SO_2
   d) all the above

8. Which of the following has maximum mass?   [1]
   a) 0.01 gram atom of carbon
   b) 0.1 mol of NH_3
   c) 6.02×10^{22} molecules of H_2
   d) 1120 cc of CO_2 at STP

9. The ratio of the energy of the electron in ground state of H-atom to the electron in first excited state
   of Be^{3+} is (Atomic No. of Be= 4)   [1]
   a)   1:4   b) 1:8   c) 1:16   d) 16:1

10. Suppose an orbital may accommodate 3 electron then what would be the numbers of elements in 4th period? [1]

a)18　　　　b) 27　　　　c) 12　　　　d) 45

11.An element whose IUPAC name is ununtrium (Uut) belongs to : [1]

a) s-block

b) p-block

c) d-block

d) f-block

In the following questions (Q.No.12 -16) a statement of assertion followed by a statement of reason is given. Choose the correct answer out of the four choices.

(a) Assertion and Reason both are correct statements and reason is the correct explanation for assertion.

(b) Assertion and Reason both are correct statements but reason is not the correct explanation for assertion.

(c) Assertion is correct statement but reason is the wrong statement.

(d) Both Assertion and Reason are wrong statements .

12. Assertion: The first ionisation energy of Be is greater than that of B. [1]

Reason : 2p- orbital is lower in energy than 2s- orbital.

1) a　　　　2)b　　　　3) c　　　　4) d

13. Assertion: There is no compound which is 100% covalent. [1]

Reason : Instantaneous dipole-induced dipole interaction is responsible for some ionic character in nonpolar molecules.

1)a　　　　2)b　　　　3)c　　　　4) d

14. Assertion : The energy of an electron is largely determined by its principal quantum number.

Reason   : The principal quantum number is a measure of the most probable distance of finding an electron around the nucleus. [1]

1)a　　　　2) b　　　　3) c　　　　4) d

15. Assertion : Cr atom belongs to 4th period. [1]

Reason :   Cr atom contains four shells .

1)a　　　　2) b　　　　3) c　　　　4) d

16. Assertion : BCl_3 involve sp^2 hybridisation. [1]

Reason   : In BCl_3 ,the geometry is trigonal planar .
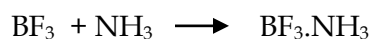
1) a　　　　2) b　　　　3)c　　　　4) d

The following questions Q 17- Q 25 are short answer type and carry 2 marks each.

17. The density of 3 molal solution of caustic soda is 1.1 gml^{-1}. Calculate the molarity of the solution. (Na=23, 0=16, H=1)

18. Write the difference between emission and absorption spectra.

19. How will you justify the presence of eighteen elements in 5th period of periodic table?

OR

On the basis of quantum number justify that sixth period of the periodic table should have 32 elements.

20. Explain the shape of H_2S molecule and PCl_3 molecule using VSEPR theory.

21. Find the number of iodine atoms present in 40 ml of its 0.1 M solution. (Atomic mass of iodine=127)

22. How does exchange energy concept explain the extra stability of half filled orbitas. Explain by taking suitable example.

23. Determine the molecular formula of the compound which contain H = 6.67 %, C=40% and rest is oxygen. 0.6 g of the compound occupy 224 ml at STP.

24 . How would you explain the fact that first ionisation enthalpy of sodium is lower than that of magnesium but its second ionisation enthalpy is higher than that of Mg?

25 .(a) Explain the shape of BrF_5.

(b) BF_3 is an electron deficient molecule. Therefore it can accept an electron pair from ammonia molecule. Is there any change in the hybridisation of Boron and nitrogen atom as a result of the following reaction?.

BF_3 + NH_3 $\longrightarrow$ $BF_3.NH_3$

SECTION – C   **[3x5=15]**

The following questions Q 26 - Q30 are short answer type questions carrying 3 marks each.

26. Calculate the wavelength of the first line and the series limit for the Lyman series for hydrogen.
(R_H = 109678 cm^{-1})

27. Explain: (a) A sigma bond has free rotation along the axis.

(b) s -orbital never form pi (π) bond.

(c) There cannot be more than one sigma bond between two atoms.

28. (a) Write down the correct set of four quantum numbers for the unpaired electron of chlorine atom.(Cl - atomic no. =17)

(b) How many electrons in Fe atom (Z =26) have (n+l) value equal to 5.

(c) What does the negative electronic energy mean for H -atom?

29.   (a) Define Vander Waal radius.

        (b) Write down the four characteristic properties of " d " block elements.

30.   (a) What is the physical significance of psi (Ψ).

        (b) What is the basic difference between molality (m) and molarity (M) ?

        (c) Give atleast two basic difference between electron gain enthalpy and electronegativity.

SECTION – D   [5x3=15]

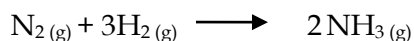**Q. 31 -Q 33 are long answer type carrying 5 marks each.**

31.   (a) Discuss the similarity and difference between 1s and 2s orbital.

        (b) State Heisenberg's Uncertainty principle.

        (c) On the basis of Heisenberg's uncertainty principle show that electron cannot exists
            within atomic nucleus.

        (given radius of nucleus = 10^{-15} m., Mass of Electron = 9.1×10^{-31} kg , h=6.6×10^{-34}Js)

OR

        (a) Explain Zeeman and Stark effect.

        (b) Calculate the uncertainty in velocity of a tennis ball of mass 150 g if the uncertainty in its
            position is of the order of $10A^0$. (h = 6.6×10^{-34} Js) .

32. (a) Define formal charge.

    (b) Calculate the formal charge on each atom in Ozone molecule.

    (c) What is Resonance? Write the resonating structure for nitrate ion.

OR

    (a) Which bond is expected to be stronger and why?

                F-F   OR   Cl -Cl

    (b) PCl_5 dissociate to give PCl_3 and Cl_2 .Why?

    (c) Explain the significance and application of dipole moments by taking suitable example.

33. (a) Write the empirical formula of acetic acid .

    (b) What is limiting reagent?

    (c) See the given reaction below.

            $N_{2 (g)}$ + $3H_{2 (g)}$ $\longrightarrow$ $2 NH_{3 (g)}$

    Calculate the mass of ammonia produced if 2.00×10^3 gm. nitrogen reacts with 1.00×10^3 gm. of
    hydrogen.

OR

    (a) Define mole fraction and molecular formula

    (b) How many molecules are present in 12 litres of liquid CCl_4.
        (density of the liquid is 1.59 gm/cm³ , atomic mass of carbon = 12, chlorine = 35.5)

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

Class:- XI   **Subject:- Mathematics**
Time:- 3 Hrs.   **F. M:- 80**

General Instructions:-

i)   This question paper contains two parts A and B. Each part is compulsory. Part A carries 24 marks and Part B carries 56 marks.

ii)   Part A has objective -type questions and Part B has descriptive type questions.

iii)   Both Part A and Part B have internal choices.

PART - A

(i)   It consists of two sections I and II.

(ii)   Section -I comprises of 16 questions of very short answer type questions.

(iii)   Section-II comprises of two case-studies. Each case-study comprises of 5 case -based MCQ's. An examinee is to attempt any four out of five MCQ's.

(iv)   Internal choice is provided in two questions of Section-I.

PART - B

(i)   It consists of three sections III , IV and V.

(ii)   Section III comprises of 10 questions of 2 marks each .

(iii)   Section IV comprises of 7 questions of 3 marks each.

(iv)   Section V comprises of 3 questions of 5 marks each.

(v)   Internal choice is provided in 2 questions of Section III ,2 questions of Section-IV and 3 questions of Section-V. You have to attempt only one of the alternatives in all such questions.

PART-A (SECTION – I)   (16 x 1 =16)

Section-I has 16 questions of 1 mark each. Internal choice is provided in 2 questions.

1. Express in general a null set in set-builder form without quoting any example.

2. Out of 500 car owners investigated,400 owned Maruti car and 200 car owners owned Hyundai car; 50 owned both cars . Is this data correct? Analyze.

3. Solve : 5x-3 < 3x +1, x is a natural number.

4. Which portion of the cartesian plane is represented by the solution set of the pair of linear inequalities: $x \geq 0, y \geq 0$?

5. If cot $(\alpha + \beta) = 0$, then evaluate sin $(\alpha + 2\beta)$.

6. Evaluate :- $\sin \frac{\pi}{10} \, sin \frac{13\pi}{10}$.

7. If for real values of x, $\cos\theta = x + \frac{1}{x}$, then predict the range of θ.

8. If z is a complex number such that $|z - 1| = |z + 1|$, evaluate Re (z).

9. If $z = 1+i$, then find the multiplicative inverse of z^2 .

10. Solve :- $6x^2 -17xi-12 = 0$.

11. Find a G.P. for which the sum of first two terms is -4 and the fifth term is 4 times the third term.

OR

Find the sum of all three digit natural numbers which are divisible by 7.

12. If $x \epsilon R, using\ A.M, G.M.\ inequality$ find the minimum value of the expression $3^x + 3^{1-x}$.

13. Find the sum of n A.M's between any two distinct numbers 'a' and 'b'.

14. How many three digit odd numbers can be formed by using the digits 1,2,3,4,5,6 if the repetition of digits is not allowed?

15. Find the L.C.M. of 4! ,5! and 6!.

OR

In how many ways a committee of 5 members can be selected from 6 men and 5 women , consisting of 3 men and 2 women ?

16. A polygon has 44 diagonals.Find the number of its sides.

<u>**PART – A (SECTION- II)**</u>   (2 x 4 =8)

Case study based questions are compulsory. Attempt any 4 sub-parts of each question. Each sub-part carry 1 mark.

17. Five students Ajay, Shyam, Rahul, Ravi and Rashid are getting bored of their regular studies. They go to a playground and sit in a straight line.

    i)   The total number of ways of sitting arrangement of 5 students is

        a) 60

        b) 24

        c) 120

        d) None of these

    ii)   The total number of arrangements if Ajay and Ravi sit together is

        a) 50

        b) 48

        c) 24

        d) None of these

iii)   The total number of arrangements if Ravi and Rahul sit at extreme positions is

a)15

b) 14

c) 12

d) none of these

iv) The total number of arrangements if Shyam is sitting in the middle is

a) 120

b) 24
c) 4
d) None of these

v) The total number of arrangements if no two friends sit together is
a) 36
b) 72
c) 48
d) 120

18. A pianist was recording music in a music studio. He invited people around him to guess what musical notes he played without looking at the piano. One of the person from the audience recorded his music in an audio-editing software which stored the recording in a waveform. The equation representing this wave was given by a complex number z= 1+i, where i=$\sqrt{-1}$.

i)   The conjugate of 'z' is given by
a) -1+i
b) -1-i
c) 1-i
d) None of these

ii)   The modulus of 'z' is given by
a) $\sqrt{2}$
b) $\sqrt{5}$
c) 1
d) 2

iii)   The amplitude of z is given by
a)$\pi/2$
b) $\pi/4$
c)$\pi/6$
d) π

iv) The multiplicative inverse of (1+i) is

    a) 1-i

    b) 1

    c) -1-i

    d) None of these

v) If the complex number z is multiplied with (1+2i), then the new complex number

thus obtained in standard form is

    a) -1+3i

    b) -1-3i

    c)1+3i

    d) none of these

PART – B (SECTION -III)   (10 x 2 = 20)

All questions are compulsory. In case of internal choices attempt any one.

19. Two finite sets have 'm' and 'n' elements respectively. The total number of subsets of first set is 56 more than the total number of subsets of the second set. Find the values of 'm' and 'n' respectively.

OR

Each set X_r contains 5 elements and each set Y_r contains 2 elements and
$\bigcup_{r=1}^{20} Xr$ =S=$\bigcup_{r=1}^{n} Yr$.
If each element of S belongs to exactly 10 of the X_r's and to exactly 4 of the Y_r's then find the value of 'n'.

20. Find sets A,B and C such that A ∩ B , A∩ C and B ∩ C are non-empty sets and

A ∩ B ∩ C =∅.

21. Find all pairs of consecutive even positive integers, both of which are larger than 8,such that their sum is less than 25.

22. If $\alpha + \beta$ =90^0, find the maximum and minimum values of sin$\alpha sin\beta$.

OR

If the angular diameter of the moon be $30'$, how far from the eye a coin of diameter 2.2 cm must be kept so as to hide the moon?

23. If A+B =π /3 , cos A+ cos B =1 , then find the value of $\cos\left(\frac{A-B}{2}\right)$.

24. Find non-zero integral solutions of $|1 - i|^x$ =2^x .

25. Find the least positive value of n, if { (1+i)/(1-i) }^{n} = 1.

26. If x,y, z are in A.P. and A_1 is the A.M. of x and y and A_2 is the A.M. of y and z, then prove that the A.M. of A_1 and A_2 is y.

Pg – 4 of 6

27. From a class of 25 students,10 are to be chosen for an excursion party. There are three students who decide that either all of them will join or none of them will join. In how many ways can they be chosen?

28. Ten different letters of an alphabet are given .Words with five letters are formed from these given letters. Determine the number of words which have at least one letter repeated.

PART-B (SECTION - IV)   (7 x 3 =21)

All questions are compulsory. In case of internal choices attempt any one.

29. For any two sets A and B show that the following statements are equivalent:

     (i)   A is a subset of B   (ii) A-B = Ø   (iii) A∪B=B   (iv) A∩ B= A .

30. Exhibit the solution of the following linear in equation graphically:-

3x+4y $\leq$ 12 , $4x + 3y \leq 12$, $x \geq 0$, $y \geq 0$.

31. Prove that: cos 6x = 32 cos^{6}x -48 cos^{4}x +18 cos^{2}x-1.

32. Prove that sin x +sin 3x +sin 5x +sin 7x = 4 cos x cos 2x sin 4x.

33. If z is a complex number such that |z| =1 , prove that: $\frac{z-1}{z+1}$ is purely imaginary. What will be your conclusion if z = 1?

OR

If α and β are different complex numbers with |β| = 1 , find the value of | (β-α)/(1- $\bar{\alpha}\beta$)|.

34. If the sum of n terms of an A.P. is pn+qn^2, where p and q are constants , find the common difference.

OR

Show that there is no A.P. which consists of only distinct prime numbers.

35. A square is drawn by joining the mid-points of the sides of a square. A third square is drawn inside the second square in the same way and the process is continued indefinitely .If the side of the square is 10 cm ,find the sum of the areas of all the squares so formed.

PART-B (SECTION-V)   (3 x 5 = 15)

All questions are compulsory. In case of internal choices attempt any one.

36. In a survey of 25 students ,it was found that 15 had taken mathematics , 12 had taken Physics and 11 had taken Chemistry , 5 had taken Mathematics and Chemistry , 9 had taken Mathematics and Physics , 4 had taken Physics and Chemistry and 3 had taken all the three subjects. Find the number of students who had taken

    i)   Mathematics and Physics but not Chemistry.
    ii)   Only one of the subjects
    iii)   At least one of the three subjects
    iv)   None of the subjects
    v)   Only Mathematics

For any two sets A and B prove that: $P(A \cap B) = P(A) \cap P(B)$. Also prove that $P(A \cup B)$ is not necessarily a subset of $P(A) \cup P(B)$.

37. If α and β are the solutions of $a \cos x + b \sin x = c$, then prove that :

$\cos(\alpha + \beta) = (a^2 - b^2)/(a^2 + b^2)$

OR

Prove that: $\tan \alpha + 2\tan 2\alpha + 4\tan 4\alpha + 8\cot 8\alpha = \cot \alpha$.

38. If S be the sum ,P be the product and R be the sum of reciprocals of n terms of a G.P., Prove that:- $(S/R)^n = P^2$.

OR

If the sum of m terms of an A.P. is equal to the sum of either the next n terms or the next p terms , then prove that :- $(m+n) \left(\frac{1}{m} - \frac{1}{p}\right) = (m+p) \left(\frac{1}{m} - \frac{1}{n}\right)$.

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DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI
HALF YEARLY EXAMINATION (2021-2022)

Class:- XI   **Subject:- Biology**
Time:- 3 Hrs.   **F. M:- 70**

General Instructions:-

1. All questions are compulsory.
2. The question paper has four sections: Section A, Section B, Section C and Section D. There are 33 questions in the question paper.
3. Section-A has 14 questions of 1 mark each and 2 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.
4. 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.
5. Wherever necessary, neat and properly labelled diagrams should be drawn.

SECTION – A

1. What is a perianth? (1)

2. Most algal genera show haplontic life style. Name an alga which is

   a) Haplodiplontic   b) diplontic (1)

3. Properties of cell organelles are not found in the molecular constituents of the cell organelles. Justify (1)

4. A virus is considered as a living organism and an obligate parasite when inside a host cell. But virus is not classified with bacteria or fungi. Mention any two characters of virus that are similar to non-living objects? (1)

5. Name the animal that exhibits the phenomenon of bioluminescence. Mention the phyla to which it belongs. (1)

6. Euglenoids are considered autotrophic as well as heterotrophic organisms. Give reason. (1)

7. Mention the types of fibres present in areolar tissue. (1)

8. What is polysome? (1)

9. Name the connective tissue from which ligaments are formed. (1)

10. Mention two surface structures of prokaryotes that do not help in motility. (1)

DIRECTION (Q Nos. 11-14)

In each of the following questions, a statement of Assertion (A) is given followed by corresponding statement of Reason (R). Of the statements, mark the correct answer as

   a) If both A and R are true and R is the correct explanation of A.
   b) If both A and R are true but R is not the correct explanation of A.
   c) If A is true, but R is false.
   d) If both A and R are false

Pg – 1 of 5

11. Assertion (A) In taxonomic hierarchy, each category is called taxon
    Reason (R) Taxon represents the unit of classification

12. Assertion (A) In molluscs, feather like gills are present in mantle cavity.
    Reason (R) Gills perform respiratory and excretory functions in molluscs

OR

Assertion (A) Thecymose type of inflorescence has limited growth
Reason (R) Inflorescence is is the arrangement and distribution of flowers on the floral axis of a plant.

13. Assertion (A) Smooth muscles are involuntary in function.
    Reason (R) these are striated in appearance

14. Assertion (A) Ribosomes are non-membrane bound organelles found in the prokaryotic cells only
    Reason (R) They are present only in the cytoplasm

15. **DIRECTION** Read the following and answer any four questions from 15 (i) to 15 (v) given below
    The members of kingdom – Fungi are eukaryotic, heterotrophic and achlorophyllous. They are either unicellular or multicellular forms that are made up of hyphae. The network of hyphae forms the mycelium. These cell walls exhibiting organisms reproduce by both sexual and asexual modes. On the basis of spore formation, fungi are classified as Phycomycetes, Ascomyetes, Basidiomycetes and Deuteromycetes. Based on the mode of nutrition, fungi are classified as saprophytic and parasitic forms. These are also found in symbiotic association with plants.

    i.   Fungal cell wall is composed of
         a) Cellulose and pectins
         b) Chitin and glycoproteins
         c) Chitin, glycoproteins and glucans
         d) Pectins, chitin and cellulose

    ii. Club-fungi is
         a) Phycomycetes
         b) Deuteromycetes
         c) Basidiomycetes
         d) Ascomycetes

    iii. The spores that help fungi to undergo asexual reproduction during favourable conditions is
         a) Zoospores
         b) Aplanospores
         c) Conidia
         d) All of the above

    iv. Sexual reproduction in Ascomycetes occurs through
         a) Somatogamy of zoospores
         b) Isogamy of zoospores
         c) Anisogamy of ascospores
         d) Both (b) and (c)

v. Assertion (A) Mycelium in Deuteromycetes is aseptate.
Reason (R) Phycomycetes possess septate and branched mycelium.
a) If both A and R are true and R is the correct explanation of A
b) If both A and R are true, but R is not the correct explanation of A
c) If A is true, but R is false
d) If both A and R are false

16. **Direction** Read the following and answer any four questions from 16 (i) to 16 (v) given below:

Algae are diverse group of aquatic organism that have the ability to conduct photosynthesis. They are unicellular or multicellular and undifferentiated organisms that occur in variety of forms and sizes. Algae belong to a polyphyletic group, i.e. the organisms of this group are not necessarily related to each other. Based on the pigment, composition and reserved food material, algae has been divided into three major classes, viz. Chlorophyceae, Phaeophyceae and Rhodophyceae.
The members of these classes also differ in cell wall composition, stored food material, body structure, mode of reproduction, etc.

i. A representative organism of class Rhodophyceae is
a) Spirogyra
b) Fucus
c) Polysiphonia
d) Chlorella

ii. Multicellular, saline forms are found in
a) Rhodophyceae
b) Chlorophyceae
c) Phaeophyceae
d) All of these

iii. Stored food material in class- Phaeophyceae is
a) Mannitol and laminarin
b) Floridean starch
c) Pyrenoids
d) All of the above

iv. Cell wall of Porphyra (red algae) contains
a) Cellulose
b) Pectins
c) Polysulphate esters
d) All of the above

v. Which of the following is rich in protein?

a) Ulothrix
b) Spirogyra
c) Nostoc
d) Chlorella

17. *Mangifera indica* Linn is the scientific name of a plant.

    a) Give the common name of the plant.

    b) What do the first two parts of the name denote?

    c) What is the meaning of Linn written at the end of the name? (2)

18. Gymnosperms are well adapted to withstand xerophytic conditions. Justify (2)

19. Comment on the statement 'the number of offspring produced by an oviparous and a viviparous animal cannot be equal.' (2)

20. Analyse why algal blooms and red tides are considered harmful for the environment.

OR

How are bacteria classified based on their shape (2)

21. An animal tissue is found to be actively involved in secretion. Identify the tissue and also mention its location in human body. (2)

22. a) Write the floral formula of an actinomorphic, bisexual, hypogynous flower with five united sepals, five free petals, five free stamens and two united carpels with superior ovary and axile placentation

b) What is a staminode? (2)

OR

Distinguish between

a) Epipetalous and epiphyllous

b) Apocarpous and syncarpous ovary.

23. What are inclusion bodies in prokaryotic cells? Give two examples. (2)

24. What is the importance of pneumatic bones and air sacs in Aves.? (2)

25. What are plasmids? Mention their role in bacteria. (2)

SECTION-C

26. Write a note on Archaebacteria. (3)

27. "The study of the nature of body cavity and coelom in the classification of animals is important." Support this statement with examples. (3)

28. Differentiate between different types of flowers based on the position of the ovary. (3)

29. Mention the role of the following in a prokaryotic cell: (3)

    a) Mesosome
    b) Chromatophores
    c) Gas vacuoles

30. Algae are divided into three main classes. Differentiate between them on the basis of the photosynthetic pigment and stored food.

OR

Distinguish between

    a) Liverworts and mosses
    b) Homosporous and heterosporous pteridophyte
    c) Isogamy and anisogamy. (3)

31. a) 'Mammals are most adapted amongst the vertebrates.' Justify the statement

     (give four points)

    b) Give three major differences between chordates and non-chordates.   (5)

OR

    a) Describe briefly four major groups of Protozoa

    b) Why are deuteromycetes called imperfect fungi?

32. Describe the major types of placentation found in flowering plants.   (5)

OR

    With the help of a schematic diagram describe the haplodiplontic life cycle pattern of a plant group

33. Epithelium or epithelial tissue covers both external and internal surfaces of the animal body. What are the various types of epithelial tissues? Describe them with the help of diagrams.   (5)

OR

    Draw a labelled diagram of a prokaryotic cell and describe its structure.

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DELHI PUBLIC SCHOOL, RANCHI
HALF YEARLY EXAMINATION(10/09/2021)

Class : XI   **Subject: Computer Science.**
Max Marks:70   **Time: 03 Hours.**

General Instructions:

- *Technically informative answers will be appreciable.*
- *All questions are mandatory unless alternative is provided.*
- *Marks are indicated against questions.*
- *Programming Concepts are of Python language only.*
- *There are 30 Questions, all in total ,in SEVEN Groups : A,B,C,D,E, F& G.*
- *Group-A consists Computer System Overview, Group-B consists Introduction to Problem Solving, Group-C consists Data Representation, Group-D consists of Python E consists Python Programs Concepts, Group-& Group-E consists Python Programs, Group-F consists Pattern Design and Group-G consists Boolean algebra.*

GROUP-A

Q.1. Your younger teenager sister has keen interest in reading technology magazines & blogs. She browsed a headline on an article that was like , " **The Acer and hp Laptops can be upgraded to an Insane 3 TB RAM & 48 TB storage.**"Little Sis has few queries & doubts related to this headline. Explain few of her inquisitive questions as : (Any Four).   **[4]**

   a) Differentiate between Storage and RAM. Do we need both of these in a Computer ?

   b) Does an Operating System, also use RAM ?

   c) Elaborate her about TB & GB.

   d) Different units of data can be used to represent the size of a file. Arranging from smallest to largest, Fill the blanks, from the units, provided (byte, GB, MB, Nibble) :

   Bit, ------------ , ----------- , KB, ----------- , ------------- , TB .

e) What is the difference between System Software and Application Software ?

f) Are Microsoft Windows & Microsoft Office software ? How are these two different from one another ?

Q.2. Along with example, Differentiate between an **Interpreter** and a **Compiler.** [1]

Q.3. What is BOOTING ? Mention main functions (at least Two) of Operating System. [1]

GROUP- B

Q.4. In context of Problem Solving, define the terms : Algorithm and Pseudocode. [2]

Q.5. Draw diagrammatically represented FLOW CHARTS for the following assignments : (Any TWO) : [2 *2 = 4]

(i) As 153 (13 + 53 + 33 = 1+125+27 =153) and similarly 371 etc are Armstrong Numbers. Draw a Flowchart to check whether a given 3-digit Number is an Armstrong Number.

(ii) To display Sum of Odd & Even Numbers up to Number N, entered by User.

(iii) To determine a Student's Final Grade and indicate whether he is PASS or FAIL. The final grade is calculated as the Average marks in five subjects. For PASS, the average must be more than or equal to 40.

(iv) To categorize a person as either Child (< 13), Teenager (>=13 But < 20) or Adult (>=20), based on Age specified.

GROUP-C

Q.6. In the given **Matrix**, Fill All the **Cells(Boxes)** with Relevant Numbers: **[4]**

Decimal	Binary	Octal	Hexadecimal
314.8125			
	11001.00111		
		76532.32	
			FADED.1A

Q.7. Add the binary numbers: [2]

(a) **1101 . 101 + 1011010111 .011 + 101011101 . 11**

(b)**11111 + 10110101 .1010 + 11101111 . 11001**

Q.8. Find: (a)One's Complement Representation of: **(-12)10**   [1/2]

(b)Two's Complements Representation of: **(- 27)10**   [1/2]

Q.9. To utilize her free time & to meet her extra academic expenditure, Ms Riya has joined a Cyber Office, as a part-time Operator. She is typing in a BASIC program, at the keyboard of a certain micro-computer. The computer converts each keystroke into an ASCII code and stores the code in memory. Determine the codes that will be entered into memory, when Riya types a statement: **LOAD.** [2]

OR

On a border, Captain Vicky Kaushal receives a message in **ASCII** code :

1010000 1001111 1010010 1010100.   Guess, what is the message ?

Q.10. Being a patriotic techie, you have assigned this tiny task. Suppose a Number System has been designed with radix 10 with symbols (ordered from Small to Large) :

A,B,C,D,G,H,I,L,M,N. Convert the following Number to its equivalent hexadecimal Number : **(INDIAN)$_{10}$.** [3]

OR

Sindhu answers a Qualifying examination question about computers & data correctly.

Six different words or numbers have been removed from the answer.

Complete the sentences in Sindhu's answer, using the list given. (Not all items in the list need to be used). [3]

2 10   16   analogue   binary   decimal   digital   hexadecimal
Fill the blanks, with above terms :
    As humans, we process ---------- data, but a computer cannot process this type of data. We mostly use a ----------- number system; this is a base ---------- number system. Computers use a -------- number system; this is a base ------- number system.

GROUP-D

Q.11. Differentiate between Script mode and Interactive mode in PythonLanguage. [1]

Q.12. Python is a Free & Open Source Language. What is this feature ? Is Python an OOP Language? [1]

<div align="center">OR</div>

What are tokens in Python? Mention the types of tokens allowed in Python.

Q.13. What will be the output of the following: [1]

(a) print (-10//3)   (b) print (-3 % -10)

(c) range (10, 1, -2)   (d) 7 % 7 +7 // 7 – 7 * 7

Q.14. What will be the output of the following? [1]

   (a) for a in range (2) :

          for b in range (2) :

          print (a, b, a + b)

   (b)for P in range (-100, 100, 100)

          print (P, end=' ')

Q.15. Find Bugs & Rewrite the code, underlying the corrections made :   **[2]**

a =int (" Enter value for a : "))

for in range (0,11) :

if a = b

       print a + b

else :

       Print a - b

Q.16. What will be the Output of the following Expressions: [2]
   (a)   2+9* ((13*12 – 8) /12**2?
   (b)   137% 4**3 * 5//3 – 5 + (–4)/2?
   (c)   (2 * 45 //5 +10**2 -25 +12 % 5 *3)?
   (d)   3+float(5)/8?

Q.17. You can add (as many as you wish) pair of parentheses to each expressions, so that, it results to True (1) : [Any TWO]   [1]

(a) 0 ==1 ==2   (b) 2 + 3 == 4 + 5 ==7   (c) 1 < -1 == 3 > 4

Q.18. With justification, Evaluate this Expression :   [1]

(4 * 5 + 7 * 2 – 8 % 3 + 4 and 5.7//2 – 1 + 4 or not 2 ==4 and not 2**4 – 6 * 2)

GROUP- E

Q.19. Write Indented & Documented **PYTHON** programs for the following: **(Any EIGHT)**

[2.5 X 8 =20]

(i) Given a point (x, y). Write a program to find out if; it lies on the X-axis, Y-axis or on the origin. Determine where this point lies in coordinate system, then in which quadrant of the circle: First, Second, Third or Fourth ?

(ii) To Intake three distinct Numbers and print those in Ascending order.

(iii) To Enter the Number of Days (at least in three digits) And Convert it into Years, Months, Weeks and remaining Days.

(iv) Program to print two series, Ser1 and Ser2 of 7 terms each, according to user's choice.

Ser1 :3   8   13   18 ………..
Ser2 :3   -8   13   -18 ………

(v) Given three points (x1, y1), (x2, y2) and (x3, y3). Your program should check, if all the three points fall on one straight line that is, whether 3 points are collinear.

(vi) A year is input by User. Your program should determine, whether the year is a Leap year or not, (It should check century years, as well).

(vii) To A program that asks the user to input the number of working hours and earnings per day. It then computes how much money they earn in a week and display a relevant message of your choice, based on their earnings.

(viii) To Input a 3-digit Integer and check whether, it is an **ARMSTRONG** Number.

(ix) Take a good glance on the output of a Program based on the Input value provided by the user. Accordingly, write a program. Assume an Illustrative Example :
Enter Hour between 1 to 12 :8 (Say)
How many hours ahead (wish to add) :6 (Say)

(x) To accept an Integer (of 5 digits at least) and display whether the Number is **PALINDROME.**

(xi) If the three sides of a triangle are entered through the keyboard, your program should check, whether the triangle is **Isosceles, Equilateral, Scalene or Right Angled triangle.** (Naturally, at the outset, you will determine the validity of the triangle, by checking the sum of the two sides, greater than the third side).

GROUP - F

Q.20. Write Python codes to exhibit following Patterns (Any Two):   **[2X2=4]**

(i)	(ii)	(iii)	(iv)
&	1	0	A
&&	2 2	2 2	B B
&&&	3 3 3	4 4 4	C CC
&&&&	4 4 4 4	6 6 6 6	D DDD
&&&&&	5 5 5 5 5	8 8 8 8 8	EEEEE
&&&&&&	6 6 6 6 6 6	10 10 10 10 10 10 10	F FFFFF

GROUP– G (Any Six)

Q.21. What is meant by Tautology & Fallacy ? Prove that : 1 + A is a tautology and 0 . A is a fallacy.   **[2]**

Q.22. State & prove DeMorgan's laws, by Truth Table. What will be the complement of the expression : **(A' + (B' + C)) ?**   **[2]**

Q.23. Mention Names of Universal **Gates. Why they are called Universal?**   **[2]**

Q.24. Define **XNOR** Gate. Draw Truth Table for 3-Input XNOR Gate.   **[2]**

Q.25. Prepare truth table for the Boolean expression: **[2]**

A.B'.(C+B.C)'+C'

Q.26. Which process is called **DEMORGANIZATION?** Provide an example, too.   **[2]**

Q.27. Prove algebraically (mentioning Names of postulates) & then Check by Truth Table . **[2]**

$$A+B.C=(A+B).(A+C)$$

Q.28. Draw diagram of a digital circuit for the function using NAND only :

F=A.B+B′.C+C′.A′   **[2]**

Q.29. State the Principle of **Duality** and Give the Dual of: **(A+A′.B)**   **[2]**

Q.30. Prove algebraically that :

(X+Y).(X+Z)=X+Y.Z. Also, check by using Truth Table.   **[2]**

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DELHI PUBLIC SCHOOL

SAIL Township, Ranchi

Half Yearly Examination 2021

Class: XI   **Subject: Informatics Practices (065)**

Max Marks: 70   **Time: 3 Hours**

General Instructions:
- *There are 2 Groups (A, B) and each group has 2 sections (I, II)*
- *Group-A: Section-I contains 20 marks, Objective Type, 20 questions are to be attempted.*
- *Group-A: Section-II contains 15 marks questions*
- *Group-B: Section-I contains 17 marks questions*
- *Group-B: Section-II contains 18 marks questions*
- *Always keep margin at the left side of your answer script & clearly write the Question Numbers*
- *Try to maintain the order of the questions in each group during answering.*
- *Keep spaces and mark 'line-of-separation' in between two answers.*

Group – A: SECTION-I

[Attempt any 20 Question]

Q1. Answer the following questions (Objective type):   **[20X1=20]**

1) In Dictionary we sort the data by_____function.

2) pop() function returns the _____ value.

3) append() function puts the element at the _____ of the List.

4) The **:** (colon) is put _____ (i) Before if….else (ii) After while (iii) Before for (iv) None

5) The _____ operator gives TRUE output when both of the conditions are correct.

6) Indent sets_____ (i) Block (ii) Space (iii) Data flow (iv) Statement

7) The only language which the computer understands is_____:

    (i) Assembly Language (ii) Binary Language (iii) BASIC   (iv) C Language

8) Which of the following is correct in terms of range() function? _____

    (i) begins from 1   (ii) 3 arguments are must   (iii) runs up to final-value minus 1   (iv) All

9) Flowchart depicts the _____ representation of the programming logic.

10) print(x[:-2]) gives the output _____ to _____ elements.

11) List is: (i) Mutable   (ii) Heterogeneous   (iii) Has +ve & -ve index   (iv) All

12) Traversing of String prints in: (i) Horizontal order   (ii) Vertical order

                                          (iii) Whole Text   (iv) None

13) _____ closes the loop and goes to next statement:

    (i) Break   (ii) Continue   (iv) Both i & ii   (v) None i & ii

14) Difference between while() and for() loop is:

    (i) initialization   (ii) increment/decrement   (iii) Both i & ii   (iv) None i & ii

15) _____and _____ operators give Boolean output.

16) FAT keeps the records of _____

      (i) Data of the memory   (ii) Files in disk (iii) Number of tracks (iv) Numbers of sectors

17) System software has two categories _____:

      (i) Language Processor & Application Software (ii) Application Software & Operating System

      (iii) Operating System & Language Processor   (iv) None of those

18) The difference between = & == respectively are:

      (i) Equality & Similarity (ii) Assignment & Equality (iii) Both i & ii (iv) None i & ii

19) The syntax of the declaration of 2D Array of a list is:

      (i) [[0 for col in range(c)] for row in range(r)]

      (ii) [[0 for row in range(r)] for col in range(c)]

      (iii) [[for row in range(r)] for col in range(c)]

      (iv) [[for col in range(c)] for row in range(r)]

20) In print() function %d prints:

      (i) The value of the variable   (ii) DataType of the value

      (iii) Both i , ii   (iv) None i , ii

21) In print() function end=" " prints the output:

      (i) Horizontally   (ii) Vertically

      (iii) Horizontally with one white space   (iv) Vertically with one white space

Group – A: SECTION-II

[Attempt Questions 22 & 23]

[15 marks]

22) Answer the following questions on a Software-Development-Project based case studies, where you are supposed to write notes of the followings for PPT presentations to train employees:

(i) In the project, you have been asked to write the functionality of computer Memory Management with a help of a diagram. **[1]**

(ii) Your project manager assigned to write few important points on difference between Operating System and Language Processor. **[1]**

(iii) Now you have been assigned to write a note on: how do Memory Unit, Central Processing Unit and Control Unit of a computer system work together. **[1]**

(iv) Your project manager asked you to explain to your junior: how 3GL is different from 4GL? **[1]**

(v) One of your juniors of your project requested you to help him to write the difference between System software and Application software. **[1]**

23) Answer the following questions on writing logic for a Software Development program:

i) Write an algorithm to calculate the Total and Average Marks of a class out of 5 subjects (to be entered by the user) of Full marks 100 each. **[1]**

ii) Write an algorithm to Input two numbers (using 3rd variable) from the user and Swap & print. **[1]**

iii) Draw a flowchart to find the greater number of any two entered numbers. **[1]**

iv) Draw a flowchart to enter age and check whether he is eligible (age 18 or above) to caste vote. **[1]**

v) Draw a flowchart to find the sum of N even numbers. **[2]**

vi) Draw a flowchart to find that an entered number is Prime or not. **[2]**

vii) Show the steps to find the final output (T/F) of the following statement, if x=10, y=20 & z=30. **[2]**

!(((x>=y) OR (y! =z)) AND (! (z==x) OR (y<z)))

Group – B: SECTION-I

[17 marks]

24) Write a Python program to enter age and display the Group according to the following list: **[2]**

Age range	Group
1-20	Red
21-40	Blue
41-55	Green
56 & above	Yellow

25) Write a Python program to find the sum of even numbers. **[2]**

26) Write a Python program to find the following output: **[2]**

```
*
* *
* * *
```

27) Write a Python code to find the factorial of number. **[2]**

28) Write a Python code to create a String say: *str= "Indo-Aryan Culture"* and display as given: **[3]**

    (i) Traverse the string i.e. show all the elements one by one.

    (ii) Display "Culture" from the string.

    (iii) What is the output of: print(str[0:4])

29) Write a Python program to create a list L=[10,20,30,40,50,60,70,80,90,100] and perform the following tasks: **[3]**

    (i) Display 20,30,40,50, from the list using +ve index.

    (ii) Display last 5 elements from the list.

    (iii) What is the output of: print (L [-5 **:** -1])

30) Write functions to perform the followings, on the list: L=[10,20,30,40,50,60,70,80,90,100] **[3]**

    (i) Enter an element 110 as the last element.

    (ii) Delete the 5th element and also return/show the deleted element.

    (iii) Re-Arrange the elements in descending order.

Group – B : SECTION-II

[18 marks]

31) Write a Python program to find S = (1) + (1+2) + (1+2+3) + ………. Nth term.   **[3]**

32) Write a Python program to enter a number and find reverse of the same.   **[3]**

33) Write a Python program to find s=1! + 2! +3! + …… Nth term.   **[3]**

34) Write a Python program to enter an element and check whether that is present in the list or not.   **[3]**

Assume the list is: L=[10,20,30,40,50,60,70,80,90,100]

35) Write a Python program to create an 4X5 (4-row & 5-col) empty 2-D List, and fill the list by entering values by the user.   **[3]**

36) Values for a Dictionary are in terms of Section and Average-marks given, in the following: **[1+2]**

A:	88.88
B:	89.90
C:	91.00
D:	78.99

Now answer the questions:

(i) Write code to create a Dictionary of the above data-set.

(ii) Write code to display Key & Values the dictionary.

###

Class:- XI **Subject:- Accountancy**

Time:- 3 Hrs. **F. M:- 80**

General Instructions:-

1. **There are 32 questions. All questions are compulsory.**
2. **Question No. 1 to 20 are very short answer type questions carrying 1 marks each.**
3. **Answer of each part should be written at one place. It should be brief and to the point.**
4. **Working notes compulsory.**

1. Original cost of an asset is Rs. 1, 26,000; Salvage value is Rs. 6000; Useful life 6 years. The rate of depreciation under straight line method will be:

   (1)
   a) 15.87%
   b) 16.67%
   c) 15.80%
   d) 16.56%

2. What will be the percentage of depreciation under SLM in the following case?

   (1)
   - Original cost of Machine   Rs. 1, 50,000
   - Salvage value after 9 years   Rs. 15,000
   - Repair Charges in 2nd Year   Rs..10,000
   a) 11.11%
   b) 10%
   c) 10.37%
   d) 9.37%

3. The arrangement is made for meeting future uncertainties:

   (1)
   a) Provision
   b) Reserves
   c) Provision and Reserves
   d) Investments.

4. Secret Reserve is shown in:

   (1)
   a) Profit and loss Account.
   b) Balance sheet on the asset side
   c) Balance sheet on the Liabilities side
   d) None of the above.

5. Reserve created by undervaluation of closing stock is called:

   (1)

a) Secret reserve.
b) General Reserve
c) Specific Reserve
d) Capital Reserve.

6. Which of the following statements are correct about a "Provision"? (1)

i. Provision are a charge against the profits of an enterprise
ii. Provision are created out of divisible profits
iii. Creation of provisions are not necessary for a business
iv. Provisions are created to meet a known Liability

a) (i) , (ii) and (iii)
b) (ii) and (iv) only
c) (i) , (iii) and (iv)
d) (i) and (iv) only

7. When a cheque deposited into bank is dishonored by bank, it will be recorded in cash book in (1)

a)   Bank column on debit side
b)   Bank column on credit side
c)   Cash column on debit side
d)   Cash column on credit side

8. Trade Discount allowed will be recorded in cash book in: (1)

a)   Cash column on credit side
b)   Discount column in debit side
c)   Discount column in credit side
d)   None of the above.

9. The advantages of sales book are: (1)

a) Knowledge of total price of goods sold on credit.
b) Price of goods sold to each party
c) Easiness in preparing trading account
d) All of the above.

10. Total of purchase Column in purchase book is posted to: (1)

a) Purchase A/c – Dr.
b) Purchase A/c – Cr.
c) Sales A/c – Dr.
d) Sales A/c – Cr.

11. Trade discount is: (1)

a) Which is allowed at the time of receiving the payment
b) Which is allowed at the time of sale of goods
c) Which is allowed both the time of receiving payment and sale of goods
d) Allowed in all of the above.

12. Accounting standards are formulated by (1)

2

a) By planning commission
b) By Institute of Chartered Accountants of India
c) By companies Act
d) By Institute of company Secretaries of India.

13.   As on 1ˢᵗ April 2020, the number of accounting standards specified by the Institute of Chartered Accountant of India is:

(1)

a) 29
b) 30
c) 31
d) 32.

14. Omission of paise and showing the round figures in financial statements is based on

(1)

a) Conservatism convention
b) Consistency concept
c) Materiality convention
d) Money measurement concept

15. Credit balance of personal account shows:

(1)

a) Profit
b) Loss
c) Asset
d) Liability

16. Debit balance of a real account shows:

(1)

a) Income
b) Expenditure
c) Asset
d) Liability

17. Debit balance of a nominal account shows:

(1)

a) Income
b) Expenditure
c) Asset
d) Liability

18. Credit balance of a nominal account shows:

(1)

a) Income
b) Expenditure
c) Asset
d) Liability

19.   Bank Reconciliation statement is:

(1)

a) An Account
b) A Subsidiary book
c) Bank Column of the cash book

d) A statement prepared to reconcile cash book and pass book balance.

20. Bank Reconciliation statement is prepared on:
    (1)
    a) At the end each of each month
    b) At the end of the year
    c) On a certain date
    d) Before the preparation of final accounts.

21. Explain any three qualitative characteristics of accounting information.
                    (3)

22. A) Shyam purchased a building for Rs. 20 Lakh. After a period of five years, the depreciation charged on the building amounted to Rs. 3 lakh. However, due to boom in the property market, the current market value of the building is Rs.28 lakh. State the value at which building should be recorded in the books of accounts. Also, give reasons for the same.

    B) "Materiality convention is an exception of the full disclosure concept". Do you agree with the above statement? Give reason in support of your answer.
                    (3)

23. A) Does cash basis of accounting violate GAAP? If yes, How?
    B) What is Accrual basis of accounting?
         (4)

24. Journalise the following transactions:
         (4)
    i.   Sold goods costing Rs.60, 000 to Dinesh against cheque at a profit of 40% on cost less 20% Trade discount and paid carriage Rs.500 (not to be charged from the customer).
    ii. Sold goods costing Rs. 45,000 to Manoj at a profit of $33\frac{1}{3}$ on cost less 20% Trade discount and paid carriage Rs. 400(to be charged from the customer)
    iii. Paid by Cheque Rs.6,000 as fire insurance premium for a period of 12 months starting 1st July 2017.Finncial year closes on 31st March every year.
    iv. Spent Rs. 300 for refreshment of a customer.

25.   Prepare a Trial Balance from the following information
                    (4)

	Rs.
Prepaid expenses	- 5,000
Outstanding Rent	- 2,000
Bad debts recovered	- 4,000
Interest on Investment	- 1,000
Due to Mohan	- 5,000
Bank overdraft	-

4

2,000	
Discount allowed	-
800	
Due from Vinod	-
1,200	
Investment	-
15,000	
Patent	-
4,000	
Machinery	-
6,000	
Capital	-
18,000	

.26.   From the following transaction of M/s Ridhima Sales, Kolkatta, Prepare Sales Book: (4)

 2021

March 1: Sold to M/S Gayatri Tea Assam, Vide Invoice No. 2005, 3 chest of tea for Rs.5000 per chest less Trade Discount @5%.

March 4: Sold to M/s Mohan and Sons, Kolkatta vide invoice no. 2006, 20kg Amul Butter @250 per Kg less Trade Discount @5%.

March 5: Sold to M/s Garry Sons, Delhi vide invoice no. 2007 , 20 kg Assam Tea @ Rs. 600 per kg less Trade Discount @ 5% Freight (Rs.1,000) and packing charges (Rs.600) were separately charged in the invoice.

March 6: Sold 10kg Amul Butter to Gangully Bros for cash @ Rs.250 per kg.

March7: Sold office furniture to Raman and Co. for Rs.10, 000.

27.   Enter the following transaction in the appropriate books of Original entries: (4)

 2021

April 1: Mohan Singh was declared insolvent and a sum of Rs.15, 000 could not be received.

April 4: Old Machinery was sold to Manish for Rs.5000.

April 5: Goods withdrawn from business for personal use of Rs.3, 000.

April 12: Purchased furniture from Raj Furniture House for shop for Rs.10, 000.

April 25: Goods of Rs.20,000 lost by fire.

April 28: Insurance Company accepted a fire insurance claim of Rs.15, 000 on April, 25th and cheque was received.

28.   Record the following transaction in double column cash book. (The transactions are in the year 2020)

Jan.1 Cash in Hand Rs.40, 000, Cash at Bank Rs. 10000(cr.)

Jan 3 Good Sold for cash Rs.20000 cash discount 10% GST @12%

Jan 5 Goods purchased for cash Rs.10000 cash discount 10% GST @12%

Jan 7 A cheque of Rs. 10000 received from Debtors a Discount allowed to him Rs. 1000.

Jan 9 A cheque of Rs. 18,000 issued to creditors and discount received @ 10%

Jan 11 Salary paid to workers @ Rs.27000 by cheque after deducting income tax @ 10%

Jan 13 Share purchased Rs.20, 000

Jan 15 Rs. 20,000 transfer from personal bank account to business bank account.

Jan 17 Interest charged by bank Rs.2000

Jan 19 Dividend collected by bank Rs.5000

Jan 21 Income Tax of worker paid by Cheque

(6)

29. On 30th June, 2016, the bank column of Anil's cash of showed a balance of Rs. 8,250. On the examination of the Cash Book and Balance statement you find that:

1. Out of the total cheque amounting to Rs. 8,000 issued, Cheques amounting to Rs.5, 800 have been presented for payment up to 30th June, 2016.
2. Out of the total cheques amounting to Rs.6, 000 sent to bank for collection, cheques of Rs. 4,100 were credited in Pass Book upto 30th June, 2016.
3. On 28th June a customer deposited Rs. 3,500 direct in the bank account but it was entered only in the Pass Book.
4. Debit side Anil's Cash book (Bank Column) has been overcast by Rs.100.
5. No entry has been made in the cash book for the rent of Rs. 800 paid by the bankers according to Anil's Standing Instructions.
6. The pass Book showed a credit of Rs 320 for interest and a debit of Rs. 40 for bank charges , but these have not been entered in the Cash Book.
   Prepare a Bank Reconciliation Statement as on 30th June, 2016.
   (6)

30. Show the effect of the following transactions on Assets, Liabilities and capital through accounting equation:

Rs.

a) Started business with Cash   1, 20,000
b) Rent Received   10,000
c) Invested in Shares   50,000
d) Received dividend   5,000
e) Purchased Goods on credit from Ragani 35,000
f) Paid cash for House Hold expenses   7,000
g) Sold goods for cash (Costing Rs.10,000) 14,000
h) Cash paid to Ragani   35,000
i) Deposited into Bank   20,000   (6)

31. On 1st Oct., 2016, X ltd .Purchase a Machinery for Rs.6, 00,000. On 31st May, 2018, a part of the Machinery purchased on 1st Oct., 2016 for Rs. 80,000 was sold for Rs. 30,000. On the same date fresh machinery was purchased for Rs. 1, 50,000. Depreciation is provided at 20% per annum on the written down value method and the books are closed on 31st March each year. You are required to prepare (a) Machinery Account, (b) Provision for Depreciation Account, and (c) Machinery Disposal Account.   (8)

32. Journalise the following:
    (8)

i. Received the V.P.P from Ram for Rs.20, 000. Sent a peon to collect it who paid Rs. 150 as cartage.

ii. Paid Rs.3, 000 for subscribing for newspapers and Magazines.

iii. Received Rs. 500 from sale of old newspapers and magazines.

iv. Received Rs. 10,000 from sale of old chairs, table etc.

v. Paid interest on loan Rs. 6,000.

vi. Withdrawn goods for personal use Rs.8, 000.

vii. Goods stolen – Cost price Rs.48, 000.

viii. Goods destroyed by fire – Cost Price Rs.1, 60,000.

ix. Sold goods to X on credit Rs.6, 00,000.

x. X returned 1/6th of the goods sold to him.

xi. X settles his account after deducting 10% discount for prompt payment.

xii. Salaries paid Rs.80, 000 and salaries owing (due) Rs.20, 000.

xiii. Paid income tax Rs.80, 000 by cheque.

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Class-XI   **Subject – Business Studies**
Time: 3 Hrs.   **Maximum Marks: 80**

General Instructions:

General Instructions:
1. This question paper contains 34 questions.
2. Marks are indicated against each question.
3. Answer should be brief and to the point.
4. Answers to the questions carrying 3 marks may be from 50 to 75 words.
5. Answers to questions carrying 4 marks may be about 150 words.
6. Answers to the questions carrying 6 marks may be about 200 words.
7. Attempt all parts of the question together.

1. Airtel is a big company providing telecom services to millions of people in India. Similarly, BSNL also provides telecom services to many people. Government of India is holding 100% of the share capital of BSNL, where as Airtel is not under the direct control of government. Identify the sectors in which these two enterprises are working.   [1]

2. Name the two important documents to be prepared by a proposed Government company that needs to be registered like any other public limited company under Companies Act, 2013.   [1]

3. Shambhavi has Rs.25,00,000 balance in her Savings Bank Account in Axis Bank. She has a good salary and at the end of every month, her balance in the savings account increases. Parvati, Manager of axis Bank, also Shambhavi's close friend, advised her to maintain an 'Account' which is a combination of both savings account and deposit account. Parvati told Shambhavi that this account interlinks the savings bank account with a deposit account and any amount in excess of a predetermined amount is automatically transferred to a fixed deposit and it will enable her to earn more interest. Identify the type of bank account advised by Parvati to Shambhavi.   [1]

4. Who is authorized to buy qualification shares in a Company form of organisation?   [1]

5. What do you mean by e-Business?   [1]

6. Identify the program that was launched by the Government of India on 25th September 2014 to encourage companies to manufacture their products in India and incentivize with dedicated investments into manufacturing.

   (A)Skill India   (B)Digital India
   (C)Make in India   (D)None of these   [1]

7. Registration is not compulsory in which of the following forms of business organizations?

    (A)Partnership and Joint Stock Company

    (B)Joint Hindu Family Business and Sole Proprietorship

    (C)Co – Operative Societies and Partnership

    (D)Joint Stock Company and Sole Proprietorship   [1]

8. It is similar to a cheque payable on order, either to the person whose name is mentioned in the Hundi or to any person so ordered by him.

    (A)Nam- Jog Hundi

    (B)Sah - Jog Hundi

    (C)Dhani- Jog Hundi

    (D)Firman- Jog Hundi   [1]

9. Social Responsibility is ____

    (A) Same as legal responsibility

    (B) Broader than Legal Responsibility

    (C) Narrower than Legal Responsibility

    (D) None of the above   [1]

(OR)

Business people have the skills to solve ____

    (A) All Social Problems

    (B) Some Social Problems

    (C) No Social Problems

    (D) None of these

10. Which of the following is not a type of General insurance?

    (A)Fire Insurance

    (B)Marine Insurance

    (C)Health Insurance

    (D)Life Insurance   [1]

11. In India, in the year 2005, the JJ Irani Expert Committee recommended the formation of One Person Company. OPC is a company with only one person as a member and shareholder of the company. That one person shall be _____

   (A) A Natural Person
   (B) Indian Citizen
   (C) Resident in India

   (D)All of these   [1]

12. The Joint Hindu Family business is controlled by the _____.
    (Fill in the blank)   [1]

                                         (OR)
    The Capital of the Company is divided into smaller parts called _____.
    (Fill in the blank)

13. State TRUE/FALSE for the following statement:
    "Transaction Risk is high in e-Business due to the distance, anonymity and non traceability of the parties."   [1]

14. State TRUE/FALSE For the following statement:
    "Participation in government programmes relating to management of hazardous substances, clearing up of polluted rivers, plantation of trees and checking deforestation is one of the important steps that can be taken by Business Enterprises in Environmental Protection."   [1]

    READ THE FOLLOWING PARAGRAPH and answer the questions from 15 TO 17

    Over the years, several business houses in India have shown their concern for social responsibility through their contribution to health, education and rural development programmes. For instance, Tatas set up Tata Institute of Social Sciences, Tata Institute of Fundamental Research and Tata Memorial Centre. Tata Steel Rural Development Society (TSRDS) launched Community Development Project in about 700 villages spread over Bihar, Odissa and M.P. The Lupin group launched Lupin Rural Support Programme in Rajasthan in 1988 to provide infrastructure so that the benefits of Government programmes reach the rural poor. Usha Martin set up Krishi Gram Vikas Kendra in Ranchi to reduce disparity in the living standards between their workers and other rural families.

15. Several Business houses in India have shown their concern for Social Responsibility through their contribution to _____
    (A)Health
    (B) Education
    (C) Rural Development
    (D)All the above   [1]

16. State TRUE/False for the following statement:

'The Lupin group launched Lupin Urban Support Programme in Rajasthan in 1998.'[1]

17. Usha Martin set up _____ in Ranchi to reduce disparity in the living standards between their workers and other rural families. (Fill in the Blank)   [1]

READ THE FOLLOWING PARAGRAPH and answer the questions from 18 TO 20

The Reserve Bank of India was established under a special Act of the Parliament, that lays down the objects, powers and functions of the corporation. It was established on 1st April, 1935 in accordance with the provisions of RBI Act, 1934. RBI formulates, implements and monitors the monetary policy and its main objective is to maintain price stability while keeping in mind the objective of growth.

18. How will you classify RBI as a form of Public Sector Enterprise?

(A) Departmental Undertaking

(B) Statutory Corporation

(C) Government Company

(D) None of these   [1]

19. RBI was established on 1st April,1935 in accordance with the provisions of _____

(A) Negotiable Instruments Act, 1881

(B) The Banking Regulation Act – 1949

(C) Reserve Bank of India Act, 1934

(D) None of these   [1]

20. Which of the following statement is FALSE in context with the above mentioned public sector enterprise.

(A) This type of organisation is wholly owned by the state.

(B) Funds of this type of organisations do not come from the central budget.

(C) This type of organizations are autonomous and they frame their own policies and procedures within the powers assigned to them by the Act.

(D) The employees of these enterprises are appointed by government and are governed by government rules and regulations.   [1]

21.   Railways and Post and Telegraph department are examples of this form of Public sector enterprises. Identify and explain any two features of it.   [3]

22. Mridul sent an e-Mail to his friend Saral who resides in US asking for financial help. Mridul shared with him that due to prolonged illness, his business suffered a lot. As a result, he was not able to repay the bank loan which he had taken for the expansion of his business. He also reminded Saral of his good times in business when he had helped Saral financially being the sole recipient of all business profits.

    (a) Identify and explain the form of business organisation that has been established

       by Mridul

    (b) Explain any two limitations of the same identified in (a) above.   [3]

(OR)

    Aman,Barun and Charan are partners in a partnership firm with Raju and Shyam. Aman has contributed for capital but does not participate in working of the partnership firm. Barun has contributed for capital and also participates in the working of partnership firm but his identity is not known to the public. Charan has given only his name and goodwill to the partnership firm for the sake of his son Raju.
    Identify the three types of partners discussed above and give the status of their liability.

23. What do you mean by Partnership Deed? List the contents of it. (Any Six Points)   [3]

(OR)

    Registration of a partnership firm is not compulsory, but it is desirable to get it registered. Give the reasons due to which a partnership firm should be registered.

24. "A business owes certain obligations towards different groups." Identify any two such groups and explain the specific responsibilities of business towards those groups.[3]

25. What are the benefits of e-Business? Explain any four points briefly.   [4]

26. "There is a strong case for the assumption of social responsibilities by business." Do you agree? Give any four arguments in support of your answer.   [4]

27. What do you mean by Business Risk?

    The following cases highlight the various situations in which entrepreneurs suffered huge losses. Identify and explain the cause of business risk indicated in the given cases.

    (a)   Alok's Factory was completely destroyed due to floods.

    (b)   Tarang was a leading manufacturer of basic keypad mobiles. However,

           demand for such mobiles drastically decreased after the origin of smart phones.

(c) Craft Ltd. is known for its technically advanced gadgets. The company is planning to launch a latest model of speakers, which is not yet released in India. However, before the company could bring out its model, the same type of speaker was launched by one of its competitor. On scrutiny, it was discovered that one of the employees shared the technical aspects of the speaker with the competitor. [4]

28. What do you mean by services? Explain the types of services briefly. [4]

(OR)

What do you mean by e-Banking? List the range of services offered by e-Banking. (Any Four}

29. It is a Public Sector Enterprise established under Indian Companies Act and conducts business in competition with companies in Private Sector.

(a) Identify the type of Public Sector enterprise.

(b) What is the minimum investment Government has to make in such companies ?

(c) Explain any two advantages of such companies. [4]

30. Explain the types of partnerships on the basis of duration and on the basis of liability briefly. [4]

[OR]

What do you mean by Co-Operative Societies? Explain any Three Merits of the Co-Operative societies briefly.

31. Explain the following Principles of Insurance with the help of suitable examples:

(i) Utmost Good Faith

(ii) Insurable Interest

(iii) Causa Proxima

(iv) Subrogation [6]

32. Differentiate between Private Ltd. Company and Public Ltd. Company on the basis of the following: (Columnar presentation is required)

(i)Minimum and Maximum Number of members

(ii) Minimum Number of Directors

(iii)Commencement of Business

(iv) Public Subscription

(v) Index of Members

(vi) Transfer of shares [6]

A Public Company can raise the required funds by means of issuing shares and debentures to the public. The company has to issue a prospectus, an invitation to the public to subscribe to the capital of the company and undergo various other formalities. The first two steps in the process of raising funds are SEBI Approval and Filing of Prospectus. Explain the next Four Steps briefly . (Follow the order of steps)

33.   Explain the characteristics of Business briefly.   (Any six points)   [6]

[OR]
    Explain the multiple objectives of Business briefly.   (Any six points)

34.   'SAREGAMA Ltd.' is a popular music company. Keeping in line with the changing trends the company uses various types of e-business activities to operate successfully. The company interacts through a network of computers with a number of other business firms which may be suppliers or sales persons. The company carries out a number of promotional activities and sometimes even delivery of products (e.g., music or films) that are carried out online. The company has set up call centres for the customers to make toll free calls to make queries and lodge complaints round the clock at no extra cost to them. The company makes use of intranet for managing interactions and dealings among various departments and persons within the organisation. The company provides Virtual Private Network (VPN) technology because of which it is not necessary for the employees to come to the office and the meetings can be held online via video conferencing. The company uses the financial intermediaries like Pay Pal in order to facilitate payments online.
Identify the various types of electronic transactions and networks used by 'SAREGAMA Ltd.' by quoting lines from the above paragraph. (Copy the relevant sentence from the above paragraph and name the network used, against it.)   [6]

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DELHI PUBLIC SCHOOL

SAIL TOWNSHIP RANCHI
HALF YEARLY EXAMINATION (2021-2022)

Class: XI   **Subject: Economics**
Time: 3 Hours   **M. Marks: 80**

General instructions:

i)   *All question in both section are compulsory.*

ii)   *Question no. 1-10 and 18-27 are 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 30-32are 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. **Read the following statements — Assertion (A) and Reason (R). choose one of the correct alternatives given below:**   [1]
   Assertion (A): Production possibility curve is downward sloping straight line.
   Reason (R) : To gain an additional unit of one commodity we have to sacrifice the same units of another commodity.
   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

2. A country has 2 alternative of production as 50X+100Y or 51X+98Y from the given resources available. If the country chooses the second alternative. What is the marginal opportunity cost of producing X:
   A) 3Y   B)4X   C)2Y   D)6Y   [1]

3. When total utility curve begins to fall, then marginal utility curve turns:
   a) Unity   b) negative   c) zero   d) positive   [1]

4. In case of consumer's equilibrium with two commodities when the price of x falls: [1]
   a) Consumer starts to buy more units of y
   b) Consumer starts to buy less units of x
   c) Consumer starts to buy more units of x
   d) Consumer does not change his purchase

5. Define price line.   [1]

6. What is monotonic preferences? [1]

Read the following and answer the question numbers 7and 8 on the basis of same:

if our income rises, we generally tend to buy more of the goods. More income would mean more pens, more shirts, more shoes, more cars and so on. But there are exceptions. If initially, you are buying coarse grain, how would you take your increase in income now? Perhaps, as a first step, you would discard the consumption of inferiors. Surely, this happens in the deserts of Rajasthan where the rich minority eats wheat while the poor majority eats Bajra as their staple food

7. The law of demand does not apply to _____ goods. (normal/giffen) [1]

8. Inferior goods are those whose income effect is _____. (Negative/ Positive). [1]

9. When the price of a commodity is rs. 10 per unit , its quantity demanded is 800 units. When price rises by rs. 4 per unit, its quantity demanded falls by 20 %. In this case elasticity of demand is:

   a) Zero   b) unity   c) more than unity   d) less than unity [1]

10. How is the price elasticity of demand related to a vertical straight line demand curve?

[1]

11. Explain the concept of marginal rate of transformation using a production possibility schedule based on the assumption that all resources are equally efficient in production of all goods. [3]

OR

Why central problem arises? Explain the problem of 'How to produce'.

12. Rahul consume two commodities X and Y whose prices are rs. 8 and rs. 12 per unit respectively. He is in a state of equilibrium when MU_x = 3 and MU_y = 2, then according to utility approach Rahul strikes his equilibrium? If not, then what will be his reaction?

[3]

13. Due to high level of unemployment, government starts employment generation schemes MNREGA. Explain its effect using PPC. [4]

14. What will be the effect on Demand curve for a commodity if the prices of related good increases? [4]

OR

Suppose consumers receive the information that cold drinks contain harmful chemicals. What will be its impact on demand curve for cold drinks? Show with the help of diagram.

15. When price of a good is rs. 8 per unit a consumer buys 12 units. When price falls to rs. 6 per unit he spends rs. 72 on the good. Calculate price elasticity of demand. Comment on the likely shape of demand curve based on this measure of elasticity. [4]

16. Explain the consumer equilibrium with the help of indifference curve analysis using diagram.

OR

Explain any three properties of indifference curve. [6]

17. Explain the inverse relation between price and quantity demanded with the help of utility analysis. Also explain two factors affecting elasticity of demand. [6]

SECTION - B

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

    Assertion (A):statistical methods are no substitute for common sense.

    Reason (R) : like scientific laws, statistics laws are perfectly accurate.

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

    Assertion (A):data collected by investigator is called the secondary data.

    Reason (R) : there is a certain bias involved in the non-random selection of samples.

    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

20. What is loss of information in classified data? [1]

21. The class mark of 60-80 is: [1]

    a) 60   b) 70   c) 80   d) 140

22. A table shows more than one characteristic of data is called [1]

    a) Derivative table   b) general table   c) complex table   d) original table

23. What kind of diagram can be used to represent net profit and loss of a company for a period of 5 years? [1]

    a) Deviation bar diagram
    b) Broken bar diagram
    c) Percentage bar diagram
    d) Simple bar diagram

24. Which diagram is preferred to show the data in a series in which some values may be very small and some very large? [1]
    a) Multiple bar diagram
    b) Broken bar diagram
    c) Percentage bar diagram
    d) Simple bar diagram

25. Data represented through a Histogram can help in finding graphically the ____.   [1]
    a) Mean
    b) Mode
    c) Median
    d) All the above

26. The price rise of a particular commodity over a period of time can be better presented on a
                                                                                    [1]
    a) Bar diagram
    b) Histogram
    c) Time series graph
    d) Frequency polygon

27. Which average is affected most by the extreme observations?   [1]
    a) Mean
    b) Mode
    c) Median
    d) None

28. Define random sampling. How is it different from haphazard sampling?   [3]
                                    OR
    What is meant by stratified sampling? Explain with an example.

29. Convert the following into more than frequency distribution: [3]

Marks below	10	20	30	40	50	60
Frequency	2	15	33	50	60	63

30. In a trip, organised by a college, there were 80 people, each of whom paid Rs. 15.50 on an average. There were 60 students, each of whom paid Rs 16. Members of teaching staff were charged at a higher rate, the number of servants (all males) were 6 and they were not charged anything. The number of females were 20% of the total and there was only one female staff member.
    Present the following information in a suitable table.   [4]

                                    OR

    Census of India 2001, population of India was 102 crore of which 74 crore people were residing in rural areas and only 28 crore people were living in urban areas, 62 crore people were non-working and 40 crore people were working (workers) in the whole country. In urban areas, non-workers were 19 crores against 9 crore workers. As compared to it, in rural areas there were 31 crore workers out of 74 crore rural population.

31. Present the following data with the help of histogram: [4]

X	0-5	5-20	20-40	40-70	70-100
F	10	60	80	120	210

32. Show with illustration that sum of deviations from arithmetic mean is zero and square sum of deviation from mean is least.   [4]

Pg – 4 of 5

33. What is false base line? Under what conditions would its use is desirable? Draw a 'less than' and 'more than' ogive from the following data given below:- [6]

Weekly wages	0-20	20-40	40-60	60-80	80-100
No. of workers	10	20	40	20	10

OR

Mention the general rules to construct a graph. Prepare a time series graph showing total cost and total production of a scooter manufacturing company.

year	2012	2013	2014	2015	2016
Production (in units)	8500	9990	11700	13300	15600
Total cost (in lakh)	24	29	34	45	49

34. Calculate the following: [6]

   a) 80 students of class XI-A secured 60 mean marks in English and 20 students of XI-B secured 70 mean marks in English. Find combine mean marks.

   b) Find out the missing frequency for the following if arithmetic mean is 23.

marks	0-10	10-20	20-30	30-40	40-50
No. of students	4	8	?	6	2

****

Class:- XI	**Subject:- History**
Time – 3 Hrs.	**F.M. :-80**

General Instructions: -

1. Answer all the questions. Some questions have internal choice. 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 /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 marks, question number 20-23, should not exceed 100 words each.
5. Section D: answer to questions carrying eight marks, 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 or location of significant test items.

Section - A

1. Who wrote the Al-Qunun fill Tibb (Canon of Medicine)?
2. Name the language used to write the sacred books of Ancient Iran?
3. Read the following information And mention the context in which the statement is connected:

   "Ultimately, the messenger 'grew vary of mouth ':He got all the messages mixed up."
4. Name the two rivers which was on the two sides of Mesopotamia.
5. Match the following

   A. 622AD1. Mohammad declared himself as the prophat of God

   B. 612AD2. End of Ummayyad dynasty

   C. 1095AD3. Beginning of Hijr calender

   D. 750 AD4. First Crusade

   Codes
   ```
        A   B   C   D
   a.   3   1   4   2
   b.   1   2   3   4
   c.   3   1   2   4
   d.   2   1   4   3
   ```

6. Correct the sentence and rewrite.

   Water was a sacred element and use it for public bathing may have seemed desecration to the Romans

7. Arrange the penetration of the following languages to the land of Mesopotamia chronologically

   I.   Aramic
   II. Sumerian
   III. Akkadian

8. Name the gold coin introduced by constantine.

9. Whose period was known as the Golden period of Roman empire?

10. Who among the following is the narrator of Thousand and one nights?

    a. Shahnama

    b. Shahrzad

    c. Shahasim

    d. Shahdhuri

11. Which among the following Roman emperors accepted Christianity as the state religion of the Roman Empire?

    a. Trajan

    b. Constantine

    c. Tiberius

    d. Augustus

12. Which among the following places became the centre of persian literary life by the beginning of eleventh century ?

    a. Ghazni

    b. Giza

    c. Kabol

    d. Ghor

13. What is the differences between *nazm* and *nathr*?

14. Read the following statement about Islamic Art and Architecture carefully.

    1. The islamic patten of buildings had a central courtyard where the picture of Allah was kept?
    2. Calligraphy was considered as an art form.
    3. Khattati and arabesque were the two art forms promoted by islam

       Which of the above statements is/are correct?

Pg – 2 of 7

a. 1, 2 & 3

b. 2 & 3

c. Only 1

d. 1&2

15. Assertion(A): Egyptian peasants deserted their villages.

Reason (R) :agricultural labour must have been fatiguing and disliked

codes.

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. A isfalse but R is true.

16. Identify thecharacters given in the following image and write their names.

Section –B

17. Study the Above picture carefully and answer any three of the following questions:

i.   Identify the building   1mark
      a. A Madrasa
      b. A school of Law
      c. A mosque
      d. A cathedral

ii.   Choose the correct option.   1 marks
Assertion (A) :Sharia was collection of   Islamic laws
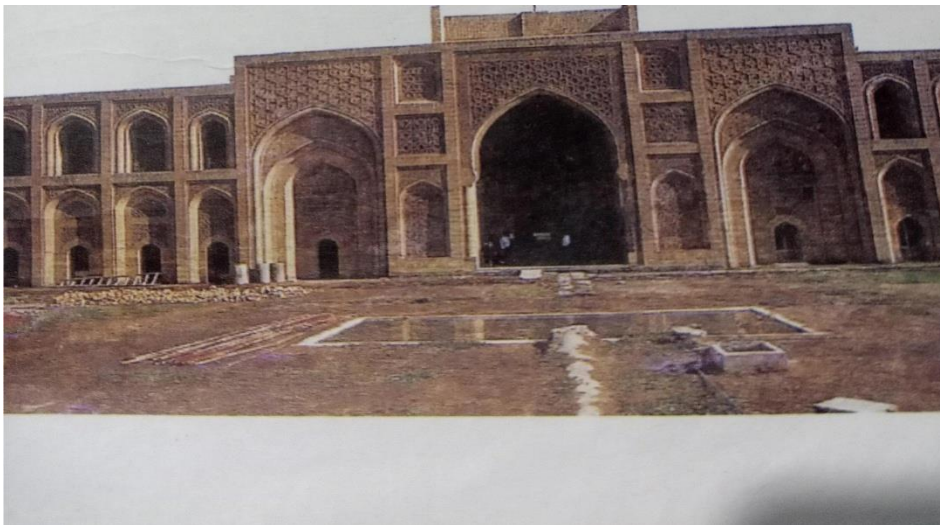Reason (R):The Islamic laws were directly made by Muhammad the prophet

      a. Both A and R are true and R is the correct explanation of A.
      b. Both A and R are true, but are is not the correct explanation of A.
      c. A is true, but R is true
      d. A is false, but R is true

iii.   The basic islamic education unit was known as   1 marks
      a. Maktab
      b. Madrasa
      c. Mosque
      d. Muamalat

iv. Which of the following islamic school of law was more conservative?   1 marks

      a. Maliki
      b. Shafi
      c. Hanabali
      d. Hanafi

18. Read the following passage and any three of the following questions.

The regime established by Augustus the first emperor in 27BCE, was called the Principate. Although Augustus was the sole ruler and the only real source of authority, the fiction was kept alive that he was actually the leading citizen (Princeps in Latin not absolute. This was done out of respect for the senate. The senate had existed in Rome for centuries and it had been and remained a body representing the aristocracy, that is, the wealthiest families of Roman and later Italian descent mainly landowners. The emperors were judged by how they behaved towards the senate. The worst emperors were those who were hostile to the senatorial class, behaving with suspicious or brutality and violence. "

      i.   What is the meaning of principate
        a. Leading citizen
        b. The regime established by Augustus
        c. An empire.
        d. The country

ii.   Who established the Roman empire
   a. The senate
   b. Augustus
   c. Julian
   d. Justinian

iii.   Why senate was treated with respect
   a. It existed in Rome for centuries
   b. It was a body of representatives of the aristocrats
   c. The people considered them with respect
   d. All of the above

iv.   Who was the real source of authority in Roman Empire?
   a. The emperor
   b. The senat
   c. The army
   d. None of the above

19. Read the following passage and any three of the following questions.

"This women's head was sculptured in white marble at Uruk before 3000 BCE. The eyesand eyebrows would probably have taken Lapis Lazuli(Blue)and shell (white)and bitumen (black) inlays, respectively. There is a groove along the top of the head, perhaps for an ornament. This is a world famous piece of sculpture, admired for the delicate modelling of the woman's mouth, chin and cheeks. And it was modelled in a hard stone that would have been imported from a distance."

i.   What is this passage about?
   a. A roman sculpture
   b. The Warka head of Mesopotamia
   c. The sculpture at the Islamic empire
   d. The warka head of a noble in France

ii. Uruk was a famous city in

   a. Rome
   b. Mesopitamia
   c. Arabia
   d. France

iii.The eyes of the sculpture were ----in colour

   a. Blur
   b. Blue
   c. Black
   d. White

iv. It is regarded as a world renowned piece of sculpture for it
   a. Mouth
   b. Chin
   c. Cheek
   d. All of the above

Section - C

20. Explain the social system of Rome in early and late empire.   3 marks
21. What do you understand about the religion of Mesopotamia?   3Marks
22. Explain the position of women in the Roman empire.   3 marks
23. Explain vassalage system.   3 marks

Section D

24. Explain Fuedalism 8marks
25. Did the sufis follow Muhammad? Explain sufism based on the teachings of the
   Prophet.   8marks
26. Explain the the uses of writing keeping the mesopotamian civilisation in mind.   8marks

Section - E

27. Read the following passage carefully an answer the questions that follow.
   "How many valient men, how many fair ladies, (had) breakfast with their kinfolk and the
   same night supped with their ancestors in the next World! The condition of the people was
   pitiable to behold. They sickened by the thousands daily, and died unattended and without
   help. Many died in the open street, other dying in their houses, made it known by the strench
   of their rotting bodies. Consecrated church yards did not suffice for the burial of the vast
   multitude of bodies, which were heaped by the hundreds in vast trenches, like goods in a
   shipshold and covered with a little earth. "

   1. The calamity of which period is been described in the given paragraph?
   2. Why did people suddenly began to die in thousands
   3. Why did people heap in the hundreds in trenches?
   4. Name the deadly epidemic because of which a large chunk of European population
      fell prey to death.

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

   A man of the southern marshes, Nabopolassar, released Babylonia from Assyrian domination
   and 625 BCE. His successes increased that territory and organised building projects at Babylon.
   From that time, even after the achaemaenids of Iran conquered Babylon in 539 BCE and under
   331 BCE when Alexander conquered Babylon, Babylon was the Premier city of the world
   Nabonidus was the last ruler of independent Babylon. He writes that the God of Ur came to
   him in a dream and ordered him to appoint a priestess to take charge of the Cult in that
   ancient town in deep South. He writes "because for a very long time the office of High

Priestess had been forgotten, her characteristic features nowhere indicated I bethought myself day after day…"Then, he says, he found the stele of a very early King whom we today date about 1150 BCE and saw on the stele the carved image of the priestess. He observed the clothing and jewellery that was depicted. This is how he was able to dress his daughter for her consecration as Priestess.

On another occasion, Nabonidus men brought to him a broken statue inscribed with the name of Sargon, King of Akkad.(we know today that the latter rulled around 2370 BCE) Nabonidus, and indeed many intellectuals, and heard of this great King of remote times. Nabodinus felt he had to repair the statue. 'Because of my reverence for the Gods and respect for kingship', he writes, I summoned skilled craftsmen, and replaced the head.

1. When and by whom Babylonia was released from Assyrian domination?   1
2. Who was Nabonidus?   2
3. Why do you think that Nabonidus had cherished early Mesopotamian traditions? 2

29. Read the following passage carefully and answer the questions that follow.
"The regime established by Augustus, the first emperor, in 27 BCE, was called the 'Principate'. Although Augustus was the sole ruler and only real source of authority, the fiction was kept alive that he was actually 'the leading citizen '
(princeps in Latin), not the absolute ruler. This was done out of respect for the Senate. The Senate had existed in Rome for centuries and it had been remained a body representing the aristocracy, that is, the wealthiest families of Rome and later, Italian descent mainly landowners. The emperors were judged by how they behaved towards the Senate. The worst emperors were those who were hostile to the senatorial class, behaving with suspicion or brutality and violence ".

1.What do you mean by 'Principate'?   2
2. How were the Roman emperors judged by?   1
3. What do you understand by the Senate?   2

Section - F

30. Identify the following places. And their names.

1. The place where enmerker ruled.

2. The place where olive oil was famous in Roman Empire.

3. The place where Sasanians ruled.

4. The place where the main shrine of the tribes of Arabia existed.

5. The place for which the crusades started.

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Class-XI **Subject – Political Science**
Time: 3 Hrs. **Maximum Marks: 80**

General Instructions:-
➢ _All questions are compulsory._
➢ _Answer to one mark question should not exceed 20 words._
➢ _Answer to two marks question should not exceed 40 words._
➢ _Answer to four marks question should not exceed 100 words._
➢ _Answer to six marks question should not exceed 150 words._

SECTION A (MCQs) (1 Marks each)

1. After October 2002 which party was in the forefront of the struggle for a popularly elected constituent assembly?

   (a) CPI(M)
   (b) The Communist Party of Nepal (Marxist)
   (c) The Communist Party of Nepal (Leninist)
   (d) The Communist Party of Nepal (Maoist)

2. How many members of the Constituent Assembly signed the constitution after 24th of January 1950?

   (a) 15
   (b) 284
   (c) 11
   (d) None

3. When did Dr. Rajendra Prasad in the constituent assembly said that- "… I have realised as nobody else could have, with what zeal and devotion the members of the drafting committee and especially its chairman Dr Ambedkar in spite of his indifferent health, have worked. We could never make a decision which was or could be ever so right as when we put him on the Drafting Committee and made him its chairman…"

   (a) 24th October 1949
   (b) 26th November 1949
   (c) 24th January 1950
   (d) 15th August 1949

4. Aristides Esteban Hernandez Guerrero made a cartoon called "Castle of Cards" describing the constitution of which nation?
   (a) India
   (b) Pakistan
   (c) Iraq
   (d) United Kingdom

5. How many seats were won by CPI(M) in the Lok Sabha elections of 1984?
   (a) 02
   (b) 08
   (c) 12
   (d) 22

6. A party must get a minimum of what percent of votes in order to be eligible to get seats in the Knesset?
   (a) 1.5
   (b) 2
   (c) 2.5
   (d) 5

7. What was the percentage of votes which DMK got in the Tamil Nadu assembly elections of 1996?
   (a) 42
   (b) 42.1
   (c) 42.2
   (d) 42.3

8. "Separate electorates have been a curse to India, have done incalculable harm to this country…Separate electorates have barred our progress. Separate electorates have gone for ever. We desire neither reservation nor separate electorates. We want to merge in the nation. We desire to stand on our own legs. We do not want the support of anyone. We are not weak. We are strong. We are Indians first and we are Indians last. (Hear, Hear). We know of no other country, no other nation. We are all Indians and will remain Indians. We shall fight for the honour and glory of India and we shall die for it…then for god's sake keep your hands observation for the Muslim community. We do not want statutory safeguard. As I said before, we must stand on our own legs. If we do that, we will have no inferiority complex. We are not inferior to you in any way there is no difference between you and me. Because we worship the same God by different names, in a different way, that is no reason why we should be considered a minority. We are not minorities." Who said these lines in the constituent assembly?

(a) Begum Qudsia Aizaz Rasul
(b) Asaf Ali
(c) Aruna Asaf Ali
(d) Tajamul Hussain

9. The Republic opens with a dialogue between Socrates and whom?
   (a) Plato
   (b) Cephalus
   (c) Polemarchus
   (d) Polemarchus's wife

10. Who is Netizen?
    (a) Citizen of the internet
    (b) A renowned political theorist and a contemporary of Plato
    (c) A renowned political theorist and a contemporary of Rousseau
    (d) A renowned political theorist and a contemporary of the 21st century

11. *"If we are to bring about a revolution of ideas, we have first to hold up before us an ideal which will galvanise our whole life. That ideal is freedom. But freedom is a word which has varied connotations and, even in our country, the conception of freedom has undergone a process of evolution. By freedom, I mean all round freedom, i.e., freedom for the individual as well as for society; freedom for the rich as well as for the poor; freedom for men as well as for women; freedom for all individuals and for all classes."* When and where did Subhash Chandra Bose say the above lines?
    (a) Lahore, 1929
    (b) Kolkata, 1939
    (c) Pune, 1942
    (d) Kanpur, 1932

12. Which of the following books was written by John Stuart Mill?
    (a) On Liberty
    (b) Harm Principle
    (c) Freedom and life
    (d) Equality Justice & Liberty a trinity

13. "In the kingdom of ends everything has either a price or a dignity. What has a price can be replaced by something else as its equivalent; what on the other hand is raised above all price and therefore admits of no equivalent has a dignity." Who said these lines?
    (a) Mahatma Gandhi
    (b) Dr B.R. Ambedkar
    (c) Subhash Chandra Bose
    (d) None of the above

14. Immanuel Kant was a?
     (a) German philosopher
     (b) British philosopher
     (c) American Philosopher
     (d) Roman Philosopher

15. When did the General Assembly of the United Nations adopted and proclaimed the Universal Declaration of Human Rights?
     (a) 10th September 1948
     (b) 10th October 1948
     (c) 10th November 1948
     (d) 10th December 1948

16. Who amongst the following was a pop star wo appealed the western governments to end poverty in Africa?
     (a) Bob Orton
     (b) Bob Ross
     (c) Bob Geldof
     (d) Bob Gunton

SECTION B (Source based)

17. Different countries may try to protect such values by enshrining them in their constitutions as is the case with the American and Indian constitutions. These documents did not just emerge overnight; they are built upon the ideas and principles debated almost since the time of Kautilya, Aristotle to Jean Jacques Rousseau, Karl Marx, Gandhi and Ambedkar.

   (i)   Who first argued for freedom as a fundamental right of humankind?
     (a) Gandhi
     (b) Rousseau
     (c) Aristotle
     (d) Marx

   (ii)   Gandhi wrote Hind Swaraj in which year?
     (a) 1909
     (b) 1910
     (c) 1901
     (d) 1921

   (iii)   Who said "Liberty cannot be divorced from equality, equality cannot be divorced from liberty. Nor can liberty and equality be divorced from fraternity"
     (a) Ambedkar
     (b) Gandhi
     (c) Marx
     (d) Rousseau

   (iv)   Who was Aristotle's teacher?
     (a) Plato
     (b) Socrates
     (c) Sophists
     (d) Polemarchus   [1x4=4]

18. The constitution of India was made by its extremely diverse, accommodative and brilliant constituent assembly where the importance of public reason was emphasised in the mundane procedures of assembly as well. There were several committees and sub-committees who formulated one of the best constitutions of the world in a long span of time. There were members who agreed and those who didn't but every single individual in the assembly tried to give his best in making the constitution of a modern, independent and free India.   [1x4=4]

   (i)   How many major committees were there in the constituent assembly?
           (a) 22
           (b) 8
           (c) 12
           (d) 9
   (ii)   Assembly met for how many days?
           (a) 106
           (b) 116
           (c) 160
           (d) 166
   (iii)   The number of days the assembly met was spread over how many years and months?
           (a) 2 years, 11 months
           (b) 2 years
           (c) 2 years, 10 months
           (d) 1 year, 8 months
   (iv)   What was the percentage of seats occupied by the congress in the constituent assembly after partition?
           (a) 86
           (b) 82
           (c) 80
           (d) 96

SECTION -C (2 MARKS EACH)

19. When and why did the Election commission postpone the election process to the Lok Sabha mid-way?
20. So according to NCERT what are the two major ways in which the Political theorists clarify the meaning of the political concepts?
21. Name the two books and their authors as mentioned in NCERT in the chapter Freedom, which were banded in India after protests from some sections of the society.
22. What are the two arguments on which the Moral Conception of rights rests?

SECTION D (4 marks each)

23. Briefly describe the composition of the constituent assembly, and elaborate the three major factors ensuring the effectiveness of a constitution. (With special reference to the Indian constitution)   (1+3=4)

24. Mention 4 points of distinctions between FPTP and PR system of elections. Also describe how PR works in Rajya Sabha elections. (Mentioning the formula used for calculating minimum quota of votes to be a winner, full form of STV) (2+2=4)

25. How do politics arise? Describe three major dimensions which we study in political theory. (1+3=4)

26. What are the 4 basic arguments which John Stuart Mill offered as reasons for why there should be freedom of expression.

27. Which organ of UN proclaimed the universal declaration of human rights as a common standard of achievement for all people and all nations? What are the 6 basic points which one can extract from the Preamble of the universal declaration of human rights by the UN. (1+3=4)

SECTION E (6 marks each)

28. Define what is Objective Resolution and its significance in context of the Indian Constitution also mentioning who moved it and when (mention the month and year). Describe the 8 main points of the objective resolution. (2+4=6)

29. Mention 5 major factors to which we can attribute the success of India's election system. And suggest any 2 relevant electoral reforms. (5+1=6)

30. Define freedom in detail. And also discuss at length the concept analogous to freedom in the Indian political thought. (3+3=6)

SECTION - F   (5marks)

31.

(a) Who are the 2 leaders standing opposite to Nehru and Patel trying to hear the opposition leader? (2)
(b) Who made this cartoon? (1)
(c) In which year was the cartoon made? (1)
(d) During the term of congress government represented in the cartoon who was the informally recognized Leader of opposition? (1)

32.

Mark on the map as per the given information and also write the name of the nation.

(a) From the constitution of which country our constitution adopted the principles of liberty, equality and fraternity?

(b) From the constitution of which country our constitution adopted the idea of residual powers?

(c) From the constitution of which country our constitution adopted the law-making procedure?

(d) From the constitution of which country our constitution adopted the DPSP?

(e) From the constitution of which country our constitution adopted the power of the judicial review and the independence of judiciary?

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DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2021-2022)

Class:- XI	**Subject:-Sociology**
Time – 3 Hrs.	**F.M. :-80**

General Instructions:-

1. Section A includes question No. 1-16 . These are objective type questions carrying 1 mark each.
2. 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.
3. Section C includes question No. 26 to 32. These are short answer type questions Carrying 4 marks each .Answer to each question word limit should not exceed 80 words . Question 26 and 27 are case study based questions with 4 parts each carrying 1 mark each, marking the questions of 4 marks each.
4. Section D includes question No. 33 -35. They are long answer type questions carrying 6 marks each. Question number 35 is to be answered with the help of the passage.

<u>**SECTION - A**</u> [1x16=16]

1. The behaviour, obligations and privileges attached to social status is known as----
   A. Status set
   B. Role set
   C. Social role
   D. Status symbol

2. The contemporary History now also focuses on social patterns, gender, relations, customs, etc. The credit for it goes to
   A. Political science
   B. Sociology
   C. Psychology
   D. Social Anthropology

3. Whose idea led to the comparison of the society with living organisms?
   A. Max Weber
   B.Auguste comte
   C. Charles Darwin
   D. Karl Marx

4. -----------is the science of behaviour which involves itself primarily.

   A. Anthropology
   B. Psychology
   C. Social Anthropology
   D. None of these

5. Which of these is an example of a quasi group?

   A. Classmates

   B. Office colleagues

   C. Cinema audience

   D. Relatives

6. Who among the following used the term' life chances 'which refers to the rewards and advantages afforded by market capacity?

   A. Max Weber

   B. Karl Marx

   C. Emile Durkheim

   D. None of the above

7. --------- groups are relatively large in size maintain formal and impersonal relationships.

   A. Primary

   B. Quasi

   C. Secondary

   D. Reference

8. Social position in society is known as -----

   A. Class

   B. Role

   C. Status

   D. Caste

9. Which of the following is the most common form of marriage?

   A. Polygamy
   B. Polyandry
   C. .Monogamy
   D. Polygyny

10. Which of the following rights includes the rights to own property?

    A. Social rights

    B. Civil rights

    C. Political rights

    D. None of these

11. According to sociologist----,the number of joint families has gradually increased in post independence India. According to him, the rising life expectancy in India is a contributing factor.

    A.   A.M. Shah

    B.   Emile Durkheim

    C.   Herbert Spencer

    D.   George Simmel

12. A family where couple lives with the man's parents is called------

    A. Matrilineal

    B. Patrilineal

    C. Matrilocal

    D. Patrilocal

13. Who is the founder of the functional school of Anthropology?

    A. Leslie White

    B. Edward Taylor

    C. Clifford Geertz

    D. Bronislaw Malinowski

14. Normative aspects of culture include------

    A. Learning and understanding

    B. Technology

    C. Folkways, customs and conventions

    D. None of the above

15. The most important agent of Socialisation in the early childhood is----

   A. Family

   B. Peer group

   C. School

   D. Mass media

16. ------- culture refers to the intangible elements of culture

   A. Material

   B. Non-material

   C. Explicit

   D. Mass

SECTION - B   **[2x9=18]**

17. What is society?

18. How Sociology is a progressive science?

19. What is Peer group?

20. What do you understand by the term Social Control?

21. What are aggregate in relation to Sociology?

           OR

   What is Sanction?

22. What do you understand by the term Consanguinous kinship?

23. What do you mean by Stateless Society?

24. What are the main elements of culture?

25. Describe the Cosmopolitan outlook to culture.

           OR

   What are Social Values?

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

Role stereotyping is a process of reinforcing some specific role for some members of the society. For example, men and women are often socialised in stereotypical roles, as breadwinner and homemaker respectively. Social roles and statuses are often wrongly seen as fixed and unchanging. It is felt that individuals learn the expectations that surround social positions in their particular culture and perform these roles largely as they have been defined. Through Socialisation, individuals internalise social roles and learn how to carry them out. It suggests that individuals simply take on roles, rather than creating or negotiating them. In fact, Socialisation is a process in which humans can exercise agency; they are not simply passive subjects waiting to be instructed or programmed.

(i)   Durkheim's-------- is a theoretical viewpoint founded on the idea that social phenomena can be explained in terms of the purpose they serve.
    A. Association
    B. Functionalism
    C. Aggression
    D. Stratification

(ii)   The role of a person in a community or society is referred to as--- --. Each------ has been given specific rights and responsibilities.
    A. Status
    B. Concept
    C. Role
    D. All of these

(iii) A ------ is a mode of reward or punishment that reinforces socially expected forms of behaviour.

    A. Peer group
    B. Social group
    C. Sanction
    D. Secondary group

(iv) -------- believe that the scarcity and value of resources produces conflict as groups

struggle to gain access to and control those resources.

    A. Deviance
    B. Status
    C. Sanction
    D. Conflict

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

Political institutions are concerned with the distribution of power in society. Two concepts, which are critical to the understanding of political institutions, are power and authority. Power is the ability of individuals or groups to carry out their will even when opposed by others. It implies that those who hold power do so at the cost of others. There is a fixed amount of power in a society and if some wield power others do not. In other words, an individual or group does not hold power in isolation, they hold it in relation to others.

(i) Around sixty years ago, social anthropologists conducted empirical studies of-------- to explain how order can be preserved in the absence of a modern governing apparatus.

    A. Stateless society

    B. Empirical societies

    C. Modern states

    D. D.Nationalism

(ii) Citizenship Rights include --- . Civil rights involve the freedom of individuals to live where they choose to.

    A. Civil

    B.Political

    C. Social

    D. All of these

(iii) ----- is a collection of symbols and values that give people a sense of belonging to a single political group.

    A. Nationalism

    B. Regionalism

    C. Fascism

    D. Communism

(iv) ----- is a branch of Protestant Christianity.

    A. Capitalism

    B. Calvinism

    C. Nationalism

    D. Socialism

28. Discuss the emergence and growth of Sociology in India.

29. What do you understand by Primary groups? Discuss the importance of primary groups in society.

30. State social functions of Education.

OR

How does Sociology studies Religion?

31. Discuss two different approaches to studying cultural changes.

32. Cite the differences between Ethnocentrism and Cosmopolitanism.

SECTION – D   [6x3=18]

33. How did Sociology develop and grow in India?

OR

Explain the characteristics of the Society.

34. Types of family in Sociology have been classified as per various parameters. How can you find the list of types of family and family forms.

35. Read the given passage and answer the questions that follow. (3×2=6)

We boys use streets for so many different things.---- as a place to stand around watching, to run around and play, try out the manoeuvrability of our bikes. Not so for girls. As we noticed all the time, for girls the street was simply a means to get straight home from school. And even for this limited use of the street they always went in clusters, perhaps because behind their purposeful demeanour they carried the worst fears of being assaulted. (Kumar 1986)

1. What is Gender? Do you see stereotyping as the violation of right to equality?
2. How far mass media is helpful to bring change in conventional outlook of society?

****

Class-XI   **Subject – Entrepreneurship**
Time: 3 Hrs.   **Maximum Marks: 70**

General Instructions:

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

1. To provide a rational basis for developing goals and strategies for business growth an entrepreneur must do environmental scanning. Information can be taken from which of the following sources?

   (A) Trade Publications

   (B) Government Publications

   (C) Consumer Publications

   (D) All of these   [1]

2. Which of the following entrepreneurs identify the potential market for his/her product in order to stimulate the demand , whether domestic/overseas?

   (A) Business Entrepreneurs

   (B) Trading Entrepreneurs

   (C) Industrial Entrepreneurs

   (D) None of these   [1]

3. Which of the following are core values?

   (A) Innovation and Creativity

   (B) Respect for work

   (C) Quest for Excellence

   (D) All of these   [1]

4. ____ is an unstructured discussion but very productive, as one idea may lead to another in such situation.

   (A) Brain storming
   (B) Creativity
   (C) Market research
   (D) None of these   [1]

5. Finance is required at the time of _____

   (A)Starting of the business

   (B) Running of the business

   (C)Expansion of the business

   (D) All the above   [1]

6. _____ study details on how to deliver a product or service i.e., materials, labour,

   transportation, technology required etc.

   (A) Market Feasibility

   (B) Technical Feasibility

   (C) Organisational Feasibility

   (D) None of these   [1]

7. An Investor or lending institution require the submission of which of the following before
   considering the request for capital.

   (A) Business Plan

   (B) Feasibility study

   (C) Both (A) and (B)

   (D) None of these   [1]

8. Why Small Scale Enterprises are unable to appoint competent employees? Give any one

   suitable reason.   [1]

9. What do you mean by Financing the Proposition in context with Promotional functions

   of an Entrepreneur?   [1]

10. 'Tata' manufactured a motor car 'Nano' for common man which is very low in price.

    Identify the behavioural characteristic that develops the idea of 'Tata' into available and

    successful project.   [1]

11. What do you mean by Business Ethics?   [1]

12. ____ Entrepreneurs are conventional in their approach and are not ready to make

    changes in their existing production methods even if they suffer losses.

    (Fill in the blank)   [1]

STATE TRUE OR FALSE FOR THE FOLLOWING: (Q.NO.13 TO Q. NO. 17)

13. Imitative Entrepreneurs are very shy, lazy and cautious. [1]

14. An Unsatisfied Need leads to Search behaviour. [1]

15. Starting own business means one must be willing to give up the security of a regular

   pay check. [1]

16. Every country is trying to promote its Trade so as to share the benefits of development. [1]

17. 'A Feasibility study is not a business plan, but serves as a foundation for developing a

   business plan,' [1]

Read the following paragraphs and answer the questions from 18 To 21:

The Story of Kellogg: In 1894, Dr. John Harvey Kellogg was superintendent of a famous hospital and health spa in Battle Creek, Michigan. His younger brother, Will Keith Kellogg, was the business manager. The hospital stressed healthful living and kept its patients on a diet that eliminated caffeine, meat, alcohol and tobacco.
The brothers invented many foods that were made from grains, including a coffee substitute and a type of granola, which they forced through rollers and rolled into long sheets of dough. One day, after cooking some wheat, the men were called away. When they finally returned, the wheat had become stale. They decided to force the tempered grain through the rollers anyway.
Surprisingly, the grain did not come out into long sheets of dough. Instead, each wheat berry was flattened and came out as a thin flake. The brothers baked the flakes and were delighted with their new invention. They realized that they have discovered a new delicious cereal, but they had no way of knowing that they had accidentally invented a whole new industry. Will Keith Kellogg eventually opened his own cereal business and its most famous product is still sold today. It wasn't until 1906 that Kellogg's Corn Flakes were made available to the general public.

18. Kellogg's Corn Flakes is an example of _____

   (A) Innovation
   (B) Invention
   (C) Creativity
   (D) None of these [1]

19. Entrepreneurs are _____

   (A) Problem Solvers

   (B) Risk bearers

   (C) Innovators

   (D) All of these [1]

20. Kellogg's Corn Flakes were made available to public in _____

(A) 1894
(B) 1906
(C) 1916
(D) None of these   [1]

21. State True/False for the following:
'Will Keith Kellogg, the founder of Kellogg's Corn Flakes was a Social entrepreneur'   [1]

22. Explain Entrepreneur Vs Entrepreneurship.   (Two points)   [2]

23. Differentiate between Entrepreneurship and Social Entrepreneurship .   [2]

24. List any Four Components of Financial Plan.   [2]

25. What do you mean by Opportunity Assessment?   [2]

26. Explain Entrepreneurs as Problem Solvers briefly.   [2]

OR

Who is a Social Entrepreneur? Give the names of any two Social Entrepreneurs.

27. Explain entrepreneurial functions briefly. (Three points)   [3]

OR

Explain the following briefly:
(i) An Entrepreneur   (ii) Entrepreneurship   (iii) An Enterprise

28. Explain why there is a growing need of Social entrepreneurship? Give any two examples
of prominent social entrepreneurs of India.   [3]

29. What is the role of Technology and Social Media in creating new forms of business?
Explain with the help of any three points briefly.   [3]

30. An entrepreneur must be competent enough to achieve the targets of his/her business
in a desired manner'. Explain any four points of competencies of an entrepreneur
briefly.   [4]

31. Draw the flow chart of Maslow's Hierarchy of needs theory and explain various needs
with the help of suitable examples .   [4]

32. Explain any four advantages of entrepreneurship.   [4]

OR

Explain the first four managerial functions of an Entrepreneur briefly.

33. Differentiate between Entrepreneur and Intrapreneur (6 points)   [6]

34. Explain the Myths of Entrepreneurship?(Any 6 points)   [6]

OR

Who is an Entrepreneur? Explain the first five steps of the process of Entrepreneurship.

35. What do you mean by Business Plan? State the purposes of a business plan.   [6]

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DELHI PUBLIC SCHOOL, RANCHI
Half Yearly Examination (2021- 2022)

Class:- XI   **Subject:- Fine Art- Painting / Graphics**

Time- 2 hrs.   **Maximum marks: 30**

_____

Section - First

1. Answer to be written for each question in a word or sentence.   **(1x6 =6)**

(i) Who discovered Bhimbetka rock art?
- (a) Rai Bahadur Daya Ram Sahni,
- (b) Sir John Marshall.
- (c) Vishnu Wakankar
- (d) Madho Sarup, Sir John Marshall

(ii) 'It is beautifully decorated with a variety of ornaments and the headgear of this statue, interestingly, comprises of two small bowls' is related to which sculpture?
- (a) Dancing Girl
- (b) Mother Goddess
- (c) Terracotta Toys
- (d) Bearded priest

(iii) "Modern type village called Harappa located near the former course of Ravi River" was excavated by _____
- (a) Rai Bahadur Daya Ram Sahni, Sir John Marshall.
- (b) Sir John Marshall, Rakhal Das Banerjee.
- (c) Rakhal Das Banerjee, Rai Bahadur Daya Ram Sahni
- (d) MadhoSarup, Sir John Marshall

(iv) What is monolithic sculpture?
- a) One stone sculpture
- b) Two stone sculpture
- c) Wood sculpture
- d) Bronze casting

(v) What is Fine Art?
- a) Performing Art
- b) Visual Art
- c) Literary Art
- d) Folk Art

(vi) The first representation of the Buddha in human form is attributed to which period in art history.
- a) Kushana Period
- b) Gupta Period
- c) Mauryan Period
- d) Sunga period

Section -Second

2. **Answer to be written for each is about 30 words. (Any Three)**   **(2x3 =6)**

   (a)   Write a note on Rock paintings 'Wizard's Dance'.
   (b)   Write a note on the compositional arrangement of 'Dancing Girl'.
   (c)   What is Stupa? Name of any Stupa? What is Vihara and Chaitya ?
   (d)   Write a note on 'Male Torso'.

Section -Third

3. **Answer to be written for each is about 100 words. (Any Two)**   **(3x2 =6)**

   (a)   Describe the characteristic features of the 'Chauri bearer' a famous sculpture of
          the Mauryan dynasty.
   (b)   Write an appreciative note on 'Bull seal' or 'Jar' found at Mohenjo-Daro.
   (c)   Write a note on Art of Ajanta.

Section -Fourth

4. **Answer to be written for each is about 200 words. (Anyone)**   **(6x1 =6)**

   (a) Write a note on the compositional arrangement of 'Lion Capital' of Sarnath.
   (b) What do you know about terracotta? Write about the terracotta artworks found at Indus
   Valley Civilization.
   (c) What is the difference between the sculpture ' Seated Buddha from Sarnath' and 'Seated
   Jain Tirthankar' of the Gupta Period.

Section - Fifth

5. **Answer to be written for each is about 300 words. (Any one)**   **(6x1 =6)**

   (a) How can you say that the Art of Indus Valley Civilization was highly developed? Write
   about the method, material, and subjects of sculptures found at Indus Valley.
   (b) Describe the method, material, subject, purpose of Prehistoric Cave Paintings with
   examples.
   (c) Write a short note on Kushana art and Gupta art with an emphasis on the expanse,
   subject matter and portrayal of Buddha image.

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DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

HALF YEARLY EXAMINATION (2021-2022)

Class-XI	**Subject – Odissi Dance**
Time: 2 Hrs.	**Maximum Marks: 30**

General Instructions:

➢ Please check that this question paper contains 6 questions.

➢ Please write down the serial Number of the question before attempting it.

Q1. Complete the following sentences. (Attempt any five question, each question carries one mark) (1X5=5 Marks)

a) Sakuni arranged for a game of dice between the Pandavas and the Kauravas and invited _____ to play.

b) All the forms of Indian Classical dance owe faithfulness to _____ which is often regarded as fifth Veda.

c) Indian dance has been contently influenced by several factors. The native Classical dance patterns underwent change with the coming of the _____.

d) Indian Classical dance celebrated around the world for its lyricism, sensuality and emphasis on _____.

e) Shiva as Natarja was first depicted in the _____ status.

f) Krishna was growing in Gokul as the younger son of _____.

g) _____ is the traditional Classical music of Odisha.

Q2. State whether the following are true or false: (Attempt any five question, each question carries one mark) (1X5=5 Marks)

a) Cheer haran of Droupadi was attempted in the court of Hastinapur.

b) In the story of DashavatarBalaram as the eight Avatar.

c) Demon Hiranyakaashyapbrother of Hiranyaksha was granted a powerful boon from Brahma that he could not be killed by Man or Animal.

d) Prashuram was the son of Jamadgni and Renuka.

e) The Mahari of Jagannathtemle were belonged to six groups.

f) The British were unable to distinguish the Devadasi from religious street dancers.

g) Kaliya chose Vridavan as his residence for safty.

Q.3.   Match the following pairs correctly: (0.5X10=5 Marks)

    a) Natya------------------ Nrutyahram

    b) Dancing girla---------- Ramnaka

    c) Yakshagana------------ KVK

    d) Kummi------------------ Orissa Theatre

    e) Konark temple ---------- BandhaNritya

    f) Gotopua------------------ Narasingha Deva

    g) MayadharRaut ---------- Tamil Nadu

    h) BabulalDoshi ------------ Karnatak

    i) Island ---------------------- Mohenjodaro

    j) 1990 - --------------------- Veda

Q4. Write the definition of any two of the following.   (2X2=4 Marks)

    a) Kurma   b) Balaram   c) Varaha   d) Kalki

Q5. State the difference between the following terms: (3X2=6 Marks)

  a) KaliyaDaman .
  b) concept of Makhanchor.

Q 6. Attempt any one question: (5 Marks)

  a) Briefly describe about Mahari dance.
  b) Briefly describe about Gotipua dance.
  c) Briefly describe history of the Odissi dance tradition and development of the style

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Class-XI   **Subject – Legal Studies**
Time: 3 Hrs.   **Maximum Marks: 80**

General Instructions:
i)   **All question in all the sections are compulsory.**

SECTION – A   [1x20=20]

1. _____ defines _____ as a body of citizens sufficing for the purpose of life .

2. _____ supported the concept of state as welfare.

3. Whose follower was Plato?

4. Who wrote Republic?

5. _____ is described as society politically organized.

6. What is the Pluralist view of state ?

7. What is a Tribal state?

8. What is Matriarchal theory?

9. According to _____ theory, state is governed by Godor some super human power or the king as his agent and the religious scriptures. This theory adds _____ character to state functions.

10. The literary work, Leviathan was written by_____

11. State is usually described as _____.

12. When a society is governed by common set of laws, rules, regulations, and obey a supreme authority, it qualifies for being a _____.

13. Machiavelli, in his book _____ defined state 'as the power which has authority over men'.

14. The earliest advocate of the theory of kinship is _____.

15. According to _____ Theory, in the origin and development of State, the eldest male descendant of the family had an important role to play.

16. The _____ Theory traces the existence of the State to the mutual agreement and mutual consent of the people, to form a State. _____, _____ and _____ are the three political   philosophers who propounded this theory.

17. What is a modern state?

18. Define constitution.

19. Give two examples of Dictatorship or two names of Dictators in history?

20. What is Federalism?

<div align="center">**SECTION - B** [2x8=16]</div>

21. Explain two important role of state

22. Explain the tribal state

23. Name the essential elements of the state

24. Why India is called a Secular state?

25. What is monarchical form of government?

26.Why democracy is called the best form of government?

27. Explain the theory of kinship

28. How can you explain the term Sovereign?

<div align="center">**SECTION - C** [4x5=20]</div>

29. Write the differences between patriarchal theory and matriarchal theory in a brief manner.

30. For the poor and needy, directive principles are more important than fundamental

    rights. Why?

31. State the differences between parliamentary and presidential form of government.

32. Write a short note on-

    a. Modern welfare state   b. Divine theory

33. Write a short essay on Right to Education.

<div align="center">**SECTION - D** [6x4=24]</div>

34. Write a note on Fundamental Rights enshrined in our constitution?

35. How John, Locke and Rousseau contributed towards the social contract theory?

36. Mention any five Fundamental Duties of the citizen . Also explain what importance they hold .

37. Distinguish between Federal and Unitary form of government. Examine how Indian

    constitution is Quasi Federal in nature .

CLASS-11th   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 है।

1)हिंदुस्तानी शास्त्रीय संगीत के अंतर्गत एक सप्तक में कितने स्वर माने गए है?
i)9   ii) 7   iii) 12   iv)22

2)राग बिहाग का गायन समय-
i) दिन का द्वितीय प्रहर   ii) प्रातःकाल
iii)मध्यरात्रि   iv) रात्रि का द्वितीय प्रहर

3)तबला कौन सा वाद्य है?
i)घन वाद्य   ii) तत् वाद्य
iii)अनबद्ध वाद्य   iv) सुषिर वाद्य

4)हिंदुस्तानी पद्धति में थाटों की संख्या कितनी है?
i)8   ii)10   iii)12   iv)20

5)नाद की कितनी विशेषताएं है?
i)एक   ii)दो   iii)तीन   iv)चार

6)दादरा में "ना" बोल किन मात्राओं पर आता है?
i)पहली व तीसरी   ii)तीसरी व छठी
iii)तीसरी व पांचवी   iv)पांचवी व छठी

7)जब कोई स्वर अपने स्थान से एक श्रुति नीचे उतरता है तो वो क्या कहलाता है?
i)कोमल   ii)शुद्ध   iii)तीव्र   iv)मंद्र

8)भातखंडे स्वरलिपि पद्धति में मंद्र सप्तक के स्वर को कैसे दर्शाते है?
i)स्वर के नीचे रेखा   ii)स्वर के ऊपर रेखा
iii)स्वर के नीचे अनुस्वार   iv)स्वर के ऊपर अनुस्वार

9)जिस राग में रे ध कोमल तथा म तीव्र में लगता हो तो वह किस थाट का राग कहलाता है?
i)तोड़ी ii)मरवा iii)पूर्वी iv)भैरव

10)भारतीय राष्ट्रगान गाने में लगने वाला उचित समय है-
i) 58 सेकेंड ii) 52 सेकेंड iii) 50 सेकेंड iv)1 मिनट

11)ताल के कितने मात्रा पर सम होता है?
i)1 ii)5 iii)9 iv)13

12)राग भैरवी में ज्यादातर क्या गातें है?
i)गज़ल ii)टप्पा iii)ठुमरी iv)ध्रुपद

13)जिन वाद्यों में वायु के प्रवेश से स्वरों की उत्पत्ति होती है,वे .... कहलाता है।

i)घन वाद्य ii)सुषिर वाद्य iii)तत् वाद्य iv)अनबद्ध वाद्य

14)जो ध्वनि कानों को स्पष्ट सुनाई पड़े उसे क्या कहते है?
i)ध्वनि ii)श्रुति iii)वेग iv)आहट

15)ध्रुपद गायकों को प्राचीन काल में क्या कहा जाता था?
i)ध्रुपदिया ii)ध्रुपद गायक iii)गोबरहरी iv)कलावंत

16)भातखंडे जी की मृत्यु कब हुई?
i)11 सितम्बर 1933   ii)11सितम्बर 1934
iii)11सितम्बर 1935   iv)11सितम्बर 1936

17)एक सप्तक में तीव्र विकृत स्वर है-
i)धैवत ii)निषाद iii)पंचम iv)मध्यम

18)राग बिहाग में गंधार स्वर .... स्वर कहलाता है।
i)संवादी ii)विवादी iii)वादी iv)अनुवादी

19)कौन सा गायन पुरुष प्रधान होता है ?
i)शास्त्रीय गायन ii)ध्रुपद
iii)ठुमरी   iv)कव्वाली

20)निम्नलिखित में संगीत में खाली का चिन्ह क्या है ?
i)X ii)0 iii)3 iv)2

21) औडव-षडव संज्ञा किसका द्योतक है ?
i)वादी-संवादी   ii)राग-जाति
iii)गायन-समय   iv)उत्तरांग-पूर्वांग

खंड-ब

निर्देश - किन्ही तीन प्रश्नों के उत्तर दीजिए।सभी प्रश्नों के अंक समान है।   (5X3=15)

1)निम्नलिखित में से किन्ही **तीन** को परिभाषित कीजिए ।
  श्रुति ,स्वर , नाद, जाति , लय

2) ध्रुपद गायन शैली का संक्षिप्त इतिहास लिखें।

3)किसी ऐसे ताल का परिचय और उसका ठेका व दुगुन लिखिए जिसमें 16 मात्राएं होती है?
                    अथवा
  लय किसे कहते हैं ? लय के कितने प्रकार है ?समझाइए ।

4)विष्णु नारायण भातखंडे के जीवन परिचय का वर्णन करते हुए उनके संगीत के क्षेत्र में किए गए
  योगदान को लिखिए।

5) राग की विशेषता बताते हुए राग और थाट में तुलना कीजिए ।
                अथवा
 तानपुरे के अंगों को सचित्र वर्णन करें।

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

Class:- XI   **Subject:- Physical Education**
Time- 3 Hrs.   **M.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 not exceed 150-200 words.**

1. First Deaflympics was held in _____ in _____, were also the first
    ever international sporting event for athletes with a disability.   (1)
    a. 1924, Paris
    b. 1928, Amsterdam
    c. 1935, London
    d. 1957, Milan

                                    OR

    Father of modern Olympic games Pierre, Baron de Coubertin was born in Paris on   _____.

    a. 1 February 1862
    b. 1 march 1862
    c. 1 January 1862
    d. 1 April 1862

2. Which one of these professionals helps children's to perform his/her self-care skills like
    eating, dressing, bathing, grooming etc.?   (1)
    a. School counselor
    b. Speech therapist
    c. Special educator
    d. Occupational therapist

3. Irani trophy is related to which game/sport?   (1)
    a. Football
    b. Cricket
    c. Hockey
    d. Swimming

OR

Azlan Shah Cup is related to which game/sport?

a. Hockey
b. Cricket
c. Table tennis
d. Badminton

4. Which one of these sports/games is an example of adventure sports?　　　(1)
a. Football
b. Cricket
c. Basketball
d. None of the above

5. "Physical education is the sum of the changes in the individual caused by experiences centering motor activity" this definition was given by: -　　　(1)

a. Cassidy
b. C.C. Cowell
c. C.L. Brownell
d. C.A. Boucher

6. This type of skills is performed at the same time as other but without direct confrontation is known as _____.　　　(1)
a. Coactive skills
b. Interactive skills
c. Serial skills
d. Complex skills

7. Entire Paragliding set includes wing, harness and helmet and it weight is less than _____.　　　(1)
a. 15 kg
b. 18 kg
c. 20 kg
d. 24 kg

OR

River rafting became popular adventure sport during the _____.

a. Mid 1980s
b. Mid 1990s
c. Mid 1960s
d. Mid 1970s

8. Who was the second president of IOA? (1)

   a. Dorabji Jamsedji Tata
   b. Maharaja Bhupinder Singh
   c. Maharaja Rupinder Singh
   d. Jyotiraditya Scindia

9. Name of Special Olympic torch is_____. (1)
   a. Flame of sports
   b. Flame of solidarity
   c. Flame of hope
   d. None of the above

10. Given below are the two-statement labeled Assertion (A) and Reason (R). (1)

    Assertion:- Special Olympics was started by "John F Kennedy" sister of "Eunice Kennedy Shriver", the former president of USA.

    Reason:- oath of the special Olympics is "Let me win, but if I cannot win, let me brave in the attempt.

    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 R is false
    d. A is false but R is true

11. Paralympic word was used officially in _____ summer Paralympic games which were held in _____. (1)
    a. 1964, Tokyo
    b. 1976, Toronto
    c. 1980, Paris
    d. 1988, Seoul

12. Match list I with list II and select correct answer from the code given below: (1)

	LIST-I		LIST-II
a.	Anabolic Steroids	i	Morphine
b.	Narcotics	ii	Marijuana
c.	Cannabinoids	iii	Metenolone
d.	Stimulants	iv	Cocaine

	I	ii	iii	iv
A	iii	ii	i	iv
B	Iii	i	ii	iv
C	i	ii	iii	iv
D	iv	iii	ii	i

13. Briefly explain any two careers in communication media?   (2)

14. Elaborate rules of ancient Olympic Games?   (2)

OR

Briefly explain objectives of Olympic Games?

15. Identify the below given images and write their names:-   (2)

a. _____

b. _____

c. _____

d. _____

16. Differentiate between general and specific warm up with sports related example?   (2)

17. Write down a brief note on Khelo-India programme?   (3)

18. Briefly explain about Paralympic games?   (3)

19. Explain the role of School Counsellor and Physiotherapist in detail.   (3)

OR

Explain the role of Physical Education Teacher and special educator in detail:

20. Briefly explain objective of physical education?   (3)

21. Explain about need of inclusive education?   (3)

OR

Briefly explain about implementation of inclusive education in India?

22. Elaborate opening and closing ceremony of modern Olympic Games?   (3)

23. Discuss the role of a leader in brief?   (3)

24. Briefly explain physiological basis of warming up?   (3)

25. Explain objective of adventure sports in detail?   (3)

26. Discuss the guiding principles of warming up?   (3)

OR

Explain importance of limbering down in detail?

27. Discuss about teaching career in physical education in detail?   (5)

28. Define IOC and explain it main functions?   (5)

OR

Define IOA and explain its objectives in detail?

29. Define adapted physical education and its objectives in detail?   (5)

OR

Briefly explain the safety measures to prevent sports injuries?

30. Define sports training. Explain principle of sports training.   (5)