



LOYOLA CONVENT SCHOOL, RANCHI

DP HOLIDAY HOMEWORK (2023-24)

CLASS – XII

[ENGLISH]

1. Cultural Society of RJ Public School has decided to organise a fancy dress show on 25th of January in which each participant will wear the dress particular to his/ her region. The aim is to show the cultural diversity of India. As Secretary, write a notice in about 50 words inviting the names of those who want to participate.
2. You are Navin/Neha, the Secretary of the Youth Club of your locality. You are organising an inter-school group-song competition. Invite a prominent musician to act as one of the judges
3. In the mad rush of today's fast-paced life, we often forget to enjoy the simple pleasures of life like reading a good book, going out for a walk in the nearby park, a simple conversation with a friend or watching a movie with the family. Write an article on Simple Pleasures of Life in 120 – 150 words. You are Rakshita/Rakshak
4. You are Navtej/Navita, Secretary, Environment Club, Akash Public School, Agra. You, along with a group of students, went on a 3-day tour to the Corbett National Park. You found how the tourists abuse the available facilities and thus endanger the environment. Write a letter in 120-150 words to the Editor of a national daily highlighting the situation. Suggest ways through which the environment of the park can be saved.
5. You are Sweety/Suresh of LM Jain School, Ajmer. As Secretary of your school Co-Curricular Activities Club, you visited a slum area in your city where the people suffered a great loss of life and property in a massive fire. The students of your school rendered their services and materials to help the victims. Write a report in 100-120 words for your school magazine.

[PHYSICS]

Instruction: All questions are compulsory and prepare the solution in holiday home work copy.

Q.1 Prepare a list of formula of the following chapters in an A4 sheet and paste it in holiday homework copy.

- Chapter 1: Electric Charges and Fields
- Chapter 2: Electrostatic Potential and Capacitance
- Chapter 3: Current Electricity
- Chapter 9: Ray Optics and Optical Instruments
- Chapter 10: Wave Optics
- Chapter 11: Dual Nature of Radiation and Matter

Q. 2. Assertion and Reason Questions (Take print out of the A-R questions and submit with answer in a stick file)

Directions: Each of these questions contains two statements, Assertion and Reason. Each of these questions also has four alternative choices, only one of which is the correct answer. You have to select one of the codes (a), (b), (c) and (d) given below.

- (a) Assertion is correct, reason is correct; reason is a correct explanation for assertion.
- (b) Assertion is correct, reason is correct; reason is not a correct explanation for assertion
- (c) Assertion is correct, reason is incorrect
- (d) Assertion is incorrect, reason is correct.
- (e) Assertion & reason both are incorrect.

Q.1. Assertion: Electron move away from a region of lower potential to a region of higher potential.

Reason: An electron has a negative charge.

Q.2. Assertion : A metallic shield in form of a hollow shell may be built to block an electric field.

Reason : In a hollow spherical shield, the electric field inside it is zero at every point.

Q.3. Assertion : Electric lines of force never cross each other.

Reason : Electric field at a point superimpose to give one resultant electric field.

Q.4. Assertion : The Coulomb force is the dominating force in the universe.

Reason : The Coulomb force is weaker than the gravitational force.

Q.5. Assertion : In a cavity within a conductor, the electric field is zero.

Reason : Charges in a conductor reside only at its surface.

Q.6. Assertion : When bodies are charged through friction, there is a transfer of electric charge from one body to another, but no creation or destruction of charge.

Reason : This follows from conservation of electric charges.

Q.7. Assertion : The tyres of aircraft are slightly conducting.

Reason : If a conductor is connected to ground, the extra charge induced on conductor will flow to ground.

Q.8. Assertion : Some charge is put at the centre of a conducting sphere. It will move to the surface of the sphere.

Reason : Conducting sphere has no free electrons at the centre.

Q.9. Assertion : Coulomb force and gravitational force follow the same inverse-square law.

Reason : Both laws are same in all aspects.

Q.10. Assertion : The coulomb force is the dominating force in the universe.

Reason : The coulomb force is weaker than the gravitational force.

Q.11. Assertion : If there exists coulomb attraction between two bodies, both of them may not be charged.

Reason : In coulomb attraction two bodies are oppositely charged.

Q.12. Assertion : A deuteron and an alpha-particle are placed in an electric field. If F_1 and F_2 be the forces acting on them and a_1 and a_2 be their accelerations respectively then, $a_1 = a_2$.

Reason : Forces will be same in electric field.

Q.13. Assertion : The property that the force with which two charges attract or repel each other are not affected by the presence of a third charge.

Reason : Force on any charge due to a number of other charge is the vector sum of all the forces on that charge due to other charges, taken one at a time.

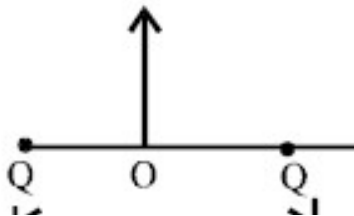
Q.14. Assertion : A metallic shield in form of a hollow shell may be built to block an electric field.

Reason : In a hollow spherical shield, the electric field inside it is zero at every point.

Q.15. Assertion : A point charge is brought in an electric field, the field at a nearby point will increase or decrease, depending on the nature of charge.

Reason : The electric field is independent of the nature of charge.

Q.16. Assertion : Consider two identical charges placed distance $2d$ apart, along x-axis.



The equilibrium of a positive test charge placed at the point O midway between them is stable for displacements along the x-axis.

Reason: Force on test charge is zero.

Q.17. Assertion : When a conductor is placed in an external electrostatic field, the net electric field inside the conductor becomes zero after a small instant of time.

Reason : It is not possible to set up an electric field inside a conductor.

Q.18. Assertion : A uniformly charged disc has a pin hole at its centre. The electric field at the centre of the disc is zero.

Reason : Disc can be supposed to be made up of many rings. Also electric field at the centre of uniformly charged ring is zero.

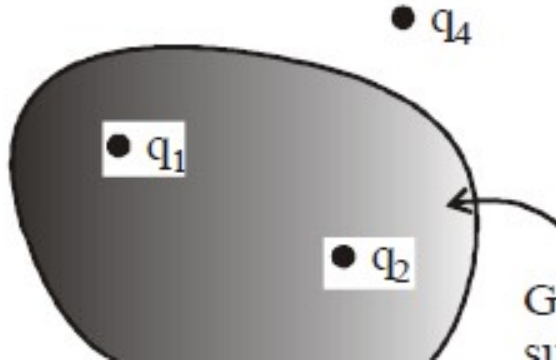
Q.19. Assertion : Electric lines of field cross each other.

Reason : Electric field at a point superimpose to give one resultant electric field.

Q.20. Assertion : On bringing a positively charged rod near the uncharged conductor, the conductor gets attracted towards the rod.

Reason : The electric field lines of the charged rod are perpendicular to the surface of conductor.

Q.21. Assertion : Four point charges q_1, q_2, q_3 and q_4 are as shown in figure. The flux over the shown Gaussian surface depends only on charges q_1 and q_2 .



Reason : Electric field at all points on Gaussian surface depends only on charges q_1 and q_2 .

Q.22. Assertion : On disturbing an electric dipole in stable equilibrium in an electric field, it returns back to its stable equilibrium orientation.

Reason : A restoring torque acts on the dipole on being disturbed from its stable equilibrium.

Q.23. Assertion : On going away from a point charge or a small electric dipole, electric field decreases at the same rate in both the cases.

Reason : Electric field is inversely proportional to square of distance from the charge or an electric dipole.

Q.24. Assertion : The electric flux of the electric field $\oint E \cdot dA$ is zero. The electric field is zero everywhere on the surface.

Reason : The charge inside the surface is zero.

Q.25. Assertion : On moving a distance two times the initial distance away from an infinitely long straight uniformly charged wire the electric field reduces to one third of the initial value.

Reason : The electric field is inversely proportional to the distance from an infinitely long straight uniformly charged wire.

Q.26. Assertion (A): No two electric lines of force can intersect each other.

Reason (R) : Tangent at any point of electric line of force gives the direction of electric field.

Q.27. Assertion (A): Electric force acting on a proton and an electron, moving in a uniform electric field is same, where as acceleration of electron is 1836 times that of a proton.

Reason (R): Electron is lighter than proton.

Q.28. Assertion (A): As force is a vector quantity, hence electric field intensity is also a vector quantity

Reason (R): The unit of electric field intensity is newton per coulomb.

Q.29. Assertion (A) : Sharper is the curvature of spot on a charged body lesser will be the surface charge density at that point

Reason (R): Electric field is non-zero inside a charged conductor.

Q.30. Assertion (A): The surface densities of two spherical conductors of different radii are equal. Then the electric field intensities near their surface are also equal.

Reason (R) : Surface density is equal to charge per unit area.

Q.31. Assertion (A): Three equal charges are situated on a circle of radius r such that they form an equilateral

triangle, then the electric field intensity at the centre is zero.

Reason (R): The force on unit positive charge at the centre, due to the three equal charges are represented by the three sides of a triangle taken in the same order. Therefore, electric field intensity at centre is zero.

Q.32. Assertion (A): The electric lines of forces diverges from a positive charge and converge at a negative charge.

Reason (A): A charged particle free to move in an electric field always move along an electric line of force.

Q.33. Assertion (A): Charging is due to transfer of electrons.

Reason (R): Mass of a body decreases slightly when it is negatively charged.

Q.34. Assertion (A): Range of Coulomb force is infinite.

Reason (R): Coulomb force acts between two charged particles.

Q.35. Assertion (A): A small metal ball is suspended in a uniform electric field with an insulated thread. If high energy X-ray beam falls on the ball, the ball will be deflected in the electric field.

Reason (R): X-rays emits photoelectron and metal becomes negatively charged.

Q.36. Assertion (A): If a point charge be rotated in a circle around a charge, the work done will be zero.

Reason (R): Work done is equal to dot product of force and distance

Q.37. Assertion : If the distance between parallel plates of a capacitor is halved and dielectric constant is three times, then the capacitance becomes 6 times.

Reason : Capacity of the capacitor does not depend upon the nature of the material.

Answer

Q.38. Assertion : A parallel plate capacitor is connected across battery through a key. A dielectric slab of dielectric constant K is introduced between the plates. The energy which is stored becomes K times.

Reason : The surface density of charge on the plate remains constant or unchanged.

Answer

Q.39. Assertion : The total charge stored in a capacitor is zero.

Reason : The field just outside the capacitor is σ/ϵ_0 . (σ is the charge density).

Answer

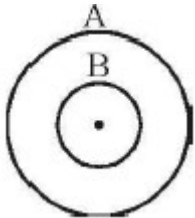
Q.40. Assertion : The electrostatic force between the plates of a charged isolated capacitor decreases when dielectric fills whole space between plates.

Reason : The electric field between the plates of a charged isolated capacitance increases when dielectric fills whole space between plates.

Answer

Q.41. Assertion : Two concentric charged shells are given. The potential difference between the shells depends on charge of inner shell.

Reason : Potential due to charge of outer shell remains same at every point inside the sphere.



Answer

Q.42. Assertion : Two equipotential surfaces cannot cut each other.

Reason : Two equipotential surfaces are parallel to each other.

Q.43. Assertion: The potential difference between any two points in an electric field depends only on initial and final position.

Reason: Electric field is a conservative field so the work done per unit positive charge does not depend on path followed.

Q.44. Assertion : Electric field inside a conductor is zero.

Reason: The potential at all the points inside a conductor is same.

Q.45. Assertion : Electric field is discontinuous across the surface of a spherical charged shell.

Reason : Electric potential is continuous across the surface of a spherical charged shell.

Q.46. Assertion : Work done in moving a charge between any two points in an electric field is independent of the path followed by the charge, between these points.

Reason: Electrostatic force is a non conservative force.

Q.47. Assertion : Two adjacent conductors of unequal dimensions, carrying the same positive charge have a potential difference between them.

Reason : The potential of a conductor depends upon the charge given to it.

Q.48. Assertion : Electric potential and electric potential energy are different quantities.

Reason : For a system of positive test charge and point charge electric potential energy = electric potential.

Q.49. Assertion : For a non-uniformly charged thin circular ring with net charge is zero, the electric field at any point on axis of the ring is zero.

Reason : For a non-uniformly charged thin circular ring with net charge zero, the electric potential at each point on axis of the ring is zero.

Q.50. Assertion : For a charged particle moving from point P to point Q, the net work done by an electrostatic field on the particle is independent of the path connecting point P to point Q.

Reason : The net work done by a conservative force on an object moving along a closed loop is zero.

Q.51. Assertion : Polar molecules have permanent dipole moment.

Reason : In polar molecules, the centres of positive and negative charges coincide even when there is no external field.

Q.52. Assertion : Dielectric polarisation means formation of positive and negative charges inside the dielectric.

Reason: Free electrons are formed in this process.

Q.53. Assertion : In the absence of an external electric field, the dipole moment per unit volume of a polar dielectric is zero.

Reason : The dipoles of a polar dielectric are randomly oriented.

Q.54. Assertion : For a point charge, concentric spheres centered at a location of the charge are equipotential surfaces.

Reason : An equipotential surface is a surface over which potential has zero value.

Q.55. Assertion : Electric energy resides out of the spherical isolated conductor.

Reason : The electric field at any point inside the conductor is zero.

Q.56. Assertion : Two equipotential surfaces cannot cut each other.

Reason : Two equipotential surfaces are parallel to each other.

Q.57. Assertion: Two equipotential surfaces can be orthogonal.

Reason: Electric field lines are normal to the equipotential surface.

Q.58. Assertion: The equatorial plane of a dipole is an equipotential surface.

Reason: The electric potential at any point on equatorial plane is zero.

Q.59. Assertion: The electric potential at any point on the equatorial plane of a dipole is zero.

Reason: The work done in bringing a unit positive charge from infinity to a point in equatorial plane is equal for the two charges of the dipole.

Q.60. Assertion : A parallel plate capacitor is connected across battery through a key. A dielectric slab of dielectric constant k is introduced between the plates. The energy stored becomes k times.

Reason : The surface density of charge on the plate remains constant.

Q.61. Assertion : Two metal plates having charges Q , $-Q$ face each other at some separation and are dipped into an oil tank. If the oil is pumped out, the electric field between the plates increases.

Reason : Electric field between the plates, $E_{\text{med}} = E_{\text{air}}/K$

Q.62. Assertion : When a dielectric slab is gradually inserted between the plates of an isolated parallel-plate capacitor, the energy of the system decreases.

Reason : The force between the plates decreases.

Q.63. Assertion : A dielectric is inserted between the plates of a battery connected capacitor. The energy of the capacitor increases.

Reason : Energy of the capacitor, $U = CV^2/2$

Q.64. Assertion : In a simple battery circuit, the point of the lowest potential is positive terminal of the battery.

Reason : The current flows towards the point of the higher potential, as it does in such a circuit from the negative to the positive terminal.

Q.65. Assertion : A larger dry cell has higher emf.

Reason : The emf of a dry cell is proportional to its size.

Q.66. Assertion : A current continues to flow in superconducting coil even after switch is off.

Reason : Superconducting coils show Meissner effect.

Q.67. Assertion : Voltmeter is connected in parallel with the circuit.

Reason : Resistance of a voltmeter is very large.

Q.68. Assertion : Ohm's law is applicable for all conducting elements.

Reason : Ohm's law is a fundamental law.

Q.69. Assertion : An electric bulb becomes dim, when the electric heater in parallel circuit is switched on.

Reason : Dimness decreases after sometime.

Q.70. Assertion : Plane mirror may form real image.

Reason : Plane mirror forms virtual image, if object is real.

Q.71. Assertion : The focal length of the convex mirror will increase, if the mirror is placed in water.

Reason : The focal length of a convex mirror of radius R is equal to, $f = R/2$.

Q.72. Assertion : The image formed by a concave mirror is certainly real if the object is virtual.

Reason : The image formed by a concave mirror is certainly virtual if the object is real.

Q.73. Assertion : The image of an extended object placed perpendicular to the principal axis of a mirror, will be erect if the object is real but the image is virtual.

Reason : The image of an extended object, placed perpendicular to the principal axis of a mirror, will be erect if the object is virtual but the image is real.

Q.74. Assertion : An object is placed at a distance of f from a convex mirror of focal length f its image will form at infinity.

Reason : The distance of image in convex mirror can never be infinity

Q.75. Assertion : The image of a point object situated at the centre of hemispherical lens is also at the centre.

Reason : For hemisphere Snell's law is not valid.

Q.76. Assertion: The focal length of an equiconvex lens of radius of curvature R made of material of refractive index $\mu = 1.5$, is R .

Reason : The focal length of the lens will be $R/2$.

Q.77. Assertion : If the rays are diverging after emerging from a lens; the lens must be concave.

Reason : The convex lens can give diverging rays.

Q.78. Assertion : The resolving power of a telescope is more if the diameter of the objective lens is more.

Reason : Objective lens of large diameter collects more light.

Q.79. Assertion : The optical instruments are used to increase the size of the image of the object.

Reason : The optical instruments are used to increase the visual angle.

Q.80. Assertion : According to Huygen's principle, no backward wave-front is possible.

Reason : Amplitude of secondary wavelet is proportional to $(1 + \cos \theta)$ where θ is the angle between the ray at the point of consideration and the direction of secondary wavelet.

Q.81. Assertion : Thin film such as soap bubble or a thin layer of oil on water show beautiful colours when illuminated by white light.

Reason : It happens due to the interference of light reflected from upper and lower face of the thin film.

Q.82. Assertion : No interference pattern is detected when two coherent sources are infinitely close to each other.

Reason : The fringe width is inversely proportional to the distance between the two sources.

Q.83. Assertion : It is necessary to have two waves of equal intensity to study interference pattern.

Reason : There will be an effect on clarity if the waves are of unequal intensity.

Q.84. Assertion : White light falls on a double slit with one slit is covered by a green filter. The bright fringes observed are of green colour.

Reason : The fringes observed are coloured.

Q.85. Assertion : In YDSE, if a thin film is introduced in front of the upper slit, then the fringe pattern shifts in the downward direction.

Reason : In YDSE if the slit widths are unequal, the minima will be completely dark.

Q.86. Assertion : In Young's double slit experiment if wavelength of incident monochromatic light is just doubled, number of bright fringe on the screen will increase.

Reason : Maximum number of bright fringe on the screen is inversely proportional to the wavelength of light used

Q.87. Assertion : In YDSE number of bright fringe or dark fringe can not be unlimited

Reason : In YDSE path difference between the superposing waves can not be more than the distance between the slits.

Q.88. Assertion : Interference pattern is made by using yellow light instead of red light, the fringes becomes narrower.

Reason : In YDSE, fringe width is given by $\beta = \lambda D/d$

Q.89. Assertion : Coloured spectrum is seen when we look through a muslin cloth.

Reason : It is due the diffraction of white light on passing through fine slits.

Q.90. Assertion : Diffraction takes place for all types of waves mechanical or non-mechanical, transverse or longitudinal.

Reason : Diffraction's effect are perceptible only if wavelength of wave is comparable to dimensions of diffracting device.

Q.91. Assertion : In process of photoelectric emission, all emitted electrons do not have same kinetic energy.

Reason : If radiation falling on photosensitive surface of a metal consists of different wavelength then energy acquired by electrons absorbing photons of different wavelengths shall be different.

Q.92. Assertion : Though light of a single frequency (monochromatic) is incident on a metal, the energies of emitted photoelectrons are different.

Reason : The energy of electrons emitted from inside the metal surface, is lost in collision with the other atoms in the metal.

Q.93. Assertion : The photoelectrons produced by a monochromatic light beam incident on a metal surface have a spread in their kinetic energies.

Reason : The work function of the metal is its characteristics property.

Q.94. Assertion : Photoelectric saturation current increases with the increase in frequency of incident light.

Reason : Energy of incident photons increases with increase in frequency and as a result photoelectric current increases.

Q.95. Assertion : Photosensitivity of a metal is high if its work function is small.

Reason : Work function = hf_0 where f_0 is the threshold frequency.

Q.96. Assertion : The photon behaves like a particle.

Reason : If E and P are the energy and momentum of the photon, then $p = E / c$.

Q.97. Assertion : In an experiment on photoelectric effect, a photon is incident on an electron from one direction and the photoelectron is emitted almost in the opposite direction. It violate the principle of conservation of linear momentum.

Reason : It does not violate the principle of conservation of linear momentum.

Q.98. Assertion : Two sources of equal intensity always emit equal number of photons in any time interval.

Reason : Two sources of equal intensity may emit equal number of photons in any time interval.

Q.99. Assertion : Two photons of equal wavelength must have equal linear momentum.

Reason : Two photons of equal linear momentum will have equal wavelength.

Q.100. Assertion : The kinetic energy of photoelectrons emitted from metal surface does not depend on the intensity of incident photon.

Reason : The ejection of electrons from metallic surface is not possible with frequency of incident photons below the threshold frequency.

[CHEMISTRY]

- 1) Prepare and complete project for CBSE BOAR EXAM on the topic given in class/ class whatsapp group in thread file with neat and clean manner.
- 2) Do the exercises Q. N. 14,15,17,21,26,31,35,38, from the chapter: d-& f- block elements of NCERT book.
- 3) Write :
 - a. Ammonolysis
 - b. Gabriel phthalimide synthesis
 - c. Hoffmann bromamide degradation
 - d. Carbylamine reaction
 - e. Hinsberg's reagent test

- f. Zwitter ion
- g. Gattermann reaction
- h. Diazotisation
- i. Coupling reaction

[BIOLOGY]

- A. Chapter : human reproduction
Do exercise q. N. 9, 14, 11
- B. Chapter :moleculer basis of inheritance
Do exercise q.n. 2,3,4 , 9
- C. chapter :strategies for enhancement in food production
Do exercise q.n. 11, 12

[ACCOUNTANCY]

- Prepare one Comprehensive Project in Accountancy (Questions given in classroom according to Roll no.)
- Project should carry 25 to 30 pages.
- (Acknowledgement, Content, Certificate, Conclusion and Bibliography shall not be apart of the pages mentioned above.)
- Project should be put in a file.
- Only interleaf Project paper should be used.
- All the Cover Pages should be Computer generated.
- All duly completed project works should be submitted after vacation
- Blue and Black Ball point pens shall be used for writing.

[BUSINESS STUDIES]

Q.1. Management translates the works to be carried out in terms of goals to be achieved and assigns the means to achieve it. This statement relates to

- (a) Management of work
- (b) Management of people
- (c) Management of operations
- (d) All of the above

Q.2. Keeping in view the changes in the consumer demands and preferences 'Tasitemaker Bakery' has reduced the sugar and fat content in its products. This approach of business shows that management is

- (a) An intangible force
- (b) A group activity
- (c) A dynamic function
- (d) A multidimensional activity

Q.3. Management is considered to be an art because

- (a) The principles of management have universal validity
- (b) The principles of management have universal application
- (c) Different principles of management are brought into effect differently by different managers
- (d) It is not important for the practising managers to be a member of a professional association.

Q 4. The authority-responsibility relationships that exist within the organisation give rise to

- (a) Different functions within the organisation
- (b) Different levels in the organisation
- (c) Management as a multidimensional activity
- (d) Management as a group activity

Q.5. Which of the following statements does not pertain to middle level management?

- (a) They are responsible for all the activities of the operational managers.
- (b) They are responsible for the welfare and survival of the organisation.
- (c) The interpreter the policies made by top level managers
- (d) Co-operate with other departments for the smooth running of the organisation.

Q.6. The function of management related to grouping of activities to be carried out into departments and creating management hierarchy is

- (a) Planning (b) Organising (c) Controlling (d) Directing

Q.7. Co-ordination is considered to be the essence of management because

- (a) It is a common thread that runs through all the activities within the organisation
(b) It is implicit and inherent in all functions of the organisation
(c) It is a force that binds all the functions of management
(d) All of the above

Q.8. Jay is working as a marketing manager in a company. Has been given the task of selling 100000 units of a product at the cost of ₹100 per unit within 20 days. He is able to sell all the units within the stipulated time, but had to sell last 1000 units at 20% discount in order to complete the target. In such a situation, he will be considered to be

- (a) An efficient manager (b) An effective manager
(c) Both effective and efficient manager (d) None of the above

Q.9. Tarang Enterprises Limited is planning to increase its sales by 30% in the next quarter. Identify the feature of management being highlighted in the given statement.

- (a) Management is all pervasive (b) Management is a goal oriented process
(c) Management is a continuous process (d) All of the above

Q.10. Identify the feature of co-ordination being highlighted in the given statement: "Coordination is not a one time function, it begins at the planning stage and continue till controlling."

- (a) Coordination ensures unity of action (b) Coordination is an all pervasive function
(c) Coordination is a continuous process (d) Coordination is a deliberate function

Q.11. Supervision, communication, motivation and leadership are the key elements of this • function of management.

- (a) Directing (b) Controlling (c) Planning (d) Organising

Q.12. Rohan works as a production manager in Global Enterprises Limited. He has been given the task of getting 1000 units of hand woven table mats manufactured at the cost of ₹150 per unit within 10 days. In order to be acknowledged as an effective manager, he must ensure that

- (a) The cost of production does not exceed ₹150 per unit
(b) The work is completed within 10 days even at higher cost per unit
(c) The cost of production is less than ₹150 per unit
(d) All of the above.

Q.13. Which of the following statements best defines the techniques of management?

- (a) It is a set of guidelines to take decisions and actions.
(b) It is a procedure which involves a series of steps to be taken.
(c) They are general rules for behaviour of individuals.
(d) None of the above.

Q.14. The principles of management enhance the understanding of relationship between human and material resources for the achievement of organisational goals. Identify the feature of the principles of management being described in the given statement.

- (a) Cause and effect relationships
(b) Optimum utilisation of resources and effective administration
(c) Formed by practice and experimentation
(d) Mainly behavioural

Q.15. According to this principle of scientific management, the employees should be rewarded for their suggestions which results in substantial reduction in the cost.

- (a) Science, not rule of thumb
- (b) Co-operation, not individualism
- (c) Harmony, not discord
- (d) All of the above

Q.16. According to this principle of general management, “an organisation should safeguard against abuse of managerial power, but at the same time a manager should have the necessary authority to carry out his responsibility.” Name the principle of management being described in the given statement.

- (a) Discipline
- (b) Authority and responsibility
- (c) Unity of command
- (d) Unity of direction

Q.17. Which principle of general management advocates that, “Employee turnover should be minimised to maintain organisational efficiency.”?

- (a) Stability of personnel
- (b) Remuneration of employees
- (c) Equity
- (d) Esprit De Corps

Q.18. Since more number of people have become more beauty and health conscious, our economy has witnessed an unprecedented surge in the number of health and beauty spas and wellness clinics. Related feature of business environment being described in the above lines is —

- (a) Totality of external forces
- (b) Dynamic nature
- (c) Interrelatedness
- (d) Relativity

Q.19. Twinkle Stars’ is a well-known resort for organising parties, especially for children. However, in past 6 months its popularity has reduced considerably as a new resort with better ambience and facilities has opened within its vicinity. Name the related feature of business environment which has influenced the business of ‘Twinkle Stars’ adversely.

- (a) Totality of external forces
- (b) Dynamic nature
- (c) Interrelatedness
- (d) Uncertainty

Q.20. According to the United Nations Environmental Agency, the world produces around 300 million tons of plastic each year, half of which constitutes single-use items. Ford is recycling over one billion plastic bottles every year to develop elements of the car’s interior, reducing the amount of plastic ending up in a landfill. The American car maker has revealed that their Romanian-built EcoSport SUVs’ carpets are made using 470 recycled single-use plastic bottles. The process for making Ford EcoSport carpets involves shredding bottles and their caps into tiny flakes and then heating them to 260° C. Identify the related dimension of business environment.

- (a) Economic dimension
- (b) Social dimension
- (c) Technological dimension
- (d) Political dimension

Q.21. DigiLocker is the country’s first secured cloud-based platform for the storage, issuance and verification of documents with the Driving Licence & Vehicle Registration System of the Road Transport Ministry. The integration of a government department with DigiLocker since its launch last year is one of the biggest of its kind. It will spare 1 people the trouble of carrying licences & vehicle papers, which can be accessed on phones using the DigiLocker app. Identify the related dimension of business environment.

- (a) Economic dimension
- (b) Technological dimension
- (c) Social dimension
- (d) Political dimension

Q.22. In order to boost and double India’s export of goods and services to over USD 1,000 billion by 2025, it is important to lower effective corporate tax rate, bring down cost of capital and simplify regulatory and tax framework. Identify the related dimension of business environment.

- (a) Social dimension and Legal dimension
- (b) Technological dimension and Political dimension

- (c) Political dimension and Social dimension
- (d) Economic dimension and Legal dimension.

Q.23. 'Yo Tummy' began its business by offering the classic combo of hamburgers and fries. But over time, their customers wanted healthier foods, so 'Yo Tummy' responded and began offering healthy alternatives such as salads, fruits, wraps and oatmeal. If 'Yo Tummy' hadn't responded, they may have lost customers that wanted to eat healthier foods. The above case highlights one of the points related to the importance of business environment and its understanding by managers. Identify it.

- (a) It helps in coping with rapid changes.
- (b) It helps in improving performance.
- (c) It helps the firm to identify threats and early warning signals.
- (d) It enables the firm to identify opportunities and getting the first mover advantage.

Q.24. India's population is expected to grow under 0.5 per cent during 2031-41 due to decline in fertility rate and increase in life expectancy. These changes in India's demography will also have implications such as the proportion of elementary school-going children will witness significant declines, lack of hospital beds and increase in retirement age. The related feature of business environment being described in the above lines is

- (a) Totality of external forces
- (b) Dynamic nature
- (c) Interrelatedness
- (d) Relativity

Q.25. Which of the following statements is not true with reference to planning?

- (a) Planning is a pre-requisite for controlling.
- (b) Planning does not lead to rigidity.
- (c) Planning enables a manager to look ahead and anticipate changes.
- (d) Planning facilitates co-ordination among departments and individuals in the organisation.

Q.26. Identify the correct sequence of steps involved in the planning process.

- (a) Evaluating alternative courses, Identifying alternative course of actions, Setting objectives, Developing premises
- (b) Setting objectives, Identifying alternative course of actions, Evaluating alternative courses, Developing premises
- (c) Setting objectives, Developing premises, Identifying alternative course of actions, Evaluating alternative courses
- (d) Setting objectives, Developing premises, Identifying alternative course of actions, Evaluating alternative courses

Q.27. A strategy is derived from

- (a) Policy
- (b) Objective
- (c) Method
- (d) Rule

Q.28. They provide a basis for interpreting strategy, which is usually stated in general terms.

- (a) Policies
- (b) Procedures
- (c) Objectives
- (d) Programmes

Q.29. Which of the following is not a standing plan?

- (a) Policy
- (b) Procedure
- (c) Programme
- (d) Rule.

Q.30. Micromax was India's largest seller of mobile handsets. It launched low-cost Chinese manufacturing with some smart packaging and features like long-lasting batteries and dual-sim functionality to garner 20% market share in India's value-conscious mobile handset market. Identify the two types of plans being described in the above lines.

- (a) Strategy and objective
- (b) Rule and Programme
- (c) Programme and objective
- (d) Method and objective.

Q.31. According to a survey of 250 consumer packaged goods (CPG) companies by a reputed firm, 75% of brand owners say they're going to spend significantly more on packaging as it is critical to their brand's success.

Identify the type of plan being described in the above lines.

- (a) Rule
- (b) Programme
- (c) Strategy
- (d) Method.

Q.32. Shubham wants to increase the sale of his business by 15% in the next quarter. Identify the type of plan being described in the above lines.

- (a) Method (b) Objective (c) Strategy (d) Programme.

Q.33. When decision-making authority is retained organisation is said to be by higher management levels, an

- (a) Decentralised (b) Centralised (c) Fragmented (d) None of the above.

Q.34. Accountability is derived from

- (a) Authority (b) Formal position (c) Responsibility (d) All of the above.

Q.35. Which of the following cannot be delegated?

- (a) Responsibility and accountability (b) Authority and responsibility
(c) Accountability and responsibility (d) All of the above.

Q.36. Authority granted to an employee should be

- (a) More than the responsibility entrusted to him
(b) Less than the responsibility entrusted to him
(c) Equal to the responsibility entrusted to him
(d) All of the above.

Q.36. Which of the following is not a demerit of informal organisation?

- (a) It leads to spreading of rumours.
(b) It gives more importance to structure and work.
(c) It may restrict implementation of changes within the organisation.
(d) It puts psychological pressure on members to conform to group expectations, even if they are against the interest of organisation..

Q.37. Lakshay has been given the task of arranging for five-day conference for foreign delegates. In order to ensure smooth functioning of the event, he has made two people as co-ordinators to take care of activities related to registration and refreshment. Identify the function of management being carried out by Lakshay.

- (a) Planning (b) Staffing (c) Organising (d) Directing.

Q.38. Indigo Limited has a staff of 300 people which is grouped into different departments. The organisational structure depicts that 100 people work in Production department, 150 in Finance department, 20 in Technology department and 30 in Human Resource department. Identify the type of organisational structure being followed by the company.

- (a) Functional structure (b) Divisional structure (c) Informal structure (d) None of the above.

Q.39. Rishabh has joined as a Creative Head in an entertainment company. He always ensures that the work has been divided into small and manageable activities and also the activities of similar nature are grouped together. Identify the related step in organising process being mentioned in the above lines.

- (a) Identification and division of work (b) Departmentalisation
(c) Assignment of duties (d) Establishing reporting relationships.

Q.40. "A manager in a conscious manner has to ensure that even where members of a department willingly cooperate, coordination gives direction to the willing spirit." The

characteristic of coordination being highlighted above is :

1. Coordination is the responsibility of all managers.
2. Coordination is a deliberate function.
3. Coordination integrates group efforts.
4. Coordination is a continuous process

Q.41. The CEO of Radhe Cycles Pvt Ltd. Mr. Kumar wants to get maximum output from the employees at a competitive cost. On the other hand, Ramakaant, an employee of the company, wants to get the maximum salary while working the least. The principle of management given by Fayol being violated by Ramakaant is -----

(a) Remuneration (b) Equity (c) Discipline (d) Subordination of individual interest to the general interest.

Q.42. Which of the following is not an element of delegation?

(a) Responsibility (b) Authority (c) Accountability (d) Decentralisation

Q.43. Rahul, sales executive of Mankind Pharma Ltd. put forth the idea of using artificial intelligence in the marketing of its products which will help in saving time, cost and energy for both ends. The marketing manager appreciated him but suggested to continue with the already developed marketing strategy. Which limitation of planning is reflected in the above case.

1. Planning is time consuming
2. Planning reduces creativity
3. Planning leads to rigidity
4. Planning does not guarantee success

Q.44. Changes and events cannot be eliminated but can be anticipated and managerial response to them can be developed. Which importance of planning is highlighted in the above statement.

1. Planning provides direction
2. Planning reduces overlapping and wasteful activities
3. Planning reduces the risk of uncertainty
4. It facilitates decision making

Q.45. Suraj was engaged in the business of carpet making. Since the company was making handmade carpets as well as machine made carpet, there were a lot of overlapping of activities. So, the Production manager advised that there should be two separate divisions where in each division should have its own head, plans and execution.

Identify the principle of management insisted by production Manager.

(a) Unity of command (b) order (c) Unity of direction (d) Equity

Q.46. According to the technique of Scientific management "Differential Piece Wage system" How much more will a worker making 60 units earn as compared to a worker making 49 units? If the standard output per day is 50 units and those who make standard output or more than standard get Rs. 75 per unit and those below get Rs. 65 per unit.

(a) Rs. 4500 (b) Rs. 3185 (c) Rs. 1315 (d) Rs. 3250

Q.47. A business has to offer wider choice in purchasing enhanced quality of goods and services in order to maintain an edge over its competitors. The implementation of the new economic policy with liberalisation, privatisation and

globalisation has posed various challenges for the corporate sector. One of the important challenges is explained in the above lines. Identify it.

- (a) Increasing competition (b) More demanding customers
(c) Necessity for change (d) Market orientation.

Q.48. Any kind of external devices, like compact discs (CD's) for computer, have become obsolete. Google, with its Google Drive service, Apple with its iCloud offering, enables the users store documents, photos, music and movies on web-based servers. Identify the feature of business environment being described in the above lines.

- (a) Relativity (b) Dynamic nature (c) Uncertainty (d) Interrelatedness.

Q.49. Swatch Ltd. plans to earn a 20% return on its investment in a new project. Identify the type of plan being described in the above lines.

- (a) Method (b) Strategy (c) Programme (d) Objective.

Q.50. The size of assets, profitability and competitiveness are all affected by

- (a) Working capital decision (b) Capital budgeting decision
(c) Financing decision (d) Dividend decision.

[ECONOMICS]

- Prepare a project on **any ONE** of the following topics(30-40 pages) as per the given guidelines of CBSE:
- Role of RBI in control of credit
- GST Act and its impact on GDP
- Government Budget and its components
- Organic Farming; Back to nature
- Self Help Groups
- Human Development Index

[GEOGRAPHY]

- Q1. Explain the emerging role of India in the world with respect of G-20.
Q2. Explain India as a destination of tourism with respect of education and medical tourism.
Q3. Prepare a project on Environmental pollution specially on Urban waste disposal
Q4. On the outline map of India label these highways - NH 1,2,3,5,7,8 and 15.
Q5. Suggest some ways to improve the economical condition of India.

[HISTORY]

TOPIC : VIJAYANAGARA EMPIRE.

- Discuss the accounts of foreign travellers on Vijayanagara in order to interpret political, social and cultural life of the city.
- Examine the Excerpts or the Sources closely and discuss the ways in which architecture can be analysed to reconstruct history.
- Write about the nature, characteristics and significance of archaeological artefacts and historical monuments of Vijayanagara.
- Assess the city planning, water management system and administration of the rulers of Vijayanagara.

[POLITICAL SCIENCE]

Answer the following questions (150 -200words)

- 1) Write a note on major Environmental Movement in India.
- 2) Give your views on Environmental Concerns in Global Politics.
- 3) Define climate change and discuss any three global initiatives on climate change in detail.
- 4) Explain the role of environmental movements to meet the challenge of environmental degradation.
- 5) What is the significance of kyoto Protocol? Is India a signatory to this Protocol.
- 6) States have common but differentiated responsibilities towards environment. Analyse statement giving suitable examples.

[PHE]

- 1) Write a brief note on the event " ASIAN GAMES" including the point table (300 words)
- 2) Draw a well labelled court marking of basketball with all rules and regulations.

- * Use A4 size Interleaf paper.
- * Submit in a stick file.
- * The first page will be your project details with your personal detail.

[COMPUTER SCIENCE]

- 1) WAP to calculate and print the sums of even and odd integers of first 'n' natural numbers.
- 2) WAP to illustrate the difference between break and continue statement.
- 3) Program to input some numbers repetitively and print their sum. The program ends when the user types 'n' else it runs in a loop.
- 4) WAP that takes the upper limit and lower limit and find all the prime numbers in that range.
- 5) Using the function Write any five programs from Sumita Arora.
 - Note: Do all your HHW in a Stick file.

[HINDI]

निम्न अप्रत्याशित विषयों पर 120 शब्दों में रचनात्मक लेख लिखें-

- 1 विज्ञापनों का जीवन पर प्रभाव
- 2 मेक इन इंडिया
- 3 विश्व की शान: भारत
- 4 विज्ञान की अदभुत खोज : मोबाइल फोन
- 5 जी ट्वेंटी और भारत