



SALWAN PUBLIC SCHOOL

Sector-15 (II), Gurgaon

Holiday Home Work

(2017-18)

CLASS – XII

English

The topics Include:

- Note Making
- Short Composition
- Long Composition – Letter Writing, Article Writing
- Long Reading Text – The Invisible Man by H.G. Wells

Date of submission- July 1, 2017

‘Practice does not make perfect. Only perfect practice makes perfect’ – Vince Lombardi

ASSIGNMENT 1

Do the following questions in your language notebook.

1. Note Making

Modern food has become our enemy. We have become so besotted by taste and presentation, that we eat food for its entertainment value not for its nutritional benefit. Each restaurant boasts of a new cuisine, which is a mixture of refined flour, oil and sugar, pasta, noodles, white rice, white bread and maida based products like pizzas, burgers, naan and rumali roti are the grain option in Italian, Chinese, Indian or Mexican. The cuisines vegetarian dishes are either overcooked or have a lot of cornstarch and fat. A process of deprivation and elimination, however, cannot achieve perfect health. The idea is to nourish the body; you might achieve some weight loss, but you will lose on your health.

I have been providing solutions to people suffering from obesity and its related problems like high cholesterol, hypertension, diabetes, osteoarthritis, and asthma. I realized that by advising a health-plan for these disorders, people lost excess baggage automatically. This means that weight loss can be a natural by – product of a health regime; you don’t have to eat less to lose weight but to choose your food correctly. In fact the link between ideal body weight and health is so crucial that if one were to concentrate completely on achieving good health one would automatically achieve some amount of weight loss.

Food influences almost every aspect of your being. It influences your nails, hair, skin, hormones and bones. The vegetables that you eat will affect the texture of your skin. The fact that the right kinds of fats are essential to achieve good health comes as a surprise to many people. Fat is the raw material for many hormones that influence various functions in your body. Most people try to cut calories by going on fat-free diets. While eating less fat is not a bad idea, going on a fat-free diet has its own set of problems. Fats make ‘eicosanoids’ which influences vital aspects of your body right from blood pressure to premenstrual syndrome to pain sensitivity as in arthritis. For example PUFA based oils, oil and MUFA based oils like til oil, mustard oil, groundnut oil increase pain and inflammation of the joints. It is primarily composed of fat. The right fat intake (walnuts, almonds, tulsı seeds) would naturally influence your concentration, memory, and ability to conceptualize, calculate and comprehend life better. The brain is the vital organ that regulates the body and makes living possible. If you deprive your body of the right fats, you might fall prey to depression and other mental disorders. Fat is as essential to your health as vitamins, proteins and carbohydrates are. Therefore whilst embarking upon any weight loss programme, remember

that health is so much more than just weight loss, at the same time achieve ideal body weight in a healthy way does provide a basis for achieving perfect health.

- a. **On the basis of your reading of the above passage, make notes on it using headings and sub-headings. Use recognizable abbreviations (at least 4) and supply a suitable title.**
- b. **Write a summary of the above passage using the notes made by you in about 80 words.**

Notice

2. You are Rohit / Ritu , Secretary, Welfare Association, ABC Colony, Chennai, Write a notice in not more than 50 words to be placed on the notice board informing the residents that there would be no water supply for two days in your colony due to major pipeline repair work.
3. You are the Secretary of your school Literary Association. Write a notice in not more than 50 words for your school notice board, giving details of the proposed inauguration of the Literary Association of your school. You are XYZ of Jain Vidyashram, Cuddalore.

Display Ads

4. You are working for an advertising agency. Draft an attractive advertisement for the company called Modern Machines which is launching washing machines.
5. You have recently started a Centre for Personality Development for school children. Draft an advertisement to be published in a local daily about it, giving all relevant details.

Posters

6. To create awareness among the people regarding the importance of rain water harvesting, prepare a poster about it to be displayed at an exhibition (Word limit 50 words).
7. Design an attractive and instructive poster on behalf of the Delhi Police to educate and warn the people against unclaimed stray articles like dolls, tiffin boxes or transistors lying in public places / trains / buses to avert bomb blasts.
8. Draft a poster for your library on the 'Value of Books and Reading ' in your life today. You may use a visual to make it meaningful.

Letter to the Editor

9. Write a letter to the Editor, Deccan Times, Bengaluru about the inadequate parking facilities in the Commercial Street, MG Road, which is causing a lot of inconvenience to the people. Offer your suggestions. You are Anoop/Ritu, 24, Hennis Road, Bengaluru.

10. Write a letter to the editor of Deccan Chronicle about the poor and unhygienic condition of the Corporation land adjoining your school premises. It has become a health hazard for your school children. You are Amrita/Anurag of S.S.V.G. Sr. Sec. School, Chennai.

Application for job

11. Read the given advertisement and then write a suitable application in response to it. Sign yourself as Medha / Mohit.

Tulip Sr. Secondary School

.We are an upcoming CBSE Sr. Sec. School located at Meerut. We require dynamic, innovative and creative faculty to teach. Urgently needed PGT as English with a degree in Education. Experience must, Salary negotiable.

Article

12. Today the 24 hour television news channels give us instant news from every nook and corner of the world. But the fact remains that the importance of the newspaper remains intact. Write an article in 150-200 words expressing your view on 'The Relevance of Newspapers'. You are Sunil/Sunita.
13. Spurt of violence previously unknown in Indian Schools makes it incumbent on the educationists to introduce value education effectively in schools. Write an article in 150-200 words expressing your views on the need of value education. You are Anu/Arun.

Debate

14. You have to participate in a debate on the motion. "Gandhian Philosophy is irrelevant in today's world". Draft the debate either in favour of or against the motion in not more than 120 words.
15. Draft a debate against the topic "Gadgets make people dependent and lazy. You are Saumya, Head Girl of D.P.S. Meerut. The debate should be about 120 words.

ASSIGNMENT 2

The Invisible Man

Do the following questions in 100-125 words each in your literature notebooks:

Chapter 1

- Q1. What pains did Mrs. Hall take to make the stranger comfortable and why?
- Q2. Give a brief character sketch of Millie, Mrs. Hall's domestic help, describing how she was dealt with by Mrs. Hall.
- Q3. How did Mrs. Hall put up two and two together and concluded that the stranger must have had an accident that disfigured his face? What idea does this conclusion give you about this lady's personality?

Chapter 2

- Q1. What brilliant idea did Mrs. Hall hit upon when Teddy Henfrey, the clock jobber, came into the bar? How well did the idea work?
- Q2. What idea do you get about Mr. Henfrey's personality from the way he reacted to his encounter with Mrs. Hall's guest?

Chapter 3

- Q1. Why did Mrs. Hall follow the stranger to his room after he was bit by the dog? What did he experience?
- Q2. What were the different remarks made by the villagers who had gathered outside 'Coach and Horses' after the stranger was bit by the Fearenside's dog?

Chapter 4

- Q1. What plans did Cuss hit upon to be able to see the stranger in person?
- Q2. Why was the stranger heard laughing after Cuss ran out of his room? What light does this laughing reflect on his mentality?

Chapter 5

- Q1. Describe the burglary that took place at the vicarage.

Chapter 6

1. Henfrey had suggested that the odd man taken in as a guest by Mrs. Hall might be a swindler. What circumstances reminded Hall of Henfrey's statement?
2. Describe in detail Mrs. Hall's experience when she came to check the guest parlour on the Whit Monday morning.

Chapter 7

1. What idea do you get about Mrs. Hall from her encounter with the guest who opened the parlour door after a good number of hours on Whit Monday?
2. Describe the circumstances that led the stranger to unveil himself.

Chapter 8

1. Describe Gibbons 'encounter' with the Invisible Man.

Chapter 9

1. "This ain't no time for foolery," said Mr. Thomas Marvel. Why did Marvel think that someone was fooling him?
2. What did the Invisible Man wish Marvel to do for him? How did he bring round Marvel to comply with his demands? What traits of his character are reflected through this incident?

Chapter 10

1. How did the believers in the Invisible Man and the skeptics react after he vanished from Iping?
2. Why did Mr. Huxter run after the stranger? Did he succeed in catching hold of him?

Maths

Subject : Mathematics Class : XII Practice Paper 1 Time : 3 Hr. MM : 100

This paper contains 3 printed page and 29 questions.

General Instructions:

1. All questions are compulsory.
2. The question paper consists of 29 questions divided into three sections A, B, C and D. Section A comprises 4 questions of one mark each, Section B comprises 8 questions of two marks, Section C comprises 11 questions of four marks each and Section D comprises 6 questions of six marks each.
3. All questions in Section A are to be answered in one word, one sentence or as per the exact requirement of the questions.
4. Use of calculator is not permitted. You may ask for logarithmic tables, if required.

SECTION A

- Q1 If A is 3×3 invertible matrix such that $(5A)^{-1} = \frac{1}{m}A^{-1}$. Find m . 1
- Q2 If $|A| = \begin{vmatrix} 5 & 3 & 9 \\ 2 & 4 & 5 \\ -2 & 4 & 2 \end{vmatrix}$ If A_{ij} is cofactor the element is its row and j th column find the value of $2A_{31} + 4A_{32} + 5A_{33}$. 1
- Q3 $y = \sin x^0$ and $z = \cos x$. Find $\frac{dy}{dz}$. 1
- Q4 If $f(x) = \frac{1 - \sin x}{\sin 2x}$, $x \neq \frac{\pi}{2}$, is continuous at $x = \frac{\pi}{2}$ find $f\left(\frac{\pi}{2}\right)$. 1
- Q5 Show that the function $f : R \rightarrow R$ defined by $f(x) = \frac{x}{x^2 + 1}$, $\forall x \in R$, is neither one – one nor onto. 2
- Q6 Solve the equation $\sin^{-1} 6x + \sin^{-1} 6\sqrt{3}x = -\frac{\pi}{2}$ 2
- Q7 Evaluate $\cos \left[\sin^{-1} \frac{1}{4} + \sec^{-1} \frac{4}{3} \right]$ 2

Q8 Find $\frac{dy}{dx}$, if $y = \tan^{-1}\left(\frac{3x-x^3}{1-3x^2}\right)$, $-\frac{1}{\sqrt{3}} < x < \frac{1}{\sqrt{3}}$ 2

Q9 Find the approximate value of $(1.999)^5$. 2

Q10 Differentiate the following function with respect to x : $f(x) = \tan^{-1}\left(\frac{1-x}{1+x}\right) - \tan^{-1}\left(\frac{x+2}{1-2x}\right)$. 2

Q11 Show that $y = ae^{2x} + be^{-x}$ is a solution of the differential equation $\frac{d^2y}{dx^2} - \frac{dy}{dx} - 2y = 0$. 2

Q12 Find $\frac{d^2y}{dx^2}$ for the following function: $y = x^3 + \sin ax$ 2

SECTION C

Q13 Find greatest and least values of $(\sin^{-1}x)^2 + (\cos^{-1}x)^2$. 4

Q14 If $f(x) = \frac{\sqrt{2}\cos x - 1}{\cot x - 1}$, $x \neq \frac{\pi}{4}$ find the value of $f\left(\frac{\pi}{4}\right)$ so that $f(x)$ becomes continuous at $x = \frac{\pi}{4}$. 4

Q15 Show that the function $f: A \rightarrow R - \left\{\frac{2}{3}\right\}$ defined as $f(x) = \frac{4x+3}{6x-4}$ is one – one and onto. Hence, find f^{-1} . 4

Q16 Let $A = \begin{bmatrix} 2 & 3 \\ -1 & 2 \end{bmatrix}$. Then show that $A^2 - 4A + 7 = 0$. Using this result calculate A^5 . 4

OR

If $A = \begin{bmatrix} 0 & -\tan\frac{\alpha}{2} \\ \tan\frac{\alpha}{2} & 0 \end{bmatrix}$ and I is the identity matrix of order 2, then show that :

$$I + A = (I - A) \cdot \begin{bmatrix} \cos \alpha & -\sin \alpha \\ \sin \alpha & \cos \alpha \end{bmatrix}.$$

Q17 A farmer posses 30 acre cultivated land that must be cultivated in two different mode of cultivations organic and inorganic. The yield for organic and inorganic system of cultivations is 11 quintals /acre and 14 quintals / acre respectively. Using matrix method, determine how to divide 30 acre land among two mode of cultivation to obtained yield 390 quintals. Which mode of cultivation you prefer most and why? 4

Q18 Prove $\begin{vmatrix} x & x^2 & 1+px^3 \\ y & y^2 & 1+py^3 \\ z & z^2 & 1+pz^3 \end{vmatrix} = (1+pxyz)(x-y)(y-z)(z-x).$ 4

Q19 Find the equation of all the tangents to the curve $y = \cos(x+y)$, $-2\pi \leq x \leq 2\pi$, that are parallel to the line $x + 2y = 0$ 4

OR

A man, 2m tall, walks at the rate of $1\frac{2}{3}m/s$ towards a street light which is $5\frac{1}{3}m$ above the ground. At what rate is the tip of his shadow moving? At what rate is the length of the shadow changing when he is $3\frac{1}{3}m$ from the base of the light?

Q20 Solve for x : $\cos^{-1}\left(\frac{x^2-1}{x^2+1}\right) + \tan^{-1}\left(\frac{2x}{x^2-1}\right) = \frac{2\pi}{3}.$ 4

Or

If $0 < a < b < c$ prove that $\cot^{-1}\left(\frac{ab+1}{a-b}\right) + \cot^{-1}\left(\frac{bc+1}{b-c}\right) + \cot^{-1}\left(\frac{ca+1}{c-a}\right) = 2\pi$

Q21 Differentiate the following with respect to x : $\sin^{-1}\left[\frac{2^{x+1}3^x}{1+(36)^x}\right].$ 4

Q22 The value of two determinant remains unchanged if its rows and columns are interchanged. Verify this property for 4

$$\Delta = \begin{vmatrix} 2 & -3 & 5 \\ 6 & 0 & 4 \\ 1 & 5 & -7 \end{vmatrix}$$

Q23 Water is leaking from a conical funnel at the rate of $5\text{ cm}^3/\text{sec}$. If the radius of the base of the funnel is 5 cm and height 10 cm, find the rate at which the water level is dropping when it is 2.5 cm deep. 4

OR

Find the intervals in which the function: $f(x) = (x+1)^3(x-3)^3$ is

(i) strictly increasing (ii) strictly decreasing

SECTION D

Q24 Let N denote the set of all natural numbers and R be the relation on $N \times N$ defined by 6

$(a,b) R (c,d)$ if $ad(b+c) = bc(a+d)$. Show that R is an equivalence relation.

Q25 Two schools P and Q want to award their selected students on the values of discipline, politeness and punctuality. The school P wants to award Rs x each, Rs y each and Rs z each for the three respective values to its 3, 2 and 1 students with a total award money of Rs 1,000. School Q wants to spend Rs 1,500 to award its 4, 1 and 3 students on the respective values (by giving the same award money for the three values as before). If the total amount of awards for one 6

prize on each value is Rs 600, using matrices find the award money for each value.

- Q26 A square piece of tin of side 18cm is to be made into a box without top by cutting a square from each corner and folding up the flaps to form a box. Find the maximum volume of the box. 6

- Q27 If $f(x)$, defined by the following, is continuous at $x=0$, find the values of a, b and c : 6

$$f(x) = \begin{cases} \frac{\sin(a+1)x + \sin x}{x}, & \text{if } x < 0 \\ c; & \text{if } x = 0 \\ \frac{\sqrt{x+bx^2} - \sqrt{x}}{bx^{\frac{3}{2}}}, & \text{if } x > 0 \end{cases}$$

- Q28 If $x = \sin t$ and $y = \sin pt$, prove that $(1-x^2)\frac{d^2y}{dx^2} - x\frac{dy}{dx} + p^2y = 0$ 6

OR

If $y = [\log(x + \sqrt{x^2+1})]^2$, then prove that $(x^2+1)y_2 + xy_1 = 2$.

- Q29 If $A = \begin{bmatrix} 1 & 2 & 3 \\ 3 & -2 & 1 \\ 4 & 2 & 1 \end{bmatrix}$, then show that $A^3 - 23A - 40I = O$ Hence find A^{-1} . 6

OR

Given that $A = \begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$, find AB.

Use this to solve the following system of equations :

$$x - y = 3$$

$$2x + 3y + 4z = 17$$

$$y + 2z = 7$$

This paper contains 4 printed pages and 29 questions.

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3. All questions in Section A are to be answered in one word, one sentence or as per the exact requirement of the questions.
4. Use of calculator is not permitted. You may ask for logarithmic tables, if required.

SECTION A

- Q1 If $A = \begin{bmatrix} 0 & 2 \\ 3 & -4 \end{bmatrix}$ and $2A = \begin{bmatrix} 0 & 2a \\ 2b & -8 \end{bmatrix}$ then what are the values of a and b? 1
- Q2 Find the slope of the tangent to the curve $y = x^3 - x + 1$ at the point whose x – coordinate is 2. 1
- Q3 If A and B are square matrices of order 3 such $|A| = -2$, $|B| = 3$, then what is the value of $|3AB|$? 1
- Q4 Find $\frac{dy}{dx}$ in the following : $2x + 3y = \sin y$ 1

SECTION B

- Q5 If $f(x) = x^2 + 1$, $g(x) = \frac{1}{x-1}$, find $g \circ f(5)$. 2
- Q6 Write the following function into the simplest form: $\tan^{-1} \left(\frac{\cos x}{1 - \sin x} \right)$, $-\frac{\pi}{2} < x < \frac{\pi}{2}$. 2
- Q7 Prove that : $\cot \left(\frac{\pi}{4} - 2 \cot^{-1} 3 \right) = 7$. 2
- Q8 Verify mean value theorem if $f(x) = x^2 - 4x - 3$ in the interval $[a, b]$, where $a = 1$ and $b = 4$. 2
- Q9 Using differentials, find the approximate value of $\sqrt{0.082}$. 2
- Q10 If $\tan^{-1} \frac{x-1}{x-2} + \tan^{-1} \frac{x+1}{x+2} = \frac{\pi}{4}$, then find the value of x. 2
- Q11 If A is 3×3 invertible matrix and $(5A)^{-1} = k A^{-1}$, find k. 2

- Q12 Find the equation of a curve whose tangent at any point on it, different from origin, has slope $y + \frac{y}{x}$. 2

SECTION C

- Q13 Let $A = \mathbb{R} - \{3\}$ and $B = \mathbb{R} - \left\{\frac{2}{3}\right\}$. If $f: A \rightarrow B: f(x) = \frac{2x-4}{3x-9}$, then prove that f is a bijective function. 4

- Q14 Prove that: $\frac{9\pi}{8} - \frac{9}{4} \sin^{-1} \frac{1}{3} = \frac{9}{4} \sin^{-1} \frac{2\sqrt{2}}{3}$. 4

- Q15 If $A = \begin{bmatrix} 0 & -\tan \frac{\alpha}{2} \\ \tan \frac{\alpha}{2} & 0 \end{bmatrix}$ and I is the identity matrix of order 2, then show that: 4

$$I + A = (I - A) \cdot \begin{bmatrix} \cos \alpha & -\sin \alpha \\ \sin \alpha & \cos \alpha \end{bmatrix}$$

- Q16 For the matrix $A = \begin{bmatrix} 1 & 1 & 1 \\ 1 & 2 & -3 \\ 2 & -1 & 3 \end{bmatrix}$ Show that $A^3 - 6A^2 + 5A + 11I = O$. Hence, find A^{-1} 4

- Q17 Prove that: $\begin{vmatrix} (b+c)^2 & a^2 & a^2 \\ b^2 & (c+a)^2 & b^2 \\ c^2 & c^2 & (a+b)^2 \end{vmatrix} = 2abc(a+b+c)^3$ 4

OR

Solve the equation $\begin{vmatrix} x+a & x & x \\ x & x+a & x \\ x & x & x+a \end{vmatrix} = 0, a \neq 0$

- Q18 Find the value of p if following function $f(x) = \begin{cases} \frac{\sqrt{1+px} - \sqrt{1-px}}{x}, & \text{if } -1 \leq x < 0 \\ \frac{2x-1}{x-2}, & \text{if } 0 \leq x < 1 \end{cases}$ is continuous at $x = 0$. 4

- Q19 Find all the points of local maxima and local minima of the function $f(x) = -\frac{3}{4}x^4 - 8x^3 - \frac{45}{2}x^2 + 105$. 4

Q20 Solve the following equation 4

$$\begin{vmatrix} x & 3 & 7 \\ 2 & x & 2 \\ 7 & 6 & x \end{vmatrix} = 0$$

Q21 If $x = a \cos^3 \theta$ and $y = a \sin^3 \theta$ find $\frac{d^2y}{dx^2}$ at $\theta = \frac{\pi}{6}$ 4

Or

Differentiate $\sqrt{\frac{(x-3)(x^2+4)}{3x^2+4x+5}}$ w.r.t. x .

Q22 Water is leaking from a conical funnel at the rate of $5 \text{ cm}^3/\text{sec}$. If the radius of the base of the funnel is 5 cm and height 10 cm, find the rate at which the water level is dropping when it is 2.5 cm deep. 4

OR

Find intervals in which the function given by

$f(x) = \frac{3}{10}x^4 - \frac{4}{5}x^3 - 3x^2 + \frac{36}{5}x + 11$ is (a) strictly increasing (b) strictly decreasing

Q23 For what values of a, b and c , if any, does the function 4

$$f(x) = \begin{cases} ax^2 + bx + c, & 0 \leq x \leq 1 \\ bx - c, & 1 < x \leq 2. \text{ become differentiable} \\ c, & x > 2 \end{cases}$$

at $x = 1$ and $x = 2$?

:

SECTION D

Q24 If $A = R - \{0\}$ and $*$ defined on A such that $a * b = 2ab$ then prove that 6
(i) $*$ is commutative (ii) $*$ is associative (iii) write identity element of $*$ on A
(iv) If inverse exists find the inverse of 'a'.

Q25 Two schools A and B decided to award prizes to their students for three values honesty 6
punctuality (y) and obedience (z). School A decided to award a total of Rs 11000 for the three values to 5, 4, and 3 students respectively, while school B decided to award Rs 10700 for the three values to 4, 3 and 5 students respectively. If all the three prizes together amount to Rs 2700, then
(i) Represent the above situation by a matrix equation and form linear equations using matrix multiplication.
(ii) Is it possible to solve the system of equations so obtained using matrices?
(iii) Which value do you prefer to be rewarded most and why?

Q26 Find the equation of the tangent line to the curve $y = x^2 - 2x + 7$ which is 6
(a) parallel to the line $2x - y + 9 = 0$
(b) perpendicular to the line $5y - 15x = 13$.

- Q27 Two sign Boards, one circular & one square are to be made cutting a wire of length 40m into two pieces. The sign boards are to depict 'BE HONEST' & "BE PUNCTUAL" and these are to be displayed near the main gate of school. What should be the lengths of the two pieces, so that the combined area of the square & the circle is minimum? Do you think these values are important in life? Justify your answer. 6

OR

An isosceles triangle of vertical angle 2θ is inscribed in a circle of radius a . Show that the area of triangle is maximum when $\theta = \frac{\pi}{6}$.

- Q28 Using elementary transformation, Find the inverse of the following matrix, 6

$$\begin{pmatrix} 1 & 3 & -2 \\ -3 & 0 & -5 \\ 2 & 5 & 0 \end{pmatrix}.$$

(OR)

Solve the system of equation for a, b, c using matrix method:

$$a - \frac{1}{b} + \frac{2}{c} = 1; \quad \frac{2}{b} - \frac{3}{c} = 1; \quad 3a - \frac{2}{b} + \frac{4}{c} = 2$$

- Q29 If $y = [\log(x + \sqrt{x^2 + 1})]^2$, then prove that $(x^2 + 1)y_2 + xy_1 = 2$. 6

Science

Physics

Practice Paper

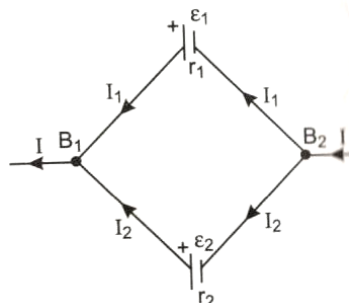
General Instructions:

All questions of all sections are compulsory.

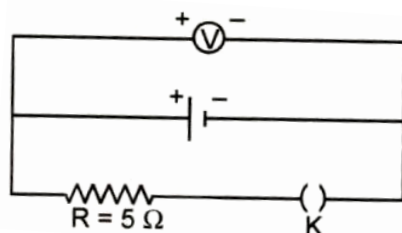
- Q1.** A wire of resistivity p is stretched to twice its length. What will be its new resistivity? **1**
- Q2.** Define electrical conductivity of a metallic wire. Write its SI unit. **1**
- Q3.** What is the effect of heating of a conductor on the drift velocity of free electrons? **1**
- Q4.** Two conducting wires X and Y of same diameter but different materials are joined in series across a battery. If the number density of electrons in X is twice that in Y, find the ratio of drift velocity v of electrons in the two wires. **1**
- Q5.** Define the term 'Mobility' of charge carriers in a conductor, Write its SI unit. **1**
- Q6.** Write a relation between current and drift velocity of electrons in a conductor. Use this relation to explain how the resistance of a conductor changes with the rise in temperature. **2**
- Q7.** Using the concept of drift velocity of charge carriers in a conductor, deduce the relationship between current density and resistivity of the conductor. **2**
- Q8.** Write the mathematical relation between mobility and drift velocity of charge carriers in a conductor Name the mobile charge carriers responsible for production of electric current in (i) an electrolyte, (ii) an ionized gas. **2**
- Q9.** Estimate the average drift speed of conduction electrons in a copper wire of cross-sectional area $1.0 \times 10^{-7} \text{ m}^2$ carrying a current of 1.5 A. Assume the density of conduction electrons to be $9 \times 10^{28} \text{ m}^{-3}$. **2**
- Q10.** The sequence of coloured bands in two carbon resistors R_1 and R_2 is (i) brown, green, blue and (ii) orange, black, green. Find the ratio of their resistances. **2**
- Q11.** Define the term current density of a metallic conductor. Deduce the relation connecting current density (J) and the conductivity (σ) of the conductor when an electric field E is applied to it. **3**
- Q12.** A cell of emf ' \mathcal{E} ' and internal resistance ' r ' is connected across a variable load resistor ' R '. Draw the plots of the terminal voltage ' V ' versus (i) R and (ii) the current I . **3**

It is found that when $R = 4\Omega$, the current is 1A and when R is increased to 9Ω , the current reduces to 0.5 A. Find the values of the emf \mathcal{E} and internal resistance r .

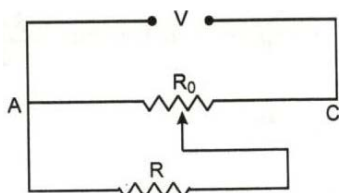
- Q13.** Two cells of emf \mathcal{E}_1 and \mathcal{E}_2 having internal resistances r_1 and r_2 respectively are connected in parallel as shown in **Fig.** Deduce the expressions for the equivalent emf and equivalent internal resistance of a cell which can replace the combination between the points B_1 and B_2 . **3**



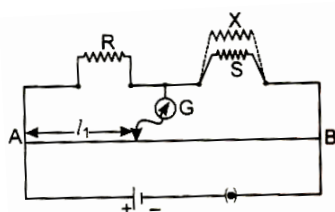
- Q14.** Write any two factors on which internal resistance of a cell depends. The reading on a high resistance voltmeter, when a cell is connected across it is 2.2 V. When the terminals of 5Ω as shown in the circuit, the voltmeter reading drops to 1.8 V. Find the internal resistance of the cell. **3**



- Q15.** State the working principle of a potentiometer. With the help of the circuit diagram explain how a potentiometer is used to compare the emfs of two primary cells. Obtain the required expression used for comparing the emfs. **3**
- Q16.** A resistance of $R\Omega$ draws current from a potentiometer as shown in **Fig.** The potentiometer has a total resistance $R_0\Omega$. A voltage V is supplied to the potentiometer. Derive an expression for the voltage across R when the sliding contact is in the middle of the potentiometer. **3**



- Q17.** (i) State the principle of working of a metre bridge. **3**
- (ii) In a metre bridge balance point is found at a distance l_1 with resistances R and S as shown in the figure.

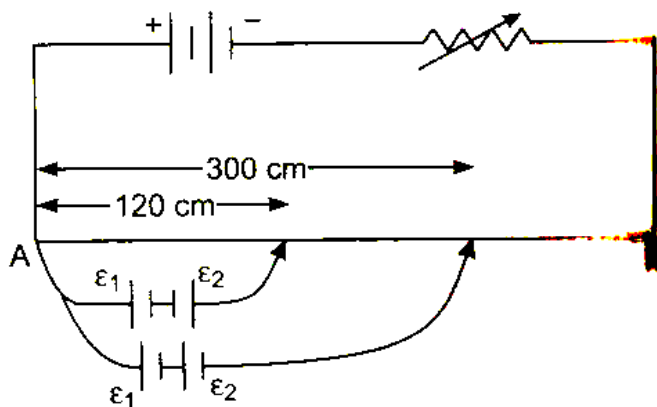


When an unknown resistance X is connected in parallel with the resistance S , the balance point shifts to a distance l_2 . Find the expression for X in terms of l_1 , l_2 and S .

- Q18.** Two cells of emf 1.5V and 2V and internal resistance 1Ω and 2Ω respectively are connected in parallel to pass a current in the same direction through an external resistance of 5Ω . **3**
- (i) Draw the circuit diagram
- (ii) Using Kirchoff's laws, calculate the current through each branch of the circuit and potential difference across the 5Ω resistor.
- Q19** Two heating elements of resistances R_1 and R_2 when operated at a constant supply of voltage V , consume powers P_1 and P_2 respectively. **3**
- Q20.** A 10 m long wire of uniform cross-section and 20Ω resistance is used in a potentiometer. The wire is connected in series with a battery of 5 V along with an external resistance of 480Ω . If an unknown emf E is balanced at 6.0 m length of the wire, calculate **3**
- (i) The potential gradient of the potentiometer wire
- (ii) The value of unknown emf.

- Q21.** In the fig. a long uniform potentiometer wire AB is having a constant potential gradient along its length. The null points for the two primary cells of emf \mathcal{E}_1 and \mathcal{E}_2 connected in the manner shown are obtained at a distance of 120 cm and 300 cm from the end A . Find (i) $\mathcal{E}_1/\mathcal{E}_2$ and (ii) Position of null point for the cell \mathcal{E}_1 . **3**

How is the sensitivity of a potentiometer increased?

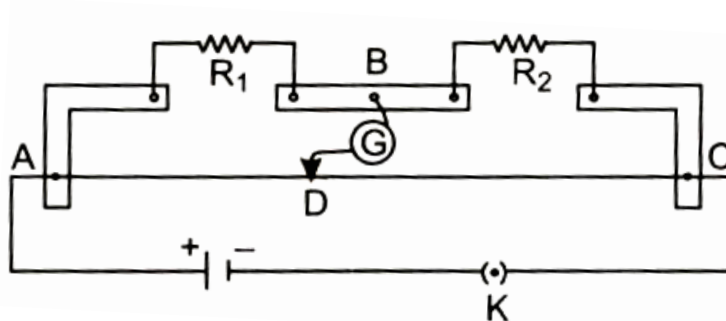


- Q22.** Two conductors are made of the same material and have the same length. Conductor A is a solid wire of diameter 1 mm . Conductor B is a hollow tube of outer diameter 2 mm and inner diameter 1 mm . Find the ratio of resistances R_A to R_B . **3**
- Q23.** (a) Derive the relation between current density j and potential difference V across a current carrying conductor of length " l ", area of cross-section " A " and the number density ' n ' of free electrons. **5**

(b) Estimate the average drift speed of conduction electrons in a copper wire of cross-sectional area $1.0 \times 10^{-7} \text{ m}^2$ carrying a current of 1.5 A. Assume that number density of conduction electrons is $9 \times 10^{28} \text{ m}^{-3}$.

Q24. (a) State Kirchhoff's rules for an electric network. Using Kirchhoff's rules, obtain the balance condition in terms of the resistances of four arms of Wheatstone bridge. **5**

(b) In the meterbridge experimental set up, shown in the figure, the null point 'D' is obtained at a distance of 40 cm from end A of the meterbridge wire. If a resistance of 10Ω is connected in series with R_2 null point is obtained at $AD = 60 \text{ cm}$. Calculate the values of R_1 and R_2 .



Q25. (a) A cell, with a finite internal resistance r , is connected across two external resistances R_1 and R_2 ($R_1 > R_2$) one by one. IN which case would the terminal potential difference of the cell be more? Justify your answer. **5**

(b) Write the underlying principle of a potentiometer. Draw the circuit diagram of the experimental setup used for determining the internal resistance of a cell by potentiometer. Write the necessary formula used.

Chemistry

Time Duration: 3 hours

M.M.: 70

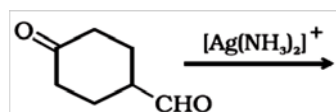
Instructions: -

1. All questions are compulsory.
2. Question nos. 1 to 5 is very short answer questions and carries 1 mark each.
3. Question nos. 5 to 10 is short answer questions and carries 2 marks each.
4. Question nos. 11 to 22 also short answer questions and carry 3 marks each.
5. Question nos. 23 is a value based short answer question and carry 4 marks.
6. Question nos. 24 to 26 is long answer question and carries 5 marks each.
7. Use log tables if necessary, use of calculators is not allowed.

- Q1. A hydrocarbon C_5H_{10} does not react with chlorine in dark but gives a single monochloro compound C_5H_9Cl in bright sunlight. Identify the hydrocarbon. 1
- Q2. What are ambident nucleophiles? Explain with an example. 1
- Q3. Which compound in each of the following pairs will react faster in SN_2 reaction with $-OH^-$? 1
- (i) CH_3Br or CH_3I (ii) $(CH_3)_3CCl$ or CH_3Cl
- Q4. Arrange the following in increasing order of basic strength: 1
- Aniline, *p*-nitroaniline and *p*-toluidine
- Q5. Give the equations of reactions for the preparation of phenol from cumene. 1
- Q6. Explain why haloarenes are less reactive as compared to haloalkanes? 2
- Q7. Carry out the following conversions: - 2
- (a) Ethanol to but-1-yne
- (b) Toluene to benzyl alcohol
- (c) Aniline to chlorobenzene
- (d) *tert*-Butyl bromide to isobutyl bromide
- Q8. What is meant by hydroboration-oxidation reaction? Illustrate it with an example. 2
- Q9. Give equations of the following reactions: 2
- (a) Oxidation of propan-1-ol with alkaline $KMnO_4$ solution.
- (b) Bromine in CS_2 with phenol.
- (c) Dilute HNO_3 with phenol.
- (d) Treating phenol with chloroform in presence of aqueous $NaOH$.
- Q10. Give two reactions that show the acidic nature of phenol. Compare acidity of phenol with that of ethanol. 2

- Q11. Explain why 3
- (i) The dipole moment of chlorobenzene is lower than that of cyclohexyl chloride?
 - (ii) Alkyl halides, though polar, are immiscible with water?
 - (iii) Grignard reagents should be prepared under anhydrous conditions?
- Q12. Write the mechanism of hydration of ethene to yield ethanol. 3
- Q13. Explain the following with an example. 3
- (i) Kolbe's reaction.
 - (ii) Reimer-Tiemann reaction.
 - (iii) Williamson ether synthesis
- Q14. Write the mechanism of acid dehydration of ethanol to yield ethene. 3
- Q15. How will you convert ethanal into the following compounds? 3
- (i) Butane-1,3-diol (ii) But-2-enal (iii) But-2-enoic acid
- Q16. An organic compound with the molecular formula $C_9H_{10}O$ forms 2,4-DNP derivative, reduces Tollens' reagent and undergoes Cannizzaro reaction. On vigorous oxidation, it gives 1,2-benzenedicarboxylic acid. Identify the compound. 3
- Q17. Give simple chemical tests to distinguish between the following pairs of compounds. 3
- (a) Acetophenone and Benzophenone
 - (b) Phenol and Benzoic acid
 - (c) Benzaldehyde and Acetophenone
 - (d) Pentan-2-one and Pentan-3-one
- Q18. How will you bring about the following conversions in not more than two steps? 3
- (a) Benzene to *m*-Nitroacetophenone
 - (b) Benzaldehyde to 3-Phenylpropan-1-ol
 - (c) Benzoic acid to *m*- Nitrobenzyl alcohol
- Q19. Give plausible explanation for each of the following: 3
- (a) Cyclohexanone forms cyanohydrin in good yield but 2,2,6-trimethylcyclohexanone does not.
 - (b) There are two $-NH_2$ groups in semicarbazide. However, only one is involved in the formation of semicarbazones.
 - (c) During the preparation of esters from a carboxylic acid and an alcohol in the presence of an acid catalyst, the water or the ester should be removed as soon as it is formed.
- Q20. Write short notes on the following: 3
- (a) Carbylamine reaction
 - (b) Hofmann's bromamide reaction
 - (c) Gabriel phthalimide synthesis.

- Q21. An organic compound contains 69.77% carbon, 11.63% hydrogen and rest oxygen. 3
The molecular mass of the compound is 86. It does not reduce Tollens' reagent but forms an addition compound with sodium hydrogensulphite and give positive iodoform test. On vigorous oxidation, it gives ethanoic and propanoic acid. Write the possible structure of the compound.
- Q22. Write chemical reactions to affect the following transformations: 3
- Butan-1-ol to butanoic acid
 - Benzyl alcohol to phenylethanoic acid
 - 3-Nitrobromobenzene to 3-nitrobenzoic acid
 - 4-Methylacetophenone to benzene-1,4-dicarboxylic acid
 - Cyclohexene to hexane-1,6-dioic acid
 - Butanal to butanoic acid.
- Q23. Write the mechanism of conversion of ethanol into diethyl ether in acidic medium. 4
- Q24. Predict the products formed when cyclohexane carbaldehyde reacts with following 5
reagents.
- PhMgBr and then H_3O^+
 - Tollens' reagent
 - Semi-carbazide and weak acid
 - Excess ethanol and acid
 - Zinc amalgam and dilute hydrochloric acid
- Q25. (a) An aromatic compound 'A' on treatment with aqueous ammonia and heating 5
forms compound 'B' which on heating with Br_2 and KOH forms a compound 'C' of molecular formula $\text{C}_6\text{H}_7\text{N}$. Write the structures and IUPAC names of compounds A, B and C.
- (b) Give plausible explanation for each of the following: -
- Why are amines less acidic than alcohols of comparable molecular masses?
 - Why do primary amines have higher boiling point than tertiary amines?
 - Why are aliphatic amines stronger bases than aromatic amines?
- Q26. (a) An organic compound with the molecular formula $\text{C}_9\text{H}_{10}\text{O}$ forms 2,4-DNP 5
derivative, reduces Tollens' reagent and undergoes Cannizzaro reaction. On vigorous oxidation, it gives 1,2-benzenedicarboxylic acid. Identify the compound.
- (b) Complete the following reactions: -
- $\text{C}_6\text{H}_5\text{CHO} \xrightarrow{\text{H}_2\text{NCONHNH}_2}$
 -



Biology

Practice Paper

General Instructions:

- (i) All questions are compulsory
- (ii) Section A contains question number 1 to 5, very short answer type questions of one mark each.
- (iii) Section B contains question number 6 to 10, short answer type I questions of two marks each.
- (iv) Section C contains question number 11 to 22, short answer type II questions of three marks each.
- (v) Section D contains question number 23; Value based questions of 4 marks.
- (vi) Section E contains question number 24 to 26, long answer type questions of 5 marks each.
- (vii) There is no overall choice in the question paper; however, an internal choice is provided in one question of two marks, one question of 3 marks and all the three questions of 5 marks.

Section-A

- Q1. What single factor caused population explosion in India? 1
- Q2. A diploid organism is heterologous for 4 loci. How many types of gametes can be produced? 1
- Q3. The mechanism to prevent the self pollen from fertilizing the ovules by inhibiting pollen germination or pollen tube growth on the pistil. What is that mechanism? 1
- Q4. Name the organism that reproduce through the following: 1
- a) Conidia
 - b) Zoospore
- Q5. Why is apple referred as false fruit? 1

Section-B

- Q6. What structure forms corpus luteum and at what stage? Name two hormones secreted by it? 2
- Q7. Why is it difficult to get rid of 'Water Hyacinth' from a water body? Name one abiotic component and one biotic component of ecosystem that gets affected by its spread in the water body. 2
- Q8. A cross between a red flower bearing plant and a white flower bearing plant of *Antirrhinum* produced all plants having pink flowers. Work out cross to explain how this is possible? 2
- Q9. In oogamous organisms, female gamete is large and non-motile but the male gamete is very small. Why such type of adjustment is there in higher organisms? 2

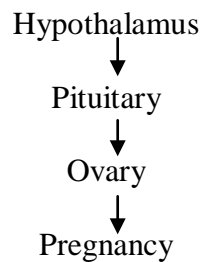
- Q10. Bring out the difference between pleiotrophy and multiple allelism, with an example for each. 2

OR

Linkage and crossing over of genes are alternatives of each other. Justify with the help of an example.

Section-C

- Q11. Study the flow chart given below. Name the hormones involved at each stage and explain their functions. 3



- Q12. What is agamospermy? How is agamospermy different from parthenogenesis and parthenocarpy? 3
- Q13. How and at what stage of menstrual cycle is corpus luteum formed in human females? When does it regress? 3
- Q14. Draw a labeled diagram of a section through ovary. 3
- Q15. Recently a baby girl has been reported to suffer from hemophilia. How is it possible? Explain with the help of a cross. 3
- Q16. Differentiate between menarche and menopause. 3

OR

Meiotic division during oogenesis is different from spermatogenesis. Explain how?

- Q17. Draw a transverse sectional view of an apple and label the following parts along with their technical terms. 3
- a) Edible part
 - b) The fruit wall
 - c) That encloses the embryo
- Q18. Draw a well labeled diagram of the vertical section of a maize grain. 3
- Q19. Why should a breeder need to emasculate a bisexual flower? Mention one condition in a flower where emasculation is not necessary? Define emasculation. 3

OR

What do you mean by artificial hybridization? How does it help in improving crop variety?

- Q20. Do you think that reproductive health has improved in our country in past 50 years? If yes, describe some such areas of improvement 3
- Q21. How is the child affected if it has grown from the zygote formed by an XX egg fertilized by a Y carrying sperm? What do you call this abnormality? Mention the abnormalities seen in such individual. 3
- Q22. Differentiate between ageing and senescence. 3

Section-D

- Q23. Mohan has two daughters. He blames his wife for bearing only daughters and no son. 4
- a) How will you convince Mohan that his wife has no role in giving birth to daughters, rather females are important component of society.
 - b) What values are involved in this advice?

Section-E

- Q24. a) Draw a labeled diagram of the fertilized embryo sac. 5
- b) Why a development of an endosperm does precedes that of an embryo in angiosperms?
 - c) Angiosperm anthers are described as dithecous. Justify.

OR

- a) Explain the phenomena of double fertilization in flowering plants.
 - b) Draw a labeled diagram of a typical anatropous ovule.
- Q25. A flower of tomato plant following the process of sexual reproduction produces 240 viable seeds. 5
- a) What is the minimum number of pollen grains that must have been involved in the pollination of its pistil?
 - b) What would have been the minimum number of ovules present in the ovary?
 - c) How many megaspore mother cells were involved?
 - d) What is the minimum number of microspore mother cells involved in the above case?
 - e) How many male gametes were involved in this case?

OR

- a) Who is known as father of experimental genetics and Why?
 - b) Why did he choose that material for experiments?
 - c) Explain the chromosomal theory of inheritance.
- Q26. a) What is the inheritance pattern observed in the size of starch grains and seed shape of *Pisum sativum*? 5
- b) Work out monohybrid cross showing the above traits.
 - c) How does this pattern of inheritance deviate from that of Mendelian Law of Dominance?

OR

- a) Explain a monohybrid cross, taking seed coat colour as a trait in *Pisum sativum*, work out the cross upto F₂ generation.
- b) State the laws of inheritance that can be derived from such a cross.
- c) What is the phenotypic ratio in the dihybrid cross?

Accountancy

Assignment -1

- Q1. L and M are partners in a firm sharing profits and losses in the ratio 2:1. They decided to share profits equally from 1st April, 2014. For this purpose, goodwill of the firm was valued at ₹ 19,000. General Reserve appeared in the books at ₹ 17,000. They decided that neither goodwill be shown nor General reserve be distributed.
- Pass journal entry to record the change
 - The firm also decided that 1% of sales revenue be spent for the following cause:
 - To organize a free medical checkup in the nearby park for checking BP. Sugar and joint pains of residents of the area.
 - To provide free of cost transportation to school going children of low income group people.

What values are involved in this decision of the firm?

- Q2. A and B are partners sharing profits and losses in the ratio 4:3. They admit C as a partner for $\frac{3}{10}$ share, which he took $\frac{2}{10}$ from A and $\frac{1}{10}$ from B. C brings ₹ 5,000 as premium in cash out of his share of ₹ 9,000. Goodwill already appearing in the books was ₹ 7,000. Give necessary journal entries.
- Q3. A and B started partnership firm on 1st January, 2014 with a capital of ₹ 3,00,000 and ₹ 1,20,000 respectively. On 1st April, B introduced ₹ 80,000 as further capital while A withdrew ₹ 50,000 on 1st July, 2014 from the business. Compute interest on capital assuming rate of interest is 9% p.a.
- Q4. A firm had employed ₹ 4,00,000 as capital and earned profits of ₹ 75,000 including ₹ 15,000 received as insurance claims. The money could be invested in a bank for 3 years @ 10% p.a. considering 2% as fair compensation for risk involved in the firm, calculate the goodwill of the firm on the basis of capitalization method.
- Q5. Hemant and Nishant were partners in a firm sharing profits in the ratio of 3:2. Their capitals were ₹ 1,60,000 and ₹ 1,00,000 respectively. They admitted Somesh on 1st April, 2013 as a new partner for $\frac{1}{5}$ share in the future profits. Somesh brought ₹ 1,20,000 as his capital. Calculate the value of Goodwill of the firm and record necessary journal entries.
- Q6. X and Y are partners sharing profits and losses in the ratio of 3:2. The remaining capitals of X and Y after all adjustments are ₹ 80,000 and ₹ 60,000 respectively. They admit Z as a partner on his contribution of ₹ 35,000 as capital for $\frac{1}{5}$ share of profits to be acquired equally from both X and Y. the capital accounts of the old partners are to be adjusted on the basis of the proportion of Z's capital to his share in the business. Calculate the amount of actual cash to be paid or brought in by the old partners for the purpose.
- Q7. P, Q and R were partners in a firm sharing profits and losses in the ratio of 1:2:2. After division of profits for the year 31-3-2001, their capitals were ₹ 1,50,000, ₹ 1,80,000 and ₹ 2,10,000 respectively. During the year, they withdrew ₹ 20,000 each. The profit of the year was ₹ 60,000. The partnership deed provided that interest on capital will be allowed @10% p.a. while preparing the final accounts, interest on partners capital was not allowed. Pass necessary adjustment entry.
- Q8. The capital of the firm consisting of partners A and B was ₹ 1,50,000 on 31st December, 2014. They had ₹ 20,000 as reserves on that date. If the goodwill of the firm was valued at ₹ 42,000 on the basis of 3 years' purchase of super profit and 10% was considered as fair return, find the average profit earned by the firm.

Q9. A, B and C are partners in a firm sharing profits and losses in the ratio 4:3:2. W.e.f 1st January, 2014, they agreed to share profits in the ratio 3:2:4. The partnership deed provided that in the event of change in profit sharing ratio, goodwill should be valued at two years' purchase of average profit of past three years. The profit of 2011, 2012 and 2013 were ₹ 30,000, ₹ 36,000 and ₹ 42,000 respectively. Pass necessary adjustment entry for goodwill adjustment.

Q10. Amit and Sumit are partners sharing profits and losses in the ratio of 3:2. Firm pays ₹ 1,000 as salary to their manager, Neha who has graduated and had deposited ₹ 30,000 with the firm carrying interest @8%p.a. .on 1st January, 2014, it was decided to treat Neha as their partner w.e.f 1st January, 2010at 1/5th share in profit. it was decided to treat her deposit as her share of capital carrying interest @ 6% p.a. like capital of other partners. The firms' profit and losses after above adjustments were as under:

2010	₹ 60,000
2011	₹ 10,000(loss)
2012	₹ 80,000
2013	₹ 89,600

Record the necessary journal entry.

Q11. X, Y and Z are partners with a fixed capital of ₹ 2,50,000, ₹ 2,00,000 and ₹ 1,50,000 respectively. They agreed to share profits upto ₹ 24,000 in their capital ratio and rest of the profits equally. X advanced ₹ 50,000 as loan @8% to the firm. The partnership deed further provided that:

(a) Interest on capital be allowed at 6% p.a. and interest on drawings be charged at 6% p.a.

(b) X withdrew ₹ 20,000 during the year while Y and Z withdrew ₹ 1,500 p.m. each.

(c) Z was entitled to a commission of 5% of net profits after charging his commission.

The net profit before charging these adjustments for the year was ₹ 67,000. Prepare profit and loss appropriation account of the firm.

Q12. P and Q were partners in a firm sharing profits and losses in the ratio 7:5. Their balance sheet was as under:

Liabilities	Amt	Assets	Amt
Bank overdraft	70,000	Cash	20,000
Creditors	40,000	Debtors	1,00,000
Provision for bad debts	2,000	Bills receivable	38,000
General reserve	48,000	Stock	40,000
S's loan	80,000	Building	2,00,000
Capitals		Land	62,000
P 1,20,000	2,20,000		
Q 1,00,000			
	4,60,000		4,60,000

On 1.4.2014, they admitted S as a new partner on the following conditions:

(i) S will get 1/4th share in the profits of the firm.

(ii) S's loan will be converted into his capital.

(iii) the goodwill of the firm will be valued at ₹ 90,000 and S will bring his share of goodwill in cash.

From the following revaluation account, partners capital account and balance sheet , complete the missing information:

Revaluation account

Particulars	Amt	Particulars	Amt
To provision for bad debts	3,000	By land	6,200
To stock	2,000		
To profit			
P ----			
Q----	----		

Partners capital account

Particulars	P	Q	R	Particulars	P	Q	R
To balance c/d	---	---	---	By balance b/d	1,20,000	1,00,000	
				By general reserve	---	---	
				By revaluation a/c	---	---	
				By premium for g/w	---	---	
				By S's loan a/c			80,000

Balance sheet of the new firm

Liabilities	Amt	Assets	Amt
Bank overdraft	70,000	Cash	---
Creditors	40,000	Debtors	1,00,000
Provision for bad debts	---	Bills receivables	38,000
Capitals		Stock	---
P ---		Building	2,00,000
Q ---		Land	68,200
S ---			
	--		--

Q13. A and B are partners sharing profits and losses in the ratio of 3:2. Their balance sheet on 31-3-2014 was as under:

Liabilities	Amt	Assets	Amt
Creditors	40,000	Goodwill	10,000
Workmen compensation fund	10,000	Plant	60,000
Capitals		Investments	20,000
A 60,000		Debtors	30,000
B 50,000	1,10,000	Stock	20,000
		Cash	20,000
	1,60,000		1,60,000

C was admitted as a partner. He brings ₹ 50,000 as his capital. New ratio will be 5:3:2.

Other terms were:

- a) Investments be brought upto ₹ 25,000 and plant to be reduced to ₹ 55,000.

- b) One customer who owed ₹ 4,000 became insolvent and nothing is recovered from him.
- c) Claim on account of workmen compensation fund was ₹ 5,000
- d) Goodwill of the firm was valued at ₹ 75,000
- e) Capitals of partners shall be in proportion to their profit sharing ratio based on C's capital.

Prepare revaluation account, partners capital account and balance sheet of the new firm.

Q14. X, Y and Z are partners in a firm sharing profits and losses in the ratio 3:2:1. Their balance sheet for the year ended 31.12.2014 was:

Liabilities	Amt	Assets	Amt
Creditors	30,000	Current assets	45,000
Profit and loss a/c	25,000	Plant	90,000
Capitals		Furniture	35,000
X 60,000		Deferred revenue expenditure	5,000
Y 40,000			
Z 20,000	1,20,000		
	1,75,000		1,75,000

The partners agreed to share profits equally w.e.f 1-1-2015. They further agreed that:

- a) Current assets be valued at 10% more.
- b) Depreciate plant and furniture by 10%
- c) Rent outstanding is ₹ 1,500
- d) Goodwill of the firm is valued at ₹ 30,000

Partners decided not to alter the values of assets, liabilities and profits. They also decided not to show goodwill in the books.

Prepare revaluation A/c, Partners capitals A/c, Balance Sheet.

Assignment -2

- Q1. List any two points from accounting point of view which must be incorporated in a partnership deed.
- Q2. If partners capital is fixed where will you record interest on drawings?
- Q3. Give the journal entry to distribute 'workmen compensation fund' of ₹ 60,000 at the time of retirement, when there is no claim against it. The firm has three partners rajat, sajjan and kavita
- Q4. A and B are partners sharing profits and losses equally and capitals being contributed equally. They have a partnership deed which does not specify charging interest on drawings. B has excess drawings of ₹ 1,00,000. A is of the view that the firm should charge interest on excess drawings @ 10%., being the rate of interest for borrowings from the firm. B objects to it on the ground that the Partnership Deed does not provide for it. Thus, no interest was charged on excess drawings. What value has been ignored in this case?
- Q5. Define Goodwill?
- Q6. If a partner withdrew ₹ 4,000 at the beginning of the every alternate month than calculate interest on drawings @ 12% p.a. at the end of the year.
- Q7. X, Y and Z are partners sharing profit in the ratio of 3:2:1. Z retired from the firm and surrendered his share in favour of X. Calculate New profit ratio.
- Q8. A, B and C entered into partnership on 1st April, 2011 to share profits and losses in the ratio of 5:3:2. B and C guaranteed that A's share of profit after charging interest on capital @ 10% p.a. would not be less than ₹ 64,000 in any year. The capitals were provided as follows: A ₹ 2,00,000, B Rs 1,50,000 and C ₹ 50,000. The profits for the year ended 31st March, 2012 amounted to 1,40,000 before providing for interest on capital.
- Q9. Mohan, neeraj and piyush are partner in a firm they contributed ₹ 75,000 each as capital. Three years ago at that time Piyush agreed to look after the business as Mohan and Neeraj were busy. The profit of the past three years 45,000, 30,000 and 60,000 respectively. While going through the books of accounts, Mohan noticed that profit had been distributed in 1:1:2 ratio. When he inquired from piyush about this Piyush answered that since he looked after the business he should get more profit. Mohan disagreed and it was decided to distributed profit equally with retrospective effect for the last three years.
- (a) you are required to make necessary corrections in the books of accounts of mohan neeraj and piyush by passing the adjustment entry.
- (b) identify the value which is being ignored by Piyush.
- Q10. I, A and S are partners in a firm. After division of the profits for the year ended 31st March, 2013 their fixed capitals were I ₹90,000, A ₹ 60,000 and S ₹ 50,000. The profits was distributed without providing for the following adjustments :
- i) A and S were entitled to a Salary of ₹10,000 and ₹ 5,000 p.a. respectively.
- ii) Interest on Capital was to be allowed @ 10% per annum.
- Pass an adjustment entry for the above.

- Q11. A, B and C are partners sharing profit 5:3:2 respectively. It is provided under the partnership deed that on the death of any partner his share of goodwill is to be valued at $\frac{1}{5}$ th of the net profit credited to his account during the last 3 completed years and share in profit up to the date of death is to be calculated on the basis of last year's profit. C died on 1st May, 2013. The profit for the last 3 years were :- in 2012 ₹3,00,000, in 2012 ₹60,000(loss) and in 2011 ₹3,60,000. Give Journal entries in the books of the firm.
- Q12. A partnership firm has earned profits or losses during the last three years 2012 ₹1,00,000, 2011 ₹ 30,000 (loss) and 2010 ₹50,000. The Average Capital employed of the firm is ₹ 2,00,000. A fair return on capital in the market is 10%. Calculate the value of goodwill on the basis of 2 years purchase of super profit and capitalisation of Average profit. Remuneration of the partners is estimated to be ₹ 10,000 p.a. which was treated as charge on profit. Assets and Liabilities of the firm were ₹ 4,50,000 and ₹ 2,00,000.
- Q13. X,Y and Z are partners sharing profits and losses in the ratio of 2:2:1. They decide to share future profits and losses equally with effect from 1st April, 2013. General Reserve and Advertisement Suspense A/c are appeared in books at ₹ 90,000 and ₹ 1,20,000 respectively. Their profit on revaluation at the time of change in ratio was ₹ 60,000. They decide not to distribute Advertisement Suspense. Give journal entries in the books of firm without opening Revaluation A/c.
- Q14. A, B and C are partners sharing profits and losses in the ratio 7:2:1. They admitted D as a partner for $\frac{1}{7}$ th share in profits and decided to share future profit equally. D brought in Cash ₹ 2,00,000; Stock ₹ 30,000 and Machinery of ₹ 50,000 for his share in capital and goodwill. Goodwill A/c is already appeared in books at ₹80,000 but at the time of admission it is valued at ₹ 3,50,000. Give Journal entries.
- Q15. From the following information calculate new profit ratio after admission of partners:
- X and Y are partner sharing profit or losses in the ratio of 3:2. They admit Z who acquired $\frac{2}{5}$ th of his share from X and $\frac{3}{20}$ from Y. Calculate new profit sharing ratio.
 - A , B and C are partners sharing profit or losses in the ratio of 5:4:1. The admit D for $\frac{1}{5}$ th share. Calculate new ratio if B share remain same.
- Q16. I, P and S were partners sharing profits in the ratio of 5:3:2 respectively. I retired on 31st March, 2013. On that date the capitals of I, P and S stood at ₹ 50,000; ₹ 40,000 and ₹ 30,000. General Reserve of ₹ 20,000 and Bank Balance of ₹ 10,000 were also appeared in books. I was to be paid through cash brought in by P and S in such a way as to make their capitals proportionate to their new profit sharing ratio which was to be P $\frac{2}{5}$ th and S $\frac{3}{5}$ th. Calculate the amount of cash to be paid or to be brought in by the continuing partners if goodwill was valued at ₹60,000 at the time of retirement.
- Q17. A, B and C are partners in a firm. Their respective capitals on 1st January, 2012 were ₹5,00,000, ₹ 3,00,000 and ₹ 2,00,000. The terms of partnership are as follows:
- Interest on capital is to be allowed @ 10% p.a.
 - Interest on drawing is to be charged @ 6% p.a.
 - A and B are to get a monthly salary of ₹ 2,000 and ₹ 3,000 respectively.
 - A is entitled to get 5% commission on net profit after charging such commission.

v) B is entitled to get 10% commission on profit after charging (i), (iii) and (iv) but before charging (ii).
 iv) 1/5th of the profit after charging (i) to (vi) will be transferred to Reserve.
 vii) Profit is to be shared up to 30,000 equally and above that in their capital ratio.
 The profit for the year ended 31st December, 2012 after charging A's salary but before charging other provisions amounted to ₹ 1,86,000. A withdrew ₹ 5,000 at the mid of the every quarter, B withdrew ₹ 10,000 at the end of the each half year and C withdrew ₹ 2,000 at the beginning of every month. Prepare profit and loss appropriation account.

Q18. Pankaj, Naresh and saurabh are partners sharing profits in the ratio of 3:2:1. Naresh retired from the firm due to illness. On that date balance sheet was as follows:

Liabilities	Amt	Assets	Amt
General reserve	12,000	Bank	7,600
Sundry creditors	15,000	Debtors 6,000	
Bills payable	12,000	(-) provision 400	5,600
Outstanding salary	2,200	Stock	9,000
Provision for legal charges	6,000	Furniture	41,000
Capitals:		Premises	80,000
Pankaj	46,000		
Naresh	30,000		
Saurabh	20,000		
	1,43,200		1,43,200

Additional information:

- NPSR is decided to be 5:1
- Premises to be appreciated by 20%, stock depreciated by 20% and provision for doubtful debt to be maintained at 5% on debtors. Further, provision for legal damages is to be made for ₹ 1,200 and furniture to be brought upto 45,000.
- Goodwill of the firm is valued at ₹ 42,000
- ₹ 26,000 from Naresh's capital account to be transferred to his loan account and balance is to be paid through bank; if required necessary loan is to be taken from bank

Give necessary ledger accounts and balance sheet after retirement.

Q19. X and Y are partners in a firm. They share profits and losses in the ratio of 3:2. Their Balance Sheet as on 31st March, 2012 was as under : –

Liabilities	Amt	Assets	Amt
Creditors	20,000	Cash	10,000
Bills payable	15,000	Debtor 13,000	
General reserve	20,000	(-)Provision3,000	10,000
Workmen compensation fund	5,0000	Stock	20,000
Capital		Furniture	30,000
		Machinery	40,000
		Goodwill	10,000

X	25,000	80,000	Profit and loss a/c	20,000
Y	55,000			
		1,40,000		1,40,000

On 1st April, 2012 Z is admitted as a new partner who just completed his MBA and searching for job for one fifth share in profit on following condition:

- i) Z will bring in ₹ 20,000 as his capital and 1/4th of his share of goodwill in cash.
- ii) Stock was undervalued by 20% and Machinery is to be depreciated to 90%.
- iii) The liability regarding workmen compensation determined at ₹ 6,000.
- iv) Furniture is to be valued at 20% less and Provision for Bad Debts is to be maintained at 10%.
- v) Creditors of ₹ 2,300 are not likely to be claimed and hence should be written back.
- vi) Goodwill of the firm is valued at ₹ 1,00,000.
- vii) The capitals of the partners to be adjusted on the basis of Z's capital.

Prepare Revaluation A/c, Partners' Capitals Accounts and Balance Sheet after admission of Z and Identify the value involve in this.

Business Studies

Assignment 1

Chapter 2: Principles of Management

1. Mr. Neeraj, the salesman in Progress Ltd., designed a new cost saving advertisement technique ' through his personal experience and suggests the same to his sales manager but it was not appreciated by his sales manager and he also warned him not to come with any suggestions in future. Which principle of Fayol is being overlooked by the sales manager? What should have been the appropriate way of response by the sales manager?
2. The production manager assigned a target of producing 1,000 TV sets in the month of April to a group of 10 workers. They mutually decided to produce 100 TV sets each. Among them, Vishal (one of the workers in the group) fell sick. The other workers refused to divide his work among themselves and concentrated only on the production of their own individual target of production. As a result target of 1,000 TV sets could not be achieved.
 - (a) Name the principle of Fayol which is violated in the given case.
 - (b) What does it state?
 - (c) What should have been the appropriate course of action
3. Rama Ltd. was engaged in the business of manufacturing auto components. Lately, its business was expanding due to increased demand for cars. The competition was also increasing. In order to keep its market share intact, the company directed its workforce to work overtime. But this resulted in a lot of problems. Due to increased pressure of work the efficiency of workers declined. Sometimes the subordinates had to work for more than one superior. The workers were becoming undisciplined. The spirit of teamwork, which had characterised the company previously, had begun to wane.

Identify any three principles of management which were being violated, quoting the lines from the above case.

4. 'Puneet Constructions Ltd'. had never given any importance to the suggestions of its employees. All the employees in the company consider themselves superior than the other. They neither help anybody nor get help from anybody. Last year, Mr. Shivam was appointed as Chief Manager of the company. He was an MBA from IIM Ahmedabad and also seven-year experience of the same post. Immediately after taking charge he decided to deal with both the problems of the company. He convened a meeting of all the employees and said, "All the employees are free to give their suggestions. Besides, the one who gives the best suggestion will be awarded a prize. In addition, he advised them to discard ego and extend help in each other's work. We will have to give it the shape of a movement. Those who participate in this movement will be promoted at the earliest." Shivam proved to be a good leader.

Identify and explain the principles of management discussed above by quoting the lines.

5. 'New Delhi Ltd.' is a famous services providing company. Mr. Aman Malhotra is its Managing Director. He continuously motivates his Research and Development department

that new and latest methods of doing work be explored. The provisions has also been made to give reward to those employees who will participate in a particular exploration. He also believes that two groups working on managerial and non-managerial posts are similar to two wheels of an organisational vehicle. If this vehicle (organisation) is to be driven in a right way then both the wheels should be property aligned. Mr. Aman is a successful leader. Among his employees, he has instilled the feeling that no decision will be taken without consulting the subordinates. To excel in this field, is the main motive of Mr. Aman and he paid lot of attention to training of employees

Identify the principles of scientific management discussed above by quoting the lines

6. Voltechindia Ltd, is manufacturing LED bulbs to save electricity and running under heavy losses. To revive from losses, the management thought of shifting the unit to backward area where labour is available at the low cost .The management also asked workers to work overtime without any additional payment and promised to increase the wages of the workers after achieving the mission

- i) State principle of management discussed above
- ii) Identify two values which company wants to communicate to the society

7. On 27th September, 2015, PM Narendra Modi visited the headquarters of 'Facebook' in California. This news was covered by ABP News Channel. The news item highlighted the following unique features of Facebook's office:

Office spread over 4.5 lakh sq feet area of land. Within the office, the employees use skates to move from one place to another.10, 000 employees working in the office, all at same level. No cabin or separate room for any employee. There is open work place to ensure mutual understanding and team work.All meeting are held in a conference room having walls made of glass. Anyone can see with whom the manager is meeting or interacting.Focus is not on working hours, rather on quality of work. There is ample provision for leisure activities, rest rooms, widespread clean and green environment and beautiful nursery at the terrace for the employees.

On the basis of above information, answer the following questions:

- a) Name one principle of Fayol followed in the Facebook's office.
- b) State any two values followed by the Facebook's office.

8. Arun and Sonia, having same educational qualifications are working as managers in Alfa Ltd. Arunbelongs to rural area where employment opportunities are very less whereas Sonia belongs to urban area.Ignoring many others differences between the two, management of Alfa Ltd. appointed them as manager, on the same salary package of Rs. 40,000 per month.

- (A) Name and explain the principle of management being followed in the above case.
- (B) Identify any two values on which management of Alfa Ltd. emphasis.

9. Nutan Tiffin Box service was started in Mumbai by Mumbai Dabbawalas. The Dabbawalas who are the soul of entire Mumbai aim to provide prompt and efficient services by providing tasty homemade tiffin to all office goers at right time and place.

The service is uninterrupted even on the days of bad weather, political unrest and social disturbances. Recently they have started online booking system through their website 'mydabbawala.com'. Owing to their tremendous popularity amongst the happy and satisfied customers and members, the dabbawalas were invited as guest lecturers by top business schools. The Dabbawalas operate in a group of 25-30 people along with a group leader. Each group teams up with other groups in order to deliver the tiffin on time. They are not transferred on frequent basis as they have to remember the addresses of their customers. They follow certain rules while doing trade- No alcohol during working hours; No leave without permission; Wearing of white cap & carrying ID cards during business hours.

Recently on the suggestion of a few self motivated fellow men, the dabbawalas thought out and executed a plan of providing food left in tiffins by customers to slum children. They have instructed their customers to place red sticker if food is left in the tiffin, to be fed to poor children later.

- a) State any two principles of management given by Fayol from above paragraph
- b) Give any two values which the Dabbawalas want to communicate to the society.

10. Mohan always comes 1 hour late in the office and leave half an hour before the scheduled time. No penal action is taken against him. Other employees also started coming late in the office. Management is very disturbed with this and has started scolding the employees.

- (a) Which management principle is being violated in the given case?
- (b) Explain the principle.
- (c) Mention one probable adverse consequence of violation of the given principle
- (d) State the value being ignored by employees in above case

Assignment 2

Chapter 11: Marketing Management

1. Spark Ltd., a fire cracker manufacturing company launched a new product for Diwali which attracted many buyers. Although the product was in great demand, appropriate safety warnings were not mentioned on the packets that led to many accidents. The company was also in the news for employing children from nearby villages. a) Identify the element of marketing mix here. Also, identify and explain an important decision related to it that was not taken into consideration by the company. b) Identify any two values which were violated by the company.
2. Haldiram is a famous chain selling a variety of products in the Indian market. Their products include chips, biscuits, sweets and squashes. It charges a comparatively higher price than its competitors as it sells quality products. Besides, it offers regular discounts to its customers and easy credit terms to the retailers. It has many outlets of its own in various cities. It also sells its products through various grocery stores so that the products are available to customers at the right place, in the right quantity and at the right time. It regularly uses different communication tools to increase its sales.

The above para describes the combination of variables used by Haldiram to prepare its market offering. Identify and explain its variables

3. Garima, Puneet, Divya and Neha are friends. They are operating different businesses. Each one has his/her own concept regarding operating their businesses. Garima believes in producing products at a large scale, thereby decreasing the average cost of the products and selling it at reasonable price. Puneet focuses on providing best quality products because he believes that a customer always wishes to buy a good quality product. The price of the product is secondary. Divya is of the belief that the customers can be persuaded and manipulated to buy the product. Neha feels that her firm has a responsibility towards the society as well. So she provides customer satisfaction along with using techniques which are environment friendly.

Quoting the lines from the above paragraph, identify and explain the marketing concepts followed by each of them.

4. ABC Crackers Ltd., a fire cracker manufacturing company launched some new products on the eve of Diwali in the market, which attracted many buyers. To meet the increased demand the company employed people from nearby villages where there is a lot of unemployment. Because of the good behavior of management with the employees, more and more people wanted to join the company. As the products were in great demand in the market, a competitor imitated the products. The products of the competitor were not accepted by the consumer as it was a status symbol to buy the products of ABC Crackers Ltd. because of their quality.
 - (a) Identify and explain the product related decision because of which consumers preferred the products of ABC Crackers Ltd.
 - (b) Also identify any two values which ABC Crackers Ltd. wanted to communicate to the society.

5. Radhika was a student of Business Studies of class XII. Her father was a farmer who grew different varieties of rice and was well versed about various aspects of rice cultivation. He was also selected by the government for a pilot project on rice cultivation. As a project work in Business Studies she decided to study the feasibility of marketing good quality rice at a reasonable price. Her father suggested her to use internet to gather customers' views and opinions. She found that there was a huge demand for packaged organic rice. She knew that there was no pre-determined specifications in case of rice because of which it would be difficult to achieve uniformity in the output. To differentiate the product from its competitors, she gave it the name of 'Malabari Organic Rice' and classified it into three different varieties namely – Popular, classic and Supreme, based on the quality. She felt these names would help her in product differentiation.

Explain the functions of marketing in the light of above case.

6. Tender Skin Care Ltd., a leading brand of skin care products has come up with a new range of anti – ageing skin cream which they claim is herbal & without any side effects. They have also set up a web site which encourages consumers to ask them questions which they genuinely & quickly answer. It is a way of connecting the customers with the company & a brilliant tactic for busting out some myths about this product. It has created transparency & makes the consumers feel personally involved with the company.

The above para denotes planned & sustained efforts taken by the company to maintain goodwill & understanding with the public. Name it.

7. Radha found a worm crawling out of newly opened tetra pack of a juice manufactured by a reputed company, Zest Ltd. She went back to the shopkeeper from whom the pack was purchased who directed her to call up the customer care centre. When all her efforts failed, she went to a consumer activist group to seek help. The group decided to help Radha and take measures to impose restrictions on the sale of the firm's products of the particular batch and urge customers to refrain from buying the products of the company. Zest Ltd. lost its image in the market. The CEO gives the responsibility of bringing back the lost image of the company to a Manager.

- a) Identify the concept of Marketing Management which will help the Manager getting the firm out of above crisis.
- b) Also explain the role of above identified concept by stating any two points
8. Identify the marketing management philosophies used by marketers in the following cases:
- A detergent manufacturing company gives more quantity of detergent at the same price.
 - An artificial jewellery manufacturing company uses metal instead of glass to enhance durability of its products.
 - A chips manufacturer makes its chips available at almost all the retail outlets of the city.
 - A book-seller sells the books after getting them binded.
 - A pharmaceutical company launches pain-killer sprays to facilitate convenient use and fast relief.

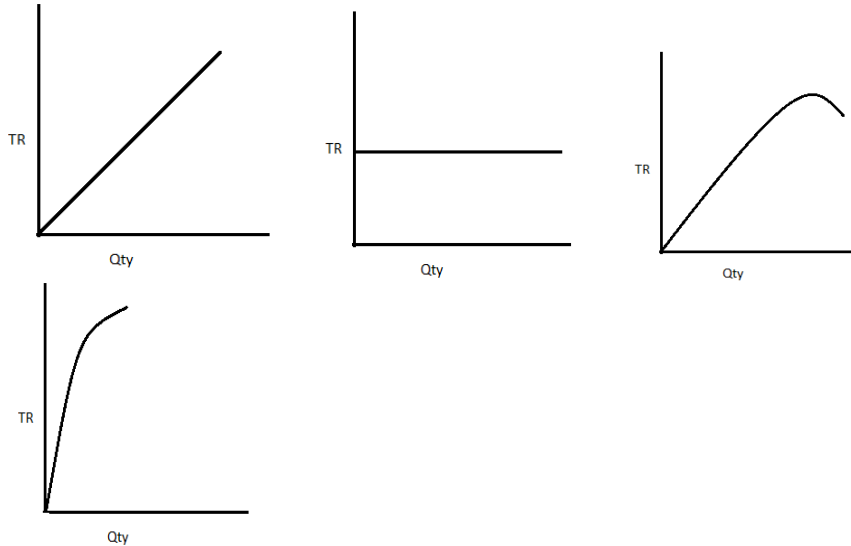
- f. A large-scale retail outlet gives goods to customers in carry bags made of paper, jute or cloth only.
9. Name the marketing function which is concerned with informing the customers about the firm's product.
10. Shalini purchased a halogen light heater for winter. The rods stopped functioning within one week of purchase. The retailer of the shop expressed his inability to exchange the product as the sale had already taken place. Which concept of marketing is followed here?
11. Aashima purchased a bottle of tomato -sauce from the local grocery shop .the information provided on the bottle was not clear .She fell sick on consuming it . She filed a case in the District Forum under Consumer Protection act and got a relief .
- (a) Identify the important aspect neglected by marketer in above case
 - (b) Explain briefly the functions of the aspect identified in (a) above

Economics

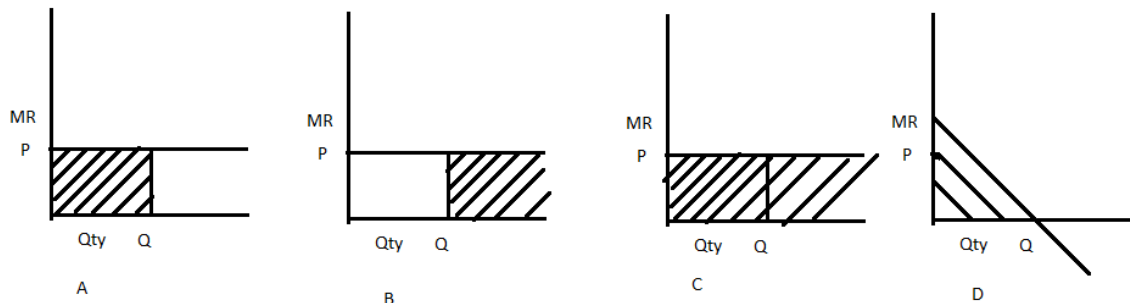
Assignment 1

Revenue

- 1 Define revenue and explain the concept of TR, MR and AR.
- 2 Identify the TR curve of perfectly Competitive Market.



- 3 Which of the following shaded area represents Total Revenue of a Perfectly Competitive Market?



- 4 What happens to TR when MR is
 - a. Falling below but positive
 - b. Falling till zero
 - c. Falling upto negative zone
 - d. constant
- 5 Prove that price is always equal to AR.
- 6 The difference between TR of 3rd unit and 6th unit is 3000 Find MR
- 7 Draw AR curves facing Monopolistic and Perfect Competitive Market. How these are different to each other? State reason behind it.
- 8 TR schedule of a firm is given. Find out the price per unit at different levels. Also identify the market conditions.

Output	1	2	3	4	5
TR	7	14	21	28	35

- 9 Give relation between TR and MR when

- a. Firm is able to sell the product at same price
 - b. Firm is able to sell higher quantity by lowering the price
- 10 Why TR curve of a price taking firm is a constantly upward curve? Why it passes through origin?
- 11 Why MR curve AR curve and price line facing to a perfectly competitive market are one and the same and are shown by a single straight line coinciding each other parallel to X axis? Use numerical example.

COST

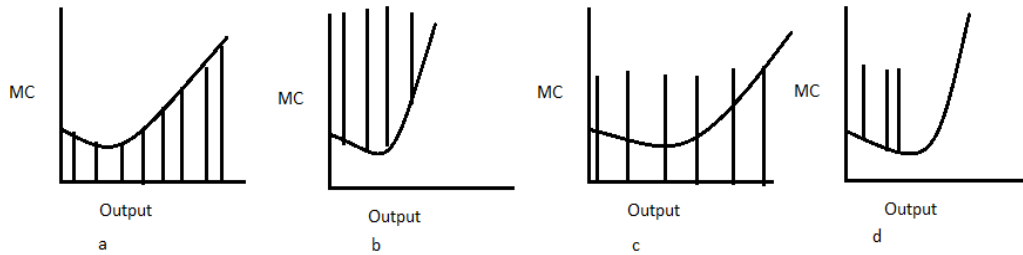
1. Explain the meaning of Explicit and Implicit Cost. Give Example.
2. Which of the two cost curves go parallel to each other and why?
3. State the name and behavior of the cost which is the difference of ATC and AVC.
4. In the total cost function which cost can be Zero?
5. Which of the two cost curves go closer with increased level of output?
6. If AFC at fifth level is 10 and TVC is 80 find TC.
7. If AC for 5 units is 40 and for 6 units is 41 find MC.
8. Find AFC and AVC

Units	0	3
TC	51	96

9. Complete the following:-

Output	TVC	AVC	MC
1	10	—	—
—	—	8	6
3	27	—	—
—	—	10	13

10. State whether following are true or false
- a. With a increased output AFC starts falling till it reaches to zero
 - b. When AVC falls MC always falls with it
 - c. When $MC > AVC$, AVC may decline
 - d. When $MC = AC$, AC is minimum
 - e. MC cuts the ATC and AVC when its is falling.
 - f. Both AC and AVC are at there minimum when MC intersects them.
11. Units produced 20, at this level ATC and AVC are 40 and 37 respectively find TFC
12. TC rises from 30 to 55 when output increases from 5 to 6. Find MC of 6th unit.
13. AC of fifth unit is 6. While AC of 6th unit is %. Find MC of 6th Unit.
14. When output increases from 40 to 55 units , TC increases from 2500 to 3,250. Find MC.
15. Which shaded area under following shows TVC



16. Difference between ATC and AVC is 2 at 7th unit of output find TFC

Production Function

1. State the concept of time period in production
2. Name the type of factors of production with example.
3. What is production function? Give its Equation.
4. Name the time period in which
 - a. All the factors are variable
 - b. Only level of output can be changed
 - c. Scale of operation can be changed
 - d. Only variable factors can be changed.
5. What is meant by very short period? Give its significance.
6. State behavior of TPP when
 - a. MP is increasing
 - b. MP is falling
 - c. MP is zero
 - d. MP is negative
7. Name the stages of operation under short run production function
8. Giving reasons state whether following are true or false
 - a. When MP is greater than AP, AP rises
 - b. When MP falls AP also falls
 - c. When MP=AP, AP is maximum
 - d. AP never falls
9. State behavior of AP if
 - a. $MP > AP$ $AP > MP$ MP is negative
10. Explain Law of Variable Proportion with reference to MP and TP.
11. From the following schedule identify the different stages of short run production function (law of V.P.) give reasons.

Units of V.P	1	2	3	4	5	6	7	8	9
TP	2	5	9	12	14	15	15	14	12
MP	2	3	4	3	2	1	0	-1	-2

12. At second unit of employment TP is 5 and at sixth level it is 21. Find MP.
13. Explain any two reasons each for increasing and diminishing returns
14. Complete the following

Units of labor	1	2	3	4	5	6
AP	8	10	—	9	—	7
MP	—	—	10	—	4	—

15. What is meant by point of inflection in Law of Variable Proportion? What these denote?

16. What are economies of scale?

Assignment 2

- Q1 Why AFC is rectangular hyperbola?
- Q2 What type of goods find rise in their demand even when income of the buyer reduces?
- Q3 Due to fall in the cost of making bicycles, its price is reduced. It will shift the demand curve of bicycles towards left. Defend or refute. Give reason.
- Q4 When Total Product increases at increasing rate, what happens to the marginal product?
- Q5 Why does the problem of choice arise?
- Q6 In which market form, average revenue and marginal revenue of a firm are always equal.
- Q7 Why PPF is concave shaped?
- Q8 Show that $AR=P$
- Q9 State one factor affecting quantity supplied of a commodity.
- Q10 As a consumer, would you equate price of a commodity with TU or MU. Give reasons in support of your answer.
- Q11 AB is a straight line demand curve touching the Y axis at A point and X axis at B point. Comment on point elasticity on AB curve: -
- a) At E point which lies at equidistance from A and B.
 - b) At E1 point which lies nearer to A.
 - c) At E2 point which lies nearer to B
- Q12 A consumer buys 50 units of a good at Rs. 4 per unit. When its price falls by 25 percent its demand rises to 100 units. Find out the price elasticity of demand.
- Q13 Explain why MR is less than AR for a monopoly firm.
- Q14 Explain any three causes of leftward shift of a demand curve.
- Q15 'Demand and Supply are like two blades of a pair of scissors.' Comment.
- Q16 'An economy always produces on, but not inside a PPF.' Defend or Refute. Justify.
- Q17 What is the likely effect on supply of a good if Sales tax is imposed on factor inputs? Explain with the help of a diagram.
- Q18 How are equilibrium prices of an inferior goods affected, when the income of the consumer increases. Explain with the help of suitable diagram
- Q19 Complete the following table

Output (Units)	AVC (RS)	TC	MC
1	-	60	20
2	18	-	-
3	-	-	18
4	20	120	-
5	22	-	-

Q20 Calculate price elasticity of demand, applying total expenditure method in following conditions

a)	Price	Quantity Demanded
	80	100
	100	90

b)	80	100
	100	80

Q21 Calculate AC and TC from the following cost schedule of a firm whose fixed cost is Rs 10

Output(in units)	1	2	3	4
MC	6	5	4	6

Q22 What conditions must be hold if a profit maximizing firm produces output in a competitive market? Explain using Marginal Variables.

History

Practice Paper 1

Time Allowed: 3hrs

M.M: 80

General Instructions:

1. Answer all the questions. Some questions have choice. Marks are indicated against each question.
2. Answers to questions 1 to 3, carrying 2 marks should not exceed 30 words each.
3. Answer to questions 4 – 9, carrying 4 marks, should not exceed 100 words each. Students should attempt any 5 questions in this section.
4. Question 10 (for 4 marks) is a value based question and compulsory.
5. Answer to questions 11 to 14, carrying 8 marks each should not exceed 350 words each. Students should attempt any 3 questions in this section.
6. Questions 15, 16 and 17 are based on sources and have no internal choice.
7. Map Question 18 includes 'identification' and 'significance' test items. Students should attach the map within the answer scripts.

Part – A

Answer all the questions given below:

2x3=6

1. Point out a shortcoming and an advantage of using inscriptions to reconstruct history. 2
2. Why were burnt bricks used in the drains of Harappa? 2
3. Mention any four duties of Chandalas as laid down in Manusmriti. 2

Part – B

Section – I

Answer any five of the following questions.

4x5= 20

4. Describe the strategies used by archaeologists to track social differences in the Harappan society. 4
5. Examine the contribution of the Begums of Bhopal towards the preservation of Sanchi. 4
6. Why is Mahabharata called a dynamic text? 4
7. Mention any two advantages and two disadvantages of land grants. 4
8. How has Ibn Battuta described the cities of medieval India? 4
9. Explain with examples what historians mean by the integration of cults. 4

Section – II

Value Based Question. (Compulsory)

4

Read the following passage and answer the question that follows:

'God is called by many names:

Names like Allah, Ram, Karim, Keshav, Hari and Hazrat

Gold may be shaped into rings and bangles.

Isn't it gold all the same?

Distinctions are only words we invent.....

10. 'The teachings of Kabir helped in strengthening values of peaceful coexistence in the society'. Explain giving examples from his ideas and state in what ways are his teachings relevant in the contemporary times to resolve conflict.

Part – C

Answer any **three** of the following questions.

3x8=24

11. Critically examine the sources that have helped in reconstructing the history of the Mauryas. 8
12. Discuss the major beliefs and practices that characterised Sufism. 8
13. What were the rules of gotra as given in Brahmanical practice? Give an example to show that these rules were not always followed. 8
14. Examine the possible reasons for the decline of the Harappan civilisation. 8

Part – D

Source Based Questions

3x7=21

15. Read the following extract carefully and answer the questions that follow:

Thus speaks Devanampiya Piyadassi:

'In the past, there were no arrangements for disposing affairs, nor for receiving reports. But I have made the following (arrangements). *Pativedakas* should report to me about the affairs of the people at all times, anywhere, whether I am eating, in the inner apartment, in the bedroom, in the cow pen, being carried (possibly in a palanquin), or in the garden. And I will dispose of the affairs of the people anywhere.'

- i. Name the ruler? What is meant by the term, *Pativedaka*? 1+1=2
- ii. What does he want the '*Pativedakas*' to do? What is his purpose? 2+2= 4
- iii. What does this inscription tell us about the nature of kingship of this period? 1

16. Read the following extract carefully and answer the questions that follow:

How could men and women acquire wealth

For men the Manusmriti declares, there are seven means of acquiring wealth: inheritance, finding, purchase, conquest, investment, work and acceptance of gifts from good people. For women there are six means of acquiring wealth: what was given in front of the fire or the bridal procession, or as a token of affection, and what she got from her brother, mother or father. she could also acquire wealth through any subsequent gift and whatever her 'affectionate' husband might give her.

- i) What does Manusmriti describe about paternal estate? 3
- ii) In how many ways a man can acquire wealth? 2
- iii) How can women acquire wealth according to Manusmriti? 2

Music in the market

Read Ibn Battuta's description of Daulatabad:

In Daulatabad there is a market place for male and female singers, which is known as Tarabad. It is one of the greatest and most beautiful bazaars. It has numerous shops and every shop has a door which leads into the house of the owner...The shops are decorated with carpets and at the centre of a shop there is a swing on which sits the female singer. She is decked with all kinds of finery and her female attendants swing her. In the middle of the market place there stands a large cupola, which is carpeted and decorated and in which the chief of the musicians takes his place every Thursday after the dawn prayers, accompanied by his servants and slaves. The female singers come in successive crowds, sing before him and dance until dusk after which he withdraws. In this bazaar there are mosques for offering prayers...One of the Hindu rulers...alighted at the cupola every time he passed by this market place, and the female singers would sing before him. Even some Muslim rulers did the same.

- i. What are the indicators in the passage that tell us that it is a market place for music? 3
- ii. What reference indicates the secular nature of the market? 2
- iii. 'Ibn Battuta has praised Indian cities and markets in his writings'. Elaborate. 2

PART-E

18. Map Question 5

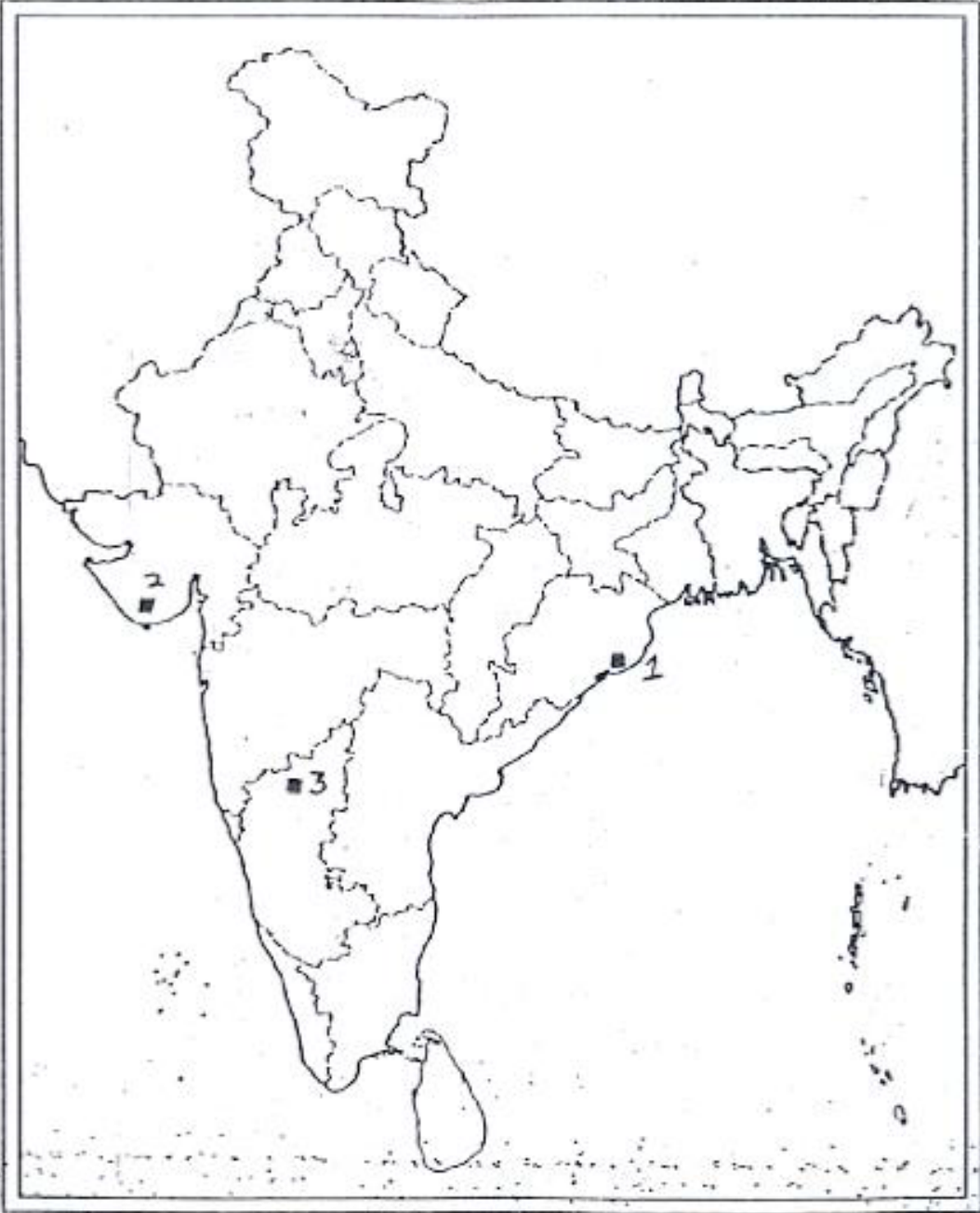
18.1 On the given political outline map of India, **Locate and label** the following. 2

- a) Chanudharo
- b) Sanchi

18.2 On the same map three places where Ashokan Pillar inscriptions have been found, are marked as 1, 2 and 3. **Identify them** and write their names on the lines drawn near them. 3

Outline Map of India (Political)

भारत का रेखा-मानचित्र (राजनीतिक)



CUT HERE
यहाँ से काटें

Practice Paper II (History)

Time Allowed: 3hrs

M.M: 80

General Instructions:

1. Answer all the questions. Some questions have choice. Marks are indicated against each question.
2. Answers to questions 1 to 3, carrying 2 marks should not exceed 30 words each.
3. Answer to questions 4 – 9, carrying 4 marks, should not exceed 100 words each. Students should attempt any 5 questions in this section.
4. Question 10 (for 4 marks) is a value based question and compulsory.
5. Answer to questions 11 to 14, carrying 8 marks each should not exceed 350 words each. Students should attempt any 3 questions in this section.
6. Questions 15, 16 and 17 are based on sources and have no internal choice.
7. Question 18 is a map question. Students should attach the map within the answer scripts.

Part – A

Answer all the questions given below:

2x3=6

1. Numismatics is an important source for the historians to reconstruct the past. Give two examples. 2
2. Bhakti and Sufi traditions came as a challenge to Brahmanical norms. Support the statement with two arguments. 2
3. What is the difference between utilitarian and luxurious artefacts? 2

Part – B

Section – I

Answer any five of the following questions.

4x5= 20

4. Discuss whether Kings in the early states were invariably Kshatriyas. 4
5. Summarise the teachings of Jainism. 4
6. What were the elements of the practice of sati that drew the attention of Bernier? 4
7. Who started the Virashaiva tradition in Karnataka? What were its main principles? 4
8. What difficulties have been faced by the historians in deciphering the Indus script? 4
9. Compare and contrast the perspectives from which Ibn Battuta and Bernier wrote the accounts of their travels in India. 4

Section – II

Value Based Question. (Compulsory)

4

10. Read the following passage and answer the questions that follow:

A mother's advice

When war between the Kauravas and the Pandavas became almost inevitable.

Gandhari made one last appeal to her eldest son Duryodhana:

By making peace you honour your father and me, as well as your well-wishers.... It

is the wise man in control of his senses who guards his kingdom. Greed and anger

drag a man away from his profits; by defeating these two enemies a king conquers the earth

.... You will happily enjoy the earth, my son, along with the wise and heroic Pandavas

There is no good in a war, no law and profit let alone happiness; nor is there (necessarily)

victory in the end – don't set your mind on war....

- | | |
|--|---|
| a) Name two reasons why Gandhari asked Duryodhana to make peace? | 1 |
| b) Explain the position of women during this period? | 2 |
| c) Why did Duryodhana not listen to his mother's advice? | 1 |

Part – C

Answer any three of the following questions. 3x8=24

- | | |
|--|---|
| 11. Describe town planning of the Harappans. | 8 |
| 12. Discuss how and why stupas were built? | 8 |
| 13. What problems do epigraphists face in the reconstruction of history? | 8 |
| 14. Write a note on Kitab-ul-Hind. | 8 |

. Part – D

Passage Based Questions 3x7=21

15. Read the following extract carefully and answer the questions that follow:

An excerpt from Bernier's description of the peasantry in the countryside:

Of the vast tracts of country constituting the empire of Hindustan, many are little more than sand, or barren mountains, badly cultivated, and thinly populated. Even a considerable portion of the good land remains untilled for want of labourers; many of whom perish in consequence of the bad treatment they experience from Governors. The poor people, when they become incapable of discharging the demands of their rapacious lords are not only often deprived of the means of subsistence, but are also made to lose their children, who are carried away as slaves. Thus, it happens that the peasantry, driven to despair by so excessive a tyranny, abandon the country. In this instance, Bernier was participating in contemporary debates in Europe concerning the nature of state and society, and intended that his description of Mughal India would serve as a warning to those who did not recognise the "merits" of private property.

- | | |
|---|---|
| (a) What were the problems faced by peasants in the subcontinent? | 3 |
| (b) Why is the land untilled? | 2 |
| (c) Describe the vast tracts of the empire of Hindustan. | 2 |

16. Read the following extract carefully and answer the questions that follow:

In the year 33 of the maharaja Huvishka (a Kushana ruler), in the first month of the hot season on the eighth day, a Bodhisatta was set up at Madhuvanaka by the Bhikkhuni Dhanavati, the sister's daughter of the Bhikkhuni Buddhamita, who knows the Tipitaka, the female pupil of the Bhikkhu Bala, who knows the Tipitaka, together with her father and mother.

- | | |
|--|---|
| (a) How did Dhanavati date her inscription? | 2 |
| (b) Why do you think she installed an image of the Bodhisatta? | 3 |
| (c) Who were the relatives she mentioned? | 2 |

17. Read the following extract carefully and answer the questions that follow:

Shastras or devotion?

This is a verse composed by Appar, a Nayanar saint: O rogues you quote the law books, of what use are your gotras and kula?

Just bow to Marperu's lord (Shiva who resides in Marperu, in Thanjavur, Tamil Nadu) as your sole refuge.

- | | |
|--|---|
| (a) What do you know about Appar (a Nayanar saint)? | 3 |
| (b) Name the book in which his teachings were compiled. | 1 |
| (c) How did Appar receive royal patronage by the Chola rulers? | 3 |

PART-E

18. Map Question **5**

20 On an outline map of India locate and label the following: $5 \times 1 = 5$

- (a) Harappa
- (b) Panchala
- (c) Magadha
- (d) Avanti
- (e) Vajji

Political Science

Subject: Political Science Class: XII Practice Paper1 Time Duration:3 Hrs M.M: 100

This paper contains 3printed pages and 27 questions.

General instructions:

- i) All questions are compulsory.
- ii) Question nos. 1-5 is of 1 mark each. The answers to these questions should not exceed 20 words.
- iii) Question nos. 6-10 is of 2 marks each. The answers to these questions should not exceed 40 words.
- iv) Question nos. 11-16 is of 4 marks each. The answers to these questions should not exceed 100 words.
- v) Question nos. 17-19 is of 5 marks each. The answers to these questions should not exceed 120 words.
- vi) Question nos. 20-21 is map based and picture based questions.
- vii) Questions nos.22-27 is of 6 marks each. The answers to these questions should not exceed 150 words.

- | | |
|--|---|
| Q.1. What was 'Marshall Plan'? | 1 |
| Q.2. How many judges are there in the International Court of Justice and what is their tenure? | 1 |
| Q.3. For how many years did the Civil War continue in Tajikistan? When did it come to an end? | 1 |
| Q.4. When was the UN founded? Name the present Secretary General of the UN. | 1 |
| Q.5. What did BWC of 1972 decide? | 1 |
| Q.6. What is 'Balance of Power'? | 2 |
| Q.7. Why is Human Security more important in the contemporary world than Territorial Security? | 2 |
| Q.8. Name the member countries of SAARC. | 2 |
| Q.9. What is NIEO? | |
| Q.10. Mention any four threats, except 'War' to Human Security. | 2 |
| Q.11. Highlight any two issues of cooperation as well confrontation each between India and Bangladesh. | 4 |
| Q.12. Has Bipolarity led to end of conflicts in post-communist regimes? Explain with the help of examples. | 4 |
| Q.13. 'NAM was neither a policy of isolationism nor neutrality'?Elaborate. | 4 |
| Q.14. How can the Euro pose a danger to the US dollar? | 4 |
| Q.15. 'Economic preponderance of the US is inseparable from the structural power'. Elaborate. | 4 |
| Q.16. Is UNO an indispensable organisation? Elaborate. | 4 |
| Q.17. Read the passage given below and answer the questions:
No region exists in a vacuum. It is influenced by outside powers and events no matter how much it may try to insulate itself from non-regional powers. China and the | |

United States remain key players in South Asian politics. Sino- Indian relations have improved significantly in the last ten years, but China's strategic partnership with Pakistan remains a major irritant. The demands of development and globalization have brought the two Asian giants closer, and their economic ties have multiplied rapidly since 1991.

- i) Which two countries have been referred to as outside powers? 1
- ii) Which are the two Asian giants and why they have been called so? 2
- iii) China's strategic partnership with Pakistan is a major irritant for which country and why? 2

Q.18. India has various problems with its smaller neighbours in the region. Given its size and power, they are bound to be suspicious of India's intentions. The Indian government, on the other hand, often feels exploited by its neighbours. It does not like the political instability in these countries, fearing it can help outside powers to gain influence in the region. The smaller countries fear that India wants to be a regionally-dominant power.

- (i) Which region is being talked about in the passage? Name the organisation that has been established to promote co-operation in the region. 2
- (ii) Give an example of India's neighbours that think that Indian government tries to dominate and interfere in the domestic affairs of smaller countries. 3

Q.19. Read the passage given below and answer the questions:

The Chinese leadership took major policy decisions in the 1970s. China ended its political and economic isolation with the establishment of relations with the United States in 1972. Premier Zhou Enlai proposed the 'four modernizations'(agriculture, industry, science and technology and military) in 1973. By 1978, the then leader Deng Xiaoping announced the 'open door' policy and economic reforms in China. The policy was to generate higher productivity by investments of capital and technology from abroad.

- (i) What was 'Open Door Policy'? 2
- (ii) In what ways does the present Chinese Economy differs from the Command Economy? 3

Q.20. Identify the counties where the UN peace keeping operations administered in the following years and write in your answer booklet. 5

- i) 2004ii) 2005iii) 2006iv) 2002v) 1999

Q.21.



- (i) What according to you is the message of the cartoon? 2.5
- (ii) What do the two wheels of the bicycle represent? 2.5

Q.22. In spite of having different political systems, how is democracy becoming an accepted norm in the entire region of South Asia? Explain. 6

OR

Analyse the different ways in which American hegemony could be overcome. 6

Q.23. 'Although India has maintained good relations with all the post Communist countries, yet the strongest relations are still between India and Russia.' Explain the statement with any three suitable arguments. 6

OR

What is the basic difference between traditional and non-traditional concepts of security? 6

Q.24. Explain the factors that led to the disintegration of the USSR? 6

OR

Describe any THREE proposed criteria for the new permanent and non-permanent members of the Security Council in order to improve its functioning. 6

Q.25. How are India and China emerging as great economic powers? 6

OR

Evaluate the role of European Union as a supra-national organization. 6

Q.26. What is Non-Aligned Movement? Examine any two of its criticisms. 6

OR

What were the factors that forced Gorbachev to initiate reforms in USSR?

Q.27. Explain the role of emerging alternative centers of power in transforming the different countries into prosperous economies. 6

OR

What steps should be taken to make UN more relevant in the changing context? 6

This paper contains 3 printed pages and 12 questions.

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Q.8. Name the member countries of SAARC.	2
Q.9. What is NIEO?	
Q.10. Mention any four threats, except 'War' to human security.	2
Q.11. Why did superpowers try to win over smaller countries?	4
Q.12. 'NAM was neither a policy of isolationism nor neutrality'? Elaborate.	4
Q.13. Assess any FOUR reforms proposed by UNCTAD as new trade policy for development.	4
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Q.21.



- (i) What according to you is the message of the cartoon? (2.5)
- (ii) What do the two wheels of the bicycle represent? (2.5)

Q.22. Why did Gorbachev's reform policy fail in spite of his accurate diagnosis of the problem? 6

OR

In what ways does the present Chinese economy differs from the command economy? 6

Q.23. Mention some of the recent agreements between India and Pakistan. Give examples to prove that the two countries are well on their way to a friendly relationship. 6

OR

'Reforming the UN means restructuring of the Security Council'. Do you agree with this statement? Give arguments for or against this proposition. 6

Q.24. 'Nuclear weapons as deterrence or defence have limited usage against contemporary security threats to states'. Explain the statement by giving examples. 6

OR

What was Cuban Missile Crisis? 6

Q.25. Mention any three features that distinguish the Soviet economy from that of a capitalist country like the USA. 6

OR

Define 'Hegemony'. Explain Hegemony as Hard Power. 6

Q.26. Name the member countries of ASEAN. Explain the pillars and components of ASEAN Vision 2020? 6

OR

“Cold war produced an arms race as well as arms control.” Explain. 6

Q.27. Suppose the Soviet Union had not disintegrated and the world was still as bi polar as it was in Mid-1980s'. How it would have affected the developments in the last decades? Identify any two regions or domains and the developments that may not have taken place in that kind of a world.

OR

Suppose the cold war had not taken place and there were several major powers at the end of the Second World War. How would have that situation affected India's foreign policy? Identify any three aspects or reasons and imagine the difference. 6

Food Production

Food Production III

Chapter 3: Fish cookery

Chapter 4: Meat

Chapter 8 &9: Bakery and Confectionery

1. Write the importance of sea foods in our diet.
2. Give a general classification of fish.
3. What points you will keep in mind while selecting fish and shell fish?
4. Explain various cuts of fish.
5. Write the difference between flat fish and round fish.
6. Explain common methods of cooking fish.
7. Give the important to be considered in selection of mutton/lamb.
8. What points will you consider while buying chicken for meat of chicken?
9. How would you define offal? Write down at least three offal that can be eaten.
10. How are game classified?
11. What do you understand by the word marbling?
12. List the cuts of lamb and at least one usage of a cut.
13. What is ageing of meat and why is it done?
14. What do you understand by the term rigor mortis?
15. Briefly describe the steps involved in slaughtering of an animal?
16. How would you define meat? What are their compositions in terms of physical and chemical properties?
17. Briefly gives the faults in bread making.
18. What is the role of sugar and salt in a bread making?
19. What are Bread improvers? Write their roll in bread making.
20. What are the principles / fundamental step in bread making?
21. Explain the laminating pastry.
22. Give uses of laminated pastry.
23. List types of pastry.
24. Give the recipe short crust pastry.
25. What is the role shortening in making short crust pastry?

- **Completion of practical file**

Food Production IV

1. What do you mean by the term costing?
2. Explain elements of cost with example.
3. Write in brief the differences between Variable and Fixed Cost?
4. Write in brief the advantages of controlling food cost?
5. Define a variable, fixed & semi variable Cost control in relation to catering industry?
6. What are the objectives and advantages of food cost control? What are the factors affecting the food cost?
7. Ascertain the total material cost (food cost) and its percentage to Net sales from the following information.

	Amount Rs.
Total Sale	57,000
Opening stock	1000
Fresh indents/purchases	12,000
Closing stock	500
Food consumed by staff	600
Food served to guests(as complementary)	400

8. Ascertain the total labour cost and its percentage to Net sales from the following information.

	Amount Rs.
Total Sale	1,14,,000
Wages and salary	7,000
Contribution towards E.P.F.	700
Medical re-imburement	500
L.T.C.	1,200
Uniform and washing allowances	500
Accommodation worth Rs. 600 charged at	200
Interest subsidy	200
Free telephone at home	500
Food served at cost 400 and charged from employee	200

9. Ascertain the total overhead cost and its percentage to Net sales from the following information.

	Amount Rs.
Total Sale	27,900
Rent	4,000
Interest	1,000
Commission	500
Depreciation	1,000
Advertisement	700
Gas and fuel	200
Electricity and power	500
Water bill	100
Miscellaneous expenses	1,000
Laundry	300

10. From the following information ascertain the Food Cost, Labor cost and overhead cost and also find out percentage to total sale of each cost. Also find out Gross profit/loss and Net profit/loss and percentage to total.

	Amount Rs.
Sale	20,000
food	
beverages	15,000
Opening stock	700
food	
beverages	800
purchases	8,500
food	
beverages	6,800
Closing stock	300
food	
beverages	450
Restaurant rent	14,000
Fuel expenses	800
Miscellaneous expenses	1200
Office expenses	2,000
Travelling allowances	500
Contribution towards E.P.F	1,500
Wages and salary	10,000
Furniture purchased	4,000
Depreciation	300
Telephone	200
Repair	200

1. Note: the total food debited to staff canteen from main kitchen was Rs. 1,200 but Rs. 200 was charged from staff towards meal. Hotel paid Rs. 1,000 as rent for staff accommodation but staff was charged Rs. 300 only. The hotel served free food to guests worth Rs. 1,100

11. Calculate as given under:
 - (i) Cost percentage, when cost is Rs. 400 and sale is Rs. 1000.
 - (ii) Food cost, when food cost percentage is 30% and total sale is Rs. 900.
 - (iii) Net profit percentage, when total sale is Rs. 8000 and total cost is Rs. 5000
12. Explain Bin card and draw the format of Bin card.
13. Write in detail methodology and phases of cost controls.
14. What do you mean by Break Even point? Explain with diagram.
15. What is markup pricing? Explain with suitable example.
16. Write in detail the essentials of cost control.
17. Write in detail the purpose of food cost accounting
18. With the help of a flow chart diagram, explain the cycle of control in Food and Beverage Department.
19. What does the term 'Wazawan' mean?
20. Explain Bengali Cuisine.
21. Describe any four dishes of Maharashtra.
22. Briefly explain the following dishes and also mention the region of each dish.
 - (1) Goshtaba
 - (2) Khakhra
 - (3) Dosai
23. Explain the main characteristics features of Goan cuisine and also describe any two famous dishes of Goa.
24. Briefly describe six dishes of Gujarati Cuisine.

- **Completion of practical file**

Fashion Studies

Exercise: 1

Fill in the blanks:

- 1) A pattern can be cut by ----- method and ----- method.
- 2) Pattern is a ----- of a garment.
- 3) The author of the book 'Modern Sizing and Pattern Making for Womens and Childrens Garments' is -----.
- 4) The dart is a ----- wedge that gives ----- to the flat piece of -----.
- 5) Waist dart is ----- inch away from the bust and side seam dart is ----- away.
- 6) Balance refers to ----- and ----- in a garment.
- 7) Muslin is used for ----- a pattern and is also called a -----.
- 8) Pattern is placed ----- to the ----- of the fabric.
- 9) ----- Is a term given to ----- set of pattern piece used to make patterns of ----- style.
- 10) ----- Method is the oldest pattern making method and is regarded as a ----- approach.

Q1: What is Pattern Making?

Q2: Describe two methods of Pattern Making.

Q3: Why is it important to choose a correct block for design development?

MEASUREMENTS:

Exercise: 2

Fill in the blanks:

- 1) Center front is the line that divides the front ----- in two -----.
- 2) Ankle should be measured around the -----.
- 3) Crotch depth on a body is measured by making the ----- sit on a ----- surface and it is measured from ----- to -----.
- 4) Apex is measured by taking the measurement from shoulder ----- ----- to the apex point.
- 5) Distance between the apex and center ----- is measured by ----- the distance between ----- points in -----.
- 6) Shoulder blade level is measured at ----- of -----.

Q1: What are the 2 ways of measuring the Crotch length?

Q2: How do you measure bust and shoulder length on the dress?

Sizes and Measurements:

Exercise: 3

Fill in the blanks:

- 1) Standard measurements are ----- in a ----- chart.
- 2) Country that has the most elaborate ----- is -----.
- 3) Sizing systems are ----- by the ----- or standardization organization for a country.
- 4) The standard sizes for the country re established by -----a ----- cross section of the -----.
- 5) In UK sizing system was established by----- ----- for the ----- industry.
- 6) All garment manufacturers in UK market adhere to the -----.
- 7) The size is suffixed with S to denote ----- and T for a ----- person.
- 8) Countries have different sizes and -----.
- 9) Two women with ----- hip girth can have a difference of ----- in their bust measurements for women.

Q1: What is General Sizing System?

Q2: Who is responsible for developing the Sizing System?

Tools:

Fill in the blanks:

- 1) Grading ruler is used for drawing ----- and ----- in making a pattern.
- 2) The ----- curve is used for drawing the ----- seam in a pattern.
- 3) ----- is used for marking a seam line on a pattern.
- 4) The pattern is made on ----- paper and test fitted on -----.
- 5) ----- Is used for marking notches on -----.

Review Question:

Q1: Explain the use of French curve as a Pattern making tool.

Q2: Explain the use of Tracing Wheel as a Pattern making tool.

Fit

Exercise: 4

Fill in the blanks:

- 1) Fitting is like ----- it creates a ----- form.
- 2) Five elements of fit are -----, -----, -----, ----- and -----.
- 3) Ease is of ----- kinds, i.e. ----- and ----- ease.
- 4) ----- Occurs when ----- is in equilibrium.

- 5) The garment is called ----- grain if it is not cut on the ----- grain of the fabric and it would not -----well.
- 6) The side seam of the garment should ----- straight on the ----- of the -----.
- 7) Pins should be placed ---- to the ---- line, as there is ----- of strain or pull on the -----.
- 8) Check the ----- muslin and make corrections till ----- satisfied, ----- all the ----- corrections and ----- on the pattern.
- 9) ----- Pulls in a garment indicate that the garment is ----- and ----- folds indicate that it is ----.

Review Question:

Q1: Define Fit and identify elements of fit.

Q2: Differentiate between Test fit and Garment fit.

Pattern development:

Fill in the blanks:

- 1) The waist of the bodice is ----- by closing ----- darts and then a ----- is drawn using a French curve.
- 2) The back shoulder line is drawn with help of ----- by dropping-----on the ----- - line.
- 3) The apex is marked at ----- of -----.
- 4) Waist dart at the back is calculated by ----- the ----- measurement from -----.
- 5) Front waist dart is obtained by ----- out a line from ----- to ----- and the distance between this point and center front to ----- is half of the dart.
- 6) For sleeveless garment go ½” ----- on the ----- level.

Neckline:

Exercise: 5

Fill in the blanks:

- 1) To ensure that the neck line doesn't end in a point go out ----- on ----- of the bodice.
- 2) While making a neckline deep in front it is ----- not to make the neckline ----- and ----- at back.
- 3) A ----- neckline is drawn using a French curve.
- 4) The ----- facing is cut keeping the pattern of the ----- of the desired piece.

- 5) The measurement required for any neckline is the depth of the neck measured from the ----- of the ----- point to the center front of the -----.

Q1: What are the measurements required to draft a neckline?

Q2: What are the different necklines that can be finished with Bias Facing?

Dart manipulation:

Exercise: 6

Fill in the blanks:

- 1) Dart manipulation is ----- for pattern maker to create -----and ----- designs for -----.
- 2) A dart is named after the -----.
- 3) A waist dart is a dart that starts from -----.
- 4) Two methods of dart manipulation are -----and -----.
- 5) In this method the old dart is ----- and its suppression folded and the new dart position is ----- and opened.

Q1: What is Dart manipulation? Why is it important?

Q2: What are the different methods of Dart manipulation?

Basic skirt:

Exercise: 7

Fill in the blanks:

- 1) Balancing the hem of a flared skirt is required due to ----- and ----- in the pattern.
- 2) A- line skirt has ----- fullness added to the ----- of the skirt.
- 3) A single dart skirt is made by combining the ----- of the----- dart skirt.
- 4) The length of the dart in the front in a single dart skirt pattern ----- is in a two dart skirt pattern is ----- .
- 5) The difference in ----- of dart in a single and two dart skirts is because if a dart is ---- -- and bigger it will result in a -----at the dart point.

Review Questions:

Q1: What is balancing?

Q2: How do you balance a skirt hemline?

** Has to be done in notebook

Media Studies

Fill in the blanks:

1. -----propounded the Uses and Gratification Theory.
2. -----invented the television.
3. Radio was first used for
4. Reporter is the -----of the newspapers.
5. Hypodermis theory is also known as -----

Define the following terms:

1. Inverted pyramid style
2. Two step model
3. Picture palaces
4. Vertical media ownership

Answer the following question in not more than 250 words.

1. What is media literacy?
2. What do you understand by audience theories?
3. What is the difference between newspaper style of writing and television style of writing?
4. What do you understand by the radio play and radio dispatch?
5. Briefly explain how a radio news bulletin is prepared?
6. What do you understand by cross media ownership?
7. How to make a ground plan for a film scene?
8. Describe the stages of production in Television?

Practicals:

Q1. Design an Ad Campaign under the following heads and justify it.

Planning: Which media you will target for giving ads.

Duration: Three-month campaign.

Ad copy : Print , Radio and TV

Budget : 5 crore (50 lakhs per print and radio ad and one crore per TV ad)

Q2. Make a documentary of 5 mins duration on any social issue.

Q3. Write editorials on five different themes (National, International, Sports, Environment and Business and Economy).

Q4. Write a radio script on any contemporary topic (30 mins duration including music).

Q5. Design a magazine page on any school event for your school magazine.

Psychology

Suggested Format For Preparing A Case Profile

CASE PROFILE The case profile will include developmental history of the subject using both qualitative and quantitative methods.

Qualitative methods include observation, interview etc. The main objective of preparing a case profile is to understand the individual in totality.

The students may prepare a case profile of an individual who has excelled in areas like sports, academics, music etc. or having special needs like learning disability, autism or those with interpersonal social problems i.e. poor body image, obesity, temper tantrums, substance abuse, not getting along with peers, withdrawn etc They may be encouraged to find out the background information and developmental history of the individual.

Contents/Index

• Certificate

• This is to certify that this case study is a part of CBSE curriculum for psychology. I have completed this case study under the guidance of my psychology teacher_____. It is now prepared for admission to the central board. The information provided by the subject for this case study is authentic and to the best of my knowledge

Acknowledgement

My subject has been of utmost importance for my case study. S/he provided all the inputs with complete integrity. Her/his help and true confessions have kept the sanctity of this case study alive. I thank her/him for sharing these details of her life with me and if it was not for her/him, I am not sure if I would have found someone to give me the truth of all their past and present life experiences. I would also like to thank my psychology teacher _____ for her constant guidance and support. If not for her, I would not have been able to do

What is a case study (Write in detail about this methodology)

What is (topic): Write in detail about the topic you have selected. Pictures, illustrations, graphical representations, newspaper cuttings can be included in describing the topic.

Methods used

1. Interview: (write in detail about the method)
2. Observation (write in detail about the method)
3. Psychological testing (write in detail about the method)

Preliminary information

Why did you choose your subject and how did you make rapport with your subject

Family Tree

Birth history

Information about socioeconomic status consisting of information about mother's /father's education and occupation, number of members in the family-brothers, sisters and their birth order

Childhood history

- Information about physical characteristics and physical health.

Adolescent stage

- Relationships with father, mother, sibling, friends, teacher (under separate headings)
- Any other information
- Analysis
- Psychometric testing: Reporting of the tests relevant to the topic.
- NOTE: CASE PROFILE SHOULD BE HAND WRITTEN

Sample Paper 1
(based on chapter 1,3 and 4)

Time :3 hours

MM – 70

General Instructions

Question Nos. 1-10 in Part A are learning checks type questions carrying one mark
Marks for each question are indicated against it.

Answers should be brief and to the point.

All the questions are compulsory.

Question Nos. 11-16 in Part B are very short answer type questions carrying 2 marks each.
You are requested to answer them as directed.

Question Nos. 17-20 in Part C are short answer type-I questions carrying 3 marks each.
Answer to each question should not exceed 30 words.

Question Nos. 21-26 in Part D are short answer type-II questions carrying 4 marks
Answer to each question should not exceed 60 words.

Question Nos. 27-28 in Part E are long answer type questions carrying 6 marks each. Answer
to each question should not exceed 100 words.

PART A

Q1. _____ refers to an individual's underlying potential for acquiring skills

Q2. Low activity of neurotransmitter gamma amino butyric acid (GABA) leads to _____.

Q3. Define mental age.

Q4. . Full form of DSM IV _____

Q5. Irrational fears related to specific objects, people or situation are symptoms of _____

Q6. In _____ disorder a person exhibits vague and recurring bodily symptoms such as pain without any organic cause.

Q7. _____ is unexpected travel away from home and workplace assuming new identity and inability to recall previous identity.

Q8 A period of depressed mood, loss of interest in most activities, change in body weight, sleep problems, thoughts of death and suicide. _____.

Q9. Define Abnormal Behaviour.

Q10. Write the formula to calculate IQ

PART B

- Q11. What is Diathesis stress model
- Q12. What is contextual intelligence
- Q13. State any two characteristics OCD
- Q14. How do the Fugue and Amnesia differ?
- Q15. What is technological intelligence?
- Q16. Explain emotion oriented strategy with the help of an example.

PART C

- Q17. Differentiate between primary and secondary appraisal
- Q18. Discuss the relationship between resilience and health.
- Q19. Explain any three characteristics of substance abuse disorder
- Q20. Explain the difference between frustration and conflict

PART D

- Q21. Explain any two psychometric approaches to intelligence.
- Q22. What are the three types of intelligences defined by Sternberg?
- Q23. How does social support help in dealing with stress?
- Q24. Explain sources of stress
- Q25. Explain the General adaptation Syndrome
- Q26. Discuss any four factors influencing stress appraisal.

PART E

- Q27. How is culture related to intelligence? Discuss with special reference to Indian and western culture.
- Q28. What is stress .Explain the effects of stress on psychological functioning and health

Physical Education

Practice Assignment

Q1	Explain procedure for giving Bye.
Q2	What is Seeding?
Q3	What is ROUND ROBIN Tournament?
Q4	Discuss the role of Fats on the performance of Sportspersons.
Q5	Explain about any two components of Diet in brief.
Q6	Describe the causes of Scoliosis. What are preventive measures required to avoid this.
Q7	Elaborate about the motor development stages in Children.
Q8	What is ELIMINATION Tournament?
Q9	What are Vitamins?
Q10	What are the effects of good Nutrition on an individual?
Q11	What are Proteins? Discuss.
Q12	What is balanced Diet
Q13	Describe the various Committees for the organization of Sports events.
Q14	Explain any-five common postural Deformities.
Q15	Describe the types of motor skills. What are the factors affecting motor development in Children.
Q16	Explain the physical and Physiological benefits of exercise on Children.
Q17	What are the main causes of poor Posture?