Literature:
Answer the Questions in 40 words each.

1) What do the parting words of the poet and her smile signify?
2) What does the world of the slum children consist of?
3) What according to the poet is the only hope for the slum children?
4) What is the sadness that the poet refers to, in the poem Keeping Quiet?
5) What symbols from nature does the poet invoke to say that there can be life under apparent stillness?
6) What makes human beings love life despite troubles and sufferings?
7) Why is grandeur associated with the mighty dead?
8) What did Derry' mother think of Mr.Lamb?
9) How does M. Hamel pay a tribute to the French class?
10) Justify the title of the lesson, Lost Spring.
11) How did Douglas finally get rid of the fear he had, of water ?
12) Why did the crofter show the thirty Kroner to the peddler?
13) Why did the Peddler think that the world was a Rattrap?
14) Explain the duties that Gandhi told the court he was involved in.
15) How do we know that ordinary people too contributed to the freedom movement?
16) What impression do you form of Jansie?

Answer the Questions in 125 -150 words each.

1) How was the last lesson different from the usual lessons taught on other days? Describe the Last Lesson.
2) In what conditions do the bangle makers of Firozabad live? Why can't they come out of the state of the poverty?
3) Describe the efforts made by Rajkumar Shukla to persuade Gandhi to go to Champarn.
4) What does the title 'The Rattrap' symbolize ? Does the story advocate the theory of giving a second chance to those who commit mistakes in life? Elaborate.

5) How did the Champaran episode prove to be a turning point in Gandhi's life? Explain with reference to the lesson, Indigo.

6) Describe the efforts made by the Tiger King to achieve his target of killing hundred tigers.
7) What assessment do you make of Dr. Sadao's character, after reading the story 'The Enemy'?
8) Why do you think Jack refused to change the ending of the story as suggested by his daughter?
9) How did Mr Lamb's meeting with Derry become a turning point in his life?

10) What impression do you form of the people of 'Iping'?
11) Describe how the Invisible Man reveals himself.

12) Why was Roger Skunk's mommy angry with him? What did she finally tell him?
13) What forced Dr Sadao to be impatient and irritated with his patient?
14) What qualities of Mr Lamb attracted Derry to him?
15) How did Zitkala –Sa Forced to part with her long ,heavy hair? Howdishe feel at the end?
16) How did the tiger king meet his end?
17) Why do you think, was the Maharaja in danger of losing his throne?
18) .Reflecting on the story, what did you feel Evans' having the last laugh?
19) Give a pen portrait of the servants of Dr.Sadao.
20) How did Jo involve herself in Jack's story telling?
21) What did Derry' mother think of Mr.Lamb? Why did she refuse Derry going there?
22) Why did Governor think that Evans had no chance to escape?
23) What made Bama Shriek with laughter?

Writing Tasks:

1)You are Mohan /Monika .You have been invited by the Lions Club to act as one of the judges for a fancy dress competition for children, but due to a previous engagement, you cannot accept this invitation .Write a formal reply to the president of the club regretting your inability to accept the invitation.

2)You are Dr. Madhu, M.D. You are looking for an independent house in Ghaziabad on a reasonable rent for your residence-cum-clinic. Draft a suitable advertisement in not more than 50 words to be published in Hindustan Times, New Delhi. Your telephone no is 12341235.

3)Today the 24 hours television news channels give us instant news from every nook and corner of the world. But the fact remains that the importance of the newspapers remains intact. Write out a speech in 150-200 words, expressing your views on 'The Relevance of Newspapers'. You are Sunil/Sunita.

4)Write a letter to the Editor, 'The Hindu', Chennai, about rash and reckless driving by the people in your city, suggesting preventive measures. You are Kamal/Kanwar of 10, Mount Road,Vela Chery.

5)Every activity that man indulges in creates waste of some kind. Some of the waste   can be recycled or reused. In fact the need of the hour is to conserve the earth's resources in all possible ways. Write an article on the topic 'Conservation, Need of the Hour' in 150-200 words. Your are Brinda, a keen environmentalist.

6)Today the 24 hours 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 views on 'The Relevance of Newspapers'. You are Sunil/Sunita.
.   ,
7).You are Mukesh/Mukta of Saket. You have been readings the news items on Nithari killing. Write a speech in about 150-200 words to be given in the morning assembly, stressing the need of keeping a close vigil on the anti-social element of the locality and taking care of young

children of the area so that they don't fall prey to bad characters.

8)Write a speech in about 150-200 words about the impact of revolution brought by information technology in India to be delivered in the morning assembly.

9) SAF Public School, Chandigarh is planning to take a group of 40 senior students to Shimla on an excursion during the summer vacation. Mr. Mohan Das, the Teacher-in-Charge of 'Excursions and Field Trips' writes a letter to JJ Tours and Travels, Chandigarh asking them to organize the tour. Write this letter giving details of preference such as dates of journey transport, accommodation etc.

10).Write a letter to the Editor, 'The Hindu', Chennai about rash and reckless driving by the people in your city, suggesting preventive measures. You are Kamal/Kanwar of 10, Mount RoadVela cherry.

11) You are Ram/Isha, Secretary of harmony Residents' Welfare Association, Karnal. Write a letter to the Editor of "the Herald" on the problem of frequent power failure faced by the people during the summer season in your locality, giving suitable suggestions to remove this problem.

MACRO ECONOMICS(PART-B)

1. **NATIONAL INCOME:(Weightage-12M)**

1.Explain any four limitations of using GDP as a index of welfare.

2.Analyse the impact of Swachhs Bharat Abhiyan on GDP and welfare.

3.Explain the problem of double counting. How can it be avoided?

4.Distinguish between:

    1.Real GDP and Nominal GDP

    2.Intermediate goods and Finished goods

    3.Saving and Leakage

    4.Positive and Negative Externilities

    5.Real flow and Money flow

    6.Consumption goods and capital goods

7.Government raises its expenriture on producing public goods.Discuss the economic value reflected by this act of government.

8.Sale of petrol and diesel cars is rising particularly in big cities.Analyse its impact on GDP and welfare

.9.Giving reason explain how the following should be treated in estimation of national income

    1.Payment of interest by a firm to a bank

    2.Payment of interest by a bank to an individual

    3.Payment of interest by an individual to a bank

    4.Profit earned by a branch o foreign bank in India.

    5.Salary received by Indian employees working in American embassy in India.

    6.Family members working free on the farm owned by the family.

    7.Payment of interest on borrowing by general government.

    8.Dividend received by a foreigner from investment in shares of an Indian company.

    9.Profit earned by a branch of an Indian bank in Canada.

    10.Scholership given to Indian students studying in India by a foreign company.

2.**MONEY AND BANKING: (Weightage-6M)**

1.Explain the problem of double coincidence of wants faced uder barter system.How has money solved it ?

2.Explain the function of money:

    1.Medium of exchange

    2.Standard of deferred payment

    3.Store of value

    4.Measure of value

3.How does the central bank perform the function of controller of credit ?

4.Explain the various instruments of monetary policy.

5.Explain the functions of the central bank.

6.Currency is issued by the central bank ,yet we say that coomercial banks create money.Explain

7.Explain these instruments in controlling credit creation.

    CRR, SLR, Bank rate, Repo rate, Margin requirement, Reverse repo rate.

8.Explain the qualitative and quantitave instruments of RBI.

3.**DETERMINATION OF INCOME AND EMPLOYMENT: (Weightage-12)**

1.Explain consumption function.Derive saving function from the consumption function.

2.What is aggregate demand ?.State its components.

3.Explain the changes that take place in an economy when aggregate demand is less than Aggregate supply.

4.What is 'deficient demand' and 'excess demand' ?.Explain the role of 'Bank rate ' and 'Reverse repo rate' in removing it.

5.Explain the meaning of underemployment equilibrium .Explain 2 measure by which full Employment equilibrium can be reached.

6.Distinguish between Autonomous and Induced investment.

7.Define inflationary and deflationary gap. Explain with diagram.Explain the measures by which

Can be corrected.

8.Distinguish between marginal propensity to consume and average propensity to consume.

4.**GOVERNMENT BUDGET(Weightage-6)**

1.What is the difference between revenue and capital expenditure?.Explain how taxes and government expenditure can be used to influence distribution of income in the society.

2.What is the difference between direct and indirect tax?.Explain the role of government budget

In influencing allocation of resources.

3.Explain the objectives of government budget.

4.Explain how the government budget can use the budgetary policy in reducing inequalities in

Income.

5.Government has started spending more on providing free services like education and health To the poor.Explain the economic value it reflects?

6.Explain the concept of 'primary deficit' ' fiscal deficit ' and ' revenue deficit'. What does It indicate?. State some measure to reduce this deficit.

7.Categories the following into revenue and capital receipts ,revenue and capital expenditure.

1.Corporation tax.

2.Dividends on investment made by government.

3.Sale of public sector undertaking.

4.Repayment of loans

5.Grants given to state government.

6.Construction of school building.

5.**BALANCE OF PAYMENTS:(Weightage-4M)**

1.Where is 'borrowings from abroad' recorded in the Balance of Payments Accounts?.Give Reasons.

2.Distinguish between balance of trade and balance on current account.

3.Indian investors lend abroad.Answer the following questions:

1.In which sub –account and on which side of the Balance of Payments account such Leading s recorded?.Give reasons.

2.Explain the impact of this lending on market exchange rate.

3.Where will sale of machinery to abroad be recorded in the balance of payments accounts? 4.Distinguish between 'autonomous ' and 'accommodating'balance of payments transcations.

5.Distinguish between BOT and BOP.

6.Giving reasons explain where charity to foreign countries is recorded in the BOP.

FOREIGN EXCHANGE RATE:

1.Define :

Currency depreciation ,Devaluation

Currency appreciation, Revaluation

Pegging

2.Explain Fixed, Flexible and Managed exchange rate.

3.Distinguish between Spot and Forward foreign exchange market.

4.Give the meaning of 'foreign exchange 'and 'foreign exchange rate' .Giving reason ,explain

The relation between foreign exchange rate and supply of foreign exchange.

5.Explain the effect of appreciation and depreciation of domestic currency on exports and imports.

6.How is exchange rate determined in the foreign exchange market?. Explain.

7.Explain the three sources of demand and supply for foreign currency.

8.Giving two examples ,explain why there is a rise in demand for a foreign currency when its price falls.

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DAYANAND ANGLO VEDIC PUBLIC SCHOOL,AIROLI
QUESTION BANK (2017-18)
SUB - ECONOMICS
CLASS-XII

MICRO: (PART A)

1.INTRODUCTION:(weightage- 6M)

1.What is the central problems ? why its arises?

2.Explain all 3 cental problems with example.

3.Define PPC/PPF. Explain the features of PPC with example and diagram.

4.Explain shifts and rotation of PPC.

2.CONSUMER'S EQUILIBRIUM AND DEMAND(weightage-12M)

1.Define cosumers equilibrium.Explain the cosumers equilibrium with utility analysis in
   Single and double commodity case with numerical example and diagram.

2.Define the indifference curve .Explain the cosumers equilibrium with the help of
   Indifference curve with example and diagram.

3.DEFINE :
   1.Budget line
   2.Law of diminishing marginal utility

4 Explain the law of diminishing marginal utility with example

5.Explain the features of indifference curve with reason and diagram.

6. Write the difference:
   1.Extension and increase in demand
   2.Contraction and decrease in demand
   3.Complementary and substitute goods
   4.Normal and inferior goods
   5.Change in quantity demand and change in demand
   6.Movement along the demand curve and shift in demand curve

7.Give the four causes of a leftward and rightward shift in demand curve.

8.State the geometric method of measuring price elasticity of demand.

9.Explain six factors that affect market and individual demand for a commodity.

10.Explain the concept of budget line equation with the help of a numerical example.

11.What is the relation between price elasticity of demand of a commodity and total
    Expenditure on it ?

12.Show that consumer of a commodity busy more of it when its price falls?. Use utility
analysis.

13.Explain the inverse relation between price and quantity demanded of a commodity.

14.Explain the relationship between:
    1. Prices of other goods and demand for the given good.
    2. Income of the buyers and demand for a good.

3.PRODUCER BEHAVIOUR AND SUPPLY:(weightage:12M)

1.Explain the Law of variable proportion with numerical example and diagram.

2.Define marginal product.State the behaviour of marginal product when only one input
   Is increased and other inputs are held constant.

3.Define producer's equilibrium.Explain the conditions of producer's equilibrium through the
   MC and MR approach with numerical example and diagram.

4.Explain why will a producer not be in equilibrium if the conditions of equilibrium are not
   Met.

5.Why is minus sign attached to the measure of price elasticity of demand of a normal good

In comparasion to the plus sign attached to the measure of price elasticity of supply?

6.Why is the equality between MC and MR necessary for a firm to be in equilibrium?.
   Is it sufficient to ensure equilibrium?. Explain.

7.Under what market condition does average revenue always equal marginal revenue?

8.Show with the help of a numerical example that average cost is constant when marginal cost is equal to it.

9.What is the behaviour of average fixed cost as output is increased?why is it so.?

10.Draw a TFC,TVC and TC in a single diagram.State the relation between TFC ,TVC and
    TC.

SUPPLY:

1.How does these things influence the supply of a good by a firm.Explain with diagram.
   (a) Subsidy (b) Taxation (c) Technological progress (d) Input prices

2.Explain the factors that changes supply of a commodity.

 3.Explain the law of supply with the help of a supply schedule and and supply curve.

4.Explain the factors which influence elasticity of supply.

5.Give any 3 causes of a rightward and leftward shift of supply curve.

 4. **MARKET:(Weightage: 10M)**

1.Why is a firm under perfect competition a price taker and in monopoly price maker ?

2.A monopolist can sell any quantity he likes at a price.

3.Why is the demand curve of a under monopolistic competition more elastic than
   Under monopoly ?.Explain.

4.What are the effects of price floor(minimum price ceiling) on the market of a good ?
   Use diagram.

5.Explain the effects of 'maximum price ceiling 'on the market of a good.Use diagram.

6.Market for a good is in equilibrium.Supply of the good 'increases' and another case decreases.Explain the chain of effects of the change.Use diagram

7. Distinguish between cooperative and non-cooperative oligopoly and pure and perfect
    Competition.

8.Market for a good is in equilibrium.Demand for the good 'decreases' and another case increase..Explain the chain of effects of this change.Use diagram.

9.Explain features with implications:
    1.Homogegeous product
    2.Product differention
    3.Non price competion
    4.Price discrimination
    5.Few sellers
    6.Free entry and exit of firm

10.Equilibrium price of an essential medicines is too high.Explain what possible steps can be taken to bring down the equilibrium price but only through the market forces.

11.Maruti,Tata Fiat and Ford are only a few auto producers in the Indian market.Identify the
    Form of market in which they sell their products and also explain its features.If they
    Decide to form collusive oligopoly then which value is being violated by them?

DAYANAND ANGLO VEDIC PUBLIC SCHOOL, AIROLI
QUESTION BANK
SUBJECT – PHYSICAL EDUCATION
STD – XII

1. Write about different specific sports programmes.
2. Write notes on the following:
   a) American Method
   b) British Method
   c) Intramural
   d) Extramural
3. Elucidate the need of food supplements for children.
4. Draw a fixture of 19 teams using knockout tournament.
5. What is a balanced diet? Explain the components of diet.
6. What do you mean by macro and micro nutrients? Explain in brief.
7. Discuss what do you mean by nutritive and non-nutritive components of diet?
8. Describe what do you mean by anorexia and bulimia nervosa?
9. Discuss the role of diet on the performance of a sportsperson.
10. Elucidate about the various pitfalls of dieting in detail.
11. What do you mean food intolerance? Explain the causes, symptoms and management of food intolerance in detail.
12. What do you mean by food myths? & enlist it.
13. What do you mean by vitamins? Write in detail about vitamins.
14. Discuss the physiological factors determining 'strength' as a component of physical fitness.
15. Draw a flow chart of various committees & Write its responsibilities.
16. Participation in physical activity for a longer duration maintain functional fitness among aged population. Justify
17. What is League Tournament? Explain types of League Tournament.
18. Discuss long term effects of exercise on cardiovascular system.
19. Elucidate the reasons of low participation of women in sports and games.
20. Discuss in detail about Female Athlete triad.
21. Elucidate the gender differences in physical and physiological differences.
22. Keeping in view of the Indian Ideology, critically analyse the sociological aspect of women athlete in sports participation.
23. What do you mean by correct posture? Write advantages of correct posture.
24. Explain various types of postural deformities?
25. Discuss physical exercises as corrective measure of each deformities?
26. What do you mean by motor development? Explain the motor development in childhood.
27. What is weight training? Write its advantages and disadvantages.
28. Describe the factors affecting motor development?
29. Elucidate the causes of bad postures.
30. Elucidate physical and physiological benefits of exercise on children?

31. What do you mean by food supplement? Describe the precautions for taking food supplement.
32. Explain the following tests:
    (a)   Harvard step test
    (b)   Sit and Reach test
    (c)   Chair stand test
    (d)   Arm Curl test
    (e)   Chair Sit and Reach test
    (f)   Back Scratch test
    (g)   Eight Foot up and go test
    (h)   Six Minute Walk test
    (i)   Rockport One Mile test
    33. What do you mean by sports medicine? Discuss the aims of sports medicine in detail.
    34. What are bone injuries? Discuss the types, causes and preventive measures of joint injuries.
    35. Explain the administration of Kraus-Weber Tests in detail.
    36. Explain any three tests for senior citizen fitness test.
    37. Discuss the method of calculation of V02 Max.
    38. Discuss asanas as preventive measures in detail.
    39. What do you mean by Asthma? Explain the procedure, benefits and contraindications.
    40. What is hypertension? Discuss the benefits and contraindications of Vajrasana and Ardha Chakrasana.
    41. Mention the management of sprain in detail.
    42. Discuss the management of abrasion, contusion and laceration.
    43. Explain the physiological factors determining 'flexibility' as a component of physical fitness.
    44. Participation in physical activity for a longer duration maintain functional fitness among aged population. Justify.
    45. Staying healthy and active is in direct proportion to the good or bad posture one adopts.
    Comment.
    46. What do you mean by Back pain? Discuss the procedure and benefits of Shalabhasana.
    47. What is the impact of high altitude on athletes? What measures would you suggest to reduce its impact?
    48. Define and classify 'fixtures'. Draw a league fixture for 16 teams.
    49. Enlist the committees for organizing sports events and explain any eight teams.
    50. Elucidate the exercise guidelines at different states of growth.

Q1.If $f : R \rightarrow R$ be given by $f(x) = (3 - x^3)^{\frac{1}{3}}$, then fof (x) is

a) $x^{\frac{1}{3}}$

b) x^3

c) x

d) $(3 - x^3)$

Q2. $\sin\left(\dfrac{\pi}{3} - \sin^{-1}\left(\dfrac{-1}{2}\right)\right)$ is equal to

a)1/2

b)1/3

c)1/4

d)1

Q3.Matrices A and B will be inverse of each other only if

a)AB=BA

b)AB=BA=0

c)AB=0 and BA= I

d)AB=BA=I

Q4.If A= $\begin{bmatrix} 2 & 3 & 4 \\ 4 & 6 & 8 \\ 1 & 4 & 1 \end{bmatrix}$ .Then $|A|$ is equal to

a)1

b)0

c)-20

d)-11

Q5.The points of discontinuity of $f(x) = |x+1| - |x+2|$ are

a)x = -1

b) x =-1 ,-2

c)x =1 ,2

d) no point of discontinuity

Q6.The rate of change of area of a circle with respect to its radius r at r = 8 cm is

a) 16π

b)10 π

b) 8 π

d) 4 π

Q7. $\int e^x (\sin^{-1} x + \dfrac{1}{\sqrt{1-x^2}})$ dx

a) $\dfrac{\sin^{-1} x}{\sqrt{1-x^2}} + c$

b) $e^x \sin^{-1} x + c$

c) $\cos^{-1} x + c$

d) $e^x \cos^{-1} x + c$

Q8.Draw a rough sketch of the curves $x^2 = 4y$ and $y^2 = 4x$ and shade the region bounded by them.

Q9.If y = 5 cos x –3 sin x ,then

a) $\dfrac{d^2 y}{dx^2} - y = 0$

b) $\dfrac{d^2 y}{dx^2} + y = 0$

c) $\dfrac{d^2 y}{dx^2} = \left(\dfrac{dy}{dx}\right)^2$

d) $\dfrac{d^2 y}{dx^2} + \dfrac{dy}{dx} = 0$

Q10.If A = $\begin{bmatrix} \cos\alpha & -\sin\alpha \\ \sin\alpha & \cos\alpha \end{bmatrix}$ then $A + A^T$ =I if the value of α is

a) $\dfrac{\pi}{3}$

b) π

c) $\dfrac{\pi}{6}$

d) $\dfrac{3\pi}{2}$

Q11.If the function $f : R \rightarrow R$ is defined by $f(x) = |x|$,then show that fof =f

Q12. Let * be a binary operator defined on Q ,given by $a * b = \dfrac{ab}{5}$,for rational numbers a and b. Show that * is commutative .Check whether * is associative.

Q13.If $A = \begin{bmatrix} 3 & -2 \\ 4 & -2 \end{bmatrix}$,then find k if $A^2 = kA - 2I$.

Q14.If $A = \begin{bmatrix} 4 & 7 \\ -1 & -3 \end{bmatrix}$,show that $A - A^T$ is a skew – symmetric matrix.

Q15. Using properties of determinants prove that $\begin{vmatrix} 1 & bc & a(b+c) \\ 1 & ca & b(c+a) \\ 1 & ab & c(a+b) \end{vmatrix} = 0$

Q16.Prove that $\tan^{-1}\dfrac{1}{4} + \tan^{-1}\dfrac{2}{9} = \cos^{-1}\dfrac{2}{\sqrt{5}}$.

Q17.Find $\dfrac{dy}{dx}$,if $y = x^{\left(1+\frac{1}{x}\right)}$.

Q18.Find the equation of the tangent to the curve $y = x^4 - 6x^3 + 13x^2 - 10x + 5$ at (1,3).

Q19. Evaluate $\displaystyle\int_{0}^{\frac{\pi}{2}} \log(\cot x)\ dx$

Q20.Evaluate $\displaystyle\int e^x \sin x\ dx$

Q21.Give an example of an empty relation on the set of natural numbers.

Q22.Is the relation R = { (1,1) (2,2) (3,3)} defined on a set A ={ 1,2,3 } an equivalence relation ?

Q23.If $f : R \longrightarrow R$ be given by $f(x) = \left(3 - x^3\right)^{\frac{1}{3}}$ then find fof(x)

Q24.If A = $N \times N$ and * be the given binary operation on A defined by $(a,b) * (c,d) = (a+c, b+d)$. Find the identity of * on A.

Q25.Give an example of a relation which is symmetric and transitive but not reflexive.

Q26.Find the principle value of $\sin^{-1}\left(\dfrac{-1}{\sqrt{2}}\right)$.

Q27.Evaluate $\tan^{-1}\sqrt{3} - \sec^{-1}(-2)$

Q28.Find the value of $\sin\left(\dfrac{\pi}{3} - \sin^{-1}\left(\dfrac{-1}{2}\right)\right)$

Q29.Find any value of $\cot^{-1}\left(-\sqrt{3}\right)$,other than the principle value.

Q30.What is the principle value branch of $\cos ec^{-1}x$.

Q31.Let R be a relation on the set A of ordered pairs of positive integers defined by (x,y)R(u,v) if and only if xv = yu. Show that the relation is an equivalence relation.

Q32.Prove that $\cot^{-1}\left(\dfrac{ab+1}{a-b}\right) + \cot^{-1}\left(\dfrac{bc+1}{b-c}\right) + \cot^{-1}\left(\dfrac{ac+1}{c-a}\right) = 0$

Q33.If $\tan^{-1}\left(\dfrac{1-x}{1+x}\right) = \dfrac{1}{2}\tan^{-1}x$ (x > 0),then find the value of x.

Q34. Find the inverse of the matrix $\begin{bmatrix} -2 & 3 \\ -3 & 6 \end{bmatrix}$ using elementary transformations .

Q35. If A $= \begin{bmatrix} 3 & -4 \\ 1 & -1 \end{bmatrix}$,then prove that $A^n = \begin{bmatrix} 1+2n & -4n \\ n & 1-2n \end{bmatrix}$,where n is any positive integer.

Q36. Verify Rolle's theorem for the function $f(x) = x^2 + 2x - 8$, $x \in$ [-4 ,2]

Q37. Find the local maximum and local minimum values of f(x)=sin x + cos x ,where $x \in \left(0, \dfrac{\pi}{2}\right)$.

Q38. Evaluate $\displaystyle\int \dfrac{8dx}{(x+2)(x^2+4)}$

Q39. Show that $\displaystyle\int_{-3}^{3} |x+1|\ dx = 10$.

Q40. Find the area of the region bounded by the ellipse $\dfrac{x^2}{16} + \dfrac{y^2}{9} = 1$.

Q41. Using matrices ,solve the system of equations
$$x + 2y - 3z = -4$$
$$2x + 3y + 2z = 2$$
$$3x - 3y - 4z = 11$$

Q42. If $(x-a)^2 + (y-b)^2 = c^2$ for some c >0 , prove that $\dfrac{\left[1+\left(\dfrac{dy}{dx}\right)^2\right]^{\frac{3}{2}}}{\dfrac{d^2y}{dx^2}}$ is a constant independent

of a and b.

Q43. Show that the height of the cylinder of greatest volume that can be inscribed in a right circular cone of height h and semi vertical angle a is one –third that of the cone. Also find the greatest volume of the cylinder.

Q44. Evaluate $\displaystyle\int \sqrt{\tan x} + \sqrt{\cot x}\ dx$

OR

Prove that $\displaystyle\int_0^{\pi} \dfrac{x\sin x}{1+\cos^2 x}\ dx = \dfrac{\pi^2}{4}$

Q45. Using integration find the area of the region bounded by the triangle whose vertices are (1,0) (2,2) and (3,1).

Q46. If $y = e^{a\cos^{-1} x}$,-1<x<1 , show that $(1-x^2)\dfrac{d^2y}{dx^2} - x\dfrac{dy}{dx} - a^2 y = 0$.

Q47. If $y = \sin(m\sin^{-1} x)$,show that $(1-x^2)\dfrac{d^2y}{dx^2} - x\dfrac{dy}{dx} + m^2 y = 0$

Q48. If $x = a(\theta - \sin\theta)$ and $y = a(1-\cos\theta)$ .Find $\dfrac{d^2y}{dx^2}$ at $\theta = \dfrac{\pi}{2}$.

Q49.Find $\dfrac{dy}{dx}$ when $y = \left[\dfrac{x}{2}\sqrt{a^2 - x^2} + \dfrac{a^2}{2}\sin^{-1}\dfrac{x}{a}\right]$

Q50.Verify Rolle's theorem for the function $f(x) = x(x-3)^2$ in [0,3]

Q51.Verify mean value theorem for the function $f(x) = (x-1)(x-2)^2$ in [1,2]

Q52.Find the equations of the tangent and normal to the curve $y = x + \sin x \cos x$ at $x = \dfrac{\pi}{2}$.

Q53.Determine the intervals in which the function $f(x) = (x-1)(x+2)^2$ is increasing or decreasing.

Q54.Find the approximate value of f (2.01) where $f(x) = 4x^2 + 5x + 2$.

Q55.Find the local maxima and minima ,if any, for the functions

i) $f(x) = x^2$

ii) $g(x) = \dfrac{x}{2} + \dfrac{2}{x}$ $x > 0$

Q56.Find the absolute maximum value and absolute minimum value of $f(x) = (x-1)^2 + 3$,where

$x \in [-3,1]$

Q57.Evaluate the following integrals

i). $\displaystyle\int \dfrac{dx}{\sqrt{x}\left(1 + \sqrt{x}\right)}$

ii). $\displaystyle\int \cot x \ dx$

iii). $\displaystyle\int \dfrac{\log(x^2)}{x} \ dx$

iv). $\displaystyle\int x\cos^{-1} x \ dx$

v). $\displaystyle\int e^x \cos ecx(1 - \cot x) \ dx$

vi). $\displaystyle\int_0^{\frac{\pi}{2}} \dfrac{\sin^5 x}{\sin^5 x + \cos^5 x} \ dx$

vii). $\displaystyle\int_0^a \dfrac{a + x}{a - x} \ dx$

viii). $\displaystyle\int_0^{\frac{1}{\sqrt{2}}} \dfrac{\left(\sin^{-1} x\right)}{\left(1 - x^2\right)^{\frac{3}{2}}} \ dx$

ix) $\displaystyle\int_0^8 |x - 5| \ dx$

x). $\displaystyle\int_{\frac{-\pi}{2}}^{\frac{\pi}{2}} \sin^5 x$

Q58.Solve $\cos x \dfrac{dy}{dx} + y = \sin x$.

Q59.Solve $\left(e^x + e^{-x}\right)dy - \left(e^x - e^{-x}\right)dx = 0$

Q60.Solve $ydx + x\log\left(\dfrac{y}{x}\right)dy - 2xdy = 0$

Q61.Find the particular solution of $2xy + y^2 - 2x^2 \dfrac{dy}{dx} = 0$,given y =2 when x=1.

Q62.Find the particular solution of $\dfrac{dy}{dx} + y\cot x = 4\cos ecx$,given y = 0 when x = $\dfrac{\pi}{2}$.

Q63.Show that the height of the cylinder of maximum volume that can be inscribed in a sphere of radius R is $\dfrac{2R}{\sqrt{3}}$.

Q64.Show that the altitude of the right circular cone of maximum volume that can be inscribed in a sphere of radius r is $\dfrac{4r}{3}$.

Q65.Show that the least perimeter of an isosceles triangle in which a circle of radius r can be inscribed is $6\sqrt{3}$ r.

Q66.Prove that $\displaystyle\int_{0}^{\frac{\pi}{2}} (\sqrt{\tan x} + \sqrt{\cot x})dx = \pi\sqrt{2}$

Q67.Prove that $\displaystyle\int_{0}^{a} \sin^{-1}\sqrt{\dfrac{x}{a-x}}dx = \dfrac{a}{2}(\pi - 2)$

Q68.Prove that $\displaystyle\int_{-a}^{a} \sqrt{\dfrac{a-x}{a+x}}dx = a\pi$

Q69.Find the area of the region included between the parabolas
   $y^2 = 4ax$ and $x^2 = 4ay$. a>0

Q70.Using integration find the area of the region bounded by the parabola
   $x^2 = 4y$ and the line x = 4y –2

Q71.Find the area bounded by the circle $x^2 + y^2 = 16$,the line y=x and the
   x- axis.

Q72.Find the area bounded by the curves $y^2 = 4x$,x=1 ,x=4 and the x-axis
   in the first quadrant.

Q73.Find the area of the region { (x ,y) : $y^2 \le 4x$, $4x^2 + 4y^2 \le 9$ }

Q74.Show that the given differential equation is homogenous and hence solve it.
$$\left(x\cos\left(\dfrac{y}{x}\right) + y\sin\left(\dfrac{y}{x}\right)\right)ydx = \left(y\sin\left(\dfrac{y}{x}\right) - x\cos\left(\dfrac{y}{x}\right)\right)xdy$$

Q75.Solve $\left(\tan^{-1} y - x\right)dy = \left(1 + y^2\right)dx$

Q76.The vector equations of two lines are
   $\vec{r} = i + 2j + 3k + \lambda(i - 3j + 2k)$
   $\vec{r} = 4i + 5j + 6k + \mu(2i + 3j + k)$
Find the shortest distance between the above lines.

Q77.Find the shortest distance between the lines whose vector equations are

$$\vec{r} = (\lambda - 1)i + (\lambda + 1)j - (\lambda + 1)k$$

$$\vec{r} = (1 - \mu)i + (2\mu - 1)j + (\mu + 2)k$$

Q78.Find the vector equation of the plane passing through the intersection of the planes $r.(2i - 7j + 4k) = 3$

and $r.(3i - 5j + 4k) + 11 = 0$ and passing through the point (-2,1,3).

Q79.Show that the points with position vectors $6i - 7j, 16i - 19j - 4k, 3j - 6k, 2i - 5j + 10k$ are coplanar.

Q80.Find the vector and Cartesian equation of the line through the point (5,2,-4) and parallel to the vector 3i+2j-8k.

Q81.There are two types of fertilizers F1 and F2. F1 consists of 10% nitrogen and 6% phosphoric acid and F2 consists of 5% nitrogen and 10% phosphoric acid .After testing soil conditions a farmer finds that he needs at least 14 kg nitrogen and 14 kg phosphoric acid .If F1 costs Rs.6/kg and F2 costs Rs.5/kg, determine how much of each type of fertilizer should be used so that requirements are met at minimum cost.

Q82.A manufacturer produces nuts and bolts.It takes 1 hour of work on machine A and 3 hours of work on machine B to produce a package of nuts .It takes 3 hours on machine A and 1 hour on machine B to produce a package of bolts.He earns a profit of Rs.17.50 per package of nuts and Rs.7.00 per package on bolts.How many packages of each should be produced each day so as to maximize his profit, if he operates his machines for at the most 12 hours a day ?

Q83.In a bulb factory machines A,B and C manufacture 60% ,30% and 10% bulbs respectively 1%,2% and 3% of the bulbs produced by A,B and C respectively are defective.A bulb is drawn at random from the total production and found to be defective.Find the probability this bulb has been produced by machine A.

Q84.If a fair coin is tossed 10 times, find the probability of

i)exactly 6 heads

ii)at least 6 heads

iii)at most 6 heads

Q85.Using properties of determinants, prove that $\begin{vmatrix} x+a & x & x \\ x & x+a & x \\ x & x & x+a \end{vmatrix}$ =a²(3x+a)

Q86.Prove using properties of determinants that

$$\begin{vmatrix} a & b & c \\ a-b & b-c & c-a \\ b+c & c+a & a+b \end{vmatrix} = a^3 + b^3 + c^3 - 3abc$$

Q87. Q13.Find a unit vector perpendicular to both the vectors 3i+j-2k and 2i +3j –k.

Q88.Find the projection of 2i –j +k on i–2j +k .

Q89.If $\vec{a} = 5i - j - 3k$ and $\vec{b} = i + 3j - 5k$ then show that the vectors a+b and a-b are orthogonal.

Q90.Find a vector perpendicular to both $\vec{a} = i + 2i + 3k$ and $\vec{b} = i - 2k$

HIGHER ORDER THINKING SKILLS (10 QUESTIONS)

Q91.For any square matrix of order 2 if A (adj A) = $\begin{bmatrix} 10 & 0 \\ 0 & 10 \end{bmatrix}$, then find determinant

of A.

Q92. Let $f(x) = x - [x]$,for every real number x ,where $[x]$ is the integral part of x. Then

find $\displaystyle\int_{-1}^{1} f(x)dx$.

Q93.If A is a non singular matrix of order 2 whose determinant is det A ,then find det
   A^{-1}

   Find the value of a and b such that the function defind by

Q94. $f(x) = \begin{cases} 5 & if \ \ x \le 2 \\ ax+b & if \ \ 2 < x < 10 \\ 21 & if \ \ x \ge 10 \end{cases}$ *is a continous function*

Q95. Let * be an operator defined on Q by a * b= a+b-ab   a,b∈Q.
   Find the identity of this operator.

Q96.Evaluate $\displaystyle\int \sqrt{\tan x} \ dx$

Q97. If the straight line $x\cos\alpha + y\sin\alpha = p$ touches the ellipse $\dfrac{x^2}{a^2} + \dfrac{y^2}{b^2} = 1$, prove that

$a^2 \cos^2\alpha + b^2 \sin^2\alpha = p^2$.

Q98. Find the vector equation of the plane passing through the intersection of planes
   $\vec{r}\cdot(2i - 7j + 4k) = 3$ and $\vec{r}\cdot(3i - 5j + 4k) + 11 = 0$ and passing through the point
   (-2,1,3).

Q99 .Two dice are thrown and it is known that the numbers which come up were different
.Find the probability that the sum of the 2 numbers was 4.

Q100. .If $\vec{a}$ and $\vec{b}$ are unit vectors and θ is the angle between them ,then show that $\sin\dfrac{\theta}{2} = \dfrac{|\vec{a} - \vec{b}|}{2}$.

DAYANAND ANGLO VEDIC PUBLIC SCHOOL, AIROLI
MASS MEDIA STUDIES- QUESTION BANK
CLASS XII 2017-18

Unit 1-Understanding the language of the medium:

Short answer questions
1. Explain media literacy.
2. Differentiate between folk and mass cultures.
3. Explain 'Hypodermic' theory.
4. What is a two step model?
5. How did media become mass media?
6. Differentiate between a plot and a story.
7. Define media ownership. Who are the conglomerates?
8. What is 'mise en scene'?
9. What is a ground plan?
10. What are fiction and non-fiction films?
11. Define micro and macro structures of a film.
12. When did daily soap begin in India? Write a brief note on the first popular play on Indian Television.
13. What is the script structure of a soap opera?
14. What are the significant features of soap opera?
15. When and how did print media evolve in India?
16. What is non-broadcast video?
17. Explain different genres of soap opera.
18. How did Raymond Williams explain the concept of "flow"?
19. Write briefly about 'education through television in India'.
20. Differentiate between broadsheet, tabloid and Berliner news papers.
21. How is an editorial different from a report?
22. What is the primary source of revenue for the news papers?
23. Why are news paper supplements popular?
24. What are the two categories of radio programmes?
25. What are radio features? How are they classified?
26. How is content analysis different from audience analysis in a radio?
27. Write a short note on radio plays.
28. List out the features of radio talks.
29. Who was Lionel Fielden?
30. What is an open source?
31. Differentiate between multicast and unicast.
32. What is meant by internet protocol?
33. Why was camera called as a peeping machine?

Long answer questions.
1. What are the parameters of film analysis?
2. What is media representation? Explain it with refernce to stereotypes, gender etc.

3. What are the key concepts in media studies?
4. "Cinema is considered to be the cinderella of all arts."Explain.
5. Explain about the logic of programming on television.
6. Differentiate between news bulletins and news reels.
7. Elaborate on how media culture has changed over the years in terms of film based and music based programmes on Indian television.
8. Explain about the fundamental rings of the internet.
9. What are the benefits of social net-working sites?
10. How is Internet used in Education?

Unit 2- Evolution of the Media:--
Short answer questions
1. Why was camera called as a peeping machine?
2. What was Lumier brother's contribution to cinema?
3. How were George Melies' films different?
4. Discuss about D.W.Griffiths as a story writer.
5. Describe about the primitive attempts of storytelling with reference to Edwin Porter's efforts.
6. What are art films of France?
7. What is Hollywood famous for?
8. How do you explain creation of Geography?
9. What is montage? What are its principles?
10. Live coverage on television has changed in a major way. Justify.
11. Why were the French slow to employ television?
12. What signifies the golden age of television in the USA?
13. What was the role of industrial revolution in the spread of print media?
14. Give a short note on John Milton's 'Areopagitica'.
15. Why was Bengal Gazette called 'Hicky Gazette'?
16. Why are Americans not the top users of news papers in print?
17. What are free news papers?
18. Virtual journalism holds no charm. Comment.
19. What are news alerts?
20. Why were coffee houses famous during press censorship in Britain?
21. What are news paper chains?
22. Television is a settling medium when compared to films. How?
23. Why is cinema called ' Cinderella of all arts'?
24. How does television encourage ,mass culture? Give examples.
25. Describe the advent and progress of films in European countries, Asian countries and Latin America.

Long answer questions.
26. Explain 'Expressionism' with examples.
27. What is non-fiction according to John Grierson?
28. What is neo-realism? Elaborate with examples.
29. Discuss about Asian and African genres of cinema.

30. Politics is taking into account the power of television. Elucidate.
31. What were the main technologies that facilitated the development of print media?
32. Elaborate on the journalism of 17th and 18th centuries.
33. What is non-fiction according to John Grierson?
34. Why are on line editions of news papers preferred?

Unit 3- Graphic Design- Multimedia Applications:--
1. What is Multimedia?
2. How can Multimedia be used in the process of film making?
3. What are the possible areas of application of Multimedia?
4. What is a sound Card?
5. What do you mean by Video Grabbing card/
6. What are the functions of a scanner?
7. What do you understand by transfer rate?
8. How is a still image a starting point of a creative process?

1. Give two examples of convenience products.

2. "It emphasis on product". Is it marketing or selling

3. What is the purpose of brand name?
4. "Management is what management does" Which feature does this indicate?

5. Name two universally accepted principles of management.

6. What is meant by the term "Deviation "in controlling process?

7. Mention any two activities of middle level management.

8. What is the objective of fatigue study?

9. At what level is controlling required?

10. Which concept of marketing suggests that the organisation should earn profit through consumer satisfaction and social welfare?

11. Why is a program formulated?

12. Wasim the sales manager achieved the targets one month in advance. This was displayed in the notice board and certificate of best performance was awarded to him by the company

    a. Name the incentive provided to Wasim
    b. Identify the type of incentive.
    c. List two other incentives of that type.
13. "Primary objective of finance management is to maximize shareholders wealth" Explain?

14. Managerial functions cannot be carried out without effective communication. Do you agree

15. Explain any 3 factors influencing the capital structure

16. Explain any 4 functions of stock exchange?

17. Define planning? State any 3 features of planning.

18. XYZ ltd. Is manufacturing chemicals and textiles. What type of organisation would suit them? Why?

19. Despite internal sources of recruitment being economical, why do companies not always use it? Give 4 reasons.
20. "Management is a science" discuss.

21. Explain any 5 factors that determine price of the product.

22. How are management principles derived?

23. What do you mean by bu8dgetory control? Explain any 4 objectives

24. State any 5 merits of personal selling.

25. Distinguish between formal and informal organisation.

26. Define the term "consumer" under the consumer protection act. Explain the procedure for filing a comlaint.

27. What is meant by "Fixed capital" describe any 4 factors which affect fixed capital

28. State the staffing process.
29. Explain the process of organizing.
30. Write the functions of SEBI to the capital markets.

1. X, Y, and Z are partners sharing profits and losses in the ratio of 3:2:1. After the final accounts have been prepared it was discovered that interest on drawings @ 5 % had not been taken into consideration. The drawings of the partner were X Rs. 15000, Y Rs. 12,600, Z Rs. 12,000. Give the necessary adjusting Journal entry.

2. A, B and C are partners sharing profits and losses in the ratio of 3:2:1. Their fixed capitals are Rs. 1,50,000, Rs. 1,00,000 and Rs. 80,000 respectively. Profit for the year after providing interest on capital was Rs. 60,000, which was wrongly transferred to partners equally. After distribution of profit it was found that interest on capital provided to them @ 10% instead of 12% . Pass necessary adjustment entry. Show your working clearly.

3. Ravi and Mohan were partner in a firm sharing profits in the ratio of 7:5. Their respective fixed capitals were Ravi Rs. 10,00,000 and Mohan Rs. 7,00,000. The partnership deed provided for the following:-
   (i) Interest on capital @ 12% p.a.
   (ii) Ravi's salary Rs. 6000 per month and Mohan's salary Rs. 60000 per year.
   The profit for the year ended 31-03-2007 was Rs. 5,04,000 which was distributed equally without providing for the above. Pass an adjustment Entry.

4. A, B and C were partners in a firm having capitals of Rs. 60,000, Rs. 60,000 and Rs. 80,000 respectively. Their current account balances were A- Rs. 10,000, B- Rs. 5000 and C- Rs. 2000 (Dr.). According to the partnership deed the partners were entitled to an interest on capital @ 5% p.a. C being the working partner was also entitled to a salary of Rs. 6,000 p. a. The profits were to be divided as follows:
   (i) The first Rs. 20,000 in proportion to their capitals.
   (ii) Next Rs. 30,000 in the ratio of 5:3:2.
   (iii) Remaining profits to be shared equally.
5. How will you asses the liquidity or short term financial position of a business?
6. Current ratio of Reliance Textiles Ltd. Is 1.5 at present. In future it wants to improve this ratio to 2.
7. Suggest any two accounting transaction for improving the current ratio.
8. State one transaction which results in an increase in 'liquid ratio 'and nochange in 'current ratio'.
9. Why stock is excluded from liquid assets?
10. Quick ratio of a company is 1.5 :1. state giving reason whether the ratio will improve, decline or Not change on payment of dividend by the company.
11. State one transaction which result in a decrease in 'debt-equity ratio 'and no change in 'current Ratio'.
12. How does ratio analysis become less effective when the price level changes?
13. The ratio of current Assets (Rs. 9,00,000) to current liabilities is 1.5:1. The accountant of this Firm is interested in maintaining a current ratio of 2:1 by paying some part of current liabilities You are required to suggest him the amount of current liabilities which must be paid for the Purpose.
14. A company has a loan of Rs.15,00,000 as part of its capital employed. The interest payable onLoan is 15% and the ROI of the company is 25%. The rate of income tax is 60%.what is the Gain to shareholders due to the loan raised by the company ?
15. Rs.2,00,000 is the cost of goods sold, inventory turnover 8 times, stock at the beginning is 1.5 Times more than the stock at the end. Calculate the value of opening & closing stock .
16. From the given information, calculate the stock turnover ratio: sales Rs.5,00,000, Gross Profit25% on cost, opening stock was $1/3^{rd}$ of the value of closing stock. Closing stock was 30% Of sales
17. Calculate cost of goods sold from the following information: Sales Rs.12,00,000, Sales Returns Rs.80,000, operating expenses Rs.1,82,000, operating ratio 92%.
18.

Liabilities	2003	2004	Assets	2003	2004
	(Rs)	(Rs)		(Rs)	(Rs)
Share capital	3,00,000	4,00,000	Goodwill	70,000	30,000
Profit & Loss	1,20,000	2,60,000	Machinery	3,00,000	3,20,000
Account	60,000	95,000	12% Investments	1,50,000	3,00,000

General Reserve	70,000	80,000	Stock	35,000	1,85,000
Tax Provision	50,000	90,000	Debtors	50,000	70,000
Creditors	30,000	10,000	Cash at Bank	30,000	40,000
Bill Payables	25,000	40,000	Short term	20,000	30,000
Depreciation			Investment		
Provision	6,55,000	9,75,000		6,55,000	9,75,000

Additional Information:

    a.   Investment costing Rs. 50,000 ~~were sold for Rs~~. 48,000 during the year.

    b.   Tax paid during the year Rs. 70,000.

    c.   Interest received on Investment Rs. 12,000.