**yksd egkfo|ky; o/kkZ**

नमुना प्रश्नपत्रिका (Model Question paper)

**fo"k;%& foRrh; ys[kkadu**

**oxZ %& ch- dkWe- Hkkx 3 (lsfeLVj VI)**

**osG %& 3%00 rkl ,dw.k xq.k %& 80**

N.B. (1) All questions are compulsory-

(2) All questions carry equal marks-

Q. 1 (a) lgk¸;d daiuh Eg.kts dk; \ dks.kR;k ifjfLFkrhr ,d daiuh nqlÚ;k daiuhph lgk¸;क daiuh ekuyh tkrs ¼8½

(b)

Balance Sheets

as on 31st March 2017

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | A . Ltd. Rs. | B. Ltd. Rs. | |
| Liabilities  Share Capital ( in share of Rs. 10 each)  Reserve Fund (1st April 2016)  Profit & Loss A/c (on 1st April 2016)  Profit for the year  Sundry Creditors  Assets  Sundry Assets  3000 Shares in B Ltd of cost | 1,00,000  20,000  5,000  20,000  30,000 | 40,000  8,000  2,000  12,000  12,000 | |
| 1,75,000 | 74,000 | |
| 1,25,000  50,000 | 74,000  ----- | |
| 1,75,000 | 74,000 | |
|  | |

A Ltd required the shares in B. Ltd on 1st August 2016

Prepare :- I) Capital Profits II) Goodwill III) Minority Interest (8)

OR

c) From the following information you are required to prepare consolidated Balance Sheet of ‘P’ Ltd. and its subsidiary ‘Q’ Ltd. as on 31st March 2000.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Liabilities | P.Ltd | Q.Ltd | Assets | P. Ltd | Q. Ltd |
| Share Capital  (Rs. 100 each)  Capital Reserve  General Reserve  Profit & Loss A/c  Loans  Creditors  Bills Payable | 8,00,000  1,50,000  1,40,000  2,60,000  2,00,000  1,50,000  1,00,000 | 4,00,000  --------  1,00,000  50,000  1,00,000  60,000  40,000 | Goodwill  Plant  Building  Investment :-  3000 share in Q. Ltd  Loans & Advances  Stocks  Debtors  Bills Receivable  Bank | 2,00,000  5,00,000  2,00,000  3,60,000  --------  1,20,000  1,50,000  1,00,000  1,70,000 | 50,000  2,50,000  1,00,000  --------  60,000  90,000  1,00,000  50,000  50,000 |
| 18,00,000 | 7,50,000 |  | 18,00,000 | 7,50,000 |

Additional Information:-

1. Bill Payable of ‘Q’ Ltd. includes Rs. 30,000 due to ‘P’ Ltd.
2. Sundry Creditors of ‘P’ Ltd. includes Rs. 50,000 due to ‘Q’ Ltd.
3. On the date to acquisition of shares (1-4-1999) ‘Q’ Ltd.’s Balance Sheet

showed a General Reserve of Rs. 40,000 and Profit & Loss A/c of Rs. 20,000. (16)

Q.2) a) vkx ykx.;kP;k osGh f'kYyd ekykps ewY; dls Bjforkr- ¼8½

b) On 17th August 2005 a fire occurred in the premises of M/s Kuchankar a book-seller. Most of the stocks were destroyed. Cost of salvaged stock being Rs. 11,200. In addition, some stock was salvaged in damaged condition and its value was agreed at Rs. 10,400.

From the books of accounts following particulars were available :-

1. Stock at close of accounts on 31st March 2005 was valued at Rs. 75,000.
2. Purchase from 1-4-2005 to 17-8-2005 amounted to Rs. 1,25,000 and sales during that period amounted to Rs.1,80,000.
3. On the basis of past 3years if appears that an average gross profits of 25% is earned on sales. Stock was insured for Rs. 60,000

Compute the amount of claim. (8)

OR

c) On 30th September ,1998, 80% of godown building and compute stock theirin were destroyed by fire. The godown and stock theirin were insured for Rs. 3,00,000 and Rs. 1,00,000 respestively. There was average clause in the policy.

The following particulars are available –

Stock on 1-4-1997 50,000

Purchase from 1-4-97 to 31-3-98 6,10,000

Stock on 31-3-1998 60,000

Sales from 1-4-97 to 31-3-98 10,00,000

Purchases from 1-4-98 to 30-9-98 1,80,000

Cash Sales from 1-4-98 to 30-9-98 1,00,000

Balance on Debtors A/c on 1-4-98 30,000

Cash Received from debtors during

1-4-98 to 30-9-98 1,60,000

Discount allowed to debtors during

1-4-98 to 30-9-98 5,000

Accounts Receivable as on 30-9-98 20,000

Stock salvaged 5,000

Your are required to prepare the statement for as certain the insurance claim of godown and loss of stock. (16)

Q.3 a) izfrHkwrhP;k [kjsnh&fodzhps izdkj Li"V djk- ¼8½

b) On 1st September,2015 Mr. Vishal purchased 2000 debentures of Rs. 100 each @ Rs. 98 cum-interest from Suresh. Interest at the rate of 15% per annum is payable on 30th June and 31st December every year.

Find out the amount of interest included in the price and record these transactions in the Journal of Mr. Vishal who closes his accounting books on 31st March of every year. (8)

OR

c) Mr. Harish Mehata held 200, 6% stock @ Rs. 102 on 1st April 2016 on which interest is payable half-yearly on 30th Sept. and 31st March. The following were his transactions in the same stock during the year ending on 31st march 2017.

1-6-2016 Bought 600 stock cum-interest @Rs. 104

30-11-2016 sold 200 stock ex-interest @Rs. 106

1-1-2017 Bought 600 stock cum-interest @Rs. 105

28-2-2017 sold 400 stock cum-interest @Rs. 107

Assuming brokerage @1/4%

Draw up the investment Account in the books of Mr.Harish Mehata.

Calculate Profit or Loss on sale on the basis of average cost. Ignore Income-tax and stamp duty. (16)

Q. 4 a) LFkkiusiwohZpk o LFkkiusuarjpk uQk 'kks/kwu dk<.;kP;k i/nrhps o.kZu djk- (8)

b) Abhay co. ltd was incorporated on 1st July 1990 to take over the running business of Mr. Nandu with effect from 1st April,1990.

The following was the Profit & Loss A/c for the year ended 31st March 1991.

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Rs. | Particulars | Rs. |
| To Advertisement  To Managing Directors  Remuneration  To Salaries  To Insurance  To Preliminary  Expenses  To Rent & Taxes  To Discount  To Net Profit | 7875  9000  20800  600  700  3000  1600  54425 | By Gross Profit | 98000 |
| 98000 | 98000 |

The following additional information is available

The average monthly turnover from July, 1990 onwards was double than that of the previous months. Prepare a statement showing profit prior and after incorporation. (8)

OR

c) Ultra-Modern co. Ltd. was incorporated on 1st August,1998 to take over the business of Modern co. as a going concern from 1st April,1998

The Profit & Loss A/c for the year ending 31st March, 1999 is as follows.

Profit & Loss A/C of Ultra-Modern Ltd.

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Rs. | Particulars | Rs. |
| To. Rent, Taxes  To. Insurance  To. Electricity Charges  To. Salaries  To. Directors fees  To. Auditors fees  To. Commission  To. Advertisement  To. Discount  To. Office expenses  To. Carriage  To. Bank Charges  To. Preliminary Exp.  To. Bad Debts  To. Interest on Loan  To. Net Profit | 12000  3000  2400  36000  3000  1600  6000  4000  3500  7500  3000  1500  6500  2000  3000  60000 | By Gross Profit | 155000 |
| 155000 | 155000 |

The total turnover for the year ending 31st March 1999 was Rs. 5,00,000 divided into Rs. 1,50,000 for the period upto 1st August 1998 and Rs. 3,50,000 for the remaining period.

As certain the profits earned prior to incorporation and after incorporation of the company. (16)

Q. 5 a) H. Ltd. aquires ¾ of the share capital of ‘S’ Ltd on 31st March 2003, when the balance sheets of the two companies are as under :-

Balance Sheets-

as on 31st march 2003.

|  |  |  |
| --- | --- | --- |
|  | H. Ltd | S. Ltd. |
| Liabilities:-  Share Capital Rs. 10 each  General Reserve  Profit & Loss A/c  10% Debentures  Sundry Creditors  Assets:-  Fixed Assets  Current Assets  Shares in ‘S’ Ltd. | 20,000  5000  3000  10,000  5000 | 10,000  3000  2000  5000  2000 |
| 43000 | 22000 |
| 20000  13000  10000 | 10000  12000  -------- |
| 43000 | 22000 |

Calculate :- I) Capital Profit II) Capital Reserve III) Minority Interest. (4)

b) A fire occoured on 1st July 2006 in the godown of Mr. Deshmukh from the following ascertain the amount of claim.

Stock on 31st March 2006 396000

Purchases from 1st April 2006 till the date of fire 364000

Wages paid from 1st April 2006 till the date of fire 36000

Sales from 1st April 2006 till the date of fire 450000

Stock of the end of each year is vaulued of 10% loss than cost. Average rate of gross profit is 25% on cost. The stock salvaged was Rs. 30000. (4)

c) Sushmita sane purchased on 1st Jan. 2015; 150, 12% debentures of Rs. 100 each in Beauty cosmetics ltd. of Rs. 115 cum-interest from Aishwarya. Interest is payable on 30 Sept. and 31st March every year. Both the parties are required to pay brokerage @0.25% on sale and purchase.

Both the parties and closes their books on 31st March every year.

Calculate I) Purchase cum- Interest

II) Sales Cum-Interest (4)

d) Alfa co. Ltd was incorporated on 30th Sept. 1996 to acquire the business of Shri Deshmukh as from 1st April 1996. The accounts for the year ended 31st March 1997 disclosed the following

I) There was a Gross Profit of Rs. 240000.

II) The Sales for the year amounted to Rs. 1200000. Of which Rs. 540000 were the first six months.

III) The expenses debited to the Profit & Loss Accounts included.

Director’s fees Rs. 15000

Bad debts Rs. 3600

Advertising Expenses Rs. 12000

(Under a contract amounting to Rs. 1000 per month)

Salaries & General expenses Rs. 64000

Preliminary Expenses. Rs. 5000

Donation Given by the Company Rs. 5000

Find out Profit Prior and after incorporation. (4)

**Lok Mahavidyalaya, Wardha**

**(B.Com.) Semester II -2019**

**Statistics and Business Mathematics**

**Model Question Paper**

**Time:- 3 Hours. 80 Marks.**

**-----------------------------------------------------------------------------------------**

N.B. 1) All questions are compulsory.

2) All questions carry equal marks.

1. 1. a) lkaf[;dh Eg.kts dk; \ R;kph dk;sZ Li"V djk- ¼8½

b) Find out Geometric Mean and Harmonic Mean.

Marks No. of Students.

20-30 5

30-40 13

40-50 7

50-60 11

60-70 4 (8)

OR

c) Find out Mean, Medium and Mode from the following data.

Marks No. of Students.

0-10 02

10-20 18

20-30 30

30-40 45

40-50 35

50-60 20

60-70 06

70-80 04 (16)

Q. 2. a) vifdj.kkph O;k[;k n;k vkf.k vidhj.kkps egRRo Li"V djk- ¼8½

b) Calculate Mean Deviation from Medium

X:- 10, 15, 20, 30, 40, 50

F:- 8 12 15 10 03 02 (8)

OR

c) Calculate co-efficient of variation from the following information.

Temp in No. of days.

-40 to -30 10

-30 to -20 28

-20 to -10 30

-10 to 0 45

0 to 10 65

10 to 20 180

20 to 30 10 (16)

Q. 3. a) Find out Bowley’s co-efficient skewness.

Size :- 10, 11, 12, 13, 14, 15

F:- 2 4 10 8 6 2 (8)

b) Find out Bowleys co-efficient of skewness.

Incomes (Rs.) :- 100, 120, 150, 140, 180, 175, 189 (8)

OR

c) Calculate Karl Pearson’s co-efficient of skewness.

Daily Income (Rs.) No. of Persons.

More than – 10 100

More than - 20 97

More than - 30 90

More than - 40 70

More than - 50 40

More than - 60 25

More than - 70 15

More than - 80 08

More than - 90 03 (16)

Q.4. a) Find the compound interest for 2 years on Rs. 14000 @10% p.a. if :-

1. The Interest is payable annually.
2. The interest is payable half yearly. (8)

b) On a certain commodity a manufacturer takes 20% profit, a wholseller 25% profit and a Retailer 40% profit. If a consumer purchased the article for Rs. 700, find out its manufacturing cost. (8)

OR

c) A house owner increased the rent of his house by 15% and after some days reduced at the rate of 15%. How much less or more rent is being paid by the tenant now than the original Rent? (8)

d) The total salary of two employees is Rs. 10350 the proportion of their salary is 7:8. Find the salary of each employee. What reduction should be made in their salary so that the proportion becomes 5:6 ? (8)

Q.5. a) Make a frequency distribution with intervals of 10 from the following date ( beginning from 30)

85, 66, 69, 40, 64, 59, 43, 84, 82, 92,

63, 56, 72, 41, 44, 34, 85, 90, 68, 65,

45, 83, 55, 53, 57, 79, 63, 81, 90, 71,

80, 73, 74, 39, 36, 43, 57, 95, 93, 88 (4)

b) Find out standard deviation

n=230, fdx2 =758, fdx= 125, i=10 (4)

c) Find out skewness

Means = 50, Medium = 51, Mode = 53, S.D. =4.68 (4)

d) Find the compound interest of Rs. 1200 at the rate of 12% p.a. for two years, if the

interest is paid quarterly. (4)

**Lok Mahavidyalaya, Wardha**

**(B.Com. III) Semester VI -2019**

**Advanced Statistics**

**Time:- 3 Hours. 80 Marks.**

**-----------------------------------------------------------------------------------------**

N.B. 1) All questions are compulsory.

2) All questions carry equal marks.

Q. 1. a) lglaca/k Eg.kts dk;\ lglaca/kkps izdkj Li"V djk- ¼8½

b) The ranking of 10 individuals at the start and at the finish of a course of training are as follows.

Rank before :- 1, 6, 3, 9, 5, 2, 7, 10, 8, 4

Rank after :- 6, 8, 3, 7, 2, 1, 5, 9, 4, 10 (8)

OR

c) Find out Karl Peason’s co-efficient of correlation between age of Husband and age of wife, and Probable error.

Age of Husband :- 22, 27, 28, 29, 30, 31, 33, 35, 36, 39

Age of Wife 18, 23, 25, 24, 25, 26, 28, 29, 30, 32 (16)

Q. 2. a) izfrixeukpk vFkZ Li"V d:u R;kP;k e;kZnk Li"V djk- ¼8½

b) In a corvelation study, the following values are obtained

X Y

Mean 65 67

Standard deviation 2.5 3.5

Co-efficient of correlation 0.8

Find the two regression equation that are associated with the above values. (8)

OR

c) From the following regression equation find the mean value of x and y series. And also calculate co-efficient of correlation, standard deviation of y.

8x - 10y = -66

40x – 18y = 214 (16)

Q.3. a) funsZ'kkad Eg.kts dk; \ funsZ'kkadkaps fofo/k izdkj Li"V djk- ¼8½

b) From the following data compute the price Index for 2002 on the basis of 1999 prices.

Items Units of Price Price in Price in

Quotations 1999(Rs) 2002(Rs)

Rice Quintals 500 600

Dal Kg 15 20

Vegetables Kg 6 8

Meat Kg 40 50

Fish Kg 30 40

Milk litre 4 7

Clothing metre 25 30 (8)

OR

c) Calculate the Dorbhish and Bowley’s index number for 2017 from the following data.

Commodity Price Quantity Price Quantity

2013 2013 2017 2017

W 4 20 6 10

X 3 15 5 20

Y 2 25 3 15

Z 5 10 4 40 (16)

Q.4. a) dkyekysps mi;ksx vkf.k egRRo Li"V djk- ¼8½

b) Calculation three yearly moving average of the following data

Year No. of Students.

1981 15

1982 18

1983 17

1984 20

1985 23

1986 25

1987 29

1988 33

1989 36

1990 40 (8)

OR

c) Below are given figures of productions (In thousand Pound) of Sugar Factory.

Year :- 1981, 1982, 1983, 1984, 1985, 1986, 1987

Productions:- 80 90 92 83 94 99 92

(in thousands)

Find out I. Is there rising trend or falling trend

II. Show the trend line

III. Find out production for the year 1988 by of least method (16)

Q.5. a) Find out limits of correlation

Correlation = 0.6 Number =64 (4)

b) The data are available are

x= 0.854 y

y=0. 89 x

x= 3

Find out co-efficient of correlation (4)

c) Find out Laspeyre’s index Number

p1q0 = 1626, p0q0= 1104 (4)

d) Prepare a calculation of trend line by the method of Semi-averages.

Year :- 1991 1992 1993 1994 1995 1996

Sales :- 60 75 81 110 106 120 (4)