

Sum 2015

PMM/KS/15/37

Bachelor of Commerce (B.Com.) Part—I
Examination
(New Course)
FUNDAMENTALS OF STATISTICS AND
COMPUTER

Compulsory Paper—IV

Time : Three Hours]

[Full Marks : 100

N.B. :— (1) **ALL** questions are compulsory.

(2) All questions carry equal marks.

1. (a) Write the limitations of computer and explain its characteristics. 10
(b) Give the classification of Computer. 10

OR

- (c) Explain the need and functions of Operating System. 10
(d) Write history of Internet in brief. 10
2. (a) Calculate Harmonic Mean from the following series :

Size

5038

258

888

554

1228

40

58

7

310

10

(b) Calculate Geometric Mean from the following distribution :

Income (Rs.)	No. of Persons
5	15
20	16
35	18
50	20
60	13
75	9
90	8
100	7
125	6

OR

(c) Find out Mean, Median and Mode from the following series :

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	03

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(Contd.)

3. (a) Find out Quartile Deviation from the following data :

Height in inches	No. of Students
58	15
59	20
60	32
61	35
62	33
63	22
64	20
65	10
66	08

10

(b) Find out mean deviation and its co-efficient from mean :

Marks
28
19
22
43
26
28
23
25
20

OR

10

3

(Contd.)

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- (c) Calculate co-efficient of skewness by Bowley method from the following data :

Size of item	Frequency
6	3
7	6
8	9
9	13
10	8
11	5
12	4

20

4. (a) Calculate co-efficient of correlation when $\Sigma dx dy = -434$, $\Sigma dx = 08$
 $\Sigma dy = 15$, $\Sigma dx^2 = 200$, $\Sigma dy^2 = 1500$
 $N = 08$. 10
- (b) Find out Number (N) when P.E. = 0.08, $r = 0.8$. 10

OR

- (c) Given the following data :

X	Y
1	6
5	1

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(Contd.)

X	Y
3	0
2	0
1	1
1	2
7	1
3	5

- (i) Find the regression line of X on Y and hence predict X, if $Y = 25$. 20
- (ii) Fit the regression line of Y on X and hence predict Y, if $X = 10$. 20
5. (a) Mohit purchased three fans, each costing Rs. 2,550. He sold one fan at 8% loss. At what percent should the other two fans he sold to earn 14% profit on the whole deal ? 10
- (b) Three persons 'A', 'B' and 'C' interested into a partnership firm and they invested Rs. 4,000, Rs. 3,000 and Rs. 2,000 respectively on the beginning of the year. At the end of 8th month they further invested ₹ 1,000, ₹ 2,000 and ₹ 3,000 respectively. They share the profit in the ratio of investment. At the end of year they earned a profit of ₹ 2,640. Find the share of each person in profit. 10

OR

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5

(Contd.)

- (c) In an examination 70% examinees passed in business mathematics and 65% in financial accounting while 15% failed in both the subjects. If 2,700 examinees passed in both the subjects, find the total number of examinees. 10
- (d) Find out the difference between simple and compound interest of Rs. 3,00,000 at the rate of 9% p.a. for 3 years. 10

(मराठी माध्यम)

सूचना :—(1) सर्व प्रश्न अनिवार्य आहेत.

(2) सर्व प्रश्नांना समान गुण आहेत.

1. (अ) संगणकाच्या मर्यादा लिहा आणि संगणकाची वैशिष्ट्ये स्पष्ट करा. 10
- (ब) संगणकाचे वर्गीकरण करा. 10
- किंवा
- (क) ऑपरेटिंग सिस्टीमची आवश्यकता आणि कार्ये स्पष्ट करा. 10
- (ड) इंटरनेटचा इतिहास थोडक्यात लिहा. 10

प्रश्न क्र. 2, 3, 4 आणि 5 इंग्रजी माध्यमानुसार।

(हिन्दी माध्यम)

सूचना :—(1) सभी प्रश्न अनिवार्य हैं।

(2) सभी प्रश्नों के अंक समान हैं।

1. (अ) संगणक की सीमाएं लिखिए तथा संगणक की विशेषताएं स्पष्ट कीजिए। 10
- (ब) संगणक का वर्गीकरण कीजिए। 10
- अथवा
- (क) ऑपरेटिंग सिस्टम की आवश्यकताएं एवं कार्य स्पष्ट कीजिए। 10
- (ड) इंटरनेट का इतिहास संक्षेप में लिखिए। 10

प्रश्न क्र. 2, 3, 4 एवं 5 अंग्रेजी माध्यम के अनुसार।