

Third Year B.B.M Degree Examinations

October / November 2014

(Directorate of Distance Education)

COMMERCE

DBC 210: MANAGERIAL STATISTICS

Time: 3hrs.]

[Max. Marks: 70/80

Instructions to candidates:

«ZÁÿÖUÚË, ÆZEÜMÄ:

1. Students who have attended 30 Marks Internal Assessment scheme will have to answer for total of 70 Marks.

30 CAPUMÄ DAVJ PÄ ¥LWÄIÄrÄiÄ°è SgÄ°Ä «ZÁÿÖUÚÄ 70 CAPUMÄ ¥LWÄIÄrÄiÄ°è GvÄ, Ä ÄPÄ.

2. Students who have attended 20 Marks Internal Assessment scheme will have to answer for total of 80 Marks.

20 CAPUMÄ DAVJ PÄ ¥LWÄIÄrÄiÄ°è SgÄ°Ä «ZÁÿÖUÚÄ 80 CAPUMÄ ¥LWÄIÄrÄiÄ°è GvÄ, Ä ÄPÄ.

SECTION – A

«ÄUA – J

I. Answer any TWO of the following questions. 5 marks each :

2 x 5 = 10 Marks

AiÄ°ÄZÄZbÄE JgbÄ ¥LWÄIÄrÄiÄ°è GvÄ Äj. vÄ Ä 5 CAPUMÄ:

- 1. Define skewness and mention the tests of skewness.
2. What are the limitations of Statistics?
3. What is Primary Data? Name the methods of collecting Primary Data.
4. Define Statistical Quality Control and name the control charts used in SQC.

SECTION – B

«ÄUA – ©

II. Answer any THREE of the following questions. 10 marks each:

3 x 10 = 30 Marks

AiÄ°ÄZÄZbÄE ÄEgÄ ¥LWÄIÄrÄiÄ°è GvÄ Äj. vÄ Ä 10 CAPUMÄ:

- 5. What is Statistical Enquiry? Explain the necessary steps to be taken in planning a Statistical Enquiry.

Contd.....2

- 6. Calculate mean & mode from the following data.

F PIAPIAQA ZIVAA ± KAZA UATVA , GA , J aAVAU S°AAVA , GA , J AiAEAB PIAQA»r-Aj .

Wages per day ¥w CEZAPPE° ( ` )	75 - 85	85 - 95	95 - 105	105 - 115	115 - 125	125 - 135	135 - 145	145 - 155
Number of Workers PA«AOPGA , ASI	10	25	20	35	10	15	18	17

7. Calculate Bowley's Co-efficient of Skewness from the following data.

F PIAVEA aIA»w-AAZA `E- AiAa GA «µPAAVAIA UAUAAPP EAB PIAQA»r-Aj .

Marks CAPUWA	63	68	73	78	83	88	93	98
Number of Students: «ZAYDUWA , ASI	2	5	6	10	11	5	1	2

8. From the following data calculate cost of living index numbers using:

PIAPIAQA EAa , KAZA PIAUE w½' gaA «ZAEKAZA fAa EA a ZN , KEZAPUWA EAB PIAQA»r-Aj :

- a) Aggregate Expenditure Method: aZUWA aFEVA «ZAEA
- b) Family Budget Method: PAI AAS DAIAa AiA ¥Zw

Items (aA AUWA)	Base Year Quantity DzAGA aµDZA ¥J aIA t	Base Year Price ( ` ) DzAGA aµDZA `E E	Current Year Price ( ` ) ZA°U aµDZA `E E
A	5	200	250
B	1	300	500
C	3	15	17
D	1	140	150
E	12	50	80
F	12	50	100

9. A survey was conducted to know the coffee drinking habits of the people of Town 'A' and 'B' and the following information was received

**Town 'A'**: Females were 40%, total coffee drinkers were 45% and male non coffee drinkers were 20%

**Town 'B'**: Males were 55%, male non coffee drinkers were 30% and female coffee drinkers were 15%.

Tabulate the above information under a suitable title.

'J' aAVAU ©' EUJAWA dE GA PA ; u Aa EE C' Aa , UAUUE , ASACU ZA MAZA , KAAPAI A EAB

PEUEAQA F PIAPIAQA aIA»wAiA EAB ¥GAIA- AVZE

EUJA 'J': aA»¼AiAGa , ASI ±A. 40, MI AOPA ; u A« , Aa P GA ±A. 45 aAVAU PA ; u Aa EE aIAQC GA a ¥AGAP GA ±A. 20.

EUJA ©': MI AOPA ¥AGAP GA ±A. 55, PA ; u Aa EE aIAQC GA a ¥AGAP GA ±A. 30 aAVAU PA ; u A« , Aa a A»¼AiAGa ±A. 15.

aAA©AQA aIA»wAiA , MEPI ZA QIOPAIA Craia° e ¥hAPGIt aIAR.



13. Following data gives the life of electric bulbs manufactured by two companies 'A' and 'B'. Calculate.  
 PIVPAQA ÉÁÁ PÁ 'J' a ÁVÁU '©' PAÑPÁUÁ VÁIÁJ 1 ZÁ «ZÁVÍ CÁÑUÁ ÁVÁPÚÉ ÁSACÍZÉ PAQA»r-Áj.

- a) Which of the two makes has a higher average life?  
 AiÁÁ PAÑPÁIÁ CÁÑZÁ ÁÁJ ÁVÁPÉ ÓÉZÉ?
- b) If prices of both the bulbs is same, which company's bulb would you prefer to buy and why? Use C.V  
 JgbÁ PAÑPÁIÁ CÁÑUÁ É ÁIÁÁ P ÁÉÁVZÁUÁ ÁÁÁ AiÁÁ PAÑPÁIÁ CÁÑPÉÁB Rj ÁC Á«j a ÁVÁU KPÉ JASÁZÉÁB «ZPÉÁ UÁUÁPZÁ P ÁÁIÁ C ZÁ PAQA»r-Áj.

Life ('000 hours) ÁVÁPÉ ( Á«gÁ UÁMÁPÉ )	Company 'A' PAÑPÁ 'J'	Company 'B' PAÑPÁ '©'
50 – 59	18	15
60 – 69	22	24
70 – 79	26	30
80 – 89	25	18
90 – 99	09	13
Total	100	100

SECTION - D

«ÁÁUÁ – r

Note: Compulsory question for 80 marks scheme only

ÁEZÉUÁ: 80 CAPUÁÑÁ ÑÁB ÑÁVÁPÉ ÉgÁ Á PÁÁIÁÑÁ ÑÁÁUÁ

Answer any ONE of the following question, 10 marks each:

1 x 10 = 10 Marks

AiÁÁ ÁZÁZgÁE MAZÁ ÑÁÁVÉ GvÁj 1, VÁ Á 10 CAPUÁÑÁ:

14. Draw a Histogram and locate mode graphically. Also verify the result by direct calculation.

PIVÁEÁ ÉÁÁ ÁZÁ DÁÁVÍ ÁSÁÁVÁgÁ 1, ÉPÁIÁ É S°Á ÁVÁ ÁÁÁ UÁgÁW1. SAZÁ ÑP VÁÁÁP ÉÁB ÉÁgÁ ÁEVÁZÁ ÁÁEÁPÁ Ñj 2Á° 1.

Class Intervals: ÁÁÁÁVÁÁ	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
Frequency DÁÁVÍ	10	30	50	80	40	20

15. Calculate Karl Perasons's co-efficient of skewness from the following data:

PIVPAQA ZÁÁÁÁÁZÁ PÁÁÍÖ ÁÁÁgí ÉIÉÁ «µP ÁVÁIÁ UÁÁPÁ ÉÁB PAQA»r-Áj:

Income ( ` ) DzÁÁIÁ	300 – 400	400 – 500	500 – 600	600 – 700	700 – 800	800 – 900	900 – 1000	1000 – 1100	1100 – 1200
Number of Persons: «ZÁÁYÖUÁÁ ÁSÁ	15	45	58	82	62	58	54	20	06

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