## College of Applied Business (CAB)

## Sent-up Examination, February 2015

## BIM / Third Semester / STT 201: Business Statistics

Candidates are required to give their answers in their own words as far as practicable.

## Section A

Time 20 minutes
Brief answer questions.
$[5 \times 2=10$ ]

1. Define measures of Dispersion.
2. In a class of 50 students, 10 have failed and their average of marks is 2.5 the total marks secured by the entire class were 281. Find the average mark of those who have passed.
3. Calculate the range of the following data.

| Class Interval: | $80-160$ | $160-240$ | $240-320$ | $320-400$ | $400-480$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Frequency : | 3 | 8 | 21 | 6 | 2 |

4. Define Scatter Diagram.
5. A student calculates the value of r as 0.7 when the number of items in the sample is 25 . He concludes that r is significant. Is his conclusion correct ?

## Section B

Time 30 minutes
Short answer questions. Attempt ANY TWO.
[ $2 \times 5=10$ ]
6. Calculate A.M., median and mode from the following data :

| Value | $0-9$ | $10-19$ | $20-29$ | $30-39$ | $40-49$ | $50-59$ | $60-69$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 8 | 10 | 15 | 20 | 15 | 10 | 8 |

Also explain the nature of the distribution.
7. Find the correlation of coefficient of following

$$
\begin{array}{llllll}
\mathrm{X} & 7 & 9 & 12 & 15 & 17 \\
\mathrm{Y} & 9 & 11 & 12 & 13 & 16
\end{array}
$$

8. Find the skewness and kurtosis of the following distribution by using the percentile method.

| No. Of hours worked : | $1-3$ | $3-5$ | $5-7$ | $7-9$ |
| :--- | :---: | :---: | :---: | :---: |
| No. Of days : | 3 | 5 | 1 | 1 |

9. A sample of 12 fathers and their eldest sons gave the following data about their height in inches, find the Spearman's Rank Correlation Coefficient.

| Father: | 65 | 63 | 67 | 64 | 68 | 62 | 70 | 66 | 68 | 67 | 69 | 71 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Son: | 68 | 66 | 68 | 65 | 69 | 66 | 68 | 65 | 71 | 67 | 68 | 70 |

## Section C Time 80 minutes

Long answer questions. Attempt ANY TWO.
$[2 \times 10=20]$
10. A factory pays workers on piece rate basis and also a bonus to each worker on the basis of individual output in each quarter. The rate of bonus payable is as follows:

| Bonus (Rs.) | $70-74$ | $75-79$ | $80-84$ | $85-89$ | $90-94$ | $95-99$ | $100-104$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 35 | 45 | 50 | 55 | 60 | 70 | 80 |

The individual output of a batch of 50 workers is given below :

| 98 | 83 | 78 | 76 | 88 | 86 | 93 | 80 | 91 | 82 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 89 | 97 | 92 | 84 | 92 | 80 | 85 | 83 | 98 | 103 |
| 87 | 88 | 88 | 81 | 95 | 86 | 99 | 81 | 87 | 90 |
| 94 | 97 | 80 | 75 | 93 | 101 | 82 | 82 | 89 | 72 |
| 85 | 83 | 75 | 72 | 83 | 98 | 77 | 87 | 71 | 80 |

Construction suitable frequency distribution and describe the characteristics of frequency distributions of bonus and draw conclusions as regards to central tendency, dispersion.
11. The following bi-variate frequency distribution gives the ages of the husbands and wives in a group of 100 couples.

| Age of wives (Yrs) | Age of husbands in years |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ |  |
| $15-25$ | 5 | 9 | 3 |  |  |  |
| $25-35$ |  | 10 | 25 | 2 |  |  |
| $35-45$ |  | 1 | 12 | 2 |  |  |
| $45-55$ |  |  |  | 16 | 5 |  |
| $55-65$ |  |  |  | 4 | 2 |  |

Find the degree of relationship between the age of husband and wife. Also test the significance of the result.
12. Daily wages paid to workers in two factories X \& Y are given as follow :

| Daily wages | No. Of workers |  |
| :---: | :---: | :---: |
| (Rs.) | Factory X | Factory Y |
| $200-300$ | 15 | 25 |
| $300-400$ | 30 | 40 |
| $400-500$ | 44 | 60 |
| $500-600$ | 60 | 35 |
| $600-700$ | 30 | 20 |
| $700-800$ | 14 | 15 |
| $800-900$ | 7 | 5 |

In which factory are wages more variable?

## College of Applied Business (CAB)

Sent-up Examination, February 2015
BIM / Third Semester / IT 217 Computer Organization
Candidates are required to give their answers in their own words as far as practicable.

Section ' $\mathrm{A}^{\prime}$

## Brief Answer Questions

Time: $\mathbf{2 0}$ min

1. Convert (456) 10 to BCO and BCH
2. Represent the following conditional control statement by two register transfer statement with control functions.

$$
\text { If }(P==1) \text { then }(R 1 \leftarrow R 2+R 3) \text { else if }(Q==1) \text { then }(R 1 \leftarrow R 3-R 2)
$$

3. Which statement is used to return back to main program from subroutine?
4. What do you mean by pseudo instruction?
5. What is the use of SBR?
6. What is RPN? Give example
7. Why do we need NOP instruction?
8. What is the representation of -16 in signed 2 's complement in 6 bit?
9. What do you mean by cycle stealing?
10. What is indirect addressing?

Section 'B'
Time: $\mathbf{3 0} \mathbf{~ m i n}$
Short Answer Questions
11. How BSA and BUN instruction work? Explain with the help of the example.
12. Write a program to unpack two characters from location WRD and store them in bits 0 through 7 of locations CH 1 and CH 2 . Bits 8 through 15 should contain 0 .
13. Explain the difference between hardwired and micro-programmed control unit.

Section 'C'
Short Answer Questions

Time: 70 min $[2 \times 3=9]$
14. Write a program to evaluate the arithmetic expression:

$$
\mathrm{X}=(\mathrm{A}+\mathrm{B}) *(\mathrm{C}+\mathrm{D})
$$

Using one address and zero address instructions.
15. A nonpipeline system takes 50 ns to process a task. The same task can be processed in a six-segment pipeline with a clock cycle of 10 ns . Determine the speedup ratio of the pipeline for 100 tasks. What is the maximum speedup that can be achieved?
Long Answer Question (3*5=15)
16. How interrupt cycle is implemented? Explain with the help of flow chart.
17. Show the step by step multiplication process using Booth's algorithm when the numbers $(+15)$ and $(-13)$ are multiplied.
18. How transfer is accomplished in DMA? Explain.

## College of Applied Business (CAB)

Sent-up Examination, February 2015
BIM / Third Semester / ACC 201: Financial Accounting
Candidates are required to give their answers in their own words as far as practicable. Section "A"

Time:- 15 Min.

Brief answer questions. (ANY TWO)
$[2 \times 2=4]$

1. Give the meaning of Financial Accounting with its objectives.
2. Explain the meaning of compensating error with suitable example.
3. Following information is given:
a) Started business with cash Rs. $1,00,000$.
b) Purchased Furniture for cash Rs. 35,000 .
c) Goods purchased worth Rs. 30,000 and paid Rs.20,000 only.
d) Goods sold to Hari worth Rs.10,000.

## Required: Accounting equation.

4. The following information is provided by a company.

Trial Balance

| Particulars | Debit Amount | Credit Amount |
| :--- | ---: | ---: |
| Book Debts | 18,000 |  |
| Bad debts | 3,000 |  |
| Provision for doubtful debts |  | 4,000 |

Additional information:-
i. Further bad debts written off Rs.2,500
ii. Maintain provision for doubtful debts @ $5 \%$.

Required: Provision for doubtful debts account.

Section 'B"
Time:- 15 Min.
Short answer questions. (ANY ONE)
$[1 \times 6=6]$
5. Explain the meaning of capital and revenue expenditure with suitable example.
6. Following information is given.
i. Credit balance as per cash book Rs. 10,000 .
ii. Cheque paid in to bank but not yet credited Rs. 4,000.
iii. Cheque issued but not presented for payment Rs. 3,500.
iv. Interest and dividend collected and credited by the bank Rs. 1,500.
v. Bank paid Rs. 1,000 as per standing instruction.
vi. Bill discounted with bank Rs. 1,000 was dishonored.

Required: Bank Reconciliation Statement.
7. The following errors were detected before preparation of trail balance:
a) Purchase book was under casted by Rs. 100 .
b) Cash received Rs. 250 for providing services omitted to post.
c) A purchase of goods of Rs. 500 from John has been wrongly recorded as sale to Sohan.
d) Ram's personal account was debited by Rs.4,000 paid as wages to him.
e) Rs.1,000 incurred for transporting an equipment purchased was entered in carriage inward account.
Required: Rectification of Accounting Errors.

## Comprehensive answer question.

8. The financial transactions executed for a period by a newly established Business House are as follows:
a) Issued 5,000 Equity Shares of Rs. 100 each as capital contribution by investors.
b) Opened an account in Nepal Bank Ltd. with Rs.1,00,000.
c) Furniture purchased for business use worth Rs.20,000 and paid through cheque and cash equally.
d) Paid rent Rs. 10,000 for whole year being Rs.1,000 per month.
e) Goods purchased for Rs. 30,000 on credit.
f) Sold goods to Jitendra costing Rs.20,000 at Rs.21,000.
g) Withdrawn Rs.10,000 from bank for business and private use being $60 \%$ and $40 \%$ respectively.
h) Paid to creditor Rs. 14,500 for settlement of $50 \%$ only.
i) Received Rs.13,000 from Debtor for full settlement of $2 / 3$.
j) Administrative expenses paid Rs.5,000 through cheque and electricity bill paid Rs.3,000 including Rs. 500 advance through cash.

## Required: -

i) Journal entries
ii) Cash book with cash, bank and discount columns.
iii) Necessary ledger accounts.[7]

iv) Financial statement using work sheet. ..... [8]
v) Cash flow statement for the period.

# College of Applied Business (CAB) 

Sent-up Examination, February 2015

| BIM / Third Semester / IT 216: JAVA Programming I |
| :--- |
| Candidates are required to give their answers in their own words as far as practicable. |
| Section 'A' |
| Brief Answer Questions: |
| Time minutes |
| $[\mathbf{1 0}=\mathbf{1 0}=1$ |

1. What is the role of JVM?
2. What is interface?
3. Define thread?
4. List the different control statement.
5. What is the use of final keyword in java?
6. Are java programs always platform independent? Justify its.
7. What is constructors? Give examples
8. Define abstract class with examples.
9. What do you mean by CLASSPATH?

10 . What is garbage collection?

## Section ' $B$ '

Time: $\mathbf{3 0}$ minutes
Short Answer Questions:
[ $3 \times 3=9$ ]
11. Write the java program for following pattern

```
*******
******
*****
****
***
**
*
```

12. What is a finally block? When and how it is used? Give a suitable examples.
13. What is method overriding? Explain with examples.

## Section 'C' Time: 70 minutes

Short Answer Questions:
14. What is the major difference between interface and class?
15. Explain package with example.

## Long Answer Questions:

16. Write a program to display all the numbers between 300 to 1 which divided by 17 gives 7 as remainder and also displays the sum of these numbers.
17. What is inheritance? Explain multilevel hierarchal inheritance with examples.

OR
What is exception? Explain ArrayIndexOutOfBoundsException with example.
18. Create a class account with member variables customer name and account number. From this class derived class name saving account. Add one member variables account type in derived class. Both class have methods to set values of their member variables. Main class name account_demo make objects of both class and display the values of their member's variables.

## College of Applied Business (CAB)

Sent-up Examination, February 2015

## BIM / Third Semester / IT 215: Web Technology - I

## Section A

Time: 20 minutes
Brief Answer question.
$[10 \times 1=10]$

1. What is the importance of using Document Type Declaration?
2. What is the use of $\operatorname{charAt}()$ ?
3. What do you think is the difference of using ID and name attribute in a tag or element?
4. How will you place an image in a web page by using relative URL? What do you think is the importance of using alt attribute in <img> tag?
5. What do you think is the use of <base> tag in a web page construction?
6. Why JavaScript is called client side scripting language?
7. What do you mean by built in objects? What are the different types of objects that you have studied in JS?
8. What is DOM?
9. How will you display a date in your website using JS?
10. In how many ways have you studied to access the form element value? Write few examples.

## Section B

Time: 20 minutes
Short Answer question.
[ $2.5 \times 4=10$ ]
11. Give two differences between GET and POST methods used for submitting the form. Write down the function of action and method attribute in the <form> tag.
12. Explain in brief about the <object> and <param> element and use those elements to insert a flash video in your web page with auto play feature.
13. What do you mean by client side validation? Why do you think it is important in the web page construction?
14. What do u mean by events in JS and why do you thinks it's important in the web page construction. Show with an example.

## Section C

Time: 70 minutes
Long Answer question.
[ $4 \times 5=20$ ]
15. Define style sheet. How can you add style information in your webpage?
16. Write JavaScript code to demonstrate the use of :
a. For loop
b. Switch-Case
17. Construct a form consisting of the following fields: name, class, marital status (unmarried should be checked by default), gender (male should be checked by default), faculty (BIM should be selected by default), resume upload (Only .doc type file should be allowed), fax number. Group the fields by using <legend>.
18. Validate the above fields using JavaScript to check:
a. None of the fields are empty.
b. Check the number of characters in a name field should not be less than 8 and should not be greater than 10 characters. If show, display a message in a dialog box.
c. Check the fax number should be a number, no other characters should be allowed.

