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## Institute of Certified Management Accountants of Sri Lanka Strategic Level <br> October 2017 Examination

| Examination Date : | $4^{\text {th }}$ November 2017 | Number of Pages : <br> Number of Questions: | 04 |
| :--- | :--- | :--- | :--- |
| Examination Time: | $1.30 \mathrm{p}: \mathrm{m} .-4.30 \mathrm{p}: \mathrm{m}$. |  | 05 |
| Instructions to Candidates |  |  |  |

1. Time allowed is three (3) hours.
2. Total: $\mathbf{1 0 0}$ Marks.
3. Answer all questions in Part I and any three (3) questions from Part II.
4. Candidates are allowed to use non-programmable calculators.
5. The answers should be in English Language.

| Subject | Subject Code |
| :---: | :---: |
| Strategic Management Accounting | (SMA /SL 1-401) |

## PART I

Answer all questions

## Question No. 01 (40 Marks)

ABC plc is a software developer provides services to local start-ups.
ABC plc has recruited 5 full time software developers to contribute by delivering software solutions to clients and each receive a salary of Rs.300,000/- per annum. There are 5 other staff members in accounts/admin and support services and they draw a total salary of Rs.1,200,000/- per year.

Estimated of ABC plc for the next financial year is as follow:

|  | Rs. |
| :--- | ---: |
| Office Rent | 360,000 |
| Electricity Water and Utilities | 115,000 |
| Advertising and Marketing | 500,000 |
| Travelling | 930,000 |
| Accommodation | $1,800,000$ |

ABC charges Rs.375/- per hour for all clients by recording the chargeable hours spent on each client and using a single cost rate. Cost estimates for new business is also based on the same basis.

Following table shows the data relating to the existing client base.

| Category | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |
| :--- | :---: | :---: | :---: |
| Chargeable Hrs. per client | 150 | 300 | 500 |
| No. of clients | 20 | 35 | 8 |
| Distance (Km) | 50 | 100 | 150 |
| No. of visits per client | 4 | 6 | 10 |

ABC is considering changing the single cost rate and arriving at a reasonable individual costing and pricing method.

ABC plc's policy that where a visit is made to a client and the distance to the client is more than 40 Km . the developer will travel the day before the visit and stay in local accommodation so that the maximum time is available for meeting the client the following day.

The cost of travel to the client is dependent on the number of KM travelled to visit the client.

## You are required to:

(a) Briefly explain term "Activity based costing (ABC)".
(05 Marks)
(b) Discuss two differences between traditional costing systems and Activity Based Costing (ABC).
(05 Marks)
(c) Prepare calculations to show the cost attributed to each client group using an activity based system.
(08 Marks)
(d) Critically evaluate the differences between the costs attributed using activity based costing and those attributed by the current system and advise the management.
(10 Marks)
(e) Briefly explain how an organization can use Michael Porters Value chain analysis for strategic cost management to assess and improve its strategic position.
(06 Marks)
(f) Explain the concept of Target costing and its four (4) basic steps.

## Part II

Answer any three (3) questions

## Question No. 02 (20 Marks)

(a) Although many people use the terms social responsibility and sustainable development interchangeably and there is a close relationship between the two, they are different concepts. Explain the Relationship between social responsibility and sustainable development. (08 Marks)
(b) Name five (5) principles of social responsibility.
(c) Explain why companies and other organizations publish sustainability reports.

## Question No. 03 (20 Marks)

(a) Briefly explain concepts known as Price takers and Price setters.
(b) Discuss advantages and disadvantages of cost plus pricing method.
(c) Briefly explain different types of price discrimination.

## Question No. 04 (20 Marks)

A manufacturing plant produce constant number of units every month despite the changing customer demand every month and as a result the stock levels fluctuate every month.

## You are required to:

(a) Identify and explain the reasons for cost changes that would result if the company changed to a Just-In-Time production method. Assume there will be no inventory at the start and end of the year.
(06 Marks)
(b) Briefly discuss the importance of Total Quality Management to a company that operates a Just-InTime production method.
(05 Marks)
(c) Explains briefly the principles of Total Quality Management.
(d) Explain the four categories of quality costs.

## Question No. 05 (20 Marks)

(a) Explain functions that project management software performs.
(07 Marks)
(b) Briefly explain how a work breakdown structure helps the overall planning and control of a contract / project.
(08 Marks)
(c) Briefly explain the technique "Earned value management" used in measuring project performance.
(05 Marks)
(Total 20 Marks)
End of Part II

## Present value table

Present value of 1.00 unit of currency, that is $(1+r)^{-n}$ where $r=$ interest rate; $n=$ number of periods until payment or receipt.

|  | Periods <br> $(n)$ |  |  |  |  |  |  |  |  |  |  | Interest rates (r) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1 \%$ | $2 \%$ | $3 \%$ | $4 \%$ | $5 \%$ | $6 \%$ | $7 \%$ | $8 \%$ | $9 \%$ | $10 \%$ |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 0.990 | 0.980 | 0.971 | 0.962 | 0.952 | 0.943 | 0.935 | 0.926 | 0.917 | 0.909 |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 0.980 | 0.961 | 0.943 | 0.925 | 0.907 | 0.890 | 0.873 | 0.857 | 0.842 | 0.826 |  |  |  |  |  |  |  |  |  |  |  |
| 3 | 0.971 | 0.942 | 0.915 | 0.889 | 0.864 | 0.840 | 0.816 | 0.794 | 0.772 | 0.751 |  |  |  |  |  |  |  |  |  |  |  |
| 4 | 0.961 | 0.924 | 0.888 | 0.855 | 0.823 | 0.792 | 0.763 | 0.735 | 0.708 | 0.683 |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 0.951 | 0.906 | 0.863 | 0.822 | 0.784 | 0.747 | 0.713 | 0.681 | 0.650 | 0.621 |  |  |  |  |  |  |  |  |  |  |  |
| 6 | 0.942 | 0.888 | 0.837 | 0.790 | 0.746 | 0705 | 0.666 | 0.630 | 0.596 | 0.564 |  |  |  |  |  |  |  |  |  |  |  |
| 7 | 0.933 | 0.871 | 0.813 | 0.760 | 0.711 | 0.665 | 0.623 | 0.583 | 0.547 | 0.513 |  |  |  |  |  |  |  |  |  |  |  |
| 8 | 0.923 | 0.853 | 0.789 | 0.731 | 0.677 | 0.627 | 0.582 | 0.540 | 0.502 | 0.467 |  |  |  |  |  |  |  |  |  |  |  |
| 9 | 0.914 | 0.837 | 0.766 | 0.703 | 0.645 | 0.592 | 0.544 | 0.500 | 0.460 | 0.424 |  |  |  |  |  |  |  |  |  |  |  |
| 10 | 0.905 | 0.820 | 0.744 | 0.676 | 0.614 | 0.558 | 0.508 | 0.463 | 0.422 | 0.386 |  |  |  |  |  |  |  |  |  |  |  |
| 11 | 0.896 | 0.804 | 0.722 | 0.650 | 0.585 | 0.527 | 0.475 | 0.429 | 0.388 | 0.350 |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 0.887 | 0.788 | 0.701 | 0.625 | 0.557 | 0.497 | 0.444 | 0.397 | 0.356 | 0.319 |  |  |  |  |  |  |  |  |  |  |  |
| 13 | 0.879 | 0.773 | 0.681 | 0.601 | 0.530 | 0.469 | 0.415 | 0.368 | 0.326 | 0.290 |  |  |  |  |  |  |  |  |  |  |  |
| 14 | 0.870 | 0.758 | 0.661 | 0.577 | 0.505 | 0.442 | 0.388 | 0.340 | 0.299 | 0.263 |  |  |  |  |  |  |  |  |  |  |  |
| 15 | 0.861 | 0.743 | 0.642 | 0.555 | 0.481 | 0.417 | 0.362 | 0.315 | 0.275 | 0.239 |  |  |  |  |  |  |  |  |  |  |  |
| 16 | 0.853 | 0.728 | 0.623 | 0.534 | 0.458 | 0.394 | 0.339 | 0.292 | 0.252 | 0.218 |  |  |  |  |  |  |  |  |  |  |  |
| 17 | 0.844 | 0.714 | 0.605 | 0.513 | 0.436 | 0.371 | 0.317 | 0.270 | 0.231 | 0.198 |  |  |  |  |  |  |  |  |  |  |  |
| 18 | 0.836 | 0.700 | 0.587 | 0.494 | 0.416 | 0.350 | 0.296 | 0.250 | 0.212 | 0.180 |  |  |  |  |  |  |  |  |  |  |  |
| 19 | 0.828 | 0.686 | 0.570 | 0.475 | 0.396 | 0.331 | 0.277 | 0.232 | 0.194 | 0.164 |  |  |  |  |  |  |  |  |  |  |  |
| 20 | 0.820 | 0.673 | 0.554 | 0.456 | 0.377 | 0.312 | 0.258 | 0.215 | 0.178 | 0.149 |  |  |  |  |  |  |  |  |  |  |  |


| Periods <br> $(n)$ |  |  | Interest rates $(r)$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $11 \%$ | $12 \%$ | $13 \%$ | $14 \%$ | $15 \%$ | $16 \%$ | $17 \%$ | $18 \%$ | $19 \%$ | $20 \%$ |  |  |  |  |
|  | 0.901 | 0.893 | 0.885 | 0.877 | 0.870 | 0.862 | 0.855 | 0.847 | 0.840 | 0.833 |  |  |  |  |
| 2 | 0.812 | 0.797 | 0.783 | 0.769 | 0.756 | 0.743 | 0.731 | 0.718 | 0.706 | 0.694 |  |  |  |  |
| 3 | 0.731 | 0.712 | 0.693 | 0.675 | 0.658 | 0.641 | 0.624 | 0.609 | 0.593 | 0.579 |  |  |  |  |
| 4 | 0.659 | 0.636 | 0.613 | 0.592 | 0.572 | 0.552 | 0.534 | 0.516 | 0.499 | 0.482 |  |  |  |  |
| 5 | 0.593 | 0.567 | 0.543 | 0.519 | 0.497 | 0.476 | 0.456 | 0.437 | 0.419 | 0.402 |  |  |  |  |
| 6 | 0.535 | 0.507 | 0.480 | 0.456 | 0.432 | 0.410 | 0.390 | 0.370 | 0.352 | 0.335 |  |  |  |  |
| 7 | 0.482 | 0.452 | 0.425 | 0.400 | 0.376 | 0.354 | 0.333 | 0.314 | 0.296 | 0.279 |  |  |  |  |
| 8 | 0.434 | 0.404 | 0.376 | 0.351 | 0.327 | 0.305 | 0.285 | 0.266 | 0.249 | 0.233 |  |  |  |  |
| 9 | 0.391 | 0.361 | 0.333 | 0.308 | 0.284 | 0.263 | 0.243 | 0.225 | 0.209 | 0.194 |  |  |  |  |
| 10 | 0.352 | 0.322 | 0.295 | 0.270 | 0.247 | 0.227 | 0.208 | 0.191 | 0.176 | 0.162 |  |  |  |  |
| 11 | 0.317 | 0.287 | 0.261 | 0.237 | 0.215 | 0.195 | 0.178 | 0.162 | 0.148 | 0.135 |  |  |  |  |
| 12 | 0.286 | 0.257 | 0.231 | 0.208 | 0.187 | 0.168 | 0.152 | 0.137 | 0.124 | 0.112 |  |  |  |  |
| 13 | 0.258 | 0.229 | 0.204 | 0.182 | 0.163 | 0.145 | 0.130 | 0.116 | 0.104 | 0.093 |  |  |  |  |
| 14 | 0.232 | 0.205 | 0.181 | 0.160 | 0.141 | 0.125 | 0.111 | 0.099 | 0.088 | 0.078 |  |  |  |  |
| 15 | 0.209 | 0.183 | 0.160 | 0.140 | 0.123 | 0.108 | 0.095 | 0.084 | 0.079 | 0.065 |  |  |  |  |
| 16 | 0.188 | 0.163 | 0.141 | 0.123 | 0.107 | 0.093 | 0.081 | 0.071 | 0.062 | 0.054 |  |  |  |  |
| 17 | 0.170 | 0.146 | 0.125 | 0.108 | 0.093 | 0.080 | 0.069 | 0.060 | 0.052 | 0.045 |  |  |  |  |
| 18 | 0.153 | 0.130 | 0.111 | 0.095 | 0.081 | 0.069 | 0.059 | 0.051 | 0.044 | 0.038 |  |  |  |  |
| 19 | 0.138 | 0.116 | 0.098 | 0.083 | 0.070 | 0.060 | 0.051 | 0.043 | 0.037 | 0.031 |  |  |  |  |
| 20 | 0.124 | 0.104 | 0.087 | 0.073 | 0.061 | 0.051 | 0.043 | 0.037 | 0.031 | 0.026 |  |  |  |  |

End of Question Paper

