## Assessment Scheme

For Biology $11^{\text {th }}$ Part I Session 2012-13 \& ONWARD

## Time:3:30 hrs <br> Total Marks:- 100

| Sr. No | Chapters | $\underset{\mathrm{e}}{\text { Weightag }}$ | Distribution of Marks | M.C.Qs |  |  |  |  |  |  |  | Essay Type Questions |  |  |  | Questions relating to Practicals Allotted Marks 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Allotted Marks 17 |  |  |  | Allotted Marks 44 |  |  |  | Allotted Marks 24 |  |  |  |  |
|  |  |  |  | Q. to be asked 17 <br> Q. to be attempted 17 |  |  |  | Q. to be asked 33 Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  | Q. to be asked 5 <br> Q. to be attempted 3 |
|  |  |  |  | Time 20 Minutes |  |  |  | Time 3 Hours \& 10 Minutes |  |  |  |  |  |  |  |  |
|  |  |  |  | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | Total <br> Marks | $\boldsymbol{K}$ | $U$ | A | Total <br> Marks | K | $U$ | A | Total Marks |  |
| 1 | Introduction | 7 \% | 9 | 1 | - | - | 1 | 1 | 1 | - | 2 | 1 | - | - | 4 |  |
| 2 | Biological molecules | 6 \% | 7 | 1 | - | - | 1 | 1 | - | - | 1 | 1 | - | - | 4 |  |
| 3 | Enzymes | $6 \%$ | 7 | 1 | - |  | 1 | 2 | 1 | - | 3 | - | - | - | - |  |
| 4 | The cell | $7 \%$ | 9 | 1 | - | - | 1 | 1 | 1 | - | 2 | 1 | - | - | 4 | Question No.10=5 marks |
| 5 | Variety of life | 6 \% | 7 | 1 | - | - | 1 | 1 | - | - | 1 | 1 | - | - | 4 |  |
| 6 | Kingdom prokaryote | 6 \% | 7 | 1 | - | - | 1 | - | - | 1 | 1 | 1 | - | - | 4 | Question No.11=5 marks |
| 7 | The kingdom protest | 7 \% | 9 | 1 | - | - | 1 | 2 | 2 | - | 4 | - | - | - | - | Question No. $12=5$ marks |
| 8 | Fungi | $7 \%$ | 9 | 1 | - | - | 1 | 1 | 1 | - | 2 | - | - | 1 | 4 |  |
| 9 | Kingdom planate | $7 \%$ | 9 | 1 | - | - | 1 | 1 | - | 1 | 2 | - | 1 | - | 4 | Question No. 13 =5 marks |
| 10 | Kingdom animalia | 8 \% | 10 | 1 | 1 | - | 2 | 2 | 2 | - | 4 | - | - | - | - | Question No. 14 =5 marks |
| 11 | Bioenergetics | $8 \%$ | 10 | 1 | - | 1 | 2 | 1 | - | 1 | 2 | - | - | 1 | 4 |  |
| 12 | Nutrition | $10 \%$ | 11 | 1 | - | - | 1 | 1 | 1 | 1 | 3 | 1 | - | - | 4 |  |
| 13 | Gaseous exchange | $7 \%$ | 9 | 1 | - | - | 1 | 2 | 1 | 1 | 4 | - | - | - | - |  |
| 14 | Transport | 8 \% | 10 | 1 | - | 1 | 2 | 2 | - | - | 2 | 1 | - | - | 4 |  |
| Total |  | 100 \% | 123 |  |  |  | 17 |  |  |  | 66 |  |  |  | 40 | 25 |

2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions \& questions relating to practicals.
3) In order to promote the cause of concept based learning at least $10 \%$ questions must be unseen or of daily life but relating to specified learning outcomes of Curricula \& Syllabi. This portion will increase @ $10 \%$ annually but not more than $30 \%$.
4) The questions relating to practical will be asked from the practical Note Book as per chapter were detail given in the curriculum and syllabi 2006.
5) The Practical will be conducted at the end of $10^{\text {th }}$ Class which is mandatory to qualify for award of certificate.

The Practical assessment will be made in the form of grading as per following criteria.
$\mathrm{A}+=\mathbf{9 0 \%} \&$ above, $\mathrm{A}=\mathbf{8 0 \%}$ to $\mathbf{8 9 \%}, \mathrm{B}=\mathbf{7 0 \%}$ to $\mathbf{7 9 \%}, \mathrm{C}=\mathbf{6 0 \%}$ to $\mathbf{6 9 \%}, \mathrm{D}=\mathbf{5 0 \%}$ to $\mathbf{5 9 \%}, \mathrm{E}=\mathbf{4 0 \%}$ to $\mathbf{4 9 \%}, \mathrm{F}=\mathrm{Fail}=\mathbf{4 0 \%}$ \& below

## Model Paper Biology Objective

## Intermediate Part - I ( $11^{\text {th }}$ Class) Examination Session 2012-2013 and onward <br> Total marks: 17 Paper Code <br> Time Allowed: $\mathbf{2 0}$ minutes

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| Q. 1 | QUESTIONS | (A) | (B) | (C) | (D) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | The study of tissues is called | paleontology | anatomy | histology | Evolution |
| 2 | The percentage of water in bacterial cell is | 70\% | 60\% | 50\% | 40\% |
| 3 | The optimum pH value for pepsin enzyme in stomach is | 4.0 | 3.5 | 3.0 | 2.0 |
| 4 | De Duve discovered the cell organelle | mitochondria | lysosomes | ribosomes | Chloroplast |
| 5 | In classification the order of Zea mays is | poales | anthophyta | plantae | Poaceae |
| 6 | The bacteria with tuft of flagella at one pole is called | a trichouos | monotrichous | lophotrichous | Amphitrichous |
| 7 | Apicomplexan move by | tube feet | pseudopodia | undulating | Flexing |
| 8 | The skeleton of arthropoda is made of | cellulose | chitin | poly saccharides | lignin |
| 9 | Unequal development of various branches during evolution of leaf is | webbing | fusion | overtopping | planation |
| 10 | The asexual reproduction in sponges is | fragmentation | budding | binary fission | multiple fission |
| 11 | Scorpion belongs to class | crustacea | insecta | arachnida | myriapoda |
| 12 | Oxygen produced during photosynthesis comes from | $\mathrm{CO}_{2}$ | $\mathrm{H}_{2} \mathrm{O}$ | NADP | FAD |
| 13 | The colour of xanthophylls is | blue | red | green | yellow |
| 14 | Rodents are | herbivores | detritivores | carnivores | omnivores |
| 15 | The diameter of bronchiole is | 3 mm | 2 mm | 1 mm | 0.1 mm |
| 16 | The ions involved in the opening and closing of stomata are | sodium | calcium | potassium | magnesium |
| 17 | Attraction between water-water molecules in xylum tissue is called | tention | adhesion | cohesion | imbibition |

## Model Paper Biology Subjective <br> Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward Total marks: 83 <br> Time: 3:10 hours <br> Section II

Q. 2 Attempt any EIGHT short questions.
i. Define the biological method.
ii. Differentiate between theory and law.
iii. Define conjugated molecules with two examples.
iv. Define apeozyme and holoenzyme.
v. Define cofactor and write its functions.
vi. Compare competative and non competative inhabitor.
vii. Differerentiate between diploblastic and triploblastic animals.
viii.Define blastocoel.
ix. Write any two benificial effects insects.
x. Diffrentiate between coelomate and acoelomate.
xi. Differentiate between systole and diastole.
xii. What do you know about blue babies?
Q. 3 Attempt any EIGHT Short questions. (8x2=16)
i. Define pili with their functions.
ii. Describe briefly about giant amoeba.
iii. Draw the life cycle of plasmodium.
iv. Write down any two characteristic of Ciliates.
v. Define Kelps. With which group it belongs.
vi. Compare microphyll with magephyll leaves.
vii. Write the significance of double fertilization.
viii. What are accessory pigments? write their significance.
ix. Define glycolysis and how many ATP molecules are formed in this process.
x. Define adipose tissues. How are they formed.
xi. What is hunger pang? write its reason.
xii. Write two side effect of obesty.
Q. 4 Attempt any SIX Short questions. ( $\mathbf{x} 2=12$ )
i. Write the main points of cell theory.
ii. Write the method to calculate the magnification power of compound microscope.
iii. Write down botanical names of Amaltas and Brinjal.
iv. Define dikaryotic hyphae?
v. Compare basidiospores with ascoscopes.
vi. Compare myoglobin with haemogloban.
vii. Briefly describe Asthama.
viii. Write the roles of nose in man.
ix. Define respiratory distress syndrome.

## SECTION III

## Attempt any three questions. $\quad(8 \times 3=24)$

Q5(a). Write in detail two hypothesis for opening and closing of stomata. (2+2)
(b) Write note on biological method. (0+4)

Q6(a). Discuss any four function of proteins.
(b) Describe plastids with their types.

Q7(a) Explain charactistics of cyanobacteria.
(b) Write various steps of Evolution of leaf.

Q8.(a) Write a note on transport of oxygen in man.
(b) Elaborate the non cyclic phosphorylation with the help of diagram. (3+1)

Q9.(a) Explain digestion in stomach.
(b) Write a note on Zygomycetes.

## Section IV

Attempt any three questions.
( $5 \times 3=15$ )
Q10. (a) You are provided with egg albumin and Million reagent. Write biochemical test for the the substance which egg contain.
(b) Write two examples of reducing sugars.

Q11. (a) You are given the flower Rosa indica.Described in technical terms its following parts.
(i) calyx
(ii) androceium
(iii) gyonecium
(b) Differentiate between polysepalous and gamsepalous.

Q12. Sketch and label the diagram of digestive system of cockroach.
Q13. (a) Write the procedure to measure the blood pressure during rest and after exercise.
(b) Write normal value of systolic and diasystolic blood pressure.

Q14. (a) Following specimen were studied in the laboratory. Give one character of each to identify.

| (i) | Euglena | (ii) |
| :--- | :--- | :--- |
| (iv) | anaphase of mitosis. | (iii) Fungi |
| stomata | (v) | male cone of pinus. |

## Assessment Scheme

For Chemistry $11^{\text {th }}$ Part I Session 2012-13 \& ONWARD

## Time:3:30 hrs Total Marks:- 100

| Sr. <br> No | Chapters | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  |  | Essay Type Questions |  |  |  | Questions relating to Practicals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Allotted Marks 17 |  |  |  | Allotted Marks 44 |  |  |  | Allotted Marks 24 |  |  |  | Allotted Marks 15 |
|  |  |  |  | Q. to be asked 17 <br> Q. to be attempted 17 |  |  |  | Q. to be asked 33 Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |
|  |  |  |  | Time 20 Minutes |  |  |  | Time 3 Hours \& 10 Minutes |  |  |  |  |  |  |  |  |
|  |  |  |  | K | $\boldsymbol{U}$ | A | Total Marks | K | $\boldsymbol{U}$ | A | Total Marks | K | $\boldsymbol{U}$ | A | Total Marks |  |
| 1 | The Basic Concepts | $10 \%$ | 12 | 1 | 1 | - | 2 | 1 | 1 | 1 | 6 | - | - | $1 / 2$ | 4 |  |
| 2 | Experimental Techniques in Chemistry | $4 \%$ | 5 | 1 | - | - | 1 | - | 1 | 1 | 4 | - | - | - | - |  |
| 3 | The Gases | $9 \%$ | 11 | - | - | 1 | 1 | - | 2 | 1 | 6 | - | $1 / 2$ | - | 4 | Question No.10=5 marks |
| 4 | Liquids and Solids | $11 \%$ | 14 | 1 | 1 | - | 2 | - | 2 | 2 | 8 | - | - | $1 / 2$ | 4 | Question No.11=5 marks |
| 5 | Atomic Structure | $12 \%$ | 14 | - | 1 | 1 | 2 | - | 2 | 2 | 8 | $1 / 2$ | - | - | - | Question No. $12=5$ marks |
| 6 | Chemical Bonding | $11 \%$ | 14 | - | 1 | 1 | 2 | 1 | 2 | 1 | 8 | 1/2 | - | - | 4 |  |
| 7 | Thermo Chemistry | 7 \% | 9 | - | - | 1 | 1 | 1 | - | 1 | 4 | - | - | $1 / 2$ | 4 | Question No. 13 =5 marks |
| 8 | Chemical Equilibrium | 10 \% | 12 | 1 | 1 | - | 2 | 1 | 1 | 1 | 6 | - | $1 / 2$ | - | 4 | Question No. 14 =5 marks |
| 9 | Solutions | $9 \%$ | 11 | - | - | 1 | 1 | 1 | - | 2 | 6 | 1/2 | - | - | 4 |  |
| 10 | Electro Chemistry | $10 \%$ | 12 | 1 | 1 | - | 2 | 1 | 1 | 1 | 6 | - | - | $1 / 2$ | 4 |  |
| 11 | Reaction Kinetics | 7 \% | 9 | - | - | 1 | 1 | - | - | 2 | 4 | - | 1/2 | - | 4 |  |
|  | Total | $100 \%$ | 123 |  |  |  | 17 |  |  |  | 66 |  |  |  | 40 | 25 |

2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions \& questions relating to practicals.
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## Model Paper Chemistry Objective

Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward<br>Total marks: 17 Paper Code<br>$\qquad$ Time Allowed: 20 minutes

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct: fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| Q.No | Question | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Empirical formula of Glucose is | $\mathrm{C}_{2} \mathrm{HO}$ | $\mathrm{CH}_{2} \mathrm{O}$ | $\mathrm{CHO}_{2}$ | $\mathrm{C}_{2} \mathrm{H}_{2} \mathrm{O}$ |
| 2 | The number of molecules present in 9.0 gm of pure water are | $3.01 \times 10^{23}$ | $6.02 \times 10^{23}$ | $9.03 \times 10^{23}$ | $1.20 \times 10^{24}$ |
| 3 | The drying agent used in a desiccator is | Lithium Chloride | Sodium Chloride | Potassium Chloride | Calcium Chloride |
| 4 | The highest temperature at which a substance can exist as liquid, is called its | Absolute | Consolute | Critical <br> Temperature | Transition <br> Temperature |
| 5 | The boiling point of water at Mount Everest is | $69^{\circ} \mathrm{C}$ | $74^{\circ} \mathrm{C}$ | $79^{\circ} \mathrm{C}$ | $84^{\circ} \mathrm{C}$ |
| 6 | The existence of an element in more than one crystalline forms is known as | Isotropy | Aniosotropy | Entropy | Allotropy |
| 7 | The Scientist Chadwick in 1932 discovered | Proton | Neutron | Electron | Positron |
| 8 | The values of Quantum numbers for 3P orbital are | $\mathrm{n}=1, \mathrm{l}=1$ | $\mathrm{n}=2,1=1$ | $\mathrm{n}=3, \mathrm{e}=1$ | $\mathrm{n}=3,1=2$ |
| 9 | The compound which follows octect rule for bonding is | $\mathrm{NaC} \mathrm{\ell}$ | $\mathrm{BC} \ell_{3}$ | $\mathrm{PF}_{5}$ | $\mathrm{SF}_{6}$ |
| 10 | The Highest percentage of ionic character is in | HF | $\mathrm{HC} \ell$ | HBr | HI |
| 11 | The amount of heat absorbed when one mole of gaseous atoms are formed from the element under standard conditions is called | Enthalpy of Formation | Enthalpy of atomization | Enthalpy of reaction | Enthalpy of combustion |
| 12 | In Haber's process, the maximum yield of ammonia can be obtained by | Increasing Pressure | Decreasing pressure | Increasing volume | Increasing temperature |
| 13 | The salt dissolved in water forms a solution with pH greater than 7 is | $\mathrm{NaC} \mathrm{\ell}$ | $\mathrm{Na}_{2} \mathrm{CO}_{3}$ | $\mathrm{CuSO}_{4}$ | $\mathrm{NH}_{4} \mathrm{C} \ell$ |
| 14 | The elevation of boiling point of 0.1 molal solution is | $0.0052^{\circ} \mathrm{C}$ | $0.052^{\circ} \mathrm{C}$ | $0.52^{\circ} \mathrm{C}$ | $5.2^{\circ} \mathrm{C}$ |
| 15 | The oxidation number of Oxygen in $\mathrm{OF}_{2}$ is | + 1 | - 1 | +2 | -2 |
| 16 | In Lead Accumulator cell, the electrolyte used is | $20 \% \mathrm{H}_{2} \mathrm{SO}_{4}$ | $30 \% \mathrm{H}_{2} \mathrm{SO}_{4}$ | $40 \% \mathrm{H}_{2} \mathrm{SO}_{4}$ | $50 \% \mathrm{H}_{2} \mathrm{SO}_{4}$ |
| 17 | Sucrose is converted into Glucose and fructose by enzyme catalyst called | Invertase | Maltase | Urease | Zymase |

## Model Paper Chemistry Subjective

## Intermediate Part -I ( $11^{\text {th }}$ Class) Examination Session 2012-2013 and onward Total marks: 83 <br> Time: 3:10 hours

## SECTION ----------------- I

2. Answer any Eight parts from the followings:- $\mathbf{8 \times 2 = 1 6}$
(i) The removal of an electron from a neutral atom is an endothermic process. Explain with reason.
(ii) Actual yield is always less than theoretical yield. Give two reasons.
(iii) Calculate the no. of molecules present in 34 g of $\mathrm{H}_{3} \mathrm{PO}_{4}$.
(iv) Solvent extraction ferns the Distribution Law. Justify.
(v) Define sublimation. Give one example.
(vi) Calculate the value of General Gas constant in SI units.
(vii) Pilots feel uncomfortable breathing at higher attitude. Give reason.
(viii) Gases deviate from ideal behaviour at low temperature and high pressure. Give reasons.
(ix) Table salt is an insulator in solid state. Justify.
(x) Liquid crystals can be used in diagonosis of Cancer. Explain.
(xi) Evaporation is a cooling process. Give reason.
(xii) Graphite has slippery touch. Give reason.
3. Answer any Eight parts from the followings:-
$8 \times 2=16$
(i) Positive rays are also called canal rays. Give reason.
(ii) The radius of first orbit of hydrogen atom is $0.529 \mathrm{~A}^{\circ}$. Calculate the radius of $3^{\text {rd }}$ orbit of hydrogen atom.
(iii) Explain stark effect.
(iv) Pressure can effect the production of Cathode Rays.
(v) Dipole moment of $\mathrm{CO}_{2}$ is zero. While that of $\mathrm{H}_{2} \mathrm{O}$ is 1.85 D. Explain.
(vi) Explain the geometry of $\mathrm{H}_{2} \mathrm{Se}$ molecule.
(vii) Electronegativity increases from left to right in periodic table. Give reason.
(viii) Sketch the molecular orbital picture of $\mathrm{O}_{2}$.
(ix) Enthalpy is a state function. Justify.
(x) Born Haber's Cycle is another form of Hess's Law. Justify.
(xi) Buffers are important in many areas of Chemistry. Justify.
(xii) Define Le-Chatelier's principle.
4. Answer any Six parts from the followings:- $\quad 6 \times 2=12$
(i) Give the applications of the solubility product.
(ii) Depression of freezing point is a colligative property. Justify.
(iii) $\mathrm{Na}_{2} \mathrm{SO}_{4} \cdot 10 \mathrm{H}_{2} \mathrm{O}$ shows discontinuous solubility curve. Give reason.
(iv) What is the molality of a solution prepared by dissolving 5 g of Glucose in 250 g of water.
(v) Electromotive force can be calculated from electrochemical series. Explain with reason.
(vi) Lead accumulators is a chargeable battery. Comment.
(vii) Calculate the oxidation number of chromium in; $\quad$ (a) $\mathrm{K}_{2} \mathrm{CrO}_{4} \quad$ (b) $\mathrm{K}_{2} \mathrm{Cr}_{2} \mathrm{O}_{7}$
(viii) Differentiate between average and instantaneous rate of reaction.
(ix) Explain auto-catalysis.
SECTION ..... II
Note: Attempt any three questions.$(8 \times 3=24)$
5.(a) What are London forces. Explain various factors affecting it. ..... 4
(b) Mg reacts with $\mathrm{HC} \ell$ to give hydrogen gas. What is the minimum volume of $\mathrm{HC} \ell$ solution( $27 \%$ by weight) required to produce 16.1 g of $\mathrm{H}_{2}$. The density of $\mathrm{HC} \ell$ solution is $1.14 \mathrm{~g} / \mathrm{cm}^{3}$.$\mathrm{Mg}_{(\mathrm{s})}+2 \mathrm{HC} \ell_{(\mathrm{aq})} \rightarrow \mathrm{MgC}_{2(\mathrm{aq})}+\mathrm{H}_{2(\mathrm{~g})} \quad 4$6.(a) What is hybridization? Explain $\mathrm{Sp}^{2}$ hybridization with example.4(b) State first law of thermodynamics and prove that $\triangle E=q_{v}$
7.(a) What is Plasma? How is it produced? Give its two applications. ..... 4
(b) Describe Milikian's Oil Drop method for the measurement of charge of an electron. ..... 4
5. (a) What is Standard Hydrogen Electrode (SHE)? How is it used for the measurement of electrode potential. ..... 4
(b) Calculate the pH of a buffer solution in which $0.11 \mathrm{M} \mathrm{CH}_{3} \mathrm{COONa}^{-5}$ and 0.09 M . acetic acid solutions are present. $\mathrm{K}_{\mathrm{a}}$ for $\mathrm{CH}_{3} \mathrm{COOH}$ is $1.85 \times 10^{-5}$. ..... 4
6. (a) Explain Roult's Law when both components are volatile. ..... 4
(b) Define order of reaction. How does half life method can be used for its determination. ..... 4
SECTION ..... III

## Note: Attempt any three questions

## ( $5 \times 3=15$ )

Q 10: In the laboratory, you are given $100 \mathrm{~cm}^{3}$ of vinegar solution. How will you determine the amount of acetic acid in it practically?5
Q 11: During the practical you need pure crystals of $\mathrm{NaC} \ell$, but in laboratory table salt is provided contaminated with sand. How will you get the pure crystals of $\mathrm{NaC} \ell$ from it?
Q 12: In Redox titrations, the molarity of $\mathrm{FeSO}_{4} \cdot \mathrm{XH}_{2} \mathrm{O}$ is found to be 0.1 M . Calculate the number of water molecules (X) in it.
Q 13: You are given a solution containing 4 g MOH dissolved per $\mathrm{dm}^{3}$. Find out atomic mass of M volumetrically.
Q 14: Katrina has mixed the inks of different colours. You are given this mixture of inks. How will you separate and identify them.

# Assessment Scheme 

## For Computer Science $11^{\text {th }}$ Part I Session 2012-13 \& ONWARD

## Time: 03:30 hrs

Total Marks:- 100

| $\begin{aligned} & \text { Sr. } \\ & \text { No } \end{aligned}$ | Chapters | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  |  | Essay Type Questions |  |  |  | Questions relating to Practicals Allotted Marks 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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|  |  |  |  | Q. to be asked 17 Q. to be attempted 17 |  |  |  | Q. to be asked 33 <br> Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |
|  |  |  |  | Time Minutes 20 |  |  |  | Time 03:10 Hours |  |  |  |  |  |  |  |  |
|  |  |  |  | K | $\boldsymbol{U}$ | $\boldsymbol{A}$ | Total <br> Marks | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | Total Marks | K | $\boldsymbol{U}$ | A | Total <br> Marks |  |
| 1 | The Basic Concepts of IT | $10 \%$ | 15 | 1 | 1 | - | 2 | 1 | 1 | 1 | 6 | - | - | - | 8 |  |
| 2 | Information networks | $10 \%$ | 15 | 1 | - | 1 | 2 | 1 | 2 | - | 6 |  |  |  | 8 | Question No.10=5marks |
| 3 | Data Communication | $10 \%$ | 15 | - | 1 | 1 | 2 | 2 | 1 | - | 6 | - | - | - | 8 |  |
| 4 | Security copyright \& the law | $10 \%$ | 15 | 1 | - | 1 | 2 | 1 | 1 | 1 | 6 | - | - | - | 8 | Question No.11=5marks |
| 5 | Hardware \& system software | $22 \%$ | 28 | 2 | 2 | 1 | 5 | 4 | 2 | 2 | 16 | - | - | - | 8 |  |
| 6 | Word processing | $10 \%$ | 15 | - | - | - | - | - | 1 | 1 | 4 | - | - | - | - | Question No.12=5marks |
| 7 | Spread sheet | $10 \%$ | 15 | - | - | - | - | 1 | - | 1 | 4 | - | - | - | - |  |
| 8 | Applications \& use of Computer | $8 \%$ | 12 | - | 1 | 1 | 2 | 1 | 1 | 3 | 10 | - | - | - | - | Question No.13=5marks |
| 9 | Operating system (Windows) | $5 \%$ | 5 | 1 | - | - | 1 | - | - | 2 | 4 | - | - | - | - |  |
| 10 | Internet browsing \& using email | $5 \%$ | 5 | - | 1 | - | 1 | 1 | - | 1 | 4 | - | - | - | - | Question No.14=5marks |
|  | Total | $100 \%$ | 150 |  |  |  | 17 |  |  |  | 66 |  |  |  | 40 |  |

Important Note:- 1) K= Knowledge
2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions $\&$ questions relating to practicals.
3) In order to promote the cause of concept based learning at least $10 \%$ questions must be unseen or of daily life but relating to specified learning outcomes of Curricula \& Syllabi. This portion will increase @ $10 \%$ annually but not more than $30 \%$.

## Q\# 2 Ch \# 1+2+3+6 <br> Q\#3 Ch \# 5+8+9 <br> Q\#4 Ch \# 4+7+10

4) The questions relating to practical will be asked from the practical Note Book as per chapter were detail given in the curriculum and syllabi 2006
5) The Practical will be conducted at the end of $10^{\text {th }}$ Class which is mandatory to qualify for award of certificate.

The Practical assessment will be made in the form of grading as per following criteria.
$A+=90 \% \&$ above, $A=80 \%$ to $89 \%, B=70 \%$ to $79 \%, C=60 \%$ to $69 \%, D=50 \%$ to $59 \%, E=40 \%$ to $49 \%, F=$ Fail $=40 \%$ \& below

## Model Paper Computer Science Objective

Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward
Total marks: $17 \quad$ Paper Code
Time Allowed: 20 minutes

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| $\begin{gathered} \hline \mathrm{Q} \\ \text { No } \end{gathered}$ | Question | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | A graphic tablet is commonly activated by | Finger | Joystick | Stylus | Trackball |
| 2 | Laser printer is an example of | Non impact | Impact | Inkjet | Dot matrix |
| 3 | The top most layer of OSI model is | Network | Session | Transport | Presentation |
| 4 | Which of the following is NOT a category of network | LAN | MAN | WAN | NAN |
| 5 | Analog signal is measured in | Volt | Hertz | WATTS | Digits |
| 6 | An important property of fiber optic cable is | Noise | Refraction | Interference | Attenuation |
| 7 | The fly-by-wire system is used in | Medical field | Airline field | Education field | Banking field |
| 8 | Many banks provide the facility of | CAD | CAM | ATM | CBT |
| 9 | Each location in primary storage is assigned a unique | Data | Field | Name | Address |
| 10 | All are types of Memory EXCEPT. | DRAM | SRAM | FRAM | ROM |
| 11 | The step that obtains next instruction from memory is called | Read | Fetch | Decode | Get |
| 12 | The maximum EXCEPT units ALU has? | 2 | 3 | 4 | 5 |
| 13 | Expansion cards are inserted into | Peripheral devices | Slots | CPU | Back of the computer |
| 14 | All of the following are biometric techniques EXCEPT | Badge | Retina | Face | Palm print |
| 15 | Another name for antivirus is | Vaccine | Worm | Trojan horse | DES |
| 16 | Software can be removed/installed through: | Control panel | Installer | Debugger | Linker |
| 17 | Web pages are connected to one another using: | Hyperlinks | http | Interlink | Multimedia |

# Model Paper Computer Science Subjective <br> Intermediate Part -I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward 

## Total marks: 83 Time: 3:10 hours

## SECTION ------------I

2. Answer any Eight (08) parts from the followings: $8 \times 2=16$
i) Differentiate between data and information.
ii) Information Technology has made our world a global village. Justify.
iii) Define barcode.
iv) Write some benefits of using computer networks.
v) Star topology is the best topology. Justify.
vi) Internet is a single network. Explain
vii) Define analog signal.
viii) State data representation in computer.
ix) Define ASCII code.
x) Explain virus activation in computers.
xi) Elaborate the importance of backup.
xii) Give some causes of virus.
3. Answer any Eight (08) parts from the followings: $\mathbf{8 \times 2 = 1 6}$
i) Describe the function of Arithmetic and Logic Unit.
ii) State the components included in the computer architecture.
iii) Define DMA.
iv) Explain the work of a computer.
v) RAM is called volatile memory. Justify.
vi) Differentiate between RAM and ROM.
vii) Write down the names of different system buses.
viii) Explain I/O devices.
ix) Define word processor.
x) State the use of clipboard in MS Word.
xi) Elaborate the steps to identify rows and columns in MS Excel.
xii) List any four functions used in MS Excel.
4. Answer any $\operatorname{Six}(06)$ parts from the followings: ..... $6 \times 2=12$
i) Write some applications of ROBOT.
ii) Banks can benefit from the use of computers. Explain.
iii) Define video conferencing.
iv) Explain Computer Simulation.
v) Differentiate between CAD and CAM.
vi) A computer need operating system. Justify.
vii) Explain the statement Plug and Play.
viii) State the process of creating web pages.
ix) Describe search engine with examples.

## SECTION -----------II

Note: Attempt any three questions from the followings. ..... $8 \times 3=24$
5. Explain different types of Non-Impact Printers. ..... 08
6. Discuss different Network Models. ..... 08
7. Briefly describe different guided media. ..... 08
8. Explain Fetch-Decode-Execute cycle of CPU. ..... 08
9. State the methods to protect a computer system from Virus. ..... 08
SECTION ------------III
(Practical Part)
Note: Attempt any three questions from the followings. ..... 25
10. Write down the procedure to create a table in MS Word. Also write the Procedure to insert rows in table. ..... 05
11. How chart is created in MS Excel? ..... 05
12. Explain different ways for editing text in MS Word. ..... 05
13. Write procedure for rotating and wrapping text in cell. ..... 05
14. Write procedure to add printer in computer ..... 05

# Assessment Scheme 

For Physics 11 ${ }^{\text {th }}$ Part I Session 2012-13 \& ONWARD
Time: 03:30 hrs
Total Marks:- 100

| $\begin{aligned} & \text { Sr. } \\ & \text { No } \end{aligned}$ | Chapters | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  | Essay Type Questions |  |  | Questions relating to Practicals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Allotted Marks 17 |  |  |  | Allotted Marks 44 |  |  | Allotted Marks 24 |  |  | Allotted Marks 15 |
|  |  |  |  | Q. to be asked 17 <br> Q. to be attempted 17 |  |  |  | Q. to be asked 33 Q. to be attempted 22 |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  | Q. to be asked 12 <br> Q. to be attempted 6 |
|  |  |  |  | Time 20 Minutes |  |  |  | $\begin{array}{\|l} \hline Q 2=\text { Chapter } 1,2,3,6=12 S Q \\ Q 3=\text { Chapter } 4,5,7,8=12 S Q \\ Q 4=\text { Chapter } 9,10,11=9 S Q \\ \hline \end{array}$ <br> Time $\mathbf{3}$ Hours \& $\mathbf{1 0}$ Minutes |  |  |  |  |  |  |
|  |  |  |  | K | $\boldsymbol{U}$ | $\boldsymbol{A}$ | Total Marks | $\boldsymbol{U}$ | A | Total <br> Marks | $\boldsymbol{U}$ | A | Total Marks |  |
| 1 | Measurements | 8 \% | 9 | 1 | - | - | 1 | 1 | 1 | 8 | - | - | 9 | Mechanics + Heat |
| 2 | Vector \& Equilibrium | $10 \%$ | 12 | 1 | - | - | 1 | 2 | - | 6 | - | - | 12 | (a) SQs. $=3+1=4$ |
| 3 | Motion and force | $11 \%$ | 13 | 1 | 1 | - | 2 | 1 | 2 | 8 | - | 3 | 13 | (b) Procedure of any one |
| 4 | Work power \& energy | $8 \%$ | 10 | 1 | - | - | 1 | 1 | - | 6 | - | 3 | 10 | experiment. |
| 5 | Circular motion | $11 \%$ | 14 | 1 | 1 | 1 | 3 | 1 | - | 6 | - | - | 14 | (c) Graph Base SQs. |
| 6 | Fluid dynamics | $5 \%$ | 6 | 1 | - | - | 1 | - | - | 2 | - | 3 | 6 | Sound and light |
| 7 | Oscillations | $8 \%$ | 10 | 1 | - | - | 1 | 2 | - | 6 | - | 3 | 10 | (a) $\mathrm{SQs}=2+2=4$ |
| 8 | Waves | $12 \%$ | 14 | 1 | 1 | 1 | 3 | 2 | - | 6 | - | - | 14 | (b) Procedure of any one |
| 9 | Physical optics | 8 \% | 10 | 1 | - | - | 1 | 1 | - | 6 | - | 3 | 10 | experiment <br> (c) Graph Base SQs. |
| 10 | Optical instruments | $8 \%$ | 10 | 1 | - | - | 1 | 1 | - | 4 | - | - | 10 |  |
| 11 | Heat \& thermodynamics | $11 \%$ | 15 | 1 | 1 | - | 2 | 1 | 1 | 8 | - | - | 15 |  |
| Total |  | $100 \%$ | 123 |  |  |  | 17 |  |  | 66 |  |  | 40 | 25 |

Important Note:- 1) $\mathrm{K}=\mathrm{Knowledge}. \mathrm{U=} \mathrm{Understanding} \mathrm{/} \mathrm{Comprehension}. \mathrm{A=Application} \mathrm{\&} \mathrm{Analysis}$.
2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions \& questions relating to practicals
3) In order to promote the cause of concept based learning at least $10 \%$ questions must be unseen or of daily life but relating to specified learning outcomes of Curricula $\&$ Syllabi. This portion will increase @ $10 \%$ annually but not more than $30 \%$.
4) The questions relating to practical will be asked from the practical Note Book as per chapter were detail given in the curriculum and syllabi 2006 .
5) The Practical will be conducted at the end of $12^{\mathrm{th}}$ Class which is mandatory to qualify for award of certificate.

The Practical assessment will be made in the form of grading as per following criteria.
$A+=90 \% \&$ above, $A=80 \%$ to $89 \%, B=70 \%$ to $79 \%, C=60 \%$ to $69 \%, D=50 \%$ to $59 \%, E=40 \%$ to $49 \%, F=F a i l=40 \% \&$ below

## Model Paper Physics Objective

Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward<br>Total marks: 17 Paper Code<br>Time Allowed: $\mathbf{2 0}$ minutes

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| Q. 1 | QUESTIONS | (A) | (B) | (C) | (D) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | The unit of Pressure in base units is | Kg m ${ }^{-1} \mathrm{Sec}^{-2}$ | Kg mSec ${ }^{2}$ | $\mathrm{Kg} \mathrm{m} \mathrm{Sec}{ }^{-2}$ | Kg m ${ }^{-1} \operatorname{Sec}^{-1}$ |
| 2 | The complete Equilibrium of a body implies that | $\sum F=0$ | $\begin{aligned} & \sum F x=0 \\ & \sum F y=0 \end{aligned}$ | $\begin{aligned} & \sum F=o \\ & \sum \tau=0 \end{aligned}$ | $\sum \tau=0$ |
| 3 | At highest point, the vertical component of velocity of Projectile becomes | Maximum | Zero | Minimum | $\mathrm{V}_{\mathrm{i}} \operatorname{Cos}^{\text {e }}$ |
| 4 | Impulse has the same unit as that of | Force | Energy | Mass | Linear Momentum |
| 5 | The Tidal Energy is due to gravitational Pull of the | Sun | Moon | Earth | Mars |
| 6 | The rotational K.E. of a disc is | $\frac{1}{2} m v^{2}$ | $\frac{1}{4} m v^{2}$ | $\frac{1}{6} m v^{2}$ | $\frac{1}{8} m v^{2}$ |
| 7 | Torque per unit Moment of Inertia is Equivalent to | Angular Velocity | Angular Acceleration | Inertia | Radius of Gyration |
| 8 | Escape velocity on surface of earth is 11.2 $\mathrm{km} / \mathrm{Sec}^{-1}$. The escape velocity on the Surface of another planet of same mass as that of earth but of $1 / 4$ times the radius of earth is | $5.6 \mathrm{~km} \mathrm{sec}^{-1}$ | $11.2 \mathrm{~km} \mathrm{sec}^{-1}$ | $\begin{gathered} 22.4 \mathrm{~km} \\ \sec ^{-1} \end{gathered}$ | $44.8 \mathrm{~km} \mathrm{sec}^{-1}$ |
| 9 | The SI unit of flow rate of fluid is | $m^{3} \mathrm{sec}^{-1}$ | $\mathrm{m}^{2} \sec ^{-1}$ | $\mathrm{m}^{2} \sec ^{-2}$ | $\mathrm{M}^{3} \mathrm{sec}^{-3}$ |
| 10 | For a spring mass system arranged horizontally, the instantaneous displacement is | $x=x_{0} \sin w t$ | $x=x_{0} \cos w t$ | $x=x_{0} \operatorname{Sin}^{2} w t$ | $x=x_{0} \cos ^{2} w t$ |
| 11 | In the time required for the tuning fork to make one complete vibration, the wave in air will travel a distance equal to | $\lambda / 4$ | $\lambda / 2$ | $\lambda$ | $2 \lambda$ |
| 12 | Velocity of sound is independent of | Temperature | Density | Pressure | Medium |
| 13 | Two tuning forks of frequencies 240 Hz and 243 Hz respectively are sounded together, the no. of beats produced per second is | Zero | '2' | '3' | '4' |
| 14 | In young's Double slit experiment, the position of Bright fringes are given by Formula, | $\mathrm{Y}_{m}=m \frac{\lambda L}{d}$ | $\mathrm{Y}_{m}=m \frac{\lambda d}{L}$ | $\mathrm{Y}_{m}=m \frac{L d}{\lambda}$ | $\mathrm{Y}_{m}=\frac{m \lambda}{L d}$ |
| 15 | Final image produced by the compound Microscope is | Real and inverted | Real and erect | Virtual and erect | Virtual and inverted |
| 16 | Carnot cycle consists of | Two steps | Three steps | Four steps | Five steps |
| 17 | The Internal energy of a piece of lead when beaten by a hammer will | Increase | Decrease | Remain constant | First increase then decrease |

Model Paper Physics Subjective
Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward

## Total marks: 83

Time: 3:10 hours

(i) Define dimension. Check the correctness of the equation $\quad v=f \lambda$ by the principle of Homogeneity of dimensions.
(ii) Briefly explain the two drawbacks to use the period of simple pendulum as a time standard.
(iii) Assess the total uncertainty in the final result of a timing experiment with the help of an example.
(iv) Determine the dimensions of pressure and density.
(v) Under what condition would a vector have components that are equal in magnitude.
(vi) Justify the statement "A body cannot rotate about its centre of gravity under the action of its own weight".
(vii) If $\vec{A} \cdot \vec{B}=0$, Can it be concluded that $\vec{A}$ and $\vec{B}$ are perpendicular to each other? Support your answer with a proof.
(viii) Why fog droplets appear to be suspended in air?
(ix) Discuss the sign of acceleration due to gravity for a cricket ball thrown upward, for its upward and downward motion.
(x) Can the velocity of an object reverse the direction when acceleration is constant? Justify with an example.
(xi) It is advisable to fasten the seat belts during a fast drive. Why is it?
(xii) Explain how would a bouncing ball behave in each of an elastic and inelastic collision with floor of room.
3. Write answers of any EIGHT questions. (8 $\times 2=16$ )
(i) When a rocket enters the atmosphere, why does its nose cone become very hot? Where does this heat energy come from?
(ii) State the work energy principle. Express it in equation.
(iii) While calculating the Absolute Gravitational potential energy, why is the distance between infinity and surface of earth is divided into very small steps.
(iv) What is meant by moment of Inertia? Give its significance.
(v) How is artificial gravity created in an Artificial satellites.
(vi) Centripetal force and centrifugal reaction are equal in magnitude but opposite in direction. Why these forces do not balance each other.
(vii) What happens to the period of simple pendulum if
(a) its length is doubled
(b) its suspended mass is doubled.
(viii) Show that in SHM, the acceleration is zero when velocity is greatest and the velocity is zero when the acceleration is greatest?
(ix) Why can we not realize an Ideal simple pendulum.
(x) What features do longitudinal waves have in common with transverse waves.
(xi) Why does sound travel faster in solids than in gases?
(xii) Justify the statement "Velocity of sound in a gas is independent of pressure of the gas"

## 4. Write answers of any SIX questions. ( $\mathbf{6 \times 2}=\mathbf{1 2 )}$

(i) Define coherent sources of light. How two light beams can be made coherent.
(ii) How is the distance between interference fringes is affected by the separation between the slits of Young's double shit experiment?
(iii) How would you distinguish between unpolarized light and plane polarized light.
(iv) Name and explain any two of major components of a fiber optic communication system.
(v) How the resolving power of a compound microscope can be increased.
(vi) What happens to the temperature of the room, when an air conditioner is left running on a table in the middle of the room.
(vii) What is meant by tripple point of water. What is the value of Absolute temperature of tripple point of water.
(viii) Can the efficiency of a carnot engine be $100 \%$ ? Justify your answer with proof.
(ix) Normal Human body temperature is $98.6^{\circ} \mathrm{F}$. Convert it into $C^{0}$ and K .

## P.T.O.

## SECTION II (Essay Type)

## Note:- Attempt any three questions. <br> ( $8 \times 3=24$ )

5. (a) Define Rectangular components of a vector. How two vectors can be added by Rectangular component method.
(b) A ball is thrown with a speed of $30 \mathrm{~m} \mathrm{sec}^{-1}$ in a direction $30^{\circ}$ above the horizontal. Determine the height to which it rises. 3
6. (a) What are geostationary orbits. Derive an expression for orbital radius of a Geostationary orbit $1+4$
(b) How large a force is required to accelerate an electron $\left(\mathrm{m}=9.1 \times 10^{-31} \mathrm{~kg}\right)$ from rest to a speed of $2 \times 10^{7} \mathrm{msec}^{-1}$ through a distance of 5.0 cm . 3
7. (a) What is the limitation of Newton's formula for speed of sound in air. How did Laplace correct it.

1+4
(b) A simple pendulum is 50 cm long. What will be its frequency of vibration at a place where $\mathrm{g}=9.8 \mathrm{~m} \mathrm{sec}^{-2}$

3
8.(a) Explain the principle, construction and Magnifying power of a compound microscope with the help of a ray diagram . $1+2+2$
(b) A light is incident normally on a grating which has 2500 lines $/ \mathrm{cm}$. compute the wavelength of a spectral line for which the deviation in $2^{\text {nd }}$ order is $15^{\circ}$.
9.(a) Explain the carnot cycle and calculate the efficiency of a carnot heat engine. $2+3=5$
(b) Water flows through a hose whose internal diameter is 1 cm at a speed of $1 \mathrm{~m} \mathrm{sec}^{-1}$. What should be the diameter of the nozzle if the water is to emerge at $21 \mathrm{~m} \mathrm{sec}^{-1}$. 3

## SECTION III (PRACTICAL)

Note:- Give answers to any Four Questions.
$4 \times 2=8$
10.(a) (i) How does the electronic timer measure time of free fall accurately.
(ii) A student measured the diameter of cylinder as 2.45 cm by a vernier calliper having least count +0.01 cm . But later on he observes a zero error in the instrument and finds zero of the vernier scale lies to the right of the zero of principal scale and $4^{\text {th }}$ division of vernier scale faces any division or the principal scale. Find the correct value of diameter of cylinder.
(iii) The wire of sonometer is stretched with a load of 4 kg wt including the hanger and resonant length of wire is found to be 11 cm by using a tuning fork having frequency 512 Hz . If diameter of the wire is doubled, find the resonant frequency of this wire for the same resonating length and same load.
(iv) Find clockwise torque from diagram.

(v) How does the angle of deviation vary with the angle of incidence in case of prism.
(vi) Does the critical angle of a transparent material varies with the colour of light.
(vii) What are the sources of error during the experimental determination of mechanical equivalent of Heat by electrical method.
(viii) Design a table of observations/calculations to prove the law of length by using the vibrations in the string of sonometer.
10.(b) Write down the brief procedure to show experimentally that time period of simple pendulum is independent of amplitude.

OR
Write down the Brief procedure to determine experimentally the focal length of a convex lens by displacement method.
10.(c) Answer the following Question on the basis of graph drawn below.

(i) What can you conclude from the graph 1
(ii) Find the value of "g" from the graph 2
(iii) Measure the length of second's pendulum from the graph 1 OR
Answer the following Question on the basis of graph drawn below.

(i) What is value of " P " corresponding to $1 / \mathrm{q}=\mathrm{os} \mathrm{cm}^{-1}$
(ii) Using a set of values of $1 / \mathrm{p}$ and $1 / \mathrm{q}$ from evaluate foul length.
Assessment Scheme
For Business Mathematics 11th Part I Session 2012-13 \& ONWARD Time: 02:30 hrs Total marks: - 75

Important Note: - 1) $\mathrm{K}=$ Knowledge. $\quad$ U= Understanding / Comprehension. $\quad$ A= Application \& Analysis.
2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions and essay type questions.
 portion will increase @ $10 \%$ annually but not more than $30 \%$.

# Model Paper Business Mathematics (Commerce Group) Objective 

Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward

Total marks: 15
Paper Code $\qquad$ Time Allowed: 20 minutes

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| $\begin{gathered} \hline \mathbf{Q} \\ \text { No. } 1 \\ \hline \end{gathered}$ | Question | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | If $A: B=2: 3$ and $B: C=3$ : <br> 5 Hence $A, B, C$ would be. | 2:3:5 | 2:5:3 | 3:2:5 | 3:5:2 |
| 2 | Decimal form of 5.3\% is. | 53 | 0.53 | 0.0053 | 0.053 |
| 3 | Rs. 250 is $2 \frac{1}{2} \%$ of what amount? | 1000 | 10000 | 100000 | 2500 |
| 4 | What is the interest on Rs. 1880.90 for one year at simple interest $5 \frac{1}{2} \%$ ? | Rs. 100 | Rs. 103.45 | Rs. 105.5 | Rs. 110.5 |
| 5 | Payments are to be made at the beginning of each period is. | annuity | annuity due | ordinary annuity | perpetuity |
| 6 | If $H(S)=S^{2}-3$ then find $H\left(\frac{2}{3}\right)$ ? | $\frac{23}{9}$ | $\frac{-23}{9}$ | $\frac{9}{23}$ | $\frac{-9}{23}$ |
| 7 | The function $f(x)=2 x^{2}-3 x+4 \text { is. }$ | Constant | Linear | Cubic | Quadratic |
| 8 | If $\frac{1}{4}$ of an amount is Rs. <br> 60 , what is the amount? | 140 | 240 | 40 | 260 |
| 9 | Two linear factors of $y^{2}+10 y+24$ are: | $(y-4)(y+6)$ | $(y+4)(y-6)$ | $(y+4)(y+6)$ | $(y-4)(y-6)$ |
| 10 | Solution setoff equation $\begin{aligned} & 4 x+5 y=40 \text { and } \\ & 3 x+2 y=23 \text { is. } \end{aligned}$ | $\{(4,5)\}$ | $\{(-5,4)\}$ | $\{(5,4)\}$ | $\{(-4,-5)\}$ |
| 11 | $(A B)^{t}$ is equal to: | $A^{t} B^{t}$ | $B^{t} A^{t}$ | $A B^{t}$ | $A^{t} \boldsymbol{B}$ |
| 12 | Any matrix " $A$ " is a skew symmetric matrix if: | $A^{t}=A$ | $A^{t}=-A$ | $A=-A$ | $A=A^{-t}$ |
| 13 | The order of matrix $\left[\begin{array}{l} 1 \\ 2 \\ 8 \\ 3 \end{array}\right]$ <br> is: | $1 \times 4$ | $4 \times 1$ | $4 \times 4$ | $3 \times 4$ |
| 14 | Decimal number system is based on: | 0 to 15 | 0 to 1 | 0 to 9 | 0 to 10 |
| 15 | Convert 77 to binary system: | $(1101101)_{2}$ | (1001101)2 | (1110001) ${ }_{2}$ | (1000101) ${ }_{2}$ |

## Model Paper Business Mathematics (Commerce Group) Subjective Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward Total marks: $\mathbf{6 0}$

SECTION........................ 1
Q 2. Answer briefly any SIX parts from the followings:-
i) Find the missing term in each case.

$$
4: 9:: ?: 54 \text { and } 4: 30:: 20 \text { ? }
$$

ii) Define successive discount and its formula.
iii) What is commission on Rs. 3000 @ $3 \frac{1}{3} \%$ ?
iv) Name two method of calculating depreciation.
v) If $\frac{1}{5}$ of an amount is Rs. $\mathbf{1 0 0 0 0}$. Find the amount?
vi) What is interest due in case of Rs. 1000 loaned for 4 months at $\mathbf{6 \%}$ annum?
vii) Write at least two key points of compound interest.
viii) Define perpetuity.
ix) What will be the accumulated amount for after 3 years on an investment of Rs. 250000 at 9\% simple interest?

Q . 3 Answer briefly any SIX parts from the followings:-
$6 \times 2=12$
i) Given function $\mathrm{g}(\mathrm{u})=\mathrm{u}^{2}+\mathrm{u}$ find $\mathrm{g}\left(-\mathrm{x}^{2}\right), \mathrm{g}(2 \mathrm{v})$
ii) Define absolute value function.
iii) Give the domain of the function $\varphi(\mathbf{x})=\frac{x}{x-3}$
iv) Six times a number is $\mathbf{1 8 0}$. What is the number?
v) Solve for ' $x$ ' $2 x+20-5 x=x-6+9 x$
vi) Resolve in standard form $\frac{1}{x+3}-\frac{1}{x-3}=3$
vii) Apply componendo and dividendo rule on

$$
\frac{\sqrt{x-3}-\sqrt{x+3}}{\sqrt{x-3}+\sqrt{x+3}}=\frac{7}{4}
$$

viii) Solve $\mathrm{x}=\mathrm{y}$ and $\mathbf{2 x + y = 3}$
ix) What is discriminant of $4 x^{2}-13 x+3=0$

## Q 4. Answer briefly any SIX parts from the followings:-

i) If $A=\left[\begin{array}{ll}4 & 5 \\ 2 & 3\end{array}\right]$ then find $\mathrm{A}^{2}$
ii) Find $A$ if $2 A+\left[\begin{array}{ll}1 & 2 \\ 4 & 6\end{array}\right]=0$
iii) Find $A B$ if $A=\left[\begin{array}{ll}3 & 4\end{array}\right]$ and $B=\left[\begin{array}{l}4 \\ 5\end{array}\right]$
iv) Define singular and non - singular matrices.
v) What do you understand by the transpose of a matrix?
vi) Simplify $(1001)_{2} \times(101)_{2}$
vii) Write down the different number system.
viii) Find the sum of $(23)_{10}+(111)_{2}=()_{10}$
ix) Simplify $(\mathbf{1 1 0 0})_{2}-(\mathbf{1 1 1})_{2}$

SECTION........................ 2
Note: Attempt any three questions. $8 \times 3=24$
Q5 (a) An item marked with price tag of Rs. 200 is available at $15 \%$ discount. Find the discounted price and amount of discount.
(b) Find the simple interest on Rs. 400000 invested for 5 years and 6 months at 4\% per year.

Q6 (a) Find the compound interest due in case of Rs. 1000 Loaned for 5 years at $\mathbf{6 \%}$ per annum.
(b) draw the graph of $f(x)=10-2 x$

Q7 a) Solve $\frac{3 x-10}{6}+\frac{8(3 x-5)}{3}=6 x$
b) Find the number which added to $\mathbf{6}$ and 8 gives two numbers with a product of 288 .

Q8 a) Solve $\begin{aligned} & 2 x+3 y=10 \\ & 4 x+8 y=24\end{aligned}$

With the help of matrices.
b) If $\left.\mathrm{A}=\begin{array}{rll}1 \\ 2 & 3 & 4 \\ 3 & 7 \\ 5 & 8 \\ 6 & 9\end{array}\right]$ and $\mathrm{B}=\begin{array}{rr}2 & 4 \\ 4 & 1 \\ 7 & -1\end{array}\left[\begin{array}{r}1 \\ 7 \\ -1\end{array}\right]$
then prove that $A B \neq B A$
Q9 a) Divide (11000011) $)_{2}$ by $(1101)_{2}$
b) Simplify $\left[(1011100)_{2}-(111100)_{2}\right]-\left\{(10000)_{2}-(111)_{2}\right\}$
Assessment Scheme
For Fine Arts 11 ${ }^{\text {th }}$ Part I Session 2012-13 \& ONWARD
Time: 0 (3:30 hrs
Total Marks:- 100

| $\begin{array}{\|l\|} \hline \mathbf{S r} \\ \mathbf{N o} \\ \hline \end{array}$ | Chapters Name | Weightage | Distribution of Marks | Allotted Marks 17 |  |  |  | Allotted Marks 44 |  |  |  | Essay Type Questions Allotted Marks 24 |  |  |  | Questions relating to Practicals Allotted Marks 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Q. to be asked 17 Q. to be attempted 17 |  |  |  | Q. to be asked 33 Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |
|  |  |  |  | Time Minutes 20 |  |  |  | Time 03:10 Hours |  |  |  |  |  |  |  |  |
|  |  |  |  | $\boldsymbol{K}$ | $U$ | $A$ | $\begin{gathered} \text { Total } \\ \text { Marks } \end{gathered}$ | K | $\boldsymbol{U}$ | A | $\begin{array}{\|c\|} \hline \text { Total } \\ \text { Marks } \\ \hline \end{array}$ | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | $\begin{gathered} \hline \text { Total } \\ \text { Marks } \\ \hline \end{gathered}$ | Question No. $10=5 \mathrm{marks}$ |
| 1 |  | 13 \% | 16 | 1 | 1 | - | 2 | 1 | 1 | 1 | 6 | 1 | - | - | 8 |  |
| 2 | قريك | 12.20 \% | 15 | 1 | 1 | 1 | 3 | 2 | 3 | 1 | 12 | - | - | - | - | Question No.11=5marks |
| 3 | \% | 18.70 \% | 23 | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 12 | - | 1 | - | 8 | Question No.12=5marks |
| 4 |  | 18.70 \% | 23 | 1 | 1 | 1 | 3 | 3 | 1 | 2 | 12 | 1 | - | - | 8 | Question No.13=5marks |
| 5 | +مرى | 18.70\% | 23 | 1 | 1 | 1 | 3 | 2 | 1 | 3 | 12 | - | 1 | - | 8 | Question No.14=5marks |
| 6 | , إك) | 18.70\% | 23 | 2 | 1 | - | 3 | 2 | 2 | 2 | 12 | - | - | 1 | 8 |  |
| Total |  | 100 \% | 123+25=148 |  |  |  | 17 |  |  |  | 66 |  |  |  | 40 | 25 |

[^0] صح

| （ D ） | （C） | （ B$)$ | （ A$)$ | QUESTIONS | Q． 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6－6 | ليّر | U＊＊＊＊ | ；； Brittary | ¢ Menhir \％¢ \％ | 1 |
| آثّهُ | \％\％\％ |  |  |  | 2 |
| $\checkmark$ Printing |  | 户 |  | N－Neolithie | 3 |
| r：$:=$ | ¢：Sm | ¢ | ب\％ | ¢ | 4 |
| تاتون | بي | ＇\％بر | 仿 |  | 5 |
| ابهابوUكغ |  | \％ | － | إبإول－ | 6 |
| ${ }_{T}$ Slab |  | \％توزبـ | \％¢ | ¢ ¢ ¢ ¢ M Mohonjodaro | 7 |
| Ruins | Dolmen | Mastaba | Menhir | ¢إنّ | 8 |
| Hית | ك\％ | ت | Hanging ينا راور <br> Garden | ب\％ | 9 |
| 「1\％ | كنب． |  | مrer |  | 10 |
| P\％ | ¢ | $2^{2}$ |  |  | 11 |
| كرآهربا | 216，6\％ | جنك | 6 | U Upper Pablithi | 12 |
| Ziggurates | Domestic <br> Building | Tomb | Temple |  | 13 |
| 4000 | 5000 | 3000 | 2000 |  | 14 |
| $b_{0}$ |  | 6 ¢ | ／ |  | 15 |
| く | ！ |  | $\grave{=}$ | ｜lo | 16 |
| \％ | ، | ¢ | ، | Code of Hammurabi | 17 |

كزنج 83
Upper Paleolithic (iii)
Mamoth (iv)

- ن.
Stone Henge (ix)
The great Ziggurate (x)
(xi)
- Bust of a Women (xii)
$8 \times 2=16$
(x)
كتريت بيان ك.ي
- 

4-ذ
(i)
-
(ii)
(iii)

- نز, Dancing Girl (iv)
(اركى (v)
Terracotta (vi)
- 

كُوثرأبان ك. Women at her toilet (viii)
Paleolithic (ix)

## P.T.O.

(ص, (صנم)
$8 \times 3=24$






(ه, (ص)

كوالْبر12 11


| Sr. <br> No. | Chapter Name | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  |  | Essay Type Questions |  |  |  | Questions relating to Practical's |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |   <br> Allotted Marks 17 <br> Q. to be asked 17 <br> Q. to be attempted 17 |  |  |  | Allotted Marks 44 <br> Q. to be asked 33 <br> Q. to be attempted 22  |  |  |  | Allotted Marks 24 <br> Q. to be asked 5 <br> Q. to be attempted 3  |  |  |  | Allotted Marks 15 |
|  |  |  |  |  |  |  |  | Q. to be asked 5 <br> Q. to be attempted 3 |  |  |  |  |
|  |  |  |  | Time 20 Minutes |  |  |  |  |  |  |  | Time 3 Hours \& 10 Minutes |  |  |  |  |  |  |  |  |
|  |  |  |  | K | U | A | Total Marks | K | U | A | Total Marks | K | U | A | Total Marks | Question No.10=5 marks Question No.11=5 marks Question No.12=5 marks Question No.13=5 marks Question No.14=5 marks |
| 1 | - | 8.943\% | 11 | - | 1 | - | 1 | 2 | 2 | 1 | 10 | - | - | - | - |  |
| 2 |  | 9.756\% | 12 | 1 | 1 | - | 2 | - | 1 | - | 2 | 1 | - | - | 8 |  |
| 3 | 淙 | 5.691\% | 07 | 1 | - | - | 1 | 2 | 1 | - | 6 | - | - | - | - |  |
| 4 | 尼 | 17.073\% | 21 | 2 | 1 | - | 3 | 2 | 2 | 1 | 10 | - | 1 | - | 8 |  |
| 5 |  | 5.691\% | 07 | - | - | 1 | 1 | 1 | 1 | 1 | 6 | - | - | - | - |  |
| 6 | \#xjerborg | 15.447\% | 19 | 2 | 1 | - | 3 | 2 | 1 | 1 | 8 | - | - | 1 | 8 |  |
| 7 | -66560 | 13.008\% | 16 | 1 | 1 | - | 2 | 1 | 1 | 1 | 6 | 1 | - | - | 8 |  |
| 8 | - | 21.951\% | 27 | 1 | 1 | 1 | 3 | 3 | 3 | 2 | 16 | 1 | - | - | 8 |  |
| 9 |  | 02.439\% | 03 | - | 1 | - | 1 | - | - | 1 | 2 | - | - | - | - |  |
|  | Total | 100\% | $123+25=148$ |  |  |  | 17 |  |  |  | 66 |  |  |  | 40 | 25 |

Important Note:- 1) $\mathrm{K}=$ Knowledge. $\quad \mathrm{U}=$ Understanding / Comprehension $\quad \mathrm{A}=$ Application \& Analysis
4) The questions relating to practical will be asked from the practical Note Book as per chapter were detail given in the curriculum and syllabi 2006 5) The Practical will be conducted at the end of $12^{\text {th }}$ Class which is mandatory to qualify for award of certificate.
The Practical assessment will be made in the form of grading as per following criteria.
$\mathrm{A}+=\mathbf{9 0 \%}$ \& above, $\mathrm{A}=\mathbf{8 0 \%}$ to $89 \%, \mathrm{~B}=70 \%$ to $79 \%, \mathrm{C}=60 \%$ to $69 \%, \mathrm{D}=50 \%$ to $59 \%, \mathrm{E}=40 \%$ to $\mathbf{4 9 \%}, \mathrm{F}=\mathrm{Fail}=\mathbf{4 0 \%}$ \& below

$$
\begin{aligned}
& \text { كز } \\
& \text { Paper Code ---- } \\
& \text {, وتت } 20 \text { ن }
\end{aligned}
$$ Note：－You have four choices for each objective type question as A，B，C and D．The choice which you think is correct；fill that circle in front of that question number．Use marker or pen to fill the circles．Cutting or filling two or more circles will result in zero mark in that question．

| （ D ） | （ C ） | （ B ） | （ A ） | QUESTIONS | Q． 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| لوپوU6 | $\begin{aligned} & \text { سمندرولOceans } \\ & \end{aligned}$ | كر <br> Atmosphere |  <br> Rocks |  <br> Meteorology is the study of | 1 |
| 10746 | 12746 | 13000 | 14000 | ( <br> The Diameter of Earth on Equator is（in KM） | 2 |
| $\begin{aligned} & =-\sigma_{50.3} \\ & 50.3 \mathrm{~km} \end{aligned}$ | $\begin{aligned} & =-639.3 \\ & 39.3 \mathrm{~km} \end{aligned}$ | $\begin{aligned} & x-29.3 \\ & 29.3 \mathrm{~km} \end{aligned}$ | $\begin{aligned} & =-\sigma^{\prime} 19.3 \\ & 19.3 \mathrm{~km} \end{aligned}$ | The average depth of continental crust is | 3 |
| ＂ <br> Granite |  <br> Sand Stone | سليـ <br> Sleet | $\begin{gathered} \text { Diamond } \\ \text { Ler } \end{gathered}$ | The common example of Sedimentary Rock is | 4 |
| 500 | 400 | 280 | 25 | The age of Caledonian Mountains is（Million years） | 5 |
| ．بيح بـ <br> Residual | كانوف：يكا <br> Folded | $\begin{gathered} \text { Blocked } \\ \text { Blos } \end{gathered}$ | آتث نشال <br> Volcanic | ． <br> The Satpura and Mahadeo mountains of India are | 6 |
| ． <br> Residual | بابك باك <br> Block |  |  <br> Volcanic | Cotopaxi mountain is | 7 |
| رركالآوبي <br> Cold | ＂ <br> Hotdry | Warm humid |  <br> Cold Humid | $-\mathcal{C}_{6}$ <br> The chemical weathering takes place rapidly in the areas of | 8 |
| 〔（ <br> Rain | 乏 <br> Wined |  | ᄃ <br> River | Eskers are formed by the action of | 9 |
| $\begin{aligned} & \dot{\psi}_{\mathbf{r}} \\ & \text { Rain } \end{aligned}$ |  | River | $\begin{gathered} \text { 19r } \\ \text { Wind } \end{gathered}$ | آبشتتميان كُ <br> Out－Wash plains are formed by the action of | 10 |
| Deserts | ？ <br> Forest | ＊ها <br> Mountain valley |  | - <br> Valley glacier are found in the areas of | 11 |
| $1^{0}-3^{0}$ | $5^{0}-7^{0}$ | $2^{0}-4^{0}$ | $4^{0}-6^{0}$ | The slope of continental slope is | 12 |
|  6th and 18th |  <br> 10th and 25th |  <br> 7th and 21th |  1st and 14th | The high tides occurs on - C－ <br> The high tides occurs on | 13 |
| 45\％ | 20．99\％ | 78．03\％ | 65\％ | The amount of nitrogen in Atmosphere is | 14 |
| $\begin{aligned} & \text { Contours } \\ & \hline \text { كنُور } \end{aligned}$ | $\begin{gathered} \hline \text { فارم لا'نْ } \\ \text { Farmlines } \end{gathered}$ | خطوطــاوى المارت ISO therms | خطرطـساوى البار ISO bar |  <br> The lines joining the area of similar temperature are called | 15 |
|  | ， <br> Willy Willy | Hurricane | $\begin{aligned} & \text { Depression } \end{aligned}$ | In Europe，the cyclones are called | 16 |
| يوايّي <br> Christianity | $\begin{aligned} & \text { Islam } \\ & \text { Islon } \end{aligned}$ | Hinduism | تヵォ <br> Buddhism | ＇با： <br> In which religion the slaughtering of animal is not allowed | 17 |

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& \text { (I) } \\
& \text { كزلْبر 83 }
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(تليّى بیثن 13-2012وطابعر)
Part ------------------------ I
$8 \times 2=16$
i) Define geography according to Dr. Keltie.
ii) Define Human Geography.
iii) What is meant by Geology.
iv) Define Oceanography.
v) What is meant by Demography.
vi) What is meant by Solar System.
vii) Define metamorphic rocks.
viii) Define Plutonic rocks.
ix) Define hypabyssal rocks.
x) Define Weathering.
xi) Define Mass wasting.
xii) What is meant by exfoliation.
i) Define Mountain
ii) Write the types of mountain according to age.
iii) Write the two names of volcanic mountains.
iv) Write a note on continental plateau.
v) Write the names of three sub types of depositional plains.
vi) Write a short note on delta.
vii) What is meant by Moraines.
viii) What is abrasion.
ix) Write a short note on Barkhans.
x) Write a note on continental slope.
xi) What is meant by low tides.
xii) Write about laboredor current.
$6 \times 2=12$
i) Define Humidity.
ii) What is meant by annual range of temperature.
iii) Differentiate between weather and climate
iv) Write the names of pressure belts.
v) Define Cyclones.
vi) Write a note on Chinook.
vii) What is meant by pressure of wind.
viii) Write two types of Monsoon winds.
ix) How mountains effect physical environment.

$$
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## P.T.O.


Assessment Scheme
For Geology 11 ${ }^{\text {th }}$ Part I Session 2012-13 \& ONWARD
Time:3:30 hrs Total Marks:- 100

| Sr. No | Chapters Name | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  |  | Essay Type Questions |  |  |  | Questions relating to Practicals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Allotted Marks 17 |  |  |  | Allotted Marks 44 |  |  |  | Allotted Marks 24 |  |  |  | Allotted Marks 15 |
|  |  |  |  | Q. to be asked 17 Q. to be attempted 17 |  |  |  | Q. to be asked 33 Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |
|  |  |  |  | Time 20 Minutes |  |  |  | Time 3 Hours \& 10 Minutes |  |  |  |  |  |  |  |  |
|  |  |  |  | K | $\boldsymbol{U}$ | A | Total <br> Marks | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | Total <br> Marks | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | Total Marks | Question No.10=5 marks |
| 1 | Physical Weathering | 7 \% | 9 | 1 | - | - | 1 | 2 | - | - | 4 | 1 | - | - | 4 |  |
| 2 | Chemical Weathering | 6 \% | 7 | 1 | - | - | 1 | 1 | - | - | 2 | - | 1 | - | 4 |  |
| 3 | Streams | 7 \% | 9 | 1 | - |  | 1 | 2 | 1 | 1 | 8 | - | - | - | - |  |
| 4 | Stream Erosion | 10 \% | 12 | 1 | 1 | - | 2 | 1 | 1 | 1 | 6 | - | 1 | - | 4 | Question No.11=5 marks |
| 5 | Ground Water I | 7 \% | 9 | 1 | - | - | 1 | 1 | - | 1 | 4 | 1 | - | - | 4 |  |
| 6 | Ground Water II | 8 \% | 10 | 1 | - | 1 | 2 | 1 | 1 | - | 4 | 1 | - | - | 4 |  |
| 7 | Crystallography | 6 \% | 7 | 1 | - | - | 1 | 1 | 1 | 1 | 6 | - | - | - | - | Question No. $12=5$ marks |
| 8 | Symmetry | $7 \%$ | 9 | 1 | - | - | 1 | - | 1 | 1 | 4 | 1 | - | - | 4 | Question No. $13=5$ marks |
| 9 | Minerals | 6 \% | 7 | 1 | - | - | 1 | 1 | - | 1 | 4 | 1/2 | - | - | 2 |  |
| 10 | Eco Minerals | 5 \% | 6 | - | - | - | - | 1 | 1 | - | 4 | 1/2 | - | - | 2 | Question No. 14 =5 marks |
| 11 | Magma | 6 \% | 7 | 1 | - | - | 1 | 1 | 1 | 1 | 6 | - | - | - | - |  |
| 12 | Igneous Rocks | 10 \% | 12 | 1 | 1 | - | 2 | 2 | 1 | - | 6 | 1 | - | - | 4 |  |
| 13 | Metamorphic Rocks | 7 \% | 9 | 1 | - | - | 1 | - | 1 | 1 | 4 | - | 1 | - | 4 |  |
| 14 | Sedimentary Rocks | 8 \% | 10 | 1 | 1 | - | 2 | 1 | 1 | - | 4 | 1 | - | - | 4 |  |
|  | Total | 100 \% | $123+25=148$ | 17 |  |  |  | 66 |  |  |  | 40 |  |  |  | 25 |

Important Note:- 1) K= Knowledge.
A=Application \& Analysis

## Model Paper Geology Objective

## Intermediate Part -I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward

Total marks: 17 Paper Code Time Allowed: $\mathbf{2 0}$ minutes

Note:- You have four choices for each objective type question as $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D . The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| $\begin{gathered} \hline \mathbf{Q} \\ \text { No. } 1 \end{gathered}$ | Question | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Water expands on | Boiling | Freezing | Heating | None |
| 2 | $\mathrm{H}_{2} \mathrm{O}+\mathrm{CO}_{2} \rightarrow$ | $\mathrm{H}_{3} \mathrm{CO}_{3}$ | $\mathrm{HC}_{3} \mathrm{O}_{3}$ | $\mathrm{H}_{2} \mathrm{CO}_{3}$ | $\mathrm{H}_{3} \mathrm{CO}_{2}$ |
| 3 | Lime stone is metamorphosed into | Chalk | Dolomite | Quartzite | Marble |
| 4 | Argillaceous rocks composed of | Sand | Pebbles | Clay | Carbon |
| 5 | Evaporated is a rock | Physical | Chemical | Organic | None |
| 6 | Silica components in basic rocks are | 66 \% | 55-65 \% | 45-55 \% | $\begin{gathered} \text { Less than } 45 \\ \% \end{gathered}$ |
| 7 | Texture of volcanic rock | Fine | Medium | Coarse | Pheno |
| 8 | Magma is a material | Gas | Solid | Molten | None |
| 9 | Ox-bow lake present in | DB. | Base level | Meanders | Old age |
| 10 | Corrosion is a process | Physical | Chemical | Deposition | Transportation |
| 11 | Peneplain is present in | Youth | Mature | Old age | Erosion |
| 12 | Stalagmites are formed on | Roof | Ceiling | Floor | Walls |
| 13 | Sink is a cavity | Close | Open | Both | None |
| 14 | Zone of aeration has belts | 2 | 3 | 4 | 5 |
| 15 | Hardness of topaz | 6 | 7 | 8 | 9 |
| 16 | Planes of cube | 7 | 8 | 9 | 13 |
| 17 | Pyrite is ore of | Iron | Sulphur | Copper | Carbon |

# Model Paper Geology Subjective <br> Intermediate Part -I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward 

Total marks: 83

## Section - I

Q. No:-2 Attempt any Eight short questions from the followings:
(i) Define hydration.
(ii) Explain crystal.
(iii) Write Inter facial angle.
(iv) What do you know about magma.
(v) Write plutonic rocks.
(vi) Elaborate acidic igneous rock.
(vii) Uses of gypsum.
(viii) Composition of magma.
(ix) Explain batholith.
(x) What do you know about magnetite.
(xi) Write Extrusive Rocks.
(xii) Differentiate between surface and ground water.
Q. No: - 3 Attempt any Eight short questions from the followings:
$8 \times 2=16$
(i)Write frost action.
(ii) Define disintegration.
(iii) Abrasion by stream.
(iv) Explain bed load.
(v) Define drainage basin.
(vi) Write ultimate base level.
(vii) Elaborate metamorphism.
(viii) Differentiate between mineral and rock.
(ix) Define porosity.
(x) Write streak.
(xi) Explain regional metamorphism.
(xii) Importance of hydrological cycle.
(i) Briefly describe Arenaceous rock.
(ii) Define Meanders.
(iii) Write and draw rectangular pattern.
(iv) Explain mature stage of valley.
(v) Elaborate cavern.
(vi) Write Stalactites.
(vii) Define sedimentary rock.
(viii) Write cubic system.
(ix) Explain principal components of cement.

## Section - II

Note: Attempt any three questions.
Q. No:-5 (a) Write in detail discordant Ign. Rocks.
(b) Explain texture of metamorphic rocks.
Q. No: - 6 (a) Elaborate two processes of physical weathering.
(b) Write organically formed sedimentary rocks.
Q. No:-7 (a) Briefly describe cycle of erosion.
(b) Write deposition of ground water.
Q. No:-8 (a) Explain oxidation and leaching.
(b) Write any two energy mineral resources in Pakistan.
Q. No:-9 (a) Discuss plane of symmetry and axis.
(b) Write and draw zone of aeration.

## Section - III (Practical)

Note: Attempt any three Question.
Q. No: - 10
(a) Draw two topographic features. 3
(b) Write hardness of gypsum and apatite.
Q. No: - 11 Define specific gravity. Write its formula.
Q. No: - 12
$\mathrm{Wa}=250 \mathrm{gms}$
$\mathrm{Ww}=150 \mathrm{gms}$
Calculate S. G.
Q. No: - 13 Hardness of mineral from

$$
3-7
$$

Q. No: - 14 Define topography. Draw a feature with contour values 1100, 1200, 1300, 1400, 1500
Assessment Scheme
For Health \& Physical Education $11^{\text {th }}$ Part I Session 2012-13 \& ONWARD

| Sr. <br> No | Chapters Name | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  |  | Essay Type Questions |  |  |  | Questions relating to Practicals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Allotted Marks 17 |  |  |  | Allotted Marks 44 |  |  |  | Allotted Marks 24 |  |  |  | Allotted Marks 15 |
|  |  |  |  | Q. to be asked 17 Q. to be attempted 17 |  |  |  | Q. to be asked 33 Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |
|  |  |  |  | Time 20 Minutes |  |  |  | Time 3 Hours \& 10 Minutes |  |  |  |  |  |  |  |  |
|  |  |  |  | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | Total <br> Marks | K | $\boldsymbol{U}$ | A | Total Marks | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | Total <br> Marks |  |
| 1 |  | 4 \% | 5 | 1 | - | - | 1 | 2 | - | - | 4 | - | - | - | - | Question No.10=5Marks |
| 2 | اغزاضوبقا | $10 \%$ | 12 | - | - | - | - | - | 2 | - | 4 | 1 | - | - | 8 |  |
| 3 |  | 14 \% | 18 | 1 | 1 | - | 2 | 3 | 2 | 3 | 16 | - | - | - | - |  |
| 4 | - هنمّ كِيلي | 19 \% | 23 | 3 | 1 | 1 | 5 | 3 | 1 | 1 | 10 | - | - | 1 | 8 | Question No.11=5Marks |
| 5 |  | 21 \% | 26 | 2 | 1 | 1 | 4 | 3 | 2 | 2 | 14 | 1 | - | - | 8 | Question No.12=5Marks |
| 6 | علمالصّ | 4 \% | 5 | - | 1 | - | 1 | 1 | 1 | - | 4 | - | - | - | - |  |
| 7 | - | 14 \% | 17 | 1 | - | - | 1 | 2 | 1 | 1 | 8 | 1 | - | - | 8 | Question No.13= 5Marks |
| 8 |  | 2 \% | 3 | 1 | - | - | 1 | 1 | - | - | 2 | - | - | - | - | Question No.14= 5Marks |
| 9 | ابتراكّبلما | $11 \%$ | 13 | 1 | - | - | 1 | 1 | 1 | - | 4 | 1 | - | - | 8 |  |
| 10 | - | $1 \%$ | 1 | - | - | 1 | 1 | - | - | - | - | - | - | - | - |  |
|  | Total | 100 \% | 123+25=148 | 17 |  |  |  | 66 |  |  |  | 40 |  |  |  | 25 |

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Note:- You have four choices for each objective type question as A, B, C and D. The choir which you think is correct; fill that circle in front of that questions number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.


| ر/ك <br> Cold | : <br> Healthy man | Medicines | 196 <br> Air |  <br> Infection diseases spread through. | 15 |
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|  |  |  |  |  |  |
| 5 | 4 | 3 | 2 | How many changes are there in a Foot Ball match | 16 |
| 3 m | 2.75m | 2.50m | 2 m | - <br> The width of jumping pit in Hop step \& jump is | 17 |
|  |  |  |  |  |  |
| 40 m | 30.50 m | 30 m | 25 m | Length of Net Ball court is | 16 |
| 2.50 kg | 2 kg | 1.50 kg | 1 kg |  <br> Weight of discus for women is | 17 |



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## Part-I

2-Answer briefly any eight parts from the following. $8 \times 2=16$
i) Narate definition of physical education according to J.B.Nash.
ii) What is ment by Mental and Physical development.
iii) Write only one hadith relevant to physical education.
iv) Write two benefits of Physical Education.
v) Write definition of educational gymnastic.
vi) Write two benefits of educational gymnastic.
vii) Why warm up is necessary.
viii) Which of two movements are necessary during the lesson of educational gymnastic.
ix) Define Recreation.
x) Write the importance of Recreation in present period.
xi) Write two basic kinds of Recreation.
xii) What are the commercial activities in recreation.

3-Answer briefly any eight parts from the following. $8 \times 2=16$
i) Write a note on "Libero" in Volley Ball.
ii) Write a note on Rotation in Volley Ball.
iii) Write only two faults of service in Volley Ball.
iv) Write two foules of Shot putt.
v) Write complete diamention of stop board for shot putt circle.
vi) Write about the structure and weight of baton in $4 \times 100 \mathrm{~m}$

## Relay Race.

vii) How much distance a team cleared in $4 \times 100 \mathrm{~m}$ Relay Race.
viii) Write two foules of $4 \times 100 \mathrm{~m}$ Relay Race.

## Only for Boys

ix) Write a note on "throw in" in Foot Ball.
x) Write kinds of Free kicks in Foot Ball.
xi) Write three foules of Hop, Step and Jump.
xii) Write diamentions of take off board in Hop, Step and Jump.
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## Only for Girls

ix) How Net Ball Game is started.
x) How many parts are there in Net Ball Court.
xi) Write about the Diameter of Discus Throw Circle.
xii) Write two foules of Discus throw.

4-Answer briefly any six parts from the following. 6x2=12
i) Define Health Education by Thomas wood.
ii) Wheat is meant by Mental Health.
iii) Define cell.
iv) There are how many blood circulations in human body also write their names.
v) Explain briefly the "Expiration"
vi) Write a note on larynx.
vii) Define good posture.
viii) Define first aid.
ix) Explain "R I C E".

## Part-II

## Note:- Attempt any three questions. $8 \times 3=24$

5-Narate aims and objectives of Physical Education in detail.
6-Draw a Sketch of Volley Ball Court. Write all diamentions of "Net" also.
7-Write the rules of "Shot Put" throw.
8-Explain the organs which take part in the circulatory system.
9 -Write a detail note on the following.
(i) Pulled Muscle
(ii) Muscle Cramp

## Part-III

## Note:- Attempt any three questions. $5 \times 3=15$

10-Write only two exercise of belly.
11-Write method of "forward role".
12-Write a note on Blocking in Volley ball.
13-Write method of Gliding in putting the Shot.
14-Write the method of Baton changing in $4 \times 100 \mathrm{~m}$ Relay race.
(viii) ابترלُبطالداو كيامراوب-

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Assessment Scheme



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Assessment Scheme For Library Science $11^{\text {th }}$ Part I Session 2012-13 \& ONWARD Total Marks:- 100

| $\begin{aligned} & \text { Sr. } \\ & \text { No } \end{aligned}$ | Chapters Name | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions Allotted Marks 44 |  |  |  | Essay Type Questions Allotted Marks 24 |  |  |  | Questions relating to Practicals Allotted Marks 15 Q. to be asked 5 Q. to be attempted 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Allotted Marks } 17 \\ \hline \begin{array}{l} \text { Q. to be asked } 17 \\ \text { Q. to be attempted } 17 \end{array} \end{gathered}$ |  |  |  | Q. to be asked 33 Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  |  |
|  |  |  |  | Time 20 Minutes |  |  |  | Time 3 Hours \& 10 Minutes |  |  |  |  |  |  |  |  |
|  |  |  |  | $\boldsymbol{K}$ | $U$ | A | $\begin{gathered} \hline \text { Total } \\ \text { Marks } \end{gathered}$ | $\boldsymbol{K}$ | $U$ | A | $\begin{gathered} \hline \text { Total } \\ \text { Marks } \end{gathered}$ | $\boldsymbol{K}$ | $U$ | A | Total <br> Marks | Question No. 10= 5Marks <br> Question No. $11=5$ Marks |
| 1 | Nature and Types of Libraries and their Use | 25.2 \% | 31 | 3 | 1 | 1 | 5 | 2 | 1 | 6 | 18 | 1 | - | - | 8 |  |
| 2 | Nature and Type of Library Material | 25.2 \% | 31 | 1 | - | 4 | 5 | 3 | 2 | 4 | 18 | 1 | - | - | 8 |  |
| 3 | History of Books and Libraries | 14.6 \% | 18 | 2 | - | - | 2 | 1 | 1 | 2 | 8 | - | 1 | - | 8 | Question No. 12= 5Marks |
| 4 | Use of Library Material | 20.3 \% | 25 | 1 | 1 | 1 | 3 | 1 | 1 | 5 | 14 | - | - | 1 | 8 | Question No. 13= 5Marks <br> Question No.14= 5Marks |
| 5 | Meaning and Concept of Information | 14.6 \% | 18 | - | 1 | 1 | 2 | 1 | 1 | 2 | 8 | - | 1 | - | 8 |  |
|  | Total | $100 \%$ | 123+25=148 |  |  |  | 17 |  |  |  | 66 |  |  |  | 40 | 25 |

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Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.


# （I）الز（1） <br> كزنبر 83 <br>  <br>  <br> $8 \times 2=16$ 

From which language the word＂Library＂drives？
Define Library．
Write names of any three academic libraries of Pakistan．
Who introduced Five Basic principles of Library Science？
Who can get the membership of Special Library？
Define＂Library Material＂．
Define＂Book＂．
What do you mean by non printed books？
Write names of any three most important Urdu newspapers published in Pakistan．
Write three measures to save Audio Visual Material．
Which device can be used to read microfilm？
Write three names of insects which damage books．
$8 \times 2=16$
What is＂writing style＂？
Which was the most beautiful writing style of the world？
Write any three kinds of paper．
Who is father of publishing？
Where Askandria Library situated？
Who had established Bat－ul－Hikmant Library？
Write any three principles of book selection．
What is Stock Taking？
What is＂Sub－Title＂？
What is＂Book Card＂？
What is acquisition method in National Library？
When the National Library of USA established？
$6 \times 2=12$
What is＂date Slip＂？
Define term＂Information＂．
Write sources of Information．
What is＂Thesis＂？
When the first publishing press established？
Write name of Mughal Emperor who kept book with him even in war．
Which is the best library of Pakistan regarding to its services？
What is other term used for＂Taleeq writing style＂？
Define＂society＂．

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Assessment Scheme
For Principals of Accounting $11^{\text {th }}$ Part I Session 2012-13 \& ONWARD Time: 02:30 hrs Total marks: - 75

| $\begin{aligned} & \mathrm{CH} \\ & \mathrm{No} \end{aligned}$ | Chapters Name | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  |  | Essay Type Questions |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Allotted Marks |  |  | 15 | Allotted Marks |  |  | 36 |  | otte | Marks | 24 |
|  |  |  |  | Q. to be asked 15 Q. to be attempted 15 |  |  |  | Q. to be asked 27 <br> Q. to be attempted 18 |  |  |  | Q. to be asked 5 <br> Q. to be attempted 3 |  |  |  |
|  |  |  |  | Time 20 Minutes |  |  |  | Time 2 Hours \& 10 Minutes |  |  |  |  |  |  |  |
| 1 | Introduction and basic terms, Business transaction and accounting equation. | 10 \% | 11 | K | U | A | Total Marks | K | U | A | Total <br> Marks | K | U | A | Total Marks |
|  |  |  |  | 1 | 1 | 1 | 3 | 1 | 1 | - | 4 | - | - | 1/2 | 4 |
| 2 | Nature of account and rules of debit and credit. Journal | 6 \% | 7 | - | 1 | 2 | 3 | 1 | 1 | - | 4 | - | - | - | - |
| 3 | Ledger and trial balance <br> Bank and banking transactions | 5 \% | 6 | - | 1 | 1 | 2 | 1 | 1 | - | 4 | - | - | - | - |
| 4 | Sub-division of journal and cash transaction Sub-division of journal and non- cash transaction | 11 \% | 12 | 1 | 1 | - | 2 | 1 | 2 | - | 6 | - | - | $1 / 2$ | 4 |
| 5 | Bank reconciliation statement | 14 \% | 15 | - | - | 1 | 1 | 1 | 1 | 1 | 6 | - | - | 1 | 8 |
| 6 | Bill of exchange and promissory note | 15 \% | 16 | - | - |  | - | 2 | 1 | 1 | 8 | - | - | 1 | 8 |
| 7 | Final accounts Basic -I <br> Final accounts with adjustments | 15 \% | 16 | - | - | - | - | 2 | 1 | 1 | 8 | - | - | 1 | 8 |
| 8 | Capital and Revenue | 11 \% | 12 | - | 1 | 1 | 2 | 1 | - | 2 | 6 | - | - | 1/2 | 4 |
| 9 | Rectification of errors | 13 \% | 14 | - | 1 | 1 | 2 | 1 | 3 | - | 8 | - | - | 1/2 | 4 |
|  | Total | 100 \% | 109 |  |  |  | 15 |  |  |  | 54 |  |  |  | 40 |

[^2]2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions and essay type questions.
3) In order to promote the cause of concept based learning at least $10 \%$ Questions must be unseen or of daily life but relating to specified learning outcomes of Curricula \& Syllabi. This portion will increase @ $10 \%$ annually but not more than $30 \%$.

Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward

Total marks: 15
Paper Code $\qquad$ Time Allowed: $\mathbf{2 0}$ minutes

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| $\begin{gathered} \text { Q } \\ \text { No. } 1 \end{gathered}$ | Question | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | The modern system of recording business transactions in the books of accounting is known as | Modern system | Double entry system | American entry system | Single entry system |
| 2 | Withdrawal of merchandise for personal use is | Drawing | Sale of merchandise | Trade expenses | Charity |
| 3 | The excess of assets over liabilities is equal | Capital | Profit | Equities | Drawings |
| 4 | A credit is represented by | A decrease in asset | A decrease in liabilities | A decrease in equity | A decrease in owner's equity |
| 5 | Nominal Account is related to | Liabilities | Assets | Income | Equity |
| 6 | Day book is another name of | Journal | Ledger | Cash Book | Purchase Book |
| 7 | The Arithmetic accuracy of books of account is verified through | Journal | Ledger | Trial Balance | Cash Book |
| 8 | Return of defective merchandise to creditor is recoded in | Cash Book | Journal | Purchase Book | Purchase return Book |
| 9 | The entry made on both sides of the cash book | Double entry | Compound entry | Contra entry | Mixed entry |
| 10 | When bank column of a cash book shows a debit balance, it means | Overdraft balance | Favorable balance | Unfavorable balance | Bank balance |
| 11 | The periodical return sent by the bank to the customer is called | Income statement | Bank statement | Bank Reconciliation statement | Ledger Statement |
| 12 | Expenditure incurred on advertising a new product is called | Capital Expenditure | Revenue Expenditure | Deferred <br> Revenue <br> Expenditure | Current Expenditure |
| 13 | Receipt on Sale of fixed asset is a | Revenue Receipt | Current Receipt | Capital Receipt | Deferred Receipt |
| 14 | Mistake in balancing an account is an error of | Omission | Commission | Principle | Compensation |


| Income tax of <br> proprietor paid out <br> of business should be <br> treated as | Expense | Income | Drawing | Liability |
| :--- | :--- | :--- | :--- | :--- |

# Model Paper Principals of Accounting Subjective 

Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward

Total marks: 60

## SECTION ------------I

Q. No:-2 Answer any six questions from the following:
i. What is credit transaction?
ii. Define Business.
iii. Define the term Capital.
iv. Describe term Account.
v. What is Pass book?
vi. Define personal Account.
vii. What is entry?
viii. What is the imprest system of petty cash?
ix. Explain contra entry.
Q. No:-3 Answer any six questions from the following:
i. Define renewal of bill of exchange
ii. Define noting charges.
iii. Explain unrepresented cheques.
iv. Who is drawer of the bill of exchange?
v. What is meant by days of grace?
vi. Define Bank Reconciliation statement.
vii. Explain the treatment of omitted cheque.
viii. Define direct expenses.
ix. Name any two fictitious assets.

## Q. No:-4 Answer any six questions from the following:

i. Define error of principle.
ii. Give two examples of deferred revenue expenditure.
iii. Define Adjustments.
iv. Give any four examples of the capital receipts.
$6 \times 2=12$
$6 \times 2=12$
$6 \times 2=12$
v. Explain the term marshalling.
vi. Define revenue loss.
vii. Describe error of commission.
viii. Explain suspense account.
ix. Explain two book keeping errors.

## Section - II

Attempt any three questions from the following:
$8 \times 3=24$

## 5- Show the effect of following transactions on the elements of Accounting Equation.

a).
i- Ahmed started business with cash Rs. 50000.
4
ii- Bought building for cash Rs. 10000.
iii- Paid salaries Rs. 1000 and outstanding salaries Rs. 200.
iv- Withdrew cash Rs. 500 for personal use.

## b). Enter the following transactions in the simple cash book.

## 2012

4
Jan., 1 Cash in hand Rs. 10000.
05,, Received cash from saleem Rs. 500
10. Paid to jamil Rs. 400

15 Cash sales Rs. 700.
6. Prepare a Bank reconciliation statement as on $31^{\text {st }}$ December, 2012 of $\mathrm{M} / \mathrm{S}$ Nadeem \& Co. from the following details 8
a) Balance as per Cash book overdrawn Rs. 54,000
b) Cheque issued Rs. 4000 are still not presented in the bank for payment.
c) Cheques amounting to Rs. 8000 were deposited on $23^{\text {rd }}$ December 2012 of which Rs. 3000 is still not credited by bank.
d) Dividend of Rs. 6000 credited by bank in bank statement but still not recorded in the cash book.
e) Cheques Rs. 20000 received but omitted to be banked.
f) Bank charges Rs. 1300 debited by bank.
7. Saad sold goods to Ali on Ist January 2011 goods valued Rs. 30000 and drew upon him a three months bill for the amount. Ali accepted the bill and returned it to Saad. On maturity, Ali
expressed his inability to meet the bill and offered to pay Rs. 10000 in cash and accepts a fresh bill for three months to cover balance plus interest at the rate of 5\% P.A. for three months. At the due date this new bill was duly met by Ali.
Pass journal entries in the books of Saad.
8. Following is the trial balance of karim \&co. on $31^{\text {st }}$ December 2011

|  | Dr. | Cr. | 8 |
| :---: | :---: | :---: | :---: |
| Opening stock | 16300 |  |  |
| Cash | 750 |  |  |
| Account Receivable | 8000 |  |  |
| Bill Receivable | 3500 |  |  |
| Motor Truck | 4000 |  |  |
| Office machine | 5000 |  |  |
| Purchases | 20000 |  |  |
| Carriage inward | 1900 |  |  |
| Salaries | 4750 |  |  |
| Office rent | 2250 |  |  |
| Misc. expenses | 850 |  |  |
| Bill payable |  | 5700 |  |
| Capital |  | 20000 |  |
| Account payable |  | 3000 |  |
| Sales |  | 38600 |  |
| Total ; | 67300 | 67300 |  |

## Adjustments:

1. Closing stock Rs. 10500
2. Prepaid rent Rs. 500
3. Salary payable Rs. 700
4.Intrest on capital @ 10\%.

Prepare Trading and profit and Loss account and Balance sheet
9.
a) State with reasons whether the following should be considered as capital or revenue

## Expenditure:

i. Interest paid on a loan taken for purchase of machinery.

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ii. Preliminary expenses in the formation of a company.
iii. Carriage paid on goods purchased.
iv. Repairs to a motor car purchased second hand.
b). Give journal entries to rectify the error:

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i. A bill for Rs. 1250 for furniture sold to Haleem was credited to sales account.
ii. An amount Rs. 2300 received on account of interest was credited to commission account.
iii. Goods to the value of Rs. 7000 were returned by Akram but return was not recorded in the books.
iv. An item of Rs. 2300 paid for the purchase of furniture debited to purchases account.
Assessment Scheme


| Sr. No | Chapters Name | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  |  | Essay Type Questions |  |  |  | Questions relating to Practicals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Allotted Marks 17 |  |  |  | Allotted Marks 44 |  |  |  | Allotted Marks 24 |  |  |  | Allotted Marks 15 |
|  |  |  |  | Q. to be asked 17 <br> Q. to be attempted 17 |  |  |  | Q. to be asked 33 Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |
|  |  |  |  | Time 20 Minutes |  |  |  | Time 3 Hours \& 10 Minutes |  |  |  |  |  |  |  |  |
|  |  |  |  | K | $\boldsymbol{U}$ | $\boldsymbol{A}$ | Total <br> Marks | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | Total <br> Marks | $\boldsymbol{K}$ | $\boldsymbol{U}$ | A | Total Marks |  |
| 1 | Introduction of psychology | 14.66\% | 18 | 1 | - | 1 | 2 | 2 | 1 | 1 | 8 | - | 1 | - | 8 | Question No.10=5 marks |
| 2 | Methods of research | 8.10\% | 10 | 1 | 1 | - | 2 | 1 | 2 | 1 | 8 | 1 | - | - | - | Question No.11=5 marks |
| 3 | Nervous system \& Behaviour | 14.66\% | 18 | 1 | - | 1 | 2 | - | 2 | 2 | 8 | - | - | - | 8 |  |
| 4 | Sensation And Perception | 8.10\% | 10 | 1 | 1 | 1 | 2 | - | 3 | 1 | 8 | - | - | - | - | Question No. $12=5$ marks |
| 5 | Learning and Memory | 14.66\% | 18 | 1 | - | 1 | 2 | 1 | 2 | 1 | 8 | - | - | 1 | 8 | Question No. $13=5$ marks |
| 6 | Motivational Behaviour | 8.10\% | 10 | 1 | 1 | - | 2 | 2 | 1 | 1 | 8 | - | - | - | - |  |
| 7 | Personality | 13.04\% | 16 | 2 | - | - | 2 | 2 | 1 | - | 6 | 1 | - | - | 8 | Question No. 14 =5 marks |
| 8 | Emotional Behaviour | 5.64\% | 07 | 1 | - | - | 1 | - | 1 | 2 | 6 | - | - | - | - |  |
| 9 | Higher Cognitive Processes | 13.04\% | 16 | 1 | - | 1 | 2 | 1 | 1 | 1 | 6 | 1 | - | - | 8 |  |
| Total |  | 100 \% | 123+25=148 |  |  |  | 17 |  |  |  | 66 |  |  |  | 40 | 25 |

Important Note:- 1) $K=$ Knowledge. $\quad U=$ Understanding / Comprehension $\quad A=$ Application \& Analysis
2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions \& questions relating to
2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions \& questions relating to practicals.
3) In order to promote the cause of concept based learning at least $10 \%$ questions must be unseen or of daily life but relating to specified le
Syllabi. This portion will increase @ $10 \%$ annually but not more than $30 \%$. 2006 5) The Practical will be conducted at the end of $12^{\text {th }}$ Class which is mandatory to qualify for award of certificate. The Practical assessment will be made in the form of grading as per following criteria.
$\mathrm{A}+=\mathbf{9 0 \%}$ \& above, $\mathrm{A}=\mathbf{8 0 \%}$ to $\mathbf{8 9 \%}, \mathrm{B}=\mathbf{7 0 \%}$ to $\mathbf{7 9 \%}, \mathrm{C}=\mathbf{6 0 \%}$ to $\mathbf{6 9 \%}, \mathrm{D}=\mathbf{5 0 \%}$ to $\mathbf{5 9 \%}, \mathrm{E}=\mathbf{4 0 \%}$ to $\mathbf{4 9 \%}, \mathrm{F}=\mathrm{Fail}=\mathbf{4 0 \%}$ \& below

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Note：－You have four choices for each objective type question as A，B，C and D．The choice which you think is correct；fill that circle in front of that question number．Use marker or pen to fill the circles．Cutting or filling two or more circles will result in zero mark in that question．

| （ D ） | （C） | （B） | （ A$)$ | QUESTIONS | Q． 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| جـج بُ وأثن <br> J．B．Watson | －，， <br> Willhelm <br> Woundt | $\begin{gathered} \hline \text { Kohlar } \end{gathered}$ | ， <br> Pavlove | Who established the first labratory of Psychology？ | 1 |
|  <br> Clinical <br> Psychology |  <br> Educational <br> Psychology | كروارىنـيـات <br> Behavioural <br> Psychology |  <br> Experimental <br> Psychology | Which Branch of Psychology diagnoses the psychological disorders？ | 2 |
| الن يِ ع كونَيْنِ <br> None of them | $\begin{gathered} \text { Subjective } \\ \text { Sun } \end{gathered}$ | $\begin{gathered} \text { تنغيزات } \\ \text { Variables } \end{gathered}$ | Objective | In experiment，the elements which can be change are？？ | 3 |
| i <br> Freud | $\begin{gathered} \text { واُّنْ } \\ \text { Watson } \end{gathered}$ |  |  | Who analyzed 91 famous personalities in 1950？ | 4 |
| يتاتم <br> All of them |  <br> Associative <br> Neuron |  | 7ك <br> Motor Neuron | Which neuron carry the message from barin to glands ？ | 5 |
| 26＂－30＂ | 22＂－24＂ | 16＂－20＂ | 10＂－16＂ | How long is spinal cord？ | 6 |
| 7 | 6 | 5 | 4 | How many senses are in humans？ | 7 |
| 066 <br> Ear Drum | Uいごッダ <br> Circular Semi <br> Canals |  <br> Oval Window |  | ， <br> Which one is a part of ear，but do not take part in the function of hearing？ | 8 |
| جـج بِ واُّن J．B．Watson | －وبي <br> Willhelm <br> Woundt | $$ | بيولو <br> Pavlove | Who is the founder of classical conditioning？ | 9 |
|  | قون <br> Law of exercise |  <br> Law of effect | قانون آاركى <br> Law of <br> Readiness | According to which law of learning，the learning process became easy by repitition？ | 10 |
| $\begin{aligned} & \text {;ivench } \\ & \text { Frenc } \end{aligned}$ | روكى <br> Russian | اركيكن <br> American | $\begin{aligned} & \text { لالـنز } \\ & \text { Latin } \end{aligned}$ | ＂Motivus＂belongs to which language？ | 11 |
| ر／ <br> Sympathetic | بيرن ثـُن <br> Extrovert | اتُرون Introvert | ． <br> Brave |  <br> The people who are keen to＂Motive of power＂are called： | 12 |
| 3 | 6 | 5 | 4 |  <br> According to Freud how many stages of development up to adolescence？ | 13 |
| : ل يّن <br> Tolman | $\therefore$ <br> Rotter | رورثا <br> Rorschach | < <br> Murray |  <br> Who introduced Thematic Apperception Test？ | 14 |


| , ورو ورّه <br> Woodworth |  |  | $\begin{aligned} & \hline \text { بیز لانگّ James Lange } \end{aligned}$ | "er" <br> "Emotion is a state in which an individual become agressive" who said? | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CA/MA + 100 | MA/CA + 100 | CA/MA x 100 | MA/CA $\times 100$ | -مثا <br> Which one is the correct formula of Inteligence Quotient? | 16 |
| سُّن <br> Stern | - <br> Spearman | Wechsler | Terman | , <br> Who introduced Two Factor Theory of Inteligence? | 17 |



i) Explain the purpose of Psychology.
ii) First experimental laboratory of Psychology established, when and where?
iii) Explain the role of criminal Psychology..
iv) Define the best definition of Psychology.
v) Explain direct method of survey.
vi) Explain introspective observational method.
vii) Which Psychologists are involve in the study of case history method?
viii) Discuss about three steps of research.
ix) According to structure write down the parts of neuron.
x) What is meant by synaptic left?
xi) What is the role of oxcipical lobe?
xii) Explain "Pacemaker"
$8 \times 2=16$
i) Discuss the structure of retina.
ii) Explain Myopia.
iii) Write down the parts of middle ear.
iv) Differentiate between hallucination and illusion.
v) Define learning.
vi) Explain short term theory.
vii) Discuss about the meaning of stimulus and response.
viii) Explain the principles of classical condining.
ix) Which type of hormones secrete in motive of sex?
x) Explain Homeotasis.
xi) Which type of hormone recrete in maternal motive?
xii) Write down the steps of creative method.
$6 \times 2=12$
i) Explain the division of personality in the period of early Greek.
ii) Discuss the types of personality theory of Jung.
iii) Explain the work of Dr. Hamid Sheikh in testing.
iv) Which hormones recreted by pancreas and adrenal gland?
v) What are the changes develop in the eyes during emotion?
vi) What is the role of learning and environment during emotion?
(ii)
-
جنى جك بي (ix)
(xi)
4هو
!u؟
يّبان يّ آموزث اور اولك كاكّل ب؟

$$
\begin{aligned}
& \text { وتت } 3.10 \text { گُ } \\
& \text { 2 } \\
& \text { - نفيات ع مقاصر بيان بكجّ (i) } \\
& \text { (ii) }
\end{aligned}
$$

$$
\begin{aligned}
& \text { - }
\end{aligned}
$$

$$
\begin{aligned}
& \text { (vii) } \\
& \text { (viii) } \\
& \text { - } \\
& \text { (x) } \\
& \text { (xi) } \\
& \text { - } \\
& \text { 3- نوط: كوَ }
\end{aligned}
$$

vii) Expalin the factors of intelligence.
viii) What is meant by WAIS and WISC?
ix) What is the last expected response?
(vii)

(ix)


Note: Attempt any three questions from the following.
Q. 5 Write a detailed note on different branches of Pschology.
Q. 6 Explain the structure and function of ear.
Q. 7 Explain the tests which are used for measurement of personality?
Q. 8 Expalin primary motives.
Q. 9 Discuss about the theories of emotion.
(حـروم)


$$
\begin{aligned}
& \text { بِ بيان شَجْ؟ }
\end{aligned}
$$

(حصـوم)

5x3=15 - نو
 والنْبر 11
Q. 13 Write down the instruments used in practical "Problem Solving". - والْبر13 .
Q. 14 Write down the results of experiment "Effect of Suggession on Perception".
Assessment Scheme
For Statistics 11 ${ }^{\text {th }}$ Part I Session 2012-13 \& ONWARD
Time: $03: 30 \mathrm{hrs} \quad$ Total Marks:- 100

| Sr. <br> No | Chapters Name | Weightage | Distribution of Marks | M.C.Qs |  |  |  | Short Answer Questions |  |  |  | Essay Type Questions |  |  |  | Questions relating to Practicals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Allotted Marks 17 |  |  |  | Allotted Marks 44 |  |  |  | Allotted Marks 24 |  |  |  | Allotted Marks 15 |
|  |  |  |  | Q. to be asked 17 <br> Q. to be attempted 17 |  |  |  | Q. to be asked 33 <br> Q. to be attempted 22 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |  |  |  | Q. to be asked 5 Q. to be attempted 3 |
|  |  |  |  | Time Minutes 20 |  |  |  | Time 03:10 Hours |  |  |  |  |  |  |  |  |
|  |  |  |  | K | $\boldsymbol{U}$ | A | $\begin{gathered} \text { Total } \\ \text { Marks } \end{gathered}$ | K | $\boldsymbol{U}$ | A | $\begin{aligned} & \hline \text { Total } \\ & \text { Marks } \end{aligned}$ | K | $\boldsymbol{U}$ | A | $\begin{array}{\|c} \hline \text { Total } \\ \text { Marks } \end{array}$ | Question No.10=5marks |
| 1 | Introduction | 4.06 \% | 5 | 1 | - | - | 1 | 2 | - | - | 4 | - | - | - | - |  |
| 2 | Presentation of Data | 4.88 \% | 6 | 1 | - | 1 | 2 | 2 | - | - | 4 | - | - | - | - | Question No.11=5marks |
| 3 | Central Tendency | 16.26 \% | 20 | 1 | 1 | - | 2 | 2 | 1 | 2 | 10 | - | - | 2 | 8 |  |
| 4 | Dispersion | 18.7 \% | 23 | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 12 | - | - | 2 | 8 | Question No.12=5marks |
| 5 | Index Number | 13 \% | 16 | - | - | 2 | 2 | 2 | 1 | 2 | 10 | - | - | 1 | 4 | Question No.13=5marks |
| 6 | Probability | 11.38 \% | 14 | - | - | 2 | 2 | 2 | 1 | 1 | 8 | 1 | - | - | 4 | Question No.14=5marks |
| 7 | Random Variable | 16.26 \% | 20 | 2 | - | - | 2 | 2 | 1 | 2 | 10 | - | - | 2 | 8 |  |
| 8 | Binomial \& Hypergeometric | 15.45 \% | 19 | 3 | - | - | 3 | 2 | - | 2 | 8 | - | - | 2 | 8 |  |
|  | Total | 100 \% | 123+25=148 |  |  |  | 17 |  |  |  | 66 |  |  |  | 40 | 25 |

Important Note:- 1) $\mathrm{K}=$ Knowledge.
2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions \& questions relating to practicals.
3) In order to promote the cause of concept based learning at least $10 \%$ questions must be unseen or of daily life but relating to specified learning outcomes of Curricula \&
Syllabi. This portion will increase @ $10 \%$ annually but not more than $30 \%$.
4) The questions relating to practical will be asked from the practical Note Book as per chapter were detail given in the curriculum and syllabi 2006 .
5) The Practical will be conducted at the end of $12^{\text {th }}$ Class which is mandatory to qualify for award of certificate.
$A+=90 \%$ \& above, $\mathrm{A}=\mathbf{8 0 \%}$ to $\mathbf{8 9 \%}, \mathrm{B}=\mathbf{7 0 \%}$ to $\mathbf{7 9 \%}, \mathrm{C}=\mathbf{6 0 \%}$ to $\mathbf{6 9 \%}, \mathrm{D}=\mathbf{5 0 \%}$ to $\mathbf{5 9 \%}, \mathrm{E}=\mathbf{4 0 \%}$ to $\mathbf{4 9 \%}, \mathrm{F}=\mathrm{Fail}=40 \%$ \& below

## Model Paper Statistics Objective

## Intermediate Part - I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward

Total marks: 17 Paper Code $\qquad$ Time Allowed: 20 minutes

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| $\begin{gathered} \mathbf{Q} \\ \text { No. } 1 \end{gathered}$ | Question | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | The science of collecting, organization, analyzing the data is called | Statistics | Parameter | Population | Mathematics |
| 2 | Classification of data by attributes is called | Quantitative data | Qualitative data | Geographical data | Chronological data |
| 3 | The lower and upper class limits 20 and 30 the midpoint of the class is | 20 | 25 | 30 | 50 |
| 4 | Geometric mean can be computed by | $\frac{\Sigma \log X}{n}$ | $\frac{\Sigma X l o g f}{\Sigma f}$ | Antilog $\left\lfloor\frac{\Sigma \log X}{n}\right\rfloor$ | $\text { Antilog }\left\lfloor\frac{n}{\sum \log X}\right\rfloor$ |
| 5 | The total of all observations divided by the number of observations is called | Arithmetic mean | Geometric mean | Median | Mode |
| 6 | The range of the scores $29,3,143,27,99$, is | 140 | 143 | 146 | 70 |
| 7 | The variance is zero only if all observations are the | Different | Square | Square root | Same |
| 8 | The lack of uniformity or symmetry is called | Skewness | Dispersion | Kurtosis | Standard deviation |
| 9 | Index for base period is always taken as | One | 100 | 200 | Zero |
| 10 | Laspeyre's index=110, Paasche's index $=108$, then Fisher's index is equal to | 110 | 108 | 100 | 109 |
| 11 | If three coins are tossed, the possible outcomes are | 8 | 3 | one | 6 |
| 12 | The probability of drawing any one Spade card is | 1/13 | $1 / 4$ | 4/13 | 1/52 |
| 13 | If " $c$ " is a constant (Non random variable), then E(c) | Zero | one | c f(c) | c |


|  | is |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 14 | An expected value of <br> a random variable is <br> equal to its | Variance | Standard <br> deviation | Mean | Mode |
| 15 | Parameters of <br> Binomial distribution <br> are | $\mathrm{n}, \mathrm{k}$ | $\mathrm{n}, \mathrm{p}$ | $\mathrm{n}, \mathrm{q}$ | $\mathrm{n}, \mathrm{p}, \mathrm{q}$ |
| 16 | The Bernoulli trial <br> has | At least two <br> outcomes | At-most two <br> outcomes | Two outcomes | Fewer then two <br> outcomes |
| 17 | The parameters of <br> Hypergeometric <br> distribution are | $\mathrm{N}, \mathrm{n}, \mathrm{p}$ | $\mathrm{N}, \mathrm{n}, \mathrm{K}$ | $\mathrm{N}, \mathrm{n}, \mathrm{np}$ | n and p |

## Model Paper Statistics Subjective

Intermediate Part -I (11 ${ }^{\text {th }}$ Class) Examination Session 2012-2013 and onward
Total marks: 83
Time: 3:10 hours

## SECTION -------------I

Q. No: - 2 Answer any Eight (08) parts from the followings: $\quad 8 \times 2=16$
i) Differentiate between population and sample.
ii) Write any two sources of primary data.
iii) What is percentile?
iv) Define geometric mean.
v) If Mean $=20$ Median $=18.67$ find mode.
vi) Given the value: $3,5,0$ find geometric mean and harmonic mean.
vii) Write any two properties of arithmetic mean.
viii) What is consumer price index number?
ix) Distinguish between simple and composite index number.
x) Write formula for Fisher index number.
xi) Given $\sum \mathrm{P}_{0} \mathrm{Q}_{1}=850$ and $\sum \mathrm{P}_{1} \mathrm{Q}_{1}=1210$ find paasches index number.
xii) Given $\mathrm{W}=20,25,15,28$ and $\mathrm{I}=100,106,115,120$ constant consumer price index number.

## Q. No: - 3 Answer any Eight (08) parts from the followings: $\quad \mathbf{8} \times \mathbf{2 = 1 6}$

i) Define class interval
ii) What is histogram
iii) Define absolute dispersion
iv) If $\beta_{1}=10 \beta_{2}=10$ Discuss the shape of the curve.
v) What is meant by skewness.
vi) If standard deviation of value of $X$ is 5 what is the standard deviation of value of $4 X$.
vii) Is it possible that first moment about mean is 10 ?
viii) Draw the shapes of mesokurtic, platykurtic ,leptokurtic curve.
ix) What do you mean by mutually exclusive events?
x) Define sample space.
xi) Write the sample space when three coins are tossed.
xii) Are the events A and B independent if $\mathrm{P}(\mathrm{A})=.5$ and $\mathrm{P}(\mathrm{A} / \mathrm{B})=.4$

## Q. No: - 4 Write short answer any six question.

I. Define discrete random variable.
II. Define probability distribution
III. If $\mathrm{E}(\mathrm{X})=5$ and $\mathrm{E}(\mathrm{Y})=-23$ then $\mathrm{E}(\mathrm{X}-\mathrm{Y})=$ ?
IV. State any two laws of expectation.
V. Check for $Y=1,2,3,4$ is $f(Y)=\frac{Y+\mathbf{1}}{\mathbf{1 4}}$ a probability density function.
VI. If $\mathrm{n}=10$ and $\mathrm{p}=.4$ find mean and variance of binomial distribution
VII. Define binomial distribution
VIII. Write down properties of Hypergeometric Experiment
IX. Calculate the probability of all aces in a sample 4 out of 52 playing cards when cards are drawn without replacement.

## Section - II

## Note: Attempt any three questions.

Q. No: - 5
(a) The Logarithm of i 910 value of X are $1.0792,1.1761,1.1761,0.9542,1.2041$, $1.2553,1.3010,1.3979,1.3010,1.4771$, calculate the arithmetic mean of X.
(b) Find out the Median of the following values
(I) $5,4,8,3,7,2,9$
(II) $18.3,20.6,19.3,22.4,20.8,18.8$.
Q. No: - 6
(a) Computes the variance from the following data

| $\mathbf{X}$ | 200 | 300 | 350 | 700 | 840 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{F}$ | 4 | 2 | 2 | 1 | 1 |

(b) Given $\sum \mathrm{f}=120, \sum \mathrm{fx}=296$, Mode $=2.94$ and second moment about mean $=1.48$ calculate coefficient of skewness .
Q. No:-7 (a) Compute chain index number for the following data taking 1997 as base year

| Years | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Prices | 180 | 185 | 194 | 200 | 204 | 218 | 220 |

(b) A card is selected at random from a deck of playing cards find the probability that card is King or a Queen
Q. No:-8(a)

Let " X " have the following probability distribution

| X | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{P}(\mathrm{X})$ | .05 | .40 | .10 | .25 | .05 | .15 |

Find (I) $\mathrm{E}(\mathrm{x})$
(II) $\mathrm{E}\left(x^{2}\right)$
(b) Continuous random variable " X " has p.d.f $\mathrm{f}(\mathrm{X})=\mathrm{CX}$ when $0<\mathrm{X}<2$
(I) Determine C
(II) $\mathrm{P}(1<\mathrm{X}<1.5)$
Q. No:-9(a)
(4+4)
An event has probability $\mathrm{P}=2 / 5$ find the complete binomial distribution when $\mathrm{n}=3$
(b) (I) Given $\mathrm{N}=10, \mathrm{n}=2, \mathrm{~K}=3$ find $\mathrm{P}(\mathrm{X}=0)$
(II) Given $N=10 \quad n=4 \quad K=5 \quad$ find $E(X)$

## Section - III

## Note: Attempt any three Question.

Q. No: - 10 Find the value of Mode from the given data.

| Marks | $10-19$ | $20-29$ | $30-39$ | $40-49$ | $50-59$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No of Students | 5 | 25 | 40 | 20 | 10 |

Q. No: - 11 Calculate Mean deviations about mean from the following data

| Class interval | $0-5$ | $5-10$ | $10-15$ | $15-20$ | $20-25$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{F}$ | 140 | 200 | 100 | 50 | 10 |

Q. No:-12 Given the following information.

| Commodities | 2002 |  | 2003 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Price | Quantity | Price | Quantity |
| A | 10 | 12 | 20 | 22 |
| B | 8 | 8 | 16 | 18 |
| C | 5 | 6 | 10 | 11 |

Compute Fisher's index number
Q. No: - 13 The probability of male birth is equal to probability of female birth. Out off 400 families with 4 children each find expected number of families with $0,1,2,3$, and 4 males.
Q. No: - 14 An urn contains 9 balls 5 of which are Red and 4 Blue. 3 balls are drawn without replacement. Find probability distribution of X when $\mathrm{X}=$ number of Red balls drawn.


[^0]:    2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions \& questions relating to practicals.
    3) In order to promote the cause of concept based learning at least $10 \%$ annually but not more than $30 \%$.
    4) The questions relating to practical will be asked from the practical Note Book as per chapter were detail given in the curriculum and syllabi 2006 . 5) The Practical will be conducted at the end of $12^{\text {th }}$ Class which is mandatory to qualify for award of certificate.

    The Practical assessment will be made in the form of grading as per following criteria.
    $A+=90 \%$ \& above, $A=80 \%$ to $89 \%, B=70 \%$ to $79 \%, C=60 \%$ to $69 \%, D=50 \%$ to $59 \%, E=40 \%$ to $49 \%, F=F a i l=40 \%$ \& below

[^1]:    Important Note:- 1) K= Knowledge.
    2) This scheme of Assessment is prepared as per $33 \%$ choice in short answer questions, essay questions \& questions relating to practicals.
    3) In order to promote the cause of concept based learning at least $10 \%$ questions must be unseen or of daily life but relating to specified learning outcomes of Curricula \& Syllabi. This portion will increase @ $10 \%$ annually but not more than $30 \%$.
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    $\mathrm{A}+=\mathbf{9 0} \%$ \&

[^2]:    Important Note: - 1) K=Knowledge.

