MANIPAL UNIVERSITY

FOURTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: MEDICAL TERMINOLOGY II/MEDICAL LANGUAGE II (BHI 202)
(COMMON FOR OLD REGULATION & CBS-2013 SCHEME)

Tuesday, June 16, 2015

Time: 10:00-13:00 Hrs   Max. Marks: 80

---

1. **Explain the following medical terms:**

   a) Botulism   b) Priapism   c) Apraxia   d) Mucolipidosis

   e) Acromegaly f) Cystitis   g) Atherosclerosis h) Leocoplakia

   i) Chloasma   j) Haze

   (1 mark × 10 = 10 marks)

2. **Expand the following abbreviations:**

   a) FNTD   b) RND   c) STD   d) IGF

   e) MAC   f) MVP   g) ECT   h) PMS

   i) IAO   j) TSS

   (1 mark × 10 = 10 marks)

3. **Briefly describe the following conditions:**

   3A. Acquired deafness

   3B. Polycystic Ovary Syndrome

   3C. Coronary Heart Disease

   3D. Beri –beri

   3E. Schizophrenia

   3F. Typhoid

   3G. Conjunctivitis

   3H. Herpes

   3I. Hypothyroidism

   3J. Puerperal Sepsis

   (2½ marks × 10 = 25 marks)

4. **Give the correct medical term for the following:**

   4A. Swelling of superficial veins of the legs

   4B. Fever of unknown origin

   4C. Inflammation of a tendon sheath

   4D. Surgical fixation of a floating kidney

   4E. Distension of the abdomen caused by gas

   (1 mark × 5 = 5 marks)

5. **Answer the following questions:**

5A. What are the nutritional disorders? Explain any five of them.

5B. Distinguish between Anorexia nervosa and bulimia nervosa.

5C. Give an account of leukaemia.

5D. Describe the syndrome AIDS.

5E. Explain briefly about cancroid and candidiasis.

5F. What are the different types of abortion?

(5 marks × 6 = 30 marks)

MANIPAL UNIVERSITY

FOURTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: BASIC ACCOUNTANCY (BHI 206)
(COMMON FOR OR & 2013 SCHEME)

Thursday, June 18, 2015

Time: 10:00-13:00 Hrs.   Max. Marks: 80

---

1.   **Answer any TEN of the following:**

1A.   What are real accounts? What is its rule of debit and credit?

1B.   What is double entry system of accounting?

1C.   What is posting? Explain how a transaction is posted to the ledger?

1D.   What do you mean by single column cash book. Give specimen.

1E.   Explain the meaning of purchase return book.

1F.   What is a bank reconciliation statement?

1G.   What is the object of preparing a profit and loss account?

1H.   Distinguish between cash transaction and credit transaction.

1I.   Explain:
      i)   Transaction
      ii) Account

1J.   Who is a debtor and creditor?

1K.   Differenciate between Gross profit and Net profit.

1L.   What is suspense account?

(2 marks × 10 = 20 marks)

✍   **Solve the following problems:**

2.   Enter the following transactions in a cash book with cash and discount columns.
      2014
      March 1 Commenced business with cash ₹ 10,000
      March 4 Opened a current account in Vijaya bank and deposited therein ₹ 5,000
      March 5 Purchased goods for cash ₹ 2,000
      March 8 Received cash for sales ₹ 1,500
      March 10 Purchased goods for ₹ 4,000 and paid by cheque.
      March 11 Sold goods on credit to Adarsh ₹ 5,000
      March 15 Bought furniture for cash ₹ 3,000
      March 16 Borrowed loan from Manoj ₹ 10,000
      March 21 Paid for stationery ₹ 500
      March 22 Cheque received from Adarsh for ₹ 4,900 in full settlement of his account
      March 28 Paid rent by cheque ₹ 500

(15 marks)

3. Enter the following transactions in proper subsidiary books:

2008

Jan 1 Purchased goods from Pratap, Mysore ₹ 800

Jan 3 Sold goods to Shivaram ₹ 300

Jan 4 Sold goods to Vinayaka ₹ 240

Jan 6 Bought goods from Venkatesh ₹ 900

Jan 7 Bought goods from Dattatreya ₹ 1,500

Jan 10 Shivaram returned goods ₹ 50

Jan 11 Bought goods from Gopal ₹ 1,500

Jan 12 Returned goods to Pratap ₹ 200

Jan 15 Returned goods to Dattatreya ₹ 100

Jan 17 Sold goods to Gururaj worth ₹ 2,000, subject to a trade discount of 25%

Jan 18 Vinayaka returned goods ₹ 40

Jan 20 Bought from Ananth ₹ 900

(15 marks)

4. Mayur started business with the following on 01/01/14:

	₹
Cash	5,000
Furniture	3,000
Amount due from Shivaram	1,000
Amount due to Supreeth	1,000
Goods	3,000
His transactions during the month were as follows:	
Jan 2 Purchased goods from Nandana	3,500
Jan 3 Sold goods to Tarana	5,000
Jan 5 Introduced fresh capital	10,000
Jan 10 Paid Nandana on account	2,000
Jan 15 Received from Tarana on account	3,000
Jan 18 Withdrew cash for personal use	500
Jan 25 Sold goods to Udaya subject to	
5% trade discount	3,000
Jan 31 Paid wages to workers	500

Pass Journal Entries and prepare cash account and capital account in the books of Mayur.

(15 marks)

5. From the following trial balance, prepare the trading and profit and loss account for the year ended 31.12.2013 and the balance sheet as on that date after taking in to account the adjustments at the end.

Trial balance

Particulars	Dr(₹)	Cr(₹)
Capital of Mr. Sharma		1,00,000
Drawings	16,000	
Stock 1.1.2013	35,000	
Purchases	1,49,000	
Sales		2,17,000
Purchases return		1,600
Sales returns	6,000	
Land and building	85,000	
Sundry Debtors	24,000	
Sundry Creditors		10,200
Bad debts reserve		2,000
Salaries	4,000	
Rent and taxes	1,800	
Discounts	400	
Wages	5,560	
Postage and stationary	1,860	
Furniture	2,000	
Carriage inwards	1,400	
Bad debts	1,240	
Bills receivable	1,700	
Bills payable		1,570
Bank overdraft		2,830
Cash	240	
	3,35,000	3,35,000

Value closing stock at ₹ 45,560.

Create 5% reserve for bad and doubtful debts.

Depreciate land and building at 20% and furniture at 5%.

Rent of ₹ 200 has been paid in advance.

(15 marks)

MANIPAL UNIVERSITY

FOURTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: BHI 208 – FUNDAMENTALS OF MANAGEMENT
(COMMON FOR OR & 2013 SCHEME)

Saturday, June 20, 2015

Time: 10:00-13:00 Hrs.   Max. Marks: 80

✍ **Answer the following questions:**

1. "Communication is sharing of understanding." Comment. What are the communication networks in a working group?

                                                        (5+5 = 10 marks)

2. What is controlling in management? What is the need for controlling? Explain the basic steps in the control process.

                                                        (2+2+6 = 10 marks)

3. Discuss Herzberg's theory of motivation. How, according to him, is job enrichment important in motivating people? Discuss the theory is different from Maslow's theory?

                                                        (10 marks)

4. "Leaders are not born but made." Comment

                                                        (10 marks)

5. What is the distinction between coordination and cooperation? Discuss the requisites for an excellent coordination. What could be the difficulty of coordination for a manager?

                                                        (2+4+4 = 10 marks)

6. How are PERT and CPM networks developed? What is critical path? How is it determined?

                                                        (10 marks)

7. **Write short notes on:**

7A. Conflict

7B. Stress

7C. Manpower planning

7D. Difficulties in decision making

                                                        (5 marks × 4 = 20 marks)

MANIPAL UNIVERSITY

THIRD YEAR/SIXTH SEMESTER BASLP AND FOURTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: BASIC STATISTICS & SCIENTIFIC ENQUIRY IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY/ BASIC STATISTICS (B 6.3) AND EPIDEMIOLOGY & BIOSTATISTICS (BHI 204)

(COMMON FOR NR AND OLD/2013 SCHEME)

Tuesday, June 23, 2015

Time: 10:00-13:00 Hrs.   Max. Marks: 80

1.   Explain the steps in a research process.

(5 marks)

2.   Usage of oral contraceptives by 250 women who visited a health center is given below. Construct a bar diagram for the same.

Oral contraceptive usage	Number of women
Never	150
Sometimes	80
Always	20

(5 marks)

3.   Compute the range, 35th percentile, first and third quartiles for the data on duration in days of chicken pox disease in 10 patients.

14   15   14   17   17   13   15   11   10   14

(10 marks)

4.   The duration of time from the first exposure to HIV infection to AIDS diagnosis is called the incubation period. The incubation periods of a random sample of 10 HIV infected individuals in given below (in years):

7.5   11.0   10.5   10.0   6.5   13.5   12.0   7.5   11.5   10.0

4A. Calculate mean, median and standard deviation of incubation period.

4B. If the number 6.5 above were changed to 9.5, what would happen to the mean and median? State whether each would increase, decrease or remain the same.

(8+2 = 10 marks)

5.   With the help of scatter diagram explain correlation.

(5 marks)

6.   **Classify the following into different scales of measurement:**

a)   Height   b)   Gender   c)   Systolic blood pressure

d)   Temperature (°C)   e)   Marital status

(5 marks)

7. **Define the following:**

7A. Crude birth rate

7B. Case fatality rate

7C. Incidence rate

(2 marks × 3 = 6 marks)

8. Serum cholesterol is an important risk factor for coronary disease. Serum cholesterol is approximately normally distributed with mean 210 mg/dL and standard deviation 20 mg/dL.

8A. If the clinically desirable range for cholesterol is < 190 mg/dL, then what proportion of people has clinically desirable levels of cholesterol?

8B. Some investigators feel that only cholesterol levels over 250 mg/dL indicate a high – enough risk for heart disease to warrant treatment. What proportion of the population does this group represent?

(2+2 = 4 marks)

9. **Write short notes on:**

9A. Validity

9B. Qualitative variables

9C. Non-probability sampling

9D. Skewness and kurtosis

9E. Census

9F. Cross sectional studies

(5 marks × 6 = 30 marks)

MANIPAL UNIVERSITY

FOURTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: BHI 212 – FUNDAMENTALS OF HEALTH INFORMATICS
(COMMON FOR OR & 2013 SCHEME)

Thursday, June 25, 2015

Time: 10:00-11:30 Hrs.   Max. Marks: 40

✍ **Answer ALL questions:**

1. Discuss the system theory of health informatics with suitable example.

(10 marks)

2. What are the recent advances observed in the field of health informatics related to the clinical areas? Explain with suitable example.

(10 marks)

3. What is the need of health informatics application for the institution, clinical documentation and operation support? Discuss with suitable example.

(4+3+3 = 10 marks)

4. **Write short notes on:**

4A. Trend to predict the development of healthcare informatics

4B. Hospital Information System

(5 marks × 2 = 10 marks)

MANIPAL UNIVERSITY

FIFTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: FRONT OFFICE MANAGEMENT

(OLD REGULATION)

Tuesday, June 02, 2015

Time: 10:00 – 13:00 Hrs.   Maximum Marks: 80

✍   All questions are compulsory.

1. What is Public Relation as per AAPR? List the important functions of PRD in a health care institution.

(2+8 = 10 marks)

2. Describe briefly the different functional aspects of innovative marketing.

(10 marks)

3. Describe in detail the scope and components of an HIS. Describe the model depicting hierarchy of information flow in an HIS.

(5+5+5 = 15 marks)

4. Draw a neat chart depicting different aspects of hospital services and explain each of them briefly.

(5+10 = 15 marks)

5. **Write short notes on the following:**

5A. Current scenario of health care industry

5B. Importance of patient satisfaction in hospitals

5C. Functions of hospital services

5D. Marketing variables

5E. Fixing prices of hospital services

5F. Human resource management in hospitals

(5 marks × 6 = 30 marks)

MANIPAL UNIVERSITY

FIFTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: INTRODUCTION TO HEALTH INSURANCE
(OLD REGULATION)

Thursday, June 04, 2015

Time: 10:00 – 13:00 Hrs.   Maximum Marks: 80

---

1.   **Answer all the questions:**

1A.   What are FFS and HMOs? What are the differences between FFS and HMO plans? Explain.

1B.   What is SNDO? Explain the features of SNDO with examples.

1C.   What is meant by classification of disease? Briefly write about the contents of Volume 1 and volume 3 of ICD-10.

1D.   With suitable examples write the coding guidelines for neoplasm.

1E.   What is the scope of coding of diseases and procedures in healthcare providers? Discuss.

(10 marks × 5 = 50 marks)

2.   **Write short notes on:**

2A.   Formulary and exclusions

2B.   Non-cancellable policy

2C.   Claim

2D.   NCHS

(5 marks × 4 = 20 marks)

3.   **Solve the given problem.**

Sum Assured	₹ 2,00,000
co - insurance clause	85/15 up to ₹ 50,000
Annual deductible	₹ 750
Hospital bill of Mr. XYZ for the year 2013	
May (Includes co-pay of ₹ 2,750)	₹ 24,000
August	₹ 1,32,500
September	₹ 17,000
December	₹ 23,500

Calculate the amount of money insurance company will pay and the out-of –pocket expense of the client.

(10 marks)

MANIPAL UNIVERSITY

FIFTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: BHI 305: PUBLIC HEALTH INFORMATION MANAGEMENT
(COMMON FOR OR AND CBS-2011 SCHEME)

Saturday, June 06, 2015

Time: 10:00 – 13:00 Hrs.   Maximum Marks: 80

✍ **Answer ALL the questions.**

1. What is the objective of maintaining health information? Briefly discuss the types of health information and its various sources.

(1+5+6 = 12 marks)

2. Write the types of routine data collection. Briefly explain the steps required in designing and developing instruments for routine data collection.

(6+6 = 12 marks)

3. Write in detail about the utilization of health information at various levels of health system.

(12 marks)

4. "Health information systems succeed or fail due to resource constraints at both the primary level and the immediate support level". Reason out the statement, discussing the HIS resources required at all the levels of health system.

(12 marks)

5. Write the components and subsystems that requires review during HIS assessment. Briefly discuss the steps required to assess health information system.

(3+3+6 = 12 marks)

6. **Write short notes on:**

6A. Reason for computerizing health information system
6B. Key elements of population based health information system
6C. Vertical data transmission
6D. Framework for defining information needs and indicators

(5 marks × 4 = 20 marks)

✂✄✂✄✂

MANIPAL UNIVERSITY

FIFTH SEMESTER B.Sc. H.I.A. DEGREE EXAMINATION – JUNE 2015

SUBJECT: COMPUTER APPLICATIONS IN HEALTH
(OLD REGULATION)

Tuesday, June 09, 2015

Time: 10:00 – 13:00 Hrs.   Maximum Marks: 80

✍ **All questions are compulsory.**

1. What is hospital information system? Write the functions and salient features of central registration module, MLC register module, Laboratory module, and Radiology module of HIS.

   (1+9 = 10 marks)

2. Define the term electronic health record. Mention various levels of electronic health records. Write the advantage of electronic health records over paper based record.

   (1+3+6 = 10 marks)

3. Mention the need for clinical decision support system in a hospital setup. How DSS supports clinicians in quality decision making?

   (4+6 = 10 marks)

4. Discuss on impact of computers on healthcare professionals, managers, paramedical staff and nurses.

   (10 marks)

5. Define the term eHealth. Discuss on challenges in successful implementation of eHealth applications.

   (1+9 = 10 marks)

6. Trace the history and development of third and fourth generation of computers.

   (5+5 = 10 marks)

7. **Write short notes:**

7A. Needs for telemedicine

7B. Phases of computer evolution in India

7C. Computer hardware and software

7D. Internet

   (5 marks × 4 = 20 marks)