| <b>Roll No:</b> |  |
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# End Semester Examination – April, 2017

Program/course: BBA - FSM Semester - VI
Subject: Fixed Income securities Max. Marks : 100
Code : BBCF 138 Duration : 3 Hrs.

No. of page/s: 3

## Section - A 5x2 = 10 Marks

- 1. If coupon rate is equal to rate of interest in prevailing in the market then bond will be sold
  - A. At par value
  - B. Below its par value
  - C. More than its par value
  - D. None of the above
- 2. Issuing process of treasury bills is classified as
  - A. Treasury trading auction
  - B. Treasury fund auction
  - C. Treasury bills auction
  - D. Treasury bills transfer
- 3. Funds transferred usually for a day between financial institutions are classified as
  - A. Federal funds
  - B. Bankers funds
  - C. Debt funds
  - D. Secured funds
- 4. Promissory notes issued by company for short term fund raising and are unsecured are classified as
  - A. Certificate of deposits
  - B. Debt paper
  - C. Banker acceptance
  - D. Commercial paper

- **5.** If a bond pays 12% coupon on face value of Rs500 and trading at Rs485 what would be the current yield
  - A. 4.169 %
  - B. 2.223 %
  - C. 2.742 %
  - D. 3.258 %

#### Section - B 4x10 = 40 Marks

- 1. What is money market and explain its functions, benefits and participants of money market?
- 2. Explain instruments traded under money market and types of treasury bills?
- 3. What is credit rating explain its criteria and suggest rating benefits for issuer and owner?
- 4. A Finance corporation is planning to sell a 8 years bond for 2000 @ 3% rate of interest semiannually and required rate of return from this bond is 12% find the value of bond.

### Section – C 50 Marks

- 1. 8% coupon bond was issued by Honeywell with a 6-year maturity and \$2300 principal after 6 years redeemable @ 4% suggest suitable discount rate for the investor.(10 marks)
- 2. Calculate expected risk and return for following: (10 marks)

|           |             | Rate of return % |           |  |  |  |
|-----------|-------------|------------------|-----------|--|--|--|
| Condition | Probability | X company        | Y company |  |  |  |
| Good      | 45%         | 15               | 16        |  |  |  |
| Average   | 40%         | 8                | 9         |  |  |  |
| Bad       | 15%         | -11              | -13       |  |  |  |

- 3. a) The price of a bond is 3000 which has coupon rate of 11% and available in the market @ 2500 at the end of 9 year find the yield to maturity. (5 marks)
  - b) 7 yeas maturity 13% planned yield of deep discount bond which has face value of 30000 find the yield to maturity and if issue price is 8000 & 9000 what would be the yield. (10 marks)
- 4. 9 year 15% bond. Face value of the bond is Rs.2100 reinvestment rate is 8% which prevailing in market is 1900. Find the realized yield? (15 marks)

# **Present value Table**

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

| Periods | Interest rates (r) |       |       |       |       |       |       |       |       |       |
|---------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| (n)     | 11%                | 12%   | 13%   | 14%   | 15%   | 16%   | 17%   | 18%   | 19%   | 20%   |
| 1       | 0.901              | 0.893 | 0.885 | 0.877 | 0.870 | 0.862 | 0.855 | 0.847 | 0.840 | 0.833 |
| 2       | 0.812              | 0.797 | 0.783 | 0.769 | 0.756 | 0.743 | 0.731 | 0.718 | 0.706 | 0.694 |
| 3       | 0.731              | 0.712 | 0.693 | 0.675 | 0.658 | 0.641 | 0.624 | 0.609 | 0.593 | 0.579 |
| 4       | 0.659              | 0.636 | 0.613 | 0.592 | 0.572 | 0.552 | 0.534 | 0.516 | 0.499 | 0.482 |
| 5       | 0.593              | 0.567 | 0.543 | 0.519 | 0.497 | 0.476 | 0.456 | 0.437 | 0.419 | 0.402 |
| 6       | 0.535              | 0.507 | 0.480 | 0.456 | 0.432 | 0.410 | 0.390 | 0.370 | 0.352 | 0.335 |
| 7       | 0.482              | 0.452 | 0.425 | 0.400 | 0.376 | 0.354 | 0.333 | 0.314 | 0.296 | 0.279 |
| 8       | 0.434              | 0.404 | 0.376 | 0.351 | 0.327 | 0.305 | 0.285 | 0.266 | 0.249 | 0.233 |
| 9       | 0.391              | 0.361 | 0.333 | 0.308 | 0.284 | 0.263 | 0.243 | 0.225 | 0.209 | 0.194 |
| 10      | 0.352              | 0.322 | 0.295 | 0.270 | 0.247 | 0.227 | 0.208 | 0.191 | 0.176 | 0.162 |
| 11      | 0.317              | 0.287 | 0.261 | 0.237 | 0.215 | 0.195 | 0.178 | 0.162 | 0.148 | 0.135 |
| 12      | 0.286              | 0.257 | 0.231 | 0.208 | 0.187 | 0.168 | 0.152 | 0.137 | 0.124 | 0.112 |
| 13      | 0.258              | 0.229 | 0.204 | 0.182 | 0.163 | 0.145 | 0.130 | 0.116 | 0.104 | 0.093 |
| 14      | 0.232              | 0.205 | 0.181 | 0.160 | 0.141 | 0.125 | 0.111 | 0.099 | 0.088 | 0.078 |
| 15      | 0.209              | 0.183 | 0.160 | 0.140 | 0.123 | 0.108 | 0.095 | 0.084 | 0.079 | 0.065 |
| 16      | 0.188              | 0.163 | 0.141 | 0.123 | 0.107 | 0.093 | 0.081 | 0.071 | 0.062 | 0.054 |
| 17      | 0.170              | 0.146 | 0.125 | 0.108 | 0.093 | 0.080 | 0.069 | 0.060 | 0.052 | 0.045 |
| 18      | 0.153              | 0.130 | 0.111 | 0.095 | 0.081 | 0.069 | 0.059 | 0.051 | 0.044 | 0.038 |
| 19      | 0.138              | 0.116 | 0.098 | 0.083 | 0.070 | 0.060 | 0.051 | 0.043 | 0.037 | 0.031 |
| 20      | 0.124              | 0.104 | 0.087 | 0.073 | 0.061 | 0.051 | 0.043 | 0.037 | 0.031 | 0.026 |